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No. 11-2-199

31 March 2010

Army Programs  
CORPS OF ENGINEERS CIVIL WORKS DIRECT PROGRAM  
PROGRAM DEVELOPMENT GUIDANCE  
FISCAL YEAR 2012

TABLE OF CONTENTS

Subject	Paragraph	Page
Purpose.....	1.....	1
Applicability .....	2.....	2
References.....	3.....	2
Distribution .....	4.....	4
Conventions .....	5.....	4
Program Development .....	6.....	4
Systems .....	7.....	11
Operation and Maintenance Increments and Integration.....	8.....	11
Multiyear Funding for Civil Works Programs.....	9.....	12
Cost Estimates.....	10.....	13
Project Economics .....	11.....	14
Report to Congress of Benefit/Cost Ratios.....	12.....	16
Manpower .....	13.....	16
Submissions .....	14.....	16
Balance-to-Complete Report .....	15.....	23
Certifications of Compliance .....	16.....	23
Coordination .....	17.....	25
Definitions/Glossary .....		27
TABLES	Table	Page
Cost Estimate Updating Rates .....	1.....	40
Summary of Submission Requirements.....	2.....	40
Codes.....	3.....	40

TABLE OF CONTENTS (continued)

ILLUSTRATIONS	Illustration	Page
Certification of Compliance with Section 3(D) of Executive Order 12906 .....	1.....	41
Certification of Compliance with Coastal Barrier Resources Act ... ..	2A.....	42
Certification of Compliance with Coastal Barrier Resources Act .....	2B.....	43
Management Control Evaluation Checklist .....	3.....	44
Certification of Use of Management Control Evaluation Checklist.....	4.....	48
8 APPENDICES		Page
Appendix I Emergency Management .....		I-i
Appendix II Environment .....		II-i
Appendix III Flood Risk Management .....		III-i
Appendix IV Hydropower .....		IV-i
Appendix V Navigation .....		V-i
Appendix VI Recreation .....		VI-i
Appendix VII Regulatory .....		VII-i
Appendix VIII Water Supply .....		VIII-i
7 ANNEXES		Page
Annex A Investigations.....		A-1
Annex B Construction & FCMR&T.....		B-1
Annex C Operation & Maintenance .....		C-1
Annex D Expenses.....		D-1
Annex E Plant Revolving Fund (PRIP) .....		E-1
Annex F Automation Program.....		F-1
Annex G Continuing Authorities Program .....		G-1

DEPARTMENT OF THE ARMY  
U. S. Army Corps of Engineers  
Washington, D. C. 20314-1000

EC 11-2-199

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EXPIRES 31 MARCH 2011  
Army Programs  
CORPS OF ENGINEERS CIVIL WORKS DIRECT PROGRAM  
PROGRAM DEVELOPMENT GUIDANCE  
FISCAL YEAR 2012

1. **Purpose.** This Engineer Circular (EC) provides guidance for development and submission of the Corps of Engineers direct Civil Works Program for Fiscal Year 2012(FY12).

a. This guidance is consistent with previous guidance in that we will continue developing our program by eight business lines:

- (1) Emergency Management (EM);
- (2) Environnement (EN);
- (3) Flood Risk Management (FRM);
- (4) Hydropower (H);
- (5) Navigation (N);
- (6) Recreation (RC);
- (7) Regulatory (RG); and
- (8) Water Supply (WS),

b. Three functions:

- (1) Expenses (E);
- (2) Revolving Fund (RF) (Plant Replacement and Improvement Program (PRIP)); and
- (3) Automation Program (AP).

c. Specifically excluded from coverage are mandatory program activities, such as those funded by Permanent Appropriations (PA) and the Coastal Wetlands Restoration Trust Fund (CWRTF).

d. Appendices I - VIII provide guidance for program development by each of the eight business lines within the Civil Works Program. Annexes A - C provide generic guidance on I (Investigations); C (Construction); and O&M Program matters, cutting across all business lines, as applicable. Annexes D - G provide guidance for program development for each of the three functional programs.

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This EC supersedes EC 11-2-194 dated 1 Apr 2009

EC 11-2-199  
31 Mar 10

2. **Applicability.** This EC applies to all headquarters elements, major subordinate commands (MSCs), districts, and field support activities having Civil Works Program responsibilities.

3. **References.**

a. **Public Laws:**

- (1) PL 84-99 Flood Control and Coastal Emergencies
- (2) PL 85-500 Water Supply Act of 1958
- (3) PL 91-190 National Environmental Policy Act of 1969
- (4) PL 92-500 Federal Water Pollution Control Act Amendments of 1972
- (5) PL 93-251 Water Resources Development Act of 1974
- (6) PL 97-348 Coastal Barrier Resources Act
- (7) PL 99-662 Water Resources Development Act of 1986
- (8) PL 100-676 Water Resources Development Act of 1988
- (9) PL 101-508 Revenue Reconciliation Act of 1990
- (10) PL 101-591 Coastal Barrier Improvement Act of 1990
- (11) PL 101-601 Native American Graves Protection and Repatriation Act
- (12) PL 101-640 Water Resources Development Act of 1990
- (13) PL 102-580 Water Resources Development Act of 1992
- (14) PL 103-62 Government Performance and Results Act of 1993
- (15) PL 104-303 Water Resources Development Act of 1996
- (16) PL 105-33 Balanced Budget Act of 1997
- (17) PL 106-53 Water Resources Development Act of 1999
- (18) PL 106-541 Water Resources Development Act of 2000
- (19) PL 108-137 Energy and Water Development Appropriation Act, 2004
- (20) PL 108-447 Consolidated Appropriations Act, 2005
- (21) PL 109-58 Energy Policy Act, 2005
- (22) PL 109-103 Energy and Water Development Act, 2006
- (23) PL 109-209 Continuing Appropriations Resolution 2007
- (24) PL 110-114 Water Resources Development Act 2007
- (25) PL 110-140 Energy Independence and Security Act, 2007
- (26) PL 110-161 Consolidated Appropriations Act, 2008

b. **Executive Orders:**

- (1) EO 11514 Protection and Enhancement of Environmental Quality
- (2) EO 12088 Federal Compliance with Pollution Control Standards, 1978
- (3) EO 12512 Federal Real Property Management, 1985
- (4) EO 12893 Principles for Federal Infrastructure Investment
- (5) EO 12906 Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure

- (6) EO 13423            Strengthening Federal Environmental, Energy and Transportation Management, 2007
- (7) EO 13514            Federal Leadership in Environmental, Energy and Economic Performance, 2009

**c. Office of Management and Budget (OMB) documents:**

- (1) Budget of the United States Government, Fiscal Year 2011, Analytical Perspectives
- (2) Budget of the United States Government, Fiscal Year 2011, Appendix
- (3) OMB Circular A-11 Preparation, Submission and Execution of the of Budget

**d. Department of the Army regulations:**

- (1) AR 11-2            Managers' Internal Control Program
- (2) AR 385-10        The Army Safety Program

**e. Corps of Engineers Engineer Circulars, Manuals, Pamphlets, Regulations, and policy announcements and letters**

- (1) EM 1110-1-2909    Geospatial Data and Systems
- (2) EP 1130-2-500    Partners and Support (Work Management Guidance and Procedures)
- (3) ER 5-1-11        USACE Business Process
- (4) ER 11-1-320     Civil Works Emergency Management Programs
- (5) ER 11-2-220     Civil Works Activities General Investigation
- (6) ER 11-2-240     Civil Works Activities - Construction & Design
- (7) ER 11-2-290     Civil Works Activities, General Expenses
- (8) ER 37-2-10      Accounting and Reporting Civil Works Activities
- (9) ER 200-1-4      FUSRAP Policy
- (10) ER 200-2-3     Environmental Compliance Policies
- (11) ER 1105-2-100   Planning Guidance Notebook
- (12) ER 1110-1-8156   Policies, Guidance, and Requirements for Geospatial Data and Systems
- (13) ER 1110-2-100   Engineering and Design Periodic Inspection and Continuing Evaluation of Completed Civil Works Structures
- (14) ER 1110-2-1302   Civil Works Cost Engineering
- (15) ER 1130-2-500   Partners and Support (Work Management Policies)
- (16) ER 1130-2-510   Hydroelectric Power Operations and Maintenance Policies
- (17) ER 1130-2-540   Environmental Stewardship Operations and Maintenance Guidance and Procedures
- (18) ER 1165-2-119   Modifications to Completed Projects
- (19) ER 1165-2-131   Local Cooperation Agreements for New Start Construction Projects

EC 11-2-199  
31 Mar 10

- (20) ER 1165-2-400 Recreational Planning, Development, and Management Policies
- (21) Policy Announcement - Chief of Engineers announcement, 26 Mar 02, subject: USACE Environmental Operating Principles
- (22) Policy Letter - Policy Guidance Letter 61, 27 Jan 99, subject: "Application of Watershed Perspective to the Corps of Engineers Civil Works Program and Activities"

4. **Distribution.** This information is approved for public release. Distribution is unlimited.

5. **Conventions.** The following designations are used for selected one-year periods:

- CCY = current calendar year
- CFY = current fiscal year (extending from 1 October CCY to 30 September CCY+1 before 1 January, latest, and 1 October CCY-1 to 30 September CCY thereafter)
- PY = program year (CFY+2 before 1 October, next, and CFY+1 thereafter) = FY11
- PY - 1 = one year before PY = FY10
- PY - 2 = two years before PY (CFY before 1 October, next, and CFY-1 thereafter) = FY09
- PY - 3 = three years before PY (CFY-1 before 1 October, next, and CFY-2 thereafter) = FY08
- PY + N = program year plus N fiscal years.

Note that 1 October of PY-1 is 1 October of CCY, until 1 January, next, when it becomes 1 October of CCY-1.

6. **Program Development.**

a. **Government Performance and Results Act Guidance.**

(1) **Guidance Development Status.** The "Government Performance and Results Act of 1993" (GPRA), PL 103-62 is the foundation for present-day program development within the federal government. GPRA requires that agencies develop strategic plans and annual performance plans for serving the nation, and reports on how effective and efficient performance actually was for any period just completed. This has led to establishment of results-oriented performance planning, measurement, and reporting throughout the Federal government. The current Civil Works Strategic Plan will be released, with the understanding that Army and OMB would continue to work on performance measures and targets tied to the strategic goals and objectives. A summary of the current Civil Works strategic goals are as follows:

- (a) Enable and assist in the development of safe and resilient communities and infrastructure.
- (b) Promote sustainable water resources, marine transportation systems, and healthy aquatic Ecosystems.
- (c) Implement effective, reliable, and adaptive life-cycle project performance.

(d) Build and sustain a competent team.

(2) **Initial Guidance.** The Operation and Maintenance, Program successfully established results-oriented business program development procedures for six business programs in 1996 as a Pilot GPRA Project for OMB. The business programs include EM, EN, FRM, H, N, and RC. The development procedures were further evolved into today's procedures - models - and served as examples for development of models for the two other business lines - RG and WS. The program development procedures are presented in Appendices I - VIII.

b. **Presidential Policy.**

(1) **Presentation of Programming Results.** Congress established its appropriation accounts by program function, such as investigations, construction, and operation and maintenance. Consistently, OMB provides funds by program function. To this end, it maintains out year planning estimates, or ceiling, for each appropriation account of the Civil Works Program. The ceilings reflect long-term effects of the President's policies for the various programs, projects, and activities (PPAs) funded by each account, and serve as benchmarks for use in evaluating Congressional actions. The 5 to 10-year period accommodates adequate definition of long-term resource requirements. These ceilings are presented, for all accounts, in OMB's MAX database.

(2) **Economic Assumptions.** Economic assumptions underlying Presidential policy of reference C-3.c.(1), Budget of the United States Government, Fiscal Year 2011, Analytical Perspectives, are reflected in Table 1. These assumptions, along with related factors presented in the Federal Personnel Guide of Key Communications Group (KCG), Inc., and Civil Service Retirement System (CSRS) - to - Federal Employees Retirement System (FERS) workforce conversion data of HQUSACE Human Resources Office, are shown for PY-3 through PY+19. The assumptions and related data cover base rates for federal civilian permanent workers, reflecting pay and burden factors; pay raises for these workers applicable to both changing and fixed base rates; and inflation for "goods and services" of federal civilian temporary and nonfederal workers, and nonpay items.

(a) **Pay and Burden Rates.** Base rates (against which pay raises apply) reflect assumed pre-raise pay and burden rates. Pre-raise pay rates are 1.000, by definition, for regular pay, and assumed to be 0.02 for awards. Assumed burden rates reflect assumed government contributions for worker benefits. The rates comprise two parts - one part for government contributions under the CSRS; the other, under the FERS. The first part (including contributions for retirement, health insurance, Medicare, and life insurance) is shrinking, while the second part (including contributions for regular, "Thrift Savings," and Old Age Survivors Disability Insurance (OASDI) retirement; health insurance; Medicare; and life insurance) is growing. This results from permanent force "attrition" and subsequent "turnover" through the hiring of more workers under FERS. With an annual permanent force attrition of 7 % and associated turnover initially representing a considerable share of that, the CSRS part is expected to become

EC 11-2-199  
31 Mar 10

negligible by FY21. Class 1 “updating factors” reflect the year-over-year change in base (resulting from change in burden), the associated year-over-year raises, and whatever raise absorption may pertain.

(b) **Pay Raise Assumptions.** Pay raise assumptions for federal civilian permanent workers are shown in reference 3.c.(1), Table 11-1, “Economic Assumptions.” Assumed pay raise rates include base and locality components. (The base component is different from the base rate, discussed above, against which the base component applies.) Base components, reflecting the Employment Cost Index (ECI), apply nationally. Locality components, reflecting conditions of local markets, apply locally. Allocation of pay raise rates to base and locality components is based on the number and distribution of workers eligible for locality pay. For PY-2, the national allocation to these components was 0.029 and 0.023, or 55 % and 44 % of the 47% total raise rate. The national allocation for PY-1 has yet to be determined, therefore, the composite raise rate is used without refinement. Class 1 rates in Table 1 are based on composite raises for all years.

(c) **Inflation Rates.** Inflation rates reflect assumed price increases for "goods and services" of temporary federal and nonfederal workers, and for nonpay items. The “Balanced Budget Act of 1997,” PL 105-33, requires that the Gross Domestic Product (GDP) percent change, year-over-year chained price index (1996 = 100) rates be used to develop “baseline estimates” reflecting, instead of Presidential policy, continued operations under current law and current year appropriations. The baseline program based on these estimates is discussed in OMB’s Circular A-11, “Preparation and Submission of Budget Estimates.” At the recommendation of OMB, these rates were used as Class 2 rates of Table 1. Class 2 “updating factors” reflect the year-over-year inflation and whatever inflation absorption may pertain.

(3) **Performance Improvement Officer (PIO).** Working with the Administration each agency has set Performance Goals and designated a PIO. Four High Priority Performance Goals have been set for USACE Civil Works, specifically:

- (a) Aquatic Ecosystem Protection and Restoration
- (b) Flood Risk Management
- (c) Inland Navigation
- (d) Hydropower Program

(4) **Performance Goals.** The four High Priority Performance Goals are to be outcome-focused and have clear measurable targets with a completion data. They are also to be ambitious but capable of achievement within current resources and authorization. The goals will be used to improve the performance of the Federal Government by using the information to provide lessons

learned, communicate priorities, and strengthen problem -solving networks. The progress attending the goals will be monitored by OMB.

(5) **Executive Order 13514 Federal Leadership in Environmental, Energy, and Economic Performance.** EO 13514, signed by President Obama on 5 Oct 2009, establishes new sustainability requirements and reemphasizes those established in EO 13423 (2007), the Energy Policy Act, 2005 (EPAAct) and the Energy Independence and Security Act, 2007 (EISA). These requirements are related to greenhouse gases (GHG), energy/fuel efficiency, renewable energy, green buildings, local and regional planning, water efficiency, pollution prevention, sustainable acquisition, electronic stewardship and data centers, and USACE sustainability innovations. Funding for items required to begin moving toward these goals should be recommended for inclusion in the budget. USACE will report sustainability status through federal reporting systems and the OMB scorecard process similar to that used previously for the President's Management Objectives.

c. **Army Policy.**

(1) **Performance-based Program Development.** Performance-based program development is development of only those programs, and only those parts of those programs, that can be justified by the results produced, or expected to be produced. Results may be in the form of outputs or outcomes. Performance-based program development is designed not only to ensure prosecution of only clearly justified programs, but also, to ensure that business lines increments are added such that the first-added increment provides the best results or returns, the second-added increment provides the second-best results or returns, etc. The increments are added in order of priority, both within and across business lines, to build total programs of whatever size, depending on available funding.

(2) **Business Lines Programming.** In response to GPRA, the Corps established its business lines by program purpose, such as navigation, environment, and flood risk management, rather than by function (e. g. investigations, construction, operation and maintenance, etc.). Consistently, the Corps programs by program purpose, and, once Army finishes program development, assists Army in cross-walking results to appropriation accounts, set up by function, for use by OMB in developing the President's program. Business lines include navigation, environment, flood risk management, hydropower, recreation, regulatory, emergency management, and water supply. Each of these business lines is fully addressed in its own appendix.

(3) **Performance.**

(a) **Measures.** Performance measures are written criteria by which to gauge progress in accomplishment of any particular performance objectives, goals, and missions. For the Civil Works Program, the Corps has a number of performance measures for each business line. They are used, not only as standards by which to judge performance based on project or program

EC 11-2-199  
31 Mar 10

results, but also, to project performance contributions of investment increments, discussed later, for consideration in prioritization of increments to be added in program development.

(b) **Results.** Performance results are products of operation of the PPAs. They are determined through collection of data, by performance measure, describing the extent to which performance objectives, goals, or missions, were met through operation of the PPA. They are used, not only to evaluate program performance and judge program worthiness after the fact, but also, to evaluate the reasonableness of performance measures.

(4) **FC,MR&T Project.** Programs for the FC,MR&T Project will be developed in accordance with guidance provided for comparable functions of other programs.

(5) **Specifically Authorized Studies and Projects.** For specifically authorized studies and projects the emphasis is on maintaining continuity in the workflow once a new start decision has been made. In general, there are two main new start decision points for all Army proposed cost-shared projects - initiation of the reconnaissance phase study and project construction. Preconstruction Engineering and Design (PED) studies may not be budgeted before review and approval of the Feasibility Report by ASA(CCW). If any feasibility study (other than for inland waterways) was not subject to efficiencies and controls of cost-sharing, a new start review and approval would be needed for PED. Likewise, a new start decision would be needed for a feasibility study being initiated after, say, an O&M-funded appraisal without an intervening reconnaissance new start decision.

#### d. **Corps Policy.**

(1) **General.** In response to GPRA, the Corps established its business lines by program purpose, such as emergency management, environment, flood risk management, rather than by function. Consistently, the Corps programs by program purpose, and, once Army finishes program development, assists Army in translating results to program function for use by OMB in developing the President' program.

(2) **Local Sponsor.** Districts should collaborate with Local Sponsors on the budget development. Please follow the guidance for Disclosure of Budgetary information. The President's Budget, after presentation to Congress contains the only releasable budgetary information. This budgetary or process information must be kept confidential until officially released to the public. Such information includes funding account, study, project, and state. Instructions on policies and procedures for disclosing budgetary information are contained in OMB guidance circular and are issued annually by CECW-ID.

(3) **Environmental Operating Principles.** By reference 3.e. (21), 26 Mar 02, the Chief of Engineers announced the USACE Environmental Operating Principles. These principles apply across all business programs and accounts. They are:

- (a) strive to achieve environmental accountability, in order to maintain the environment in a healthy, diverse, and sustainable condition necessary to support life;
- (b) recognize the interdependence of life and the physical environment, proactively considering environmental consequences of Corps programs and acting accordingly in all appropriate circumstances;
- (c) seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another;
- (d) continue to accept responsibility and accountability under the law for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems;
- (e) seek ways and means to assess and mitigate cumulative impacts to the environment, bringing systems approaches to the full life cycle of our processes and work;
- (f) build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work; and
- (g) respect the views of individuals and groups interested in Corps activities, listen to them actively, and learn from their perspective in the search to find innovative win-win solutions to the nation's problems that also protect and enhance the environment.

(4) **Geospatial Data and Systems.** Key to successful implementation of the Watershed Perspective will be the sharing of data internally and with others. To ensure that data and information technology are consistent and compatible throughout the Corps, each District shall develop an Enterprise Geospatial Information System (eGIS) initiative that fits into the Division's Enterprise GIS Program Management Plan and the Corp's Geospatial Enterprise Architecture (CeA), as outlined in Engineer Manual 1110-1-2909, Geospatial Data and Systems. As part of the eGIS initiative, each MSC shall establish, and maintain for easy access, its own geospatial database repository into which its districts shall input their project data and other data essential to multi-purpose water and related land resources management within their watersheds. Such other data might include data on water and land use regulation, water control, and environmental and emergency management. Furthermore, to the fullest extent practicable, all districts will prioritize historical program and project data and input it into the E-GIS databases. Finally, each District shall review and update project information annually through the CorpsMap web portal - <https://corpsmap.usace.army.mil> to ensure project information is accurate and current.

(5) **Watershed Principles.** Watershed studies are planning initiatives that have a multi-purpose and multi-objective scope and accommodate flexibility and collaboration in the planning process. Possible areas of investigation include flood risk management activities, ecosystem

EC 11-2-199  
31 Mar 10

restoration, navigations, water supply and recreations. The watershed principles require team thinking about water resources development and management in the context of multiple purposes rather than single purposes, and thus, facilitates the search for comprehensive and integrated solutions; improve opportunities for public and private groups to identify and achieve common goals by unifying on-going efforts and leveraging resources; identify a combination of recommended actions (a Watershed Management Plan) to be undertaken by various partners and stakeholders in order to achieve local, tribal, regional, and national water resources management goals identified in the study and may or may not identify further budgetable Corps studies or implementation projects; leverage resources, including cost shared collaboration, and integrates programs and activities within and among Civil Works programs, and with other Federal, tribal state and non-governmental organizations, to improve consistency and cost effectiveness. Watershed principles may be applied to Watershed Assessments (leading to Watershed Management Plans) in accordance with Section 729 or feasibility studies accomplished in a watershed context (leading to Corps implementation). See Annex A (Investigations) and Business Line Appendices.

(6) **Plant Replacement and Improvement Program.** Submission of documents to support new Plant Replace and Improvement Program (PRIP) projects are contained in Annex E along with referenced materials. Both large and small projects are reviewed by the HQ Prioritization Group which makes recommendations to the Senior Program Budget Advisory Committee on the disposition with respect to inclusion in the program. Good planning dictates that justification, economic analysis, estimates, and other submission materials are prepared well in advance of this budget review, since it is only one year away from project execution. Submissions of projects outside of the normal budget cycle are discouraged except for situations dictated by extraordinary circumstances.

(7) **Construction Contracts** guidance is referenced in Annex B and in the current Execution of the Annual Civil Works Program EC.

(8) **Initial Program.** The initial program is the first business line increment for each business line. Criteria for initial levels are presented, as applicable, in Appendices I - VIII. For each business line and account program, HQUSACE must develop a realistic, multiyear initial program reflecting PY-2 work allowances and projected current year appropriations and meeting further requirements for program formulation presented in the appendices and/or annexes covering the programs. (Note that this is not the same program represented by “baseline estimates” required by reference 3.a.(9), PL 101-508, and discussed in reference 3.c.(3) OMB’s Circular A-11).

(9) **Capability Program.** When developing capabilities, District should fully fund all contracts \$20 million or less; for contracts greater than \$20 million, treat them as incrementally funded (i.e. continuing contract, base bid + option, multiple year contract); when stating capabilities, in addition to the optimally funded capabilities, provide one or two logical increments less than the optimal capability with a brief explanation of what can be accomplished

at each funding increment. The recommended program to OMB, the President's FY12 budget, and the associated 5, 10, and 20 year budget plans will be derived in part from the Capability Program. Future or known work should be identified in the capability program.

**7. Systems.** The National Academy of Public Administration (Prioritizing America's Water Resources Investments) released their February 2007 report which was chartered by the House Appropriations Energy and Water Subcommittee. The report validates the direction the Corps has been heading in the implementation of performance based budgets, system/watershed perspectives, long range asset planning reflected on the near term through the Five Year Funding Streams and the Five Year Infrastructure Management Plans providing a near term horizon.

a. **Infrastructure Management Plan.** The Infrastructure Management Plan will be consistent with the 5 year funding stream and represent the O&M component of the 5 year funding stream. The Infrastructure Management Plan will be based on sub-plans developed by Business Line Managers for six primary missions (Flood Risk Management, Navigation, Environmental Stewardship, Water Supply, Hydropower, and Recreation). The Infrastructure Management Plan should be jointly developed and improved within the Operation & Maintenance Community of Practice. The Infrastructure Management Plan must reflect sound engineering, construction, operation and maintenance state of practice (reliability centered maintenance, condition assessments, equipment mortality studies, predictive maintenance, etc) and continually honed to achieve the lowest sustainable O&M investment level. Accelerated replacement cycles within the 5 year funding stream may affect O&M needs within the Infrastructure Management Plan (i.e. replacement versus continuing high outage and repairs on failing equipment). The O&M budget submission should be consistent with the 5 year funding stream and the Infrastructure Management Plan. The 5 year funding stream and Infrastructure Management Plan both reflect planned investments for a long range five year period.

b. **Systems and Basins.** A systems approach or watershed approach is needed to ensure that investments are integrated into a whole that preserves or enhances performance and sustainability at the system level. System data for PY budget items requested (studies, construction, and O&M) will include the USGS Hydrologic Unit Code (HUC) sub-region (4 digits) codes. These codes can be found at [http://water.usgs.gov/GIS/huc\\_name.html](http://water.usgs.gov/GIS/huc_name.html). A list of 52 Systems has been developed for O&M (see Table C-5.1).

## **8. Operation and Maintenance Increments and Integration.**

a. **Increments.** O&M Increment 1 is defined as critical routine and critical cyclical activities. O&M Increment 2 is defined as critical non-routine activities (see individual business line appendices for further details). Increments 1 and 2 for O&M can not exceed 75 percent of each MSC's O&M total average for all business lines together of the prior 5 year budgets.

b. **Integration.** Districts will input data and their priorities and MSC's will develop a complete, single, O&M program representing the MSC's desired integrated program. All

EC 11-2-199  
31 Mar 10

business line O&M activities must be integrated, which means across all business lines, and then prioritized into one O&M program. This will facilitate consistency in HQUSACE formulation of the Civil Works Budget across all MSC's as well as business lines, appropriations and Districts.

#### 9. Multiyear Funding Programs for Civil Works Programs.

a. Introduction. OMB ceilings reflect intent of the President's 5 to 10 year program from a national perspective. However, Army may recommend the distribution of funding within the ceiling for Civil Works and may elect to recommend alternative funding levels. To this end, it can select alternative work mixes and associated funding levels, by functional account, that best meet scheduled commitments, program priorities, and capabilities. Emphasis or de-emphasis of programs, projects, and activities should always provide for the most efficient and productive use of funds.

b. General. Multi-year funding programs identify the long-term resource requirements for the Civil Works Program. Ten- and Twenty-year databases have been established in P2 to allow MSCs to input out-year funding data. Specific data and submission requirements are described below. See EC budget appendices for additional information.

(1) Five-Year Funding Stream. The five-year funding stream (PY through PY+4), is a subset of the 10 year funding stream described below and is the basis for the Five-Year Development Plan (FYDP). The FYDP is a stand alone document prepared by HQ which provides a five-year funding stream for each Corps business line. These funding streams must contribute to achievement of the strategic goals and objectives contained in the Civil Works Strategic Plan. The FYDP is submitted to the Office of Management and Budget (OMB) and the Congress along with the PY budget submission.

(2) Ten-Year Funding Stream. The purpose of the Civil Works Ten-Year Development Plan is to present the funding required for the Civil Works program for analysis over a 10 year period. The 10-year period (PY through PY+9) approximates the implementation life of projects from start to finish and establishes long-term resource requirements. The focus is to undertake projects and activities that provide the highest net economic and environmental returns on the Nation's investment as well as reducing risks to life. As in the FYDP, these funding streams must contribute to achievement of the strategic goals and objectives contained in the Civil Works Strategic Plan. MSCs shall provide the data required by the Ten-year funding stream in P2 as required by paragraph d. below.

(3) Twenty-Year Funding Stream. This funding stream provides an alternative long-term view of the Civil Works Program. Twenty-year funding streams build on the ten-year database. PY+10 through PY+19 have been added to the ten-year funding stream for this purpose. This data will allow the HQ to assess the twenty-year investment requirements for the Civil Works Program for additional long-term analysis. MSCs shall provide the data required by the Twenty-year funding stream in P2 as required by paragraph d. below.

c. **Submission Requirements.** MSCs shall complete data input to multi-year funding streams in accordance with Table 2 of the budget EC entitled: Summary of Submission Requirements. MSCs shall update the ten-year program following OMB Passback to support the President's final submission to Congress in February PY-1. MSCs must incorporate all post Passback adjustments as well as the PY-1 appropriations if passed by Congress by February PY-1.

d. **Data Requirements.** The ten- and twenty-year databases have been modified to require only CAPABILITY funding for PEDs, construction projects and O&M projects that require justification to support funding (e.g. Major Maintenance). Only FEDERAL dollars (including IWTF dollars) should be shown. DO NOT include non-Federal dollars such as required cash contributions in the capability funding data. There is NO requirement for including O&M projects in the ten- and twenty-year databases EXCEPT for those O&M projects that require justification to support funding (e.g. Major Maintenance).

e. **Business Line Increments.** Business line increments are defined in each applicable business line. They are prioritized by MSCs for each of their business lines, then, reviewed and modified or approved by HQUSACE and, ultimately, ASA(CW). They are added to the "initial" program in order of priority within each business line. Their priorities are based on their relative efficiencies and effectiveness in accomplishing approved performance objectives, goals, and missions. The objectives, goals, and missions include serving specific water and related land resource management purposes, meeting statutory requirements, and promoting national health and safety. Justification statements present the relationships between investment increments, incremental contributions to achieving objectives, goals, and missions, and incremental funding. Making these relationships clear to all parties within the Corps, OMB, Congress, and the public is important to gaining support for recommended programs.

f. **Programs Developed by Army.** Based on HQUSACE recommendations, OASA(CW) will develop a "ceiling program," based on Presidential policy, by adding the highest-return business line increments nationwide to HQUSACE's initial program. Additional increments will be added to develop an above-ceiling "recommended" program.

## 10. Cost Estimates.

a. **Economic Assumptions.** As explained above, the Administration's economic assumptions address inflation and adjustments through PY-1. Table 1 provides cost estimate updating rates based on these assumptions, extrapolated through PY+19. These rates may be extended beyond PY+19 using the procedures described in Footnote 16 of the table. They are used, as explained below, to update all study and project cost estimates.

b. **Updating.** As shown in Table 1, all costs of Corps work are grouped into just two "classes" - Class 1 and Class 2. Class 1 includes only costs of Corps civilian permanent workers. Class 2 includes all other costs, including costs of Corps civilian temporary workers.

EC 11-2-199  
31 Mar 10

Each class has its own set of rates for cost estimate updating. Nevertheless, each set is used in the very same way - through execution of the "algorithm" described in the table. The two cost classes and their rates are discussed next.

(1) **Corps Civilian Permanent Worker Cost.** The Class 1 rates in Table 1 are applicable to the PY-1 pay raise base. They derive from "updating factors" incorporating effects of then-year pay raises and a changing pay raise base. The pay raises reflect standard nationwide pay raises and locality pay increments. The breakdown between the two is based on local pay gaps and must be determined each year. Use these rates to update Corps civilian permanent worker cost estimates for all programmed work of all studies, projects, and activities.

(2) **Corps Civilian Temporary and NonCorps Worker and Nonpay Cost.** The Class 2 rates of Table 1 are applicable to the PY-1 base of all costs other than those for Corps civilian permanent workers, ranging from costs of Corps civilian temporary workers, and consultants and Architect Engineers used in the various preconstruction planning and construction stages of work, to real estate costs. They derive from "updating factors" reflecting standard nationwide inflation. Use these rates to update Corps civilian temporary and nonCorps worker and nonpay cost estimates for all programmed work of all studies, projects, and activities.

c. **Micro-computer Assisted Cost Estimating System (M-CACES).** A complete and reliable Micro-computer Assisted Cost Estimating System (M-CACES) baseline cost estimate and realistic workflow and funding schedule are essential in preparing out-year programs. Projections of work and funding requirements will be consistent with the President's PY-1 budget, as modified by any Congressional action in the meantime. However, the funding schedules should be reviewed and adjusted continuously to reflect the sponsor's financial capability and project progress.

## 11. Project Economics.

a. **Discount Rates.** A discount rate of 4 3/8% will be used to determine the "current" economics of any project. For projects funded for construction, the "applicable" rate is the one in effect when construction funds were first appropriated. For projects never funded for construction, the applicable rate is the "current" rate, unless the project qualifies for the 3 1/4% rate under the "grandfather" clause in Section 80 of the Water Resource Development Act of 1974, PL 93-251. Even if "grandfathered" for budgetary purposes the actual current rate should be also used and results shown. In addition, as noted in paragraph 12 below, costs and benefits, and remaining costs and benefits must be computed and displayed at a 7 percent discount rate for consistent evaluation.

### b. Evaluation.

(1) **Benefit/Cost Ratios.** As required, in support of funding requests, benefit-cost ratios will be evaluated based on the benefits in the latest approved official document, such as Feasibility

Report, Chief of Engineers Report, Limited or General Reevaluation Report (LRR or GRR), Engineering Documentation Report (EDR), or other report. If the date of the last approved report is more than 3 years old, then an economic update will be required and approved by the appropriate MSCs' except for projects under construction. An economic update will be required for projects under construction when the date of the economic analysis is more than 5 years old.

(2) **New Construction Projects.** For any project or element proposed as a new construction, the fiscal year of the approval date of the latest economic analysis must not precede the fiscal year of the MSC program submission by more than 3 years. For example, for any new construction project or element in your initial submission, the approval date of the document containing the most recent economic analysis can be no earlier than 1 October CCY-4 - the first day of PY-5. This point in time precedes the start of the fiscal year in which you are making your submission by 3 years. If the fiscal year of the approval date is more than 3 years ago, you must perform a reevaluation to show that the project remains justified. Such reevaluation will be the first item of work upon receipt of funds and will be documented in an LRR to be submitted in support of any request for follow-on funding. The reevaluation will involve no major new analysis. It will be limited to reviewing and updating previous assumptions and limited surveying, sampling, and application of other techniques to develop a reasonable estimate of project benefits. If the limited reevaluation uncovers major changes that could affect project formulation or sizing, then additional PED rather than construction funds must be requested to undertake a complete GRR.

(3) **Continuing Construction Projects.** Continuing construction data from the P2 data base will be used in formulation of the President's PY Budget. For continuing construction projects, the fiscal year of the approval date of the latest economic analysis must not precede the fiscal year of the MSC program submission by more than **5 years**. For example, for any continuing construction project recommended in your June submission, the price level of the economic analysis can be no earlier than 1 October **CCY-6** - the first day of **PY-7**. This point in time precedes the start of the fiscal year in which you are making your submission by **5 years**. If the fiscal year of the price level is more than **5 years** ago, you must perform an economic update to show that BCR and RBRCR criteria used for performance based budgeting is current. The economic update will involve no major new analysis. It will be limited to reviewing and updating previous assumptions and limited surveying, sampling, and application of other techniques to develop a reasonable estimate of project benefits. For any continuing construction project, in order to assure currency of economic analysis, the price level of the economic analysis, or update, must not precede the fiscal year of the MSC submission by more than **5 years**. Economic updates should be performed in accordance with the update plan in the feasibility report and/or the Project Management Plan, MSCs may approve them.

(4) **Approval of Post-authorization Documents.** MSCs have approval authority for post-authorization documents that are certified as being in accordance with law and policy for projects not requiring a Washington-level decision or additional congressional authorization. Decision documents for projects not in accordance with policy or those requiring action by the Chief or

EC 11-2-199  
31 Mar 10

ASA(CW), or requiring additional congressional authorization, must be submitted to headquarters, U. S. Army Corps of Engineers (HQUSACE).

**12. Report to Congress of Benefit/Cost Ratios.** Executive Order 12893, "Principles for Federal Infrastructure Investment," requires that benefits, costs, and benefit-cost ratios for new infrastructure investments of all federal agencies be evaluated at a discount rate of 7% to facilitate comparison and decision making. The total benefit/cost ratios (BCR) and remaining benefit / remaining cost ratios (RBRCs) for all continuing and new construction projects, each based on a 7% discount rate, will be input into P2. **RBRC's are required when updating Justification Sheets.** Specifics on computing RBRCs are included in Annex B, Construction.

**13. Manpower.** No manpower data is required by this EC. CERM-M will use current resourcing guidance, the Corps of Engineers Manpower Requirements Systems (CEMRS), and PY-2 through PY workload data to develop PY manpower requirements by appropriation account for the OMB program submission. In early CCY+1, once the President's Program has been resolved for PY, then budget and manpower data compatible with the program will be updated in P2 Primavera Project Manager. This data will be imported to CEMRS for use in the development of the PY manpower allocations in accordance with the then current EC (to be published in January of CCY+1).

#### **14. Submissions.**

a. **Summary.** MSC's role is for quality assurance, to verify consistency and adhere to guidance in this document. Required MSC submissions, recipients, means of input, numbers of copies, and due dates are discussed at length in the appendices and summarized in Table 2. Due dates are designed to manage the budget development workload. They must be met.

b. **Input Instructions.** Input instructions are provided by various means, including, in addition to this EC, User's Manuals, system websites, and e-mail messages.

c. **Databases.** Data is input to databases of up to four automated information systems. These include P2, Information Technology Investment Portfolio System (ITIPS), Recreation Budget Evaluation System (Rec-BEST) and Environmental-Stewardship Budget Evaluation System (E-S BEST). These databases are open; they will close on the various dates shown in Table 2.

#### **(1) P2.**

(a) **Instructions.** In addition to the guidance below, detailed documentation and instructions concerning use of P2 for submission of the FY12 program can be found in a document named "PBS Training Workbook". This document can be obtained from a link on the P2 OFA-CW start-up screen. Note that the dates shown in the "Data Sources and Process Flow" section of the PBS Functional Design document are notional dates. Refer to Table 2 in this EC for a

summary of official due dates. Additional instructions concerning use of all P2 tools are available on the PMBP Portal at <https://pmbp.usace.army.mil>.

(b) **General Provisions.** P2 will be used by all MSC/Districts for I, C, O&M, MR&T, FCCE FUSRAP, and RG program submissions. "Remaining Items" in these accounts will be handled separately by HQUSACE. Refer to the "Data Sources and Process Flow" section of the PBS Training Workbook document for a detailed discussion of the process flow. In summary, the concept is as follows: MSC/Districts will use P2 Primavera Project Manager (PM) to schedule their projects and identify unconstrained (capability level) resource requirements. Every night during the budget submission timeframe, selected data fields in PM will be automatically loaded into the PBS module of P2 Oracle Financial Analyzer (OFA) at a defined level of detail. The MSC/District will then use OFA to enter performance indicators, budget request amounts, and District and MSC rankings within each business line for all budget items across appropriation accounts. Upon completion of the submission by MSC/Districts, the P2 data in OFA will be utilized by each HQUSACE business line manager for development of the nationwide program. HQUSACE business line managers may work directly in OFA or may use Excel extracts of OFA data. Excel extracts revised by HQUSACE business line managers will be periodically uploaded back into OFA by HQUSACE.

(c) **P2 Primavera Project Manager (PM).** The current unconstrained (capability-level) project schedule, activities, and resource requirements identified in PM for the PY should provide the starting point upon which the budget submission is built in OFA. The PM data will also be used to provide additional details to a business line, account, or program manager who wants to see what specifically is included in an aggregated OFA budget item. Outyear schedule and resource data in PM on projects in the Construction phase will be queried to provide activity-level (contract) information for current and future years as needed. Thus it is necessary to schedule and resource budgeted Construction projects in PM through project completion. For instructions concerning PM data entry, refer to the PBS Training Workbook document sections entitled "Data Quality Considerations/User Action Checklist" and "PBS Business Process Procedures (Update PY Schedules in Project Management)".

(d) **Recreation and Environmental Stewardship.** Budget packages and performance measure data for Recreation and the Environmental Stewardship part of the EN program will be updated and submitted through use of Rec-BEST and E-S BEST, respectively. The performance measure information must be updated in the BEST programs by **21 May 10**. This performance data will be extracted from Rec-BEST and E-S BEST and then merged into OFA along with budget data extracted from PM. When entering budget information into PM, make sure the corresponding BEST ID's are entered for all resourced activities to ensure that the proper performance measures can be matched in OFA. In OFA the Budget Item ID data field will contain the BEST ID. For most projects, the preliminary budget information and the matching BEST\_ID's can be carried over from last year's data entry in PM or can be taken from the existing Rec-BEST and E-S BEST database. The information needed for P2 data entry is available on the P2 summary page in the BEST programs. Extracts of Rec-BEST and E-S BEST

EC 11-2-199  
31 Mar 10

will be loaded into OFA on a nightly basis once the projects have submitted data input in Rec-BEST and E-S BEST and the budget items have been created in P2-OFA, to allow Districts and MSCs to review and evaluate their budget comprehensively, across business lines.

(e) **Business Line.** P2 provides a project level code to identify the project's primary business line. This code may be over-ridden in PM at the activity level for specific activities which differ from the project's overall primary business line. Several Business Line choices available in P2's list of values are not applicable for this budget submission, including "OTH" - Other, "SOTH" - Support for Others, and "RE" - Real Estate. The business line choice "ENV" - Environment should not be used. Instead, use "ENV-Ecosystem", "ENV-Steward", or "ENV-FUSRAP". The "JOINT" business line should not be used for a project's primary business line classification, but may be used as the business line over-ride activity code on applicable activities in PM.

(f) **Increments.** An activity code named "CW Funding Increment" will be used in PM to categorize a discrete amount of work identified by an activity or a set of activities. The valid values for this data element are defined in the Definitions/Glossary section of this EC. If the activity code is blank, the corresponding data will be placed in a CW Funding Increment called "Unassigned" in OFA. Budget items with an "Unassigned" increment will not be considered for funding in FY12.

(g) **Phase Code.** An activity code named "CW Budget Phase" will be used in PM to categorize each resourced activity. The valid values for this data element are identified in Table 3 of the EC. If the activity code is blank, the corresponding data will be placed in a CW Phase called "Unassigned" in OFA. Budget items with an "Unassigned" CW Phase will not be considered for funding in FY12. O&M multipurpose hydropower projects (CW Type of Funds 96 3123 300) which are assigned a Phase code of "OJ" (Operation Joint Activities) or "MJ" (Maintenance Joint Activities) will appear in OFA under the Hydropower business line.

(h) **CW Type of Funds.** Every resourced activity in PM needs to have a valid Type of Funds (Approp Dept / Approp Symbol / Category-Class-Subclass (CCS)) code assigned at either the WBS or activity (override) levels for interfacing to CEFMS and proper OFA functionality and reporting. Do not assign a CW Type of Funds value which only identifies the Appropriation Dept and Symbol, but only choose values which include the CCS as well.

(i) **OFA Performance Measure Data Entry Forms.** The PBS module of OFA provides Performance Measure data entry forms which allow for submission of budget data. There is a separate data entry form for each business line. The data requirements for each business line are detailed in the business line appendices. For each budget item (row) in OFA, the PY Federal Corps (and PY Inland Waterway Trust Fund, if applicable) funding request amount will need to be entered, along with performance indicators applicable to the business line, as well as the MSC rank for the budget item. MSC ranking is required across business lines. Each budget item should receive a unique ranking, beginning with rank '1', and incrementing by 1. For detailed

documentation and instructions on the use of these forms, refer to the “Update PY Budget and Enter Performance Measures in OFA” and “OFA Nightly Update Process” sections in the PBS Training Workbook document. Note that budget items brought into OFA from PM may be revised as needed, including deletion and insertion of budget items. These revisions may be accomplished directly within OFA or by pasting from Excel into the OFA data entry forms. Data entered in OFA will not be overwritten by the PM-to-OFA nightly load process.

(j) **Level of Detail and Budget-Item-ID.** Each record (or row) of budget and performance measure data in the OFA data entry forms will be identified in detail by seven key fields - Business Line, EROC, Type of Funds, P2 Project, Funding Increment, Phase, and Budget Item ID. The Budget Item ID field is used to break-out budget items to an appropriate level of detail. Refer to the business line appendices to determine at what level of detail to enter the individual budget items for each project and study. An activity code named “CW Budget Aggregation Override” is available in PM which can be used to force an activity in PM to load into OFA as an individual item without aggregation by setting the activity code to “Yes”. Setting this activity code to “Yes” is optional, and only needs to be done to override the default aggregation rules detailed below. By default, the PM-to-OFA nightly load process derives Budget Item ID’s based on the following business rules:

- **EM, EN Restoration, FRM, Navigation, FUSRAP, and CAP** - If the Resource Type is CONSTSVCS (Construction Contract), or if the “CW Budget Aggregation Override” activity code is “Yes”, then the Budget Item ID will represent the Activity Number. In all other cases, the Budget Item ID will be “NCS” (Non-Construction Services).
- **EN Stewardship and Recreation** - The Budget Item ID will represent the Best ID assigned at the resourced activity level in PM. If there is not a BEST ID assigned, the Budget Item ID will be “UNK” (Unknown).
- **Hydropower (Increments 1, 2, and 2.5)** – If the Resource Type is CONSTSVCS, or if the “CW Budget Aggregation Override” activity code is “Yes”, the Budget Item ID will represent the Activity Number. Otherwise, the Budget Item ID will represent the Work Category Code assigned at the resourced activity level in PM. If there is not a Work Category Code assigned, the Budget Item ID will be “NCS”.
- **Hydropower (Increment 5)** – If the “CW Budget Aggregation Override” activity code is “Yes”, the Budget Item ID will represent the Activity Number. Otherwise, the Budget Item ID will represent the Work Category Code assigned at the resourced activity level in PM. If there is not a Work Category Code assigned, the Budget Item ID will be “NCS”.
- **Hydropower (Increments other than 1, 2, 2.5, and 5) and Water Supply** – The Budget Item ID will represent the Activity Number. Thus, each activity is brought into OFA individually.

(k) The sum of all PY requested amounts in OFA for all budget items within a project should represent the project's obligation capability.

(l) **Activity Rankings.** Each activity in PM may have a rank number assigned to it, and duplicate ranks are allowed. Activity rankings will be used to determine the relative priority of activities within a project, district, and MSC. However, the MSC rank that is added in OFA will be the primary ordering rank used within the budget. Therefore, the activity ranks in PM are optional and will not transfer into OFA.

(m) **Joint Activities.** Refer to paragraph C-2.3.b in Annex C for instructions concerning “JOINT” activities.

(n) **Program Codes.** The Program Code identifies the AMSCO/CWIS/PWI associated with a P2 project. A Program Code must be assigned to every CW P2 project for which funds are requested. The Program Code is a project level code which is entered in Oracle Projects (OP). Refer to Appendix N in the most recent Execution EC for further guidance concerning Program Codes.

(o) **Multi-Year Funding Streams.** OFA also provides a data entry form named “PBS Multi-Year Funding Stream DEF” which is used to enter funding streams by FY, Project, Business Line, Type of Funds, Work/Financial Category (Federal, Inland Waterway Trust Fund), Phase, and Funding Level. Refer to the “Prepare Multi-Year Funding Streams in OFA” section of the PBS Training Workbook document for detailed instructions on using the data entry form. Also refer to paragraphs 9 and 15 of this EC for further information on data requirements.

(2) **ITIPS.** Instructions for input to the ITIPS database were provided by CECI-TR in the latest ITIPS User's Manual, accessible at:  
<https://kme.usace.army.mil/ci/CIOrganization/IMITPortfolioProgram/Pages/ITIPS.aspx>  
These instructions cover input of automation requirements, discussed in Annex F. This database remains open; but input is required by the date shown under “Automation Program” in Table 2.

(3) **Rec-BEST.** A web-based tool has been developed for field use in calculating Recreation performance measures for O&M activities. Rec-BEST **MUST** be used to develop performance measures for Recreation O&M and MR&T budget packages for PY. Rec-BEST may be accessed at:  
<http://corpslakes.usace.army.mil/employees/recbest/recbest.html> along with directions for its use. See Appendix VI for further information concerning Rec-BEST.

(4) **E-S BEST.** A web-based tool has been developed for field use in calculating Environmental Stewardship performance measures for O&M activities. E-S BEST **MUST** be used to rank PY Environmental Stewardship O&M and MR&T budget packages. E-S BEST maybe accessed at <http://corpslakes.usace.army.mil/employees/esbest/esbest.html>. See Appendix II for further information concerning E-S BEST.

d. **E-mail and FTP Data.**

(1) **Justification Statements and Books.**

(a) **General.** Complete your updates of illustrations A-2.1 through A-2.4, B-4.2, C-2.1, C-5.3a through 5.3b of Annexes A – C by dates specified in Table 2.

(b) Use 10-point regular Arial font, automatic line height, line spacing of 1, and margins of 1" top and bottom, and 0.5" both sides. (In "File," "Page Setup," "Margins," set bottom margin at 1.5" and footer margin at 1.0" from bottom edge of page. This provides a 0.5" footer height for printing the footer and page number.) Do not number pages.

(c) Develop project completion schedules consistent with the President's budget funding amounts. The PM data will be queried to obtain schedules for the report formerly provided by the PB-2As. These schedules will be provided to the Appropriations Committees for the record. Do not show future advanced appropriations in the summarized financial data on your justification sheets. Prepare the summarized financial data in accordance with the examples in Illustration B-2.4 of Annex B.

(d) Submit justification statements, as completed, via e-mail to your RIT, as appropriate, for review. Coordinate e-mailing logistics with your RIT, beforehand.

(e) Justification Materials for Studies, PED, and Construction Projects Submission. Draft justification materials are to be provided for all studies, PEDs, projects that were not in PY-1 (FY10) budget and are proposed for inclusion in the Army's recommendations to OMB. See Table 2 for the due date for these draft materials. Justification materials for new work are due earlier than justification material for other work.

(f) **Revised Submission.** Between the times of the initial and Congressional submissions, revised submissions may be required for various reasons, including changes in funding for PY-1 affected by appropriations. Submit these as specifically requested.

(g) **Congressional Submission.** The ultimate product of the justification development process is the justification book for Congress - one volume of justification material for each MSC. Each division is responsible for developing its own data using whatever software it chooses, such as computer-aided design (CAD), and Microsoft Word and Excel software. However, ultimately, each division must convert its book to an Adobe Acrobat file for efficient electronic transmission and publication. In order to ensure that your book will "present" in the Adobe Acrobat file as it does in the development software file, you must select the Adobe Acrobat printer in the development software before finalizing your product in that software. For example, to ensure that what you see in Word is what you get in Adobe Acrobat, you must select "File," "Print," "Printer," "Acrobat PDFWriter" in Word before finalizing in Word. Doing this first of all will spare you untold lost time and frustration. Of course, if you want to print your finalized file at a local printer, simply select the printer and print, but do not modify the file while the local printer is selected.

EC 11-2-199  
31 Mar 10

(h) Prepare a table of contents list studies and projects alphabetically by Business Line by Account. Include page numbers. On each page of the document and maps, show the date of Army's press conference (to be provided later) centered in the bottom margin, 1" from its bottom edge. Preparation of status maps format and instructions are referenced in ER -11-2-240, Appendix C (Project Status Maps). Maps format must be in accordance with the regulation.

(i) Justification documents for Replacement projects are required for C projects, including justification statements and status maps. Justification documents for Rehabilitation are required for O&M. For rehabilitation of inland waterways locks and dams and associated structures, show half of funding from the Inland Waterway Trust Fund.

(j) For other O&M projects, show funding for "operations" and "maintenance" work separately. Copy PY funding for these parts from guidance to be provided later, ensuring that the total of amounts copied matches your division's total. Update individual project amounts to reflect your latest projection of PY-1 obligations. Round all funding amounts to the nearest \$K. Add the following statement (less quotation marks) after the introductory paragraph for each category, as applicable:

"For recreation areas, part of the requested amount will be offset by a transfer from the Special Recreation Use Fees Special Fund (SRUF)"

(k) Include rehabilitation requirements for projects as part of single line item entries on the justification of estimate statements with the following remark (less quotation marks) under "Reason for Change and Major Maintenance Items:"

"Includes Rehabilitation at \$XXX. See justification following this table."

(l) Identify States for each of the following items: Scheduling Reservoir Operations, Inspection of Completed Works, Project Condition Surveys, and Surveillance of Northern Boundary Waters. Refer to Annex C.

(m) Submit these as specifically requested later. Submit final versions, printed front to back and collated into a single book (with a cover like last year's, including the disclosure statement, and paginated and dated table of contents, budget summary, and status maps, as applicable) in a single Adobe Acrobat file.

(2) **Other.** The Continuing Authority Program is assigned to Annex G. The Homeland Security/ Emergency Management Business Line Manager (BLM) will provide instructions to cover FC&CE activities of former Annex D, requiring input by e-mail or FTP directly to that office by dates specified in Table 2.

(a) **Hardcopy Data.** Provide hardcopy items required (e. g., certifications, etc.) by dates specified in Table 2.

(b) **Document Marking.** All submissions required by this EC are not to be released outside the Department of the Army. See reference 3.e.(7), ER 11-2-240, "Civil Works Activities - Construction & Design," for instructions regarding the marking of documents for restricted distribution.

**15. Balance-to-Complete Report.** Districts will utilize the OFA "PBS Multi-Year Funding Stream" data entry form to ensure that the funding required beyond the PY to complete all active, inactive, and deferred PED and construction projects is accurately entered by the date shown under "Main Part" in Table 2. Records for all PED and construction projects must include total estimated federal costs. Give special attention to active status PED and construction projects, as they are the subject of periodic Congressional questions on project balances-to-complete.

**16. Certifications of Compliance.** You must submit, to CECW-ID, at least two, and possibly four, certifications that your program submission complies with laws and an Executive Order. The two certifications always required include one by district commanders regarding compliance with an Executive Order on data sharing, and one by the MSC directors of programs management regarding compliance with law on use of management controls. The other two possibly required are both by district commanders - both regarding compliance with coastal barrier laws. Each certification is discussed below.

a. **Executive Order on Geospatial Data.** Reference 3.e.(12), ER 1110-1-8156, "Policies, Guidance, and Requirements for Geospatial Data and Systems," and EM 1110-1-2909, "Geospatial Data and Systems," assist USACE in protecting its investment in geospatial data and systems and in complying with Executive Order 12906, "Coordinating Geographic Data Acquisition and Access - The National Spatial Data Infrastructure." USACE collects a variety of geospatial data to produce products such as river and harbor maps, charts, and drawings; real estate maps; environmental and economic studies; and engineering studies and drawings. Paragraph 7.g(4) of the ER explains that, beginning with the FY97 Civil Works program cycle, each district commander will submit a certification, modeled after Illustration 2, certifying that his command has documented new geospatial data that it has created and made this documentation (metadata) available via the National Geospatial Data Clearinghouse on the Internet. The certification is due by the date shown under "Main Part" in Table 2.

b. **Coastal Barrier Laws.** OMB's Circular A-11, Section 12.5(s) states that estimates must not include any new federal expenditures or financial assistance prohibited by the "Coastal Barrier Resources Act" (CBRA), PL 97-348. In addition, the "Coastal Barrier Improvement Act of 1990," PL 101-591, amending CBRA, requires that the Corps certify annually to Congress and the Secretary of Interior that it was in compliance with the provisions of CBRA, as amended, during the previous fiscal year. Therefore, each District Commander whose district includes areas covered by the Coastal Barrier Resources System will submit two certifications - one modeled after each Illustration 3A and 3B certifying, respectively, that his program request is in compliance with these laws and that no funds were obligated in the past fiscal year (PY-2) for

EC 11-2-199  
31 Mar 10

purposes prohibited by them. Note that PL 101-591 added new units to the Coastal Barrier Resources System. The certifications are due by dates shown under Main Part in Table 2.

c. **Management Control Law.** Federal agencies are required by law to establish "management controls" for the activities they manage, and to provide assessments of their effectiveness to the President and Congress, annually. To this end, functional proponents identify requirements for compliance with law, including safeguarding assets, ensuring adequate records, and promoting efficiency and effectiveness of program accomplishment, and reflect them in checklists. Army's management control effort, implemented by AR 11-2, "Management Control," specifically includes the Civil Works Program. The new management control checklist for Civil Works Program Development is provided as Illustration 4. This is for use by programs management organizations in MSCs and districts, as explained below:

(1) Use the checklist during development of your program submission. District commands will use it first; then MSCs, when reviewing and modifying district submissions.

(2) A "no" response to a checklist question suggests a potential management weakness. However, if it is the result of a special case or specific exception, then probably there is no management weakness. You are the judge. If you determine that a weakness exists, you must correct it as quickly as resources and essential mission priorities permit. No upward reporting is required.

(3) If a management weakness requires the attention or awareness of the next higher level of management, it is a "*material weakness*." This is a judgment call on the relative seriousness of the problem. It is made at each progressive echelon, based on each manager's professional judgment. Material weaknesses discovered by districts are reported to the MSCs, which determine whether to report them to CECW-BD. The reports must specify corrective actions taken or planned. The highest echelon receiving the report will evaluate the corrective actions, provide assistance, if needed, and track progress. Consult AR 11-2 for help in determining whether a weakness is "material."

(4) Do not send checklists to HQUSACE. Each MSC director of programs management will submit a certification, modeled after Illustration 5, certifying that the checklist was used by the districts, as applicable, and MSC. The certification is due by the date shown in Table 2, and should be submitted to CECW-IN.

17. **Coordination.** The CECW staff will work closely with MSC office staffs throughout the program development process to assure that the CECW recommended program, as well as alternative programs, are thoroughly coordinated. Coordination will continue after receipt of

OMB's passback and during development of Army's proposed appeal. The out-year program will be revised, as necessary, to reflect resolution of the passback appeal and final President's Program.

FOR THE COMMANDER:



STEVEN L. STOCKTON, P.E.  
Director of Civil Works

8 Appendices (See Table of Contents)  
7 Annexes (See Table of Contents)

## DEFINITIONS/GLOSSARY SECTION

### INCREMENTS:

**Work Increment:** A work increment is a discrete amount of work identified by an activity or a set of activities with specific resource requirements and a schedule.

**Activity:** A component of work performed during the course of a project. An activity could be a process (e.g. collection of data) or lead to a deliverable (write a report). Activities are the building blocks of the P2 system – they have assigned durations, resources, and relationships.

### **Investigation Increments (for studies, and pre-construction engineering and design of specifically authorized and MR&T investigations):**

**Increment 1:** This increment will include only the minimum continuing and new study activities and the total request is limited to the budget amount for PY-1, by study. Do not include new PED or study phases. If a study is ready for changing phases or is no longer likely to produce a high performing project, then the Increment 1 level for that study will be zero. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 2:** New phases of studies previously budgeted may be initiated in this increment. Studies that do not have an Increment 1 may reflect the study activities in Increment 2. Studies that have a high probability of recommending a project with high value output may include additional activities in this increment that will provide improvement to the study completion compared to the items submitted in increment 1. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 3:** This increment will include the activities needed to sustain (not fall behind/not accelerate) the study schedule included in the PMP. New starts and resumptions may be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 4:** This increment includes additional capability activities that can be supported by cost sharing sponsor and Corps resources. This increment can be viewed as enhancing (or advancing) the study schedule at a faster pace than shown in the PMP. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increments 5-8:** Not used.

**Increment 9:** Place unbudgetable studies.

**Construction Increments.** All contracts will be fully funded if the estimated contract total (total of both federal and non-federal shares) is \$20M or less. For all contracts that are proposed for full funding, the total estimated amount for EDC and S&A will be included with the contract. Each contract included in any increment must be shown separately to allow individual funding decisions based on the performance metrics and must be shown in priority order by District and MSC Rank. This section includes: specifically authorized projects, MR&T construction, dam safety projects, deficiency corrections projects and dam safety, seepage, static instability studies.

**Increment 1:** This increment will include only the minimum project activities budgeted in, and continuing from, PY-1. Only true continuing contract needs, and the Engineering and Design during Construction (EDC) and Supervision and Administration (S&A) of contracts fully funded in PY-1 and before may be included in this increment. Do not include any continuing incrementally funded contract requirements. Do not include new contracts, options, or funding for the engineering and design activities for new contracts. Only mandatory real estate activities for required project lands, easements and right-of-ways may be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 2:** This increment will include continuing incrementally funded contract requirements for ongoing projects, new contracts, engineering and design for future contracts or other activities (show each separately), and EDC and S&A for new contracts awarded in PY. Real estate activities for required project lands, easements and right-of-ways may be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 3:** This increment will include activities and contracts needed to sustain (not fall behind but not accelerate) the efficient project schedule based on the PMP. This increment may include projects that do not qualify for increment 2, and may include continuing incrementally funded contract requirements, new contracts, engineering and design for future contracts or other activities (show each significant activity separately), and EDC and S&A for new contracts awarded in PY. Real estate activities for required project lands, easements and right-of-ways may be included. New starts and resumptions may be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 4:** This increment will include additional capability activities that can be supported by the cost sharing sponsor and Corps resources and will advance the project schedule at a faster pace than shown in the PMP. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increments 5-7:** Not used.

**Increment 8:** This increment will include projects that are consistent with Administration policy but are unbudgetable due to the decision document not yet being cleared by the Administration.

EC 11-2-199  
31 Mar 10

**Increment 9:** This increment will include unbudgetable projects that are inconsistent with Administration policy, such as environmental infrastructure.

**Continuing Authority Program Increments:**

**Increment 1:** This increment includes: continuing or new items for phases that were budgeted in PY-1; Excluded are: new phases and items requiring initiation of new phases; items for projects that have been terminated, completed, funded for completion, or which are no longer likely to produce an eligible project; and unbudgetable activities. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 2:** This increment includes: items for previously funded phases; Excluded are: new phases and items requiring initiation of new phases and unbudgetable items. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 3:** This increment include item for continuing or new phases to sustain the efficient PMP project schedule. Excluded are items which advance the efficient project schedule and unbudgetable activities. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increments 4-8:** This increment includes additional capability for continuing or new phases to enhance or advance the PMP project schedule. Excluded are unbudgetable activities. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 9:** This increment includes unbudgetable activities. Excluded are budgetable activities. Remarks should provide a clear explanation of why the item is not budgetable.

**Operation and Maintenance Increments (includes O&M General and MR&T O&M):**

The philosophy is to use increment 1 as the minimum level to account for critical routine operation and maintenance activities and to use increment 2 to account for critical non-routine activities on projects. The total of Increment 1 plus Increment 2 represents the minimal program and is limited to the amount in Table C-2-3 by MSC based on 75% of prior five fiscal year Budgets.

The total of Increments 1, 2 and 3 represents no more than 100% of the amount in **Table C 2.2** by MSC.

New starts are not applicable to the O&M Program.

**Increment 1:** Only critical routine activities can be included in this increment. Critical cyclical routine activities may be included in Increment 1. Routine activities are those that have been conducted every year for at least the last five years, for example the operation of a powerhouse or are required to meet legal mandates, environmental (ESA/Biological Opinion) requirements, authorized mitigation requirements, and historic preservation. Cyclic activities are those that are required on a regular basis, but not each year. An example of a cyclic routine activity would be projects where dredging is needed on a regular recurring basis, but not every year, e.g. dredging is needed only every two years. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 2:** Only critical non-routine activities may be included in this increment. Critical non-routine activities are those that must be accomplished to insure project safety, and critical maintenance actions that are required to keep the project operating and delivering benefits. Non-routine activities are actions that are “project like” in that they are a unique action with a specific beginning and end. Examples of non-routine actions would be the replacement of a potable water well, or paving a project access road. This increment **includes** major maintenance **and** rehabilitation. Each non-routine activity must be shown separately to allow individual funding decisions based on the performance metrics and must be shown in priority order by District and MSC Rank. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 3:** This increment includes critical operation and maintenance activities, both routine and non-routine, for the 25% above the minimal program level, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project. Preparation of reports for Major maintenance (MM) and rehabilitation (MR) can be included in this increment. MM and MR activities must have approved reports before they can be included for implementation. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 4:** This increment includes operation and maintenance activities, both routine and non-routine, above the 100% level of the Table C 2.2 level by MSC, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project. In most cases, activities in this increment will support continuing the level of service that customers, stakeholders, and others have come to expect and depend-on for sustaining public safety and economic, environmental and social benefits. Multiple Increment 4 activities should be submitted that reflect the logical pieces of routine or non-routine activities beyond the 5 year

EC 11-2-199  
31 Mar 10

average limit. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 5:** Activities that have a high expected return on investment that enable greater levels of performance in future years should be included in this enhanced or capability Increment. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

### **FUSRAP Increments:**

#### **Investigations/Study Increments:**

**Increment 1:** This increment will include only the minimum continuing study activities, which include all CERCLA study processes. The total request is limited to the budget amount for PY-1, by study. Do not include new studies. Increment must be performance based with high outputs and consistent with ranking. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 2:** This increment will include the activities needed to sustain (not fall behind/not accelerate) the study schedule included in the PMP. The total of the activities included in this level is not limited by the PY-1 budget. New starts may not be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 3:** This increment includes additional capability activities that can be supported by Corps resources. This increment can be viewed as enhancing the project schedule. Increment must be performance based with high outputs and consistent with ranking. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 4:** Place new start studies in Increment 4, for example a new Site Inspection at a new site. Increment must be performance based with high outputs and consistent with ranking. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increments 5 – 8:** Not used.

**Increment 9:** Place unbudgetable studies for potential sites in Increment 9.

### **Implementation (Construction) phase Increments:**

**Increment 1:** This increment will include only the minimum implementation processes continuing from PY-1 and is limited to no more than the budget amount for PY-1, by project.

Engineering and Design during Construction (EDC) and Supervision and Administration (S&A), of contracts fully funded in PY-1 and before may be included in this increment. Real estate activities for required project lands, easements and right-of-ways may be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 2:** This increment will include the activities needed to sustain (not fall behind/not accelerate) the efficient project schedule based on the PMP. The total of the activities included in this level is not limited by the PY-1 budget. Multiple contracts should be submitted as separate increment requests and shown in priority order by District and MSC Rank. New starts may not be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 3:** This increment includes additional capability activities that can be supported by Corps resources. This increment can be viewed as enhancing the project schedule. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increment 4:** Place new start projects with decision documents (such as, a signed ROD) cleared by the HQUSACE in Increment 4. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**Increments 5-9:** Not used.

## **CONTRACTS**

**Continuing Contracts:** For all contracts using a continuing contract clause or an incrementally funded contract clause, the amount estimated for PY-2 (FY10) contractor activities and reserved to the contract must not exceed the amount provided for the project in PY-2 appropriations, plus any carryover for that project, and any amounts approved for reprogramming to the project. All funds to be reserved must be available for the project prior to bid opening.

**Incremental Contracts:** The use of incremental contracts (i.e., contracts using the incrementally funded clause (EFARS 52.232-5004 or DFARS 252.232-7007), must be done carefully and judiciously as part of the acquisition planning process.. The incremental funding clause may be used for projects that do not have funding in the budget for the out years. The incrementally funded contract scope of work to be funded with PY-2 (FY10) funds must produce a useful increment of work (i.e. increment of work that produces benefits or outputs, and will remain in a safe condition) or navigation reach that will not rely upon additional out year funding to implement. So long as the scope of work to be funded in with PY-2 funds will complete a useful increment of work or navigation reach that does not rely upon additional out year funds to implement, use of the incremental funding clause can be approved by the District Commander. However, the ASA(CW) must approve the use of any incrementally funded contract that does

EC 11-2-199  
31 Mar 10

not complete a useful increment of work or navigation reach with funds available to the contract in PY-2 in advance of solicitation.

**Major Maintenance:** Any Operation and Maintenance work item costing \$3M or more that is not an element of rehabilitation.

**Programmed:** Any part of project that is not unprogrammed.

**Project Partnership Agreement/Partnership Agreement:** Reference WRDA 2007 H.R. 110-280 WRDA 2007 Conference Report, Section 2003 “REFERENCES TO COOPERATION AGREEMENTS”. - Any reference in a law, regulation, document, or other paper of the United States to a “cooperation agreement” or “project cooperation agreement” shall be deemed to be a reference to a “partnership agreement” or a project partnership agreement,” (PPA), respectively.

**Ranking:** Activity rankings will be used to determine the relative priority of activities within a project, district, and MSC.

**Rounding:** All cost estimates shall be rounded to the nearest one thousand dollar (\$1000).

### COMMON DATA FIELD IN ALL Business Lines

1. BUSINESS LINE = Abbreviation for Business Line, such as ENR.
2. EROC = Two character code for district, such as B1 for Memphis District.
3. MSC = Three letter abbreviation for the MSC, such as MVD. This is a display-only field which is auto-populated based on the EROC. Data entry is not required.
4. DISTRICT = Three letter abbreviation for district, such as NWK. This is a display-only field which is auto-populated based on the EROC. Data entry is not required.
5. APPROP ABBREV = An abbreviation for the Appropriation Account. The abbreviations are: I (Investigations), C (Construction), OM (O&M), MRT-I (MR&T Investigations), MRT-C (MR&T Construction), MRT-OM (MR&T O&M), FCCE, and FUSRAP. This is a display-only field which is auto-populated based on the CW TYPE OF FUNDS. Data entry is not required.
6. CW TYPE OF FUNDS = An 11 character code that combines the numeric Appropriation Account codes with the numeric Category-Class-Subclass (CCS) codes. Appropriation Account codes (characters 1-7) are Investigations (96 3121), Construction (96 3122), Operations and Maintenance (96 3123), Mississippi River and Tributaries (96 3112), FCCE (96 3125), and FUSRAP (96 3130). These are followed by a space (character 8) and then the three digit CCS code (characters 9-11) which can be found in Table 3.
7. PROGRAM CODE = A code which identifies the AMSCO/CWIS/PWI associated with a P2 project. A Program Code must be assigned to every CW P2 project for which funds are requested. The Program Code is a project level code which is entered in Oracle Projects (OP). Refer to Appendix N in the most recent Execution EC for further guidance concerning Program Codes.
8. PRIMARY FEATURE CODE – Required for all Operation & Maintenance work packages associated with real property assets (buildings, structures and land). The Feature Code is as it relates to the predominant asset category as defined below. A Feature Code number in 8.b. below will be selected and entered into OFA.

8a. *Feature Code Defined* – “Features” are the permanent project constructed features and their “Codes” are the two digit account numbers found in Appendix A, Chapter 14 of ER 37-1-30, “Financial Administration: Accounting and Reporting.” (NOTE: Chapter 14 of the current version of the ER is focused on “Financial Reporting and Accounting Treatment for Multiple - Purpose Projects with Power” and is not all inclusive of valid asset category permanent features representative of all Corps water resource projects. Therefore, for asset management purposes, the Feature Codes in ER 37-1-30 have been supplemented as noted in this change document below in italics. They are derived from previous versions of the Finance and Accounting regulation, specifically ER 37-2-10.)

8b. Applicable Feature Codes (enter two-digit number only)

- 01 – Land
- 02 – N/A
- 03 - Reservoirs
- 04 - Dams
- 05 - Locks
- 06 - Fish and Wildlife
- 07 - Power Plants

EC 11-2-199  
31 Mar 10

- 08 - Roads, Railroads and Bridges
- 09 - Channels and Canals
- 10 - *Breakwaters and Seawalls*
- 11 -- Levees and Floodwalls
- 12 - *Navigation Ports and Harbors*
- 13 - Pumping Plants
- 14 - Recreation
- 15 - *Floodway Control and Diversion Structures*
- 16 - *Bank Stabilization*
- 17 - *Beach Replenishment*
- 18 - *Cultural Resource Preservation*
- 19 - Buildings, grounds and utilities
- 20 – Permanent Operating Equipment

8c. *Narrative definitions of Feature Code asset categories* -- The current ER lists “sub-features” (or “plant items”) associated with each Feature and is not all inclusive as mentioned above. For ease of understanding for the purposes of this EC, the narratives from the prior ER (ER 37-2-10 [<http://140.194.76.129/publications/eng-regs/er37-2-10/ch08.pdf>]) are provided below:

**01. Land.** While the referenced ER is focused on the "acquisition" of land, for the purposes of Asset Management and this requirement that definition to limiting. Land will be defined as "any work to be performed on the land." This addition for FY12 completes the entire portfolio of assets: buildings, structures and now land.

**03. Reservoirs.** This feature includes clearing lands in reservoirs of debris, brush, trees, improvements and structures. Also includes the sale of salvage obtained by sale or disposal of material in clearing operations. Also includes bank stabilization, shoreline improvement, fire breaks, fencing, boundary line surveys and improvement, fencing, boundary line surveys and marking of land which has been acquired or is to be acquired, rehabilitation of natural resource, erosion control, drainage and rim grouting and mine sealing etc., to prevent leakage.

**04. Dams and Other Water Collecting Facilities.** This feature includes the cost of all dams and other water collecting facilities, whether man made or natural, together with appurtenant water diversion, regulation, and delivery facilities.

**05. Locks** This feature includes facilities to provide for passage of waterborne traffic, including gates, valves, operating mechanisms, cribs, fills, lock walls, guide and guard walls, and operating buildings.

**06. Fish and Wildlife Facilities.** This feature includes items such as ladders, elevators, locks and related facilities for passage of fish at dams and navigation locks and maintenance of fish runs; and provision for wildlife preservation.

**07. Power Plant.** This feature includes those facilities specifically required for the production of power other than those included in the feature “Dams,” and consists of the following: powerhouse, turbines, and governors, generators, accessory electrical equipment, miscellaneous power plant equipment, switchyard, and tailrace improvement for power. In the case where the powerhouse is an integral part of the power intake dam, the cost of the power intake dam is included in this feature. Where the structure of a dam also forms the foundation of the powerhouse, such foundation is considered a part of the dam. The cost of a cofferdam or the

appropriate part thereof is charged to this feature. Units for production of power for the operation only of navigation, flood control, or other purpose projects (excluding those projects with power as a feature) are included in other features as appropriate.

**08. Roads, Railroads and Bridges.** This feature includes permanent roads, railroads, and bridges required for access and other purposes in connection with the construction and operation of the project. This feature does not include access roads to recreation facilities and areas, which will be charged to the feature "Recreation Facilities," and service roads and service railroads on structures, which will be charged to the appropriate feature for the structure.

**09. Channels and Canals.** This feature includes all forms of excavation (including dredging, preparation of spoil disposal areas, and attendant facilities) necessary for the development and construction of channels, or improving existing watercourses for flood control and major drainage. Excavation of natural watercourses to provide adequate depths for navigation is Included. Excavation for specific structures, such as dams and locks used in the development of waterways and conservation of water resources, is Included with such structures. The removal of trees, brush, accumulated snags, drift, debris, water hyacinths and other aquatic growths from canals, harbors, and channels in navigable streams and tributaries thereof for navigation is included in this feature. Excavation, clearing and removal of accumulated snags, drifts, debris, and vegetable growth from streams for flood control and major drainage purposes also is included. Included in this feature are revetments, linings, dikes, and bulkheads constructed as channel improvement works for flood control or navigation, as against such items constructed for bank stabilization only. Also included are jetties constructed in connection with flood control channel improvements.

**10. Breakwaters and Seawalls.** This feature includes breakwaters, seawalls, piers, and like improvements constructed in connection with the protection of beaches, harbors, shores, and port facilities against the force of waves and encroachment of seas or lakes by direct wave action. Jetties, groins, and like structures provided in seas, lakes, tidewater reaches of rivers and canals, and harbors to control water flow and current, to maintain depth of channels, and to provide protection are included in this feature.

**11. Levees and Floodwalls and Floodproofing.** This feature includes embankments and walls constructed to protect areas from inundation by overflow from creeks, rivers, lakes, canals, and other bodies of water. This feature consists of such items as: service roads on levee crown or landside berms, road ramps, closure structures, seepage control measures, erosion protection measures on levee slopes and on berms and bank slopes when an integral part of the levees or floodwalls; and drainage facilities, constructed to provide means for the passage of accumulated drainage and seepage water and sewage from the protected area over or through levees and floodwalls, comprising such items as interceptor and collection sewers and ditches, and pressurized sewers and drainage structures, including outfalls through levees of floodwalls. Levees locally called dikes are included in this feature. Floodproofing includes construction activities associated with raising the buildings in the flood zone. Pumping plants are included in the feature "Pumping Plants."

**12. Navigation Ports and Harbors.** (no description available, derived from previous F&A ER)  
12100 BULKHEADS, JETTIES, PIERS, DOCKS, SPOIL DISPOSAL AREA  
ATTENDANT FACILITIES, ETC.  
12200 REVETMENTS AND LININGS  
12300 EXCAVATION/DREDGING OF NAVIGATION PORTS AND HARBORS  
12400 REMOVAL OF TREES, BRUSH, ACCUMULATED SNAGS, DRIFT,

EC 11-2-199  
31 Mar 10

AQUATIC AND VEGETABLE GROWTHS AND DEBRIS  
12900 ALL OTHER

**13. Pumping Plants.** This feature includes pumping plants constructed to pass accumulated drainage and seepage water and sewage from the protected area over or through levees and floodwalls.

**14. Recreation Facilities.** This feature includes access roads; parking areas; public camping and picnicking areas, including tables and fireplaces; water supply; sanitary facilities; boat launching ramps; directional signs; and other facilities constructed primarily for public recreational use, including essential safety measures in connection therewith. The latter includes, as appropriate, sheltered anchorage areas for small craft, bathing areas readily accessible and reasonably safe, and safety provisions for visitors and fishermen in the project area.

**15. Floodway Control and Diversion Structures.** This feature included floodway control and diversion structures to provide for the release of flood waters from streams where discharges exceed flood capacity of the stream, including such items as diversion dams, gated or ungated discharge structures, training walls, stilling basin, and those adjacent embankment sections forming part of the control structure. Construction of channels and levees not forming part of the main control structure, but necessary for operation of such structures is included in the appropriate feature "Channels and Canals" or "Levees and Floodwalls."

**16. Bank Stabilization.** This feature includes revetments, linings, training dikes, and bulkheads for stabilization of banks and watercourse to prevent erosion, sloughing, or meandering. Bank stabilization constructed in navigation channels or in connection with flood control channel improvement is included in the feature "Channels and Canals."

**17. Beach Replenishment.** This feature includes replacement of eroded beaches, for purposes of recreation and shore protection, by direct deposit of materials obtained by dredging or land excavation.

**18. Cultural Resources Preservation.** This feature pertains to the preservation, recovery, or other mitigation of significant scientific, prehistorical, historical, or archaeological data, buildings, sites, districts, structures, or objects. This feature covers costs during construction and includes excavation, preparation of areas, recovery of data, movement of artifacts, relics and objects of antiquity, analysis of data and preparation of reports thereon, and construction of cultural facilities.

**19. Buildings, Grounds and Utilities.** This feature includes permanent facilities such as operators quarters, administration and shop buildings, storage buildings and areas, garage buildings and areas, community buildings, local streets and sidewalks, landscaping, and electric, gas, water, and sewage facilities. Where space in a dam, powerhouse, or other basic structure is used in lieu of construction of any of the above-mentioned buildings, such allocated space is not separated from the basic structure.

**20. Permanent Operating Equipment.** This feature includes all project-owned operation and maintenance tools and equipment, such as laboratory, shop, warehousing, communications, and transportation equipment, and office furniture and equipment.

8.d. Source(s) -- The current Feature Codes and list of "plant Items" associated with each Feature Code are identified in Chapter 14 of ER 37-1-30 which may be found on the HQ Resource

Management Sharepoint site at:

<https://kme.usace.army.mil/CoPs/ResourceManagement/FAPolicy/>

-> Documents

-> Finance and Accounting Policy Shared Documents

-> Finance and Accounting Regulations

-> ER 37-1-30 Financial Administration, Accounting and Reporting

-> Chapter 14, Accounting Treatment for Multiple Purpose  
Projects

Or direct link at:

<https://kme.usace.army.mil/CoPs/ResourceManagement/FAPolicy/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fCoPs%2fResourceManagement%2fFAPolicy%2fShared%20Documents%2fFinance%20and%20Accounting%20Regulations&FolderCTID=&View=%7b616308F6%2d8C68%2d4BD7%2d9EE1%2dC19B6105C213%7d>

Specific information on the supplemental Feature Codes (in *italics* above) are found in ER 37-2-10 [http://140.194.76.129/publications/eng-regs/er37-2-10/ch08.pdf] which was superseded by the previously referenced ER 37-1-30.

9. ADDITIONAL FEATURE CODE – Required for all Operation and Maintenance work packages associated with real property assets. List all of the additional Feature Code(s) that are secondarily supporting other feature code asset categories. As an example, a budget work package to construct a new “storage building” would have a “Primary” Feature Code of 19 but also have an “Additional” Feature Code of 14 if it is associated with a recreation area. Note, not all work packages will have an “additional” Feature Code, in fact the vast majority will not. A Feature Code number in 8.b. above will be selected and entered into OFA.

10. P2 PROJECT NUMBER = A six digit numeric code which identifies a project in P2. This code is system-generated when a project is initiated in Oracle Projects. In OFA it is a display-only data field.

11. BUDGET ITEM ID = A code to uniquely identify multiple entries within the same EROC, P2 Project, CW Type of Funds (Approp/CCS), Business Line, Increment, and Phase. See paragraph 14c.(1)(j) in the main EC for more information concerning Budget Item ID.

12. INCREMENT = Enter the appropriate number in accordance with the guidance in the Definitions/Glossary section in the main EC. Enter a “1” if the budget item meets the requirements for inclusion in the Initial increment as defined. Enter a “2” if the budgetable item should be considered for the second Increment, etc. Every project may not necessarily have a budget item in the first two Increments. A project may have multiple budget items in an increment.

13. DIST RANK = The budget item’s rank in the district’s request.

14. MSC RANK = The budget item’s rank in the MSC request.

15. HQ RANK = The budget item’s rank in the HQ request. HQ will complete this item. It is not available for District or MSC entry.

16. ARMY RANK = The budget item’s rank in the Army request. HQ will complete this item. It is not available for District or MSC entry.

EC 11-2-199  
31 Mar 10

17. PRESIDENT'S BUDGET RANK = The budget item's rank in the President's Budget Rank, will be entered by HQ after OMB Passback. It is not available for District or MSC entry.

18. PHASE = A letter code will be used to indicate phase. See Table 3 for a list of valid values. Note that Joint activities on multi-purpose hydropower projects (Cat-Class 300) will have a phase code of OJ or MJ as appropriate.

19. PHASE STATUS = Status of the Phase listed in column 16 will be indicated with a letter code. NP = New Phase; CN=Continuing; LY= Last year of phase. Only use LY if FY2012 is the last year for which funding will be requested for the phase (not for a contract). For Reconnaissance and Construction initiation, a new start should be coded as a New Phase in this column. If a study or a project is completing one phase and starting a new one in the PY (e.g. finish Feasibility and start PED), each should be a separate entry (one LY and one NP). If there are multiple budget items for one phase of a project (especially construction) this code may vary. Perhaps the first entry would be NP and the second one CN and the last one if funded would complete the phase and be LY.

20. PHASE COMPL = Required for all items in all accounts. Enter the fiscal year the phase for which funds are being requested is scheduled to complete. This is a 4-digit numeric field. The Reconnaissance phase ends with execution of a Feasibility Cost Sharing Agreement, or a report recommending no Federal action. For budget development, use the date of the Division Engineer's Transmittal of the report to HQ as the end of the Feasibility phase. The PED phase ends with completion of the first set of plans and specifications and execution of the PCA/PPA (project partnership agreement) . Construction completion is defined as physical completion with the project turned over to the non-Federal sponsor to operate and maintain. For items in the O&M account, enter the PY unless the requested funds are scheduled to be carried over.

21. PROGRAM NAME = Name associated with the Program Code which is entered in Oracle Projects. In OFA it is a display-only data field.

22. P2 PROJECT NAME = Name of the P2 project. The project name is entered in Oracle Projects. In OFA it is a display-only data field.

23. SYSTEMS CODE = The System Code is used to identify the primary system in which the project or study (Program Code) is located. See Table C-5.1 for a list of valid system codes. Required entry for all items.

24. BASIN CODE = The USGS Hydrologic Unit Codes (HUC) will be used to identify systems/watersheds. The four-digit code for the appropriate sub-region as defined by USGS will be entered for every budget item. These codes may be found at [http://water.usgs.gov/GIS/huc\\_name.html](http://water.usgs.gov/GIS/huc_name.html). Some programmatic elements may cover more than one sub-region. If there are separable elements enter the code that is appropriate for the separable element. If there are no separable elements enter the code applicable to most of the project or area where funding will be applied. Required entry for all items.

25. STATE = Enter the two letter abbreviation for the primary state in which the study or project (Program Code) is located.

26. CONTRACT TYPE = Required for all contract items in Construction and any contract with a remaining amount over \$20,000,000 in any phase. Enter one of the following: CC for continuing contract; CF for fully funded contract; CB for base contract with options; or CI for incrementally funded contract.

27. CURRENT BUD - FED = This is a display-only field which is auto-populated from the project's current schedule in Primavera / Oracle Projects. It displays the PY 'At Completion Cost' Federal (Corps) amount for the budget item.

28. CURRENT INFLATION ADJUSTED BUD - FED = No longer in use

29. BUDGET REQUEST - FED = The Federal (Corps) amount requested for the work proposed to be accomplished with this budget item in FY11. Enter the amount in whole dollars, rounded to the nearest thousand. Example: Five million four hundred thirty two thousand dollars should be entered as 5,432,000.

**TABLE 1**

**Cost Estimate Updating Table**



Table 1 Cost  
Estimate Update Rate

**TABLE 2**

**Summary of Submission Requirements**



Table 2 MAIN  
REPORT FINAL .xls

**TABLE 3**

**Codes**



Table 3 Codes  
FINAL.doc

ILLUSTRATION 1

DATE: \_\_\_\_\_

CERTIFICATION OF COMPLIANCE WITH SECTION 3(D) OF EXECUTIVE ORDER

12906

and SECTION 8.j of ER 1110-1-8156

I hereby certify that the PY program for the \_\_\_\_\_ (district, division, or laboratory name) Civil Works Program does not include an implicit or explicit request for funds to collect, produce, or acquire Geospatial data that is available through the National Geospatial Data Clearinghouse and that all possible data collection partnerships identified through the Clearinghouse were investigated. The \_\_\_\_\_ (district, division, or laboratory name) has also contributed metadata to the National Geospatial Data Clearinghouse in accordance with ER 1110-1-8156.

Colonel, Corps of Engineers

Commanding

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EC 11-2-199  
31 Mar 10

ILLUSTRATION 2A

DATE: \_\_\_\_\_

CERTIFICATION OF COMPLIANCE WITH COASTAL BARRIER RESOURCES ACT

I hereby certify that the PY program for the \_\_\_\_\_ (district name)  
District Civil Works Program does not include a request for funds which would result in any new  
federal expenditures or financial assistance prohibited by the Coastal Barrier Resources  
Act (PL 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591).

Colonel, Corps of Engineers  
Commanding

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ILLUSTRATION 2B

DATE: \_\_\_\_\_

CERTIFICATION OF COMPLIANCE WITH COASTAL BARRIER RESOURCES ACT

I hereby certify that no Civil Works Program funds were obligated in PY-2 by the  
\_\_\_\_\_ (district name) District for any new federal expenditures or  
financial assistance prohibited by the Coastal Barrier Resources Act (PL 97-348), as amended by  
the Coastal Barrier Improvement Act of 1990 (PL 101-591).

Colonel, Corps of Engineers  
Commanding

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ILLUSTRATION 3

MANAGEMENT CONTROL EVALUATION CHECKLIST

**FUNCTION.** The function covered by this checklist is Civil Works Program Development.

**PURPOSE.** The purpose of this checklist is to assist programs management organizations in USACE major subordinate commands (MSC) and districts in evaluating key management controls in development of their annual program requests. It is not intended to cover all controls.

**INSTRUCTIONS.** Become thoroughly familiar with the contents of the Program EC and read paragraph **16** before completing the checklist. Answers must be based on the **actual testing** of key management controls (such as **document analysis, direct observation, sampling, simulation, other**). Answers which indicate deficiencies must be explained and corrective actions indicated in support documentation.

**TEST QUESTIONS:**

1. Are funding schedules continuously reviewed and adjusted to reflect Congressional actions, the local sponsors' financial capability, and project progress?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

2. Does development of the multi-year programs follow the guidance included in the applicable appendices of the Program EC?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

3. Are alternative multi-year program proposals fully documented?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

ILLUSTRATION 3 (Continued)  
MANAGEMENT CONTROL EVALUATION CHECKLIST

4. Is the multi-year Capability program independent of the other programs, yet consistent with Army policy and approved project cooperation agreements?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

5. Have the "Class 1" rates of Table 1, "PY Program, Cost Estimate Updating," been applied to the pay-related costs for Civilian employees when preparing PB3a's and PB6's?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

6. Have the "Class 2" rates of Table 1, "PY Program, Cost Estimate Updating," been used to update costs for consultants and AEs used in the various preconstruction planning and construction stages of work when preparing PB3a's and PB6's?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

7. Have the "Class 1" and "Class 2" rates of Table 1, "PY Program, Cost Estimate Updating," been used for the period PY-1 through PY+19 for all activities when preparing PB3a's and PB6's?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

8. Has the procedure in Footnote 8 of Table 1, "PY Program, Cost Estimate Updating," been used to determine rates for use in updating cost estimates beyond PY+19?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

ILLUSTRATION 3 (Continued)

MANAGEMENT CONTROL EVALUATION CHECKLIST

9. Are the appropriate discount rates being used to compute the benefit-cost ratios of projects?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

10. Is the fiscal year of the approval date of the current economic analysis?

a. For new and continuing PED, not more than three years older than the fiscal year of the submission date of the program request to HQUSACE?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

b. For new construction starts, not more than three years older than the fiscal year of the assumed program decision date by the Administration and Congress?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

11. Were benefit-cost ratio computations based on benefits in the latest approved economic analyses and current project costs deflated to the price levels of such benefits?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

12. Are new start recommendations justified based on NED benefits, or responsive to restoration and protection of environmental resources, including fish and wildlife habitat, i. e., inland and coastal wetlands, other aquatic and riparian habitat?

**Tested by:**

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

ILLUSTRATION 3 (Continued)

MANAGEMENT CONTROL EVALUATION CHECKLIST

13. Do recommended new construction starts have firm M-CACES baseline cost estimates?

**Tested by:**

**Response:** YES \_\_\_\_\_ NO \_\_\_\_\_ NA \_\_\_\_\_

**Remarks:**

14. Have new start recommendations been screened according to the criteria established in the Program EC?

**Tested by:**

**Response:** YES \_\_\_\_\_ NO \_\_\_\_\_ NA \_\_\_\_\_

**Remarks:**

15. Are data in the Construction and Investigations illustrations compatible, showing that:

a. Construction capability is shown for the fiscal year following PED completion?

**Tested by:**

**Response:** YES \_\_\_\_\_ NO \_\_\_\_\_ NA \_\_\_\_\_

**Remarks:**

b. Project cost estimates are identical?

**Tested by:**

**Response:** YES \_\_\_\_\_ NO \_\_\_\_\_ NA \_\_\_\_\_

**Remarks:**

[NOTE: Help make this a better tool for evaluating management controls. Submit suggestions for improvement to HQUSACE (CECW-ID), Washington, D. C. 20314-1000.]

EC 11-2-199  
31 Mar 10

ILLUSTRATION 4

DATE: \_\_\_\_\_

CERTIFICATION OF USE OF MANAGEMENT CONTROL EVALUATION CHECKLIST

I hereby certify that the PY \_\_\_\_\_ (major subordinate command name) Division Civil Works Program was developed making full use of the Management Control Evaluation Checklist.

Director of Programs Management

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EC 11-2-199  
31 Mar 10

APPENDIX I

Homeland Security/Emergency Management

TABLE OF CONTENTS

Subject	Paragraph	Page
Background .....	I-1.....	I-1
Purpose .....	I-2.....	I-1
Civil Works Ten-Year Plan .....	1-3 .....	I-1
Program Objectives.....	I-4.....	I-1
FCCE Performance Measures .....	I-5.....	I-2
Budget Screening Criteria .....	I-6.....	I-3
Program Rating and Ranking Criteria for PY Budget Development .....	I-7.....	I-3
Special Considerations or Special Rating Criteria .....	I-8.....	I-4
FY12 Budget Development.....	I-9 .....	I-4
P-2 Requirements.....	I-10.....	I-5
TABLES	Table	Page
Strategic Plan Objectives and Performance Measures .....	I-1.....	I-1
Measures Rating Criteria .....	I-2.....	I-2



APPENDIX I

Homeland Security/Emergency Management

I-1. **Background.** The Flood Control and Coastal Emergencies (FCCE) program was established in 1955 by Public Law 84-99, as amended (33 USC 701n).

I-2. **Purpose.** The Corps FCCE Program purpose is to provide for Disaster Preparedness to include preparedness activities under Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), Homeland Security/Emergency Operations, Rehabilitation of Flood Control Works damaged or destroyed by floods and the rehabilitation of Federally authorized and constructed Hurricane/Shore Protection Projects (HSPP) damaged or destroyed by wind, wave or water action of an other than ordinary nature, provision of Emergency Water, Advance Measures to prevent or reduce flood damage when there is an imminent threat of unusual flooding and participation in the Hazard Mitigation program.

I-3. **Civil Works Ten - Year Plan.** The purpose of the Civil Works Ten Year Development Plan is to present an overview of the funding required for the Civil Works program over a 10 year period. The five Year Development Plan (FYDP), a stand alone document will be based on a subset of the 10 year program and will produce results that contribute to the achievement of strategic goals and objectives in the Civil Works Strategic Plan. The Civil Works Plan is increasing to include a ten year funding stream. For the Homeland Security/Emergency Management program the proposed increments included in this Appendix were developed to provide the glide path to get the program to its target goals within the proposed a ten year plan. See paragraph 9 (b) of the main part of the EC.

I-4. **Program Objectives.** Table I-1 immediately below displays the FCCE Program Objectives and Performance Measures published in the March 2004 Civil Works Strategic Plan. The CW Strategic Plan was developed with an explicit assumption of an unconstrained resource environment to encourage an unconstrained assessment of the nation's water resources needs and potential Corps response. Preparation of the PY (FY12) Budget Request requires the recognition of a constrained budget environment and the ongoing effort to evolve better budget linked performance measures. Table I-2 displays the program performance measures and performance ranking and rating criteria which support and/or supplement Table I-1 program objectives and performance measures to reflect the near term realities of a constrained PY budget environment.

TABLE I-1 Strategic Plan Objectives and Performance Measures	
Program Objectives	Performance Measures
1. Attain and maintain a high, consistent state of preparedness.	<ul style="list-style-type: none"> <li>- Planning Response Team Readiness index</li> <li>- PL84-99 Response Team Readiness index</li> <li>- Percent of scheduled inspections performed for all non-Federal Flood Control Works in Rehabilitation and Inspection Program (RIP), as required by ER 500-1-1</li> </ul>
2. Provide rapid, effective, efficient	- Percent of time solutions are developed

all-hazards response.	and implemented (either repaired to pre-flood conditions or possible non-structural alternative) prior to next flood season
3. Ensure effective and efficient long-term recovery operations.	– Percentage of Federal and non-Federal flood control works in the Rehabilitation and Inspection Program with a satisfactory condition rating

I-5. **FCCE Performance Measures.** The FCCE program is a well-established, multi-faceted program that encompasses disaster preparedness, response and recovery activities in support of federal, state and local stakeholders. Due to the emergency nature of this program, funding must be available for preparedness and response requirements. To achieve the FCCE goals, the following program budget objectives and rating criteria are established for PY program. We have also established a system of ranking criteria that are more detailed than those in the Strategic Plan and will permit objective evaluation of expenditure of funds.

TABLE I-2 Measures Rating Criteria	
Program Measures	Measure Rating Criteria
1. Planning Response Team Readiness index.	This measure tracks the percent of the time that Planning Response Teams for a given mission area are in the Green state of readiness (trained, staffed, ready to deploy).
2. PL84-99 Response Team Readiness index.	This measure tracks the percent of the time that PL84-99 Response Teams are in the Green state of readiness at the beginning of flood/hurricane season (trained, fully staffed, ready to deploy).
3. FCW (Levees, floodwalls, etc.) inspections performed.	Percent of scheduled inspections performed for all non-Federal Flood Control Works in RIP, as required by ER 500-1-1.
4. Deployable Tactical Operations System (DTOS) Readiness Index	Measures the readiness status of the national deployable support equipment and teams.
5. Develop/maintain/exercise preparedness plans	Measures development/maintenance/exercising of contingency plans, SOPs, Guides, etc. IAW 1yr/5yr. MSC/District workplans (Flood/Hurricane/NRP (natural disasters), etc.)
6. Execution of the National Training, Exercise and Evaluation and Corrective Action	Measures the effective execution of the national (USACE-wide) readiness life cycle
7. Conditional rating of Federal and non-Federal flood control works	Tracks the condition of Federal and non-Federal FCW (approximately 3000) in the RIP. Provides an opportunity to judge program and expected project performance as the projects age and potentially deteriorate. Measurement reflects cumulative percent of projects with satisfactory rating (national database).
8. PRT Performance	Measures the performance of PRT mission/functional during response in support of

	FEMA/DHS under the NRP.
9. ESF #3 Cadre Performance	Measures the performance of ESF #3 TL/ATL during response in support of FEMA under the NRP.
10. Restoration of damaged FCW.	Percent of time solutions are developed and implemented (either repaired to pre-flood conditions or possible non-structural alternative) prior to the next flood season.
11. Homeland Security/Emergency Management Readiness Index	MSC/District maintained in an operations readiness status for all hazards contingency requirement. Operational readiness includes staffed, trained, equipped cadres for both supported and supporting MSC/District roles.
12. Career Management and Credentialing	HQ/MSD/District has effective career management and training program for senior staff and progression of responsibilities for other positions.
13. Homeland Security/Emergency Management business process	MSC/District develop and maintain 5-year plan forecasting organizational structure and purpose while indicating resources (dollars & hours) required as part of the budget process utilizing standardized budget guidance. Meet all mission essential tasks for overall MSC/District goals and objectives relative to Homeland Security/Emergency Management.

I-6. **Budget Screening Criteria.** The following criteria will be utilized to address deficiencies and prioritize the expenditure of available funds. (The following criteria are not intended to imply that all funding will necessarily be eliminated in a given category before moving to the next priority):

- a. Limit or eliminate training and exercises for response personnel.
- b. Postpone the rehabilitation of damaged FCW.
- c. Limit or eliminate advance measures activities.
- d. Reduce or eliminate funding for equipment purchases for operational needs.
- e. Limited emergency operations capability.
- f. Reduce or eliminate funding for EM staff at all levels.

I-7. **Program Rating and Ranking Criteria for PY Budget Development.**

a. **Ceiling and Recommended Programs.** This activity consists of functions required to ensure that USACE activities are ready to respond to a broad range of disasters and emergencies. It includes coordination, planning, training, and the conduct of response exercises with key local, state and federal stakeholders/partners under our own statutory authorities and in support of the Federal Emergency Management Agency, Department of Homeland Security. It also provides the vehicle for the purchase

EC 11-2-199  
31 Mar 10

and stockpiling of critical supplies and equipment and support facilities (Emergency Operations Centers) to include the purchase additional and upgrade existing deployable tactical operations systems (DTOS). The Deployable Tactical Operations System, (DTOS), provides USACE with the necessary equipment to begin providing emergency aid to a disaster stricken community immediately. This requirement for DTOS is budgeted over a 3 year period. These activities ensure USACE personnel assigned emergency assistance responsibilities are trained and equipped to accomplish their missions. This includes, but not limited to, personnel assigned to Emergency Operations Centers, Crisis Management Teams, Crisis Action Teams, Regional Operations Centers, Planning and Response Teams, Special Cadres, Levee Inspection Teams and general response personnel.

b. Major preparedness efforts include the review and updating of response plans based on lessons learned from recent disasters; training of personnel and teams to develop critical skills which enhance the capability to respond under adverse conditions; procurement and prepositioning of critical supplies and equipment (i.e., sandbags, pumps) which likely would be otherwise unavailable during the initial response stages; periodic exercises to test and evaluate plans, personnel, and training; inspection of non-Federal flood control projects to ensure their viability to provide flood protection and assess their eligibility for post-flood rehabilitation; laboratory support for field operations; liaison with state and local governments and agencies; and effective management to ensure workable, coordinated efforts that will meet the needs of disaster victims. The funding identified under All-Natural Hazards Preparedness Activities reflects expanded national and regional planning, training and coordination to support response to all natural disasters that includes disasters under the umbrella of the National Response Plan.

#### **I-8. Special Considerations or Special Rating Criteria.**

a. USACE plans for all natural disasters, but response and recovery under its own authority (FCCE) are limited to-- fights floods (direct and technical assistance), provision of emergency water, advance measures, and restoration of federal/non-federal flood control works. All other responses are funded by external authorities (i.e. Stafford Act).

b. Due to the uncertainty of the number and severity of disasters, it is difficult to determine the program funding requirements for activities other than the baseline operational and preparedness costs.

#### **I-9. FY12 Budget Development.**

Supplemental Budget Guidance will be provided to the MSCs and District elements through separate cover outlining budget work plan requirements. In that regard, MSCs and Districts will submit their recommended budget requirements as requested that maintain the existing level of service plus the OMB accepted rate of inflation. The budget requirements will be reflective of a labor based requirement trending towards a performance based budget that identifies those outcomes and outputs that can be achieved and/or measured during the execution year. The recommended budget should include only existing staff and current approved FTEs (no new staff requirements); existing leases not funded through revolving fund; and required ancillary costs to support minimum requirements. Due to the current budget environment it may be extremely difficult to maintain the current level of staffing and operations, thus, each organization must review their current FTE's required versus allotted positions within each organization. Under the Rehabilitation and Inspection Program, a supplemental document will be required that identifies those projects to be inspected with associated costs. The Work Plan should only have a roll up of the cost. However, Districts are requested to supplement the Work Plan with a separate sheet that indicates the projects and schedule for inspection. Refer to Appendix III-5(c) (3), Sub-Annex C-2.2.h Levee Safety Program for guidance to develop the program year budget activities for inspections of non-Federal projects. Refer to Appendix III-5 for guidance on initial and additional increments for Levee Safety Program activities. Budget requirements will provide for positive

contributions to the applicable business line performance measures. Justification for specific new items from the previous fiscal year must be provided.

All work resources identified will be linked to the existing Performance Measures and should tie into current Mission Essential Task Lists (METLs) identified by each organization.

#### 1-10. P-2 Requirements.

a. P-2 will be used to summarize the Flood Control and Coastal Emergencies (FCCE) and National Emergency Preparedness Program (NEPP) Categories for the FY11 budget for HS/EM. Emergency activities requiring Category 200 (Emergency Operations) funds will not be included in this budget exercise.

b. This section provides guidance for each program, but there are certain common structures for each program that will be represented within Primavera Project Manager (PPM). The program consists of a set of projects that are included in the budget. These projects consist of a set of activities that are required to fulfill the purpose of the project. For a category/project in Homeland Security/Emergency Management (HSO) FCCE and/or NEPP, these activities are required for that project during the budget year. The activities within these projects require resources. These resources are labor, contracts, travel, supplies and materials, etc. The total cost of supplying these resources for a given activity represents the budget amount that the activity requires within the budget. The total cost of all activities represents the total budget required by the project.

c. The common structure of project – activities – resources is consistent across all programs and provides a hierarchy for summarizing the program as a whole. The performance based budget process also requires a different view of the budget by business. To accommodate this view of the program, each activity is assigned to a business. The tagging of each activity by business allows a view of the budget by business as well as program. For Emergency Management/Homeland Security, use the Business Line identifier EM.

d. Identifying the activities that are part of the budget provides a level of detail and classification to help answer questions by all the various stakeholders for the Corps budget.

e. The instructions that follow describe the specific tasks that must be done to develop the FY11 budget for Corps HS/EM projects using PPM.

##### (1) General Directions.

(a) The HS/EM Appendix has been modified to add the use of P-2/Oracle Financial Analyzer (OFA) to summarize the Categories of funds requested for FCCE (Categories 100 and 300) and NEPP (Category 500).

(b) Project Managers must direct a local configuration manager to complete a change to existing P-2 projects in order to complete the budget in PM. This change is to assign a program code in Oracle Project.

(c) Project Managers must assign a program code, if one is not already assigned. The program code must be the six character AMSCO/CWIS code that has been assigned in CEFMS for the project. If multiple P-2 projects have been created from one AMSCO/CWIS, then each P-2 project must be assigned the same program code. A P-2 OP local configuration manager has the permission to add the program code to a project. The complete list of program codes is under review and will be added to the

EC 11-2-199  
31 Mar 10

list of values for the program code in Oracle Projects. The program code can be added after the budget activities are added to a P-2 project.

(2) If using Primavera, the following information will aid data entry.

(a) Each Program Manager will direct a local configuration manager (LCM) to create a separate WBS for budget development. The WBS should be named Budget. The WBS should be "Planned" Status so that proposed budgets will remain in P-2 alone until ready for transfer to CEFMS. Additional child WBS levels can be added if needed to help prepare the budget. During FY12, the WBS will be marked as "Active" so that the budgets can be transferred to CEFMS.

(b) Each Project Manager must add the activities and resources needed to complete FY12 work. All work will be described as one or more activities that require resources to complete. On each activity which is resourced for FY12, enter the applicable increment value in the "CW Funding Increment" activity code; either a '1' to signify the baseline funding requirement, or a '2' for recommended funding.

(c) Each District and MSC Program Managers, Business Line Managers, Division Chiefs, Commanders, and other interested parties can begin review of the FY11 budget data as soon as it is added by the Project Manager. Each District and MSC will likely have their own processes to review budget data. Much of the review can be done using Primavera Project Manager and some can be done using Oracle Financial Manager. Budget reports will be developed to show detail and summary data needed to review the budget.

(d) FY12 resourced activities in PM will be extracted nightly into OFA. The level of detail of the data, either project-business-increment or process-business-increment-activity, will be determined by the HQ Business Line Manager. Once the data is extracted, each MSC will be responsible for adding performance measure data for each increment. HQ will evaluate each increment in the business area and set the overall rank of each increment.

(3) FY10 Required P-2 entries for HS/EM

(a) Each record (or row) of budget and performance measure data in the OFA data entry forms will be detailed by seven key fields:

(b) Business Line. The primary Business Line is EM for Homeland Security/Emergency management.

(c) EROC. Used to identify District/Division

(d) CW Type of Funds (Approp/CCS) This data element identifies the FCCE and NEPP Categories which will be reported. For FY12, please roll-up all FCCE 110, 120, 130 and 140 classes into FCCE Category 100; FCCE classes 340 and 350 are to be rolled into FCCE Category 300; and NEPP Classes 510 through 560 are to be rolled into NEPP Category 500.

(e) P-2 Project Number. This is the P-2 project ID assigned when the project is created in OP.

(f) CW Funding Increment. This data element identifies the business funding increment for each activity. Increment 1 is used to identify the baseline funding requirement and Increment 2 signifies recommended funding. The data element, CW Funding Increment, is used to assign the increment number to each activity. This code will be used to identify an activity as a FY12 budget activity, and will

be used to extract FY11 budget activities for OFA. Please do not assign this activity code to any activities that are not part of the FY11 budget.

(g) Phase. Enter N/A.

(h) Budget Item ID. Enter N/A.

(4) Two additional Fields of Interests

(a) Budget Request (Fed). Enter the requested amount in whole dollars. This Field is required.

(b) Budget Item Justification. This can be used to add comments or clarify any entries to the record. This Field is optional.

Note: that if two activities in Primavera have identical values for all seven key fields, they will be rolled together when they are extracted into OFA.

APPENDIX II

Environment

TABLE OF CONTENTS

Subject	Paragraph	Page
Sub-Appendix II-1, Overview .....		II-1-1
Introduction.....	II-1-1.....	II-1-1
Components of the Environment Business Line .....	II-1-2.....	II-1-1
Increments.....	II-1-3.....	II-1-2
Additional Information .....	II-1-4.....	II-1-2
Ranking .....	II-1-5.....	II-1-2
 Sub-Appendix II-2, Ecosystem Restoration .....		 II-2-1
Background .....	II-2-1.....	II-2-1
Purpose .....	II-2-2.....	II-2-1
Civil Works Program Five, Ten, and Twenty Year Development Plans.....	II-2-3.....	II-2-1
Ecosystem Restoration Performance Measures.....	II-2-4.....	II-2-2
Performance Based Budgeting .....	II-2-5.....	II-2-4
Asset Management .....	II-2-6.....	II-2-4
Systems Approach .....	II-2-7.....	II-2-4
Watershed Studies .....	II-2-8.....	II-2-5
Budget Screening Definitions.....	II-2-9.....	II-2-5
Increments.....	II-2-10.....	II-2-6
Ecosystem Ranking Criteria.....	II-2-11.....	II-2-8
Separable Elements.....	II-2-12.....	II-2-8
Data Requirements .....	II-2-13.....	II-2-8
 Sub-Appendix II-3, Environment-Stewardship .....		 II-3-1
Introduction.....	II-3-1.....	II-3-1
Purpose .....	II-3-2.....	II-3-1
Goals, Objectives and Performance Measures .....	II-3-3.....	II-3-1
Environment-Stewardship Program Development – General Instructions .....	II-3-4.....	II-3-3
Budget Increments for Environment-Stewardship .....	II-3-5.....	II-3-6
Performance Measure Output Criteria and Ranking Factors by Increment.....	II-3-6.....	II-3-8
Risk Assessment.....	II-3-7.....	II-3-16
Five and Ten Year Performance/Funding Glide Plans .....	II-3-8.....	II-3-20
 Sub-Appendix II-4, Formerly Utilized Sites Remedial Action Program .....		 II-4-1
Introduction.....	II-4-1.....	II-4-1
Purpose .....	II-4-2.....	II-4-1
Goals and Objectives .....	II-4-3.....	II-4-1
Five and Ten Year Funding Streams .....	II-4-4.....	II-4-2
Ranking Process .....	II-4-5.....	II-4-3
Performance Based Budget Increments .....	II-4-6.....	II-4-4
Program Phases .....	II-4-7.....	II-4-4
Work/Activity Increment Guidance .....	II-4-8.....	II-4-5
P-2 Requirements .....	II-4-9.....	II-4-6

TABLE OF CONTENTS (continued)

TABLES	Table	Page
Goals, Objectives and Performance Measures in the Civil Works Strategic Plan .....	II-2-1 .....	II-2-2
Ecosystem Restoration Budget Ranking Criteria .....	II-2-2 .....	II-2-3
Ecosystem Restoration Study and Project Information .....	II-2-3 .....	II-2-10
Formulas for Conversion of Stream Miles to Acres .....	II-2-4 .....	II-2-23
Civil Works Strategic Plan Objectives and Performance Measures .....	II-3-1 .....	II-3-2
FY12 Environment-Stewardship Budget-Linked Objectives and Performance Measures .....	II-3-2 .....	II-3-3
Budget Increments Reference Table between E-S BEST and P-2 .....	II-3-3 .....	II-3-5
ENS- Consequences Rating Criteria .....	II-3-4 .....	II-3-18
Environmental-Stewardship Relative Risk Index Matrix .....	II-3-5 .....	II-3-19
FY12 Performance Targets for 10-Year Recommended Glide Plan .....	II-3-6 .....	II-3-21
FUSRAP Environmental Performance Measures .....	II-4-1 .....	II-4-2
ILLUSTRATIONS	Illustration	Page
Sample Spread Sheet: Ecosystem Ranking Criteria and Additional Data .....	II-2-1 .....	II-2-24
Environment-Stewardship FY12 Performance Measure: Mitigation Compliance .....	II-3-1 .....	II-3-22
Environment-Stewardship FY12 Performance Measure: Endangered Species Protection .....	II-3-2 .....	II-3-23
Environment-Stewardship FY12 Performance Measure: Cultural Resources Management .....	II-3-3 .....	II-3-24
Environment-Stewardship FY12 Performance Measure: Basic Stewardship .....	II-3-4 .....	II-3-25
Environment-Stewardship FY12 Performance Measure: Master Plan Completion .....	II-3-5 .....	II-3-27
FY12 Environment-Stewardship Budget Development Workflow .....	II-3-6 .....	II-3-28

## SUB-APPENDIX II-1

### Overview

II-1-1. **Introduction.** Numerous Federal laws and executive orders establish National policy for and Federal interest in the protection, restoration, conservation, and management of environmental resources. These provisions include compliance requirements and emphasize protecting environmental quality. They also endorse Federal efforts to advance environmental goals, and a number of these general statements declare it national policy that full consideration is to be given to the opportunities that projects afford to ecological resources. Recent water resources authorizations have enhanced opportunities for Corps involvement in studies and projects to specifically address objectives related to the restoration of ecological resources and ecosystem management. Specific authorities for new individual studies and projects to restore ecological resources have also been provided in legislation. Examples of legislation that broadly supports Federal involvement in the restoration and protection of ecological resources include:

- a. Federal Water Project Recreation Act of 1965, as amended.
- b. The National Environmental Policy Act of 1969, as amended.
- c. Water Resource Development Acts of 1986, 1988, 1990, 1992, 1996, 1999, 2000 and 2007.
- d. Coastal Wetlands Planning, Protection and Restoration Act of 1990 (Title III of P.L. 101-646).

### II-1-2. **Components of the Environment Business Line.**

a. The Environment Business Line includes the Corps Ecosystem Restoration studies and projects, Stewardship and the Formerly Utilized Sites Remedial Action Program. A portion of the funding for Research and Development and corporate data collection activities will also be charged to the Environment Business Line but these items will be budgeted similar to previous years. Although the Environmental CAP (sections 1135, 204, and 206) is part of the Environment Business Line, it will be budgeted in accordance with guidance in **Annex G**. Environmental Compliance is to be budgeted within applicable business lines (Navigation, Flood Risk Management, Hydropower, Environment-Stewardship, Recreation) as there are Work Category Codes for ERGO (Environmental Review Guide for Operations) compliance assessments within each of these business lines.

b. Ecosystem Restoration is funded primarily from the Investigations, Construction, and Mississippi River and Tributaries accounts. Inspection of Completed Works, Ecosystem Restoration, and Operations and Maintenance for Everglades projects are funded from the Operations and Maintenance account. Related budget development guidance is found in Annexes A, B, and C. The goal of ecosystem restoration is to restore degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition in a cost effective manner.

c. Stewardship is funded from the Operations and Maintenance and Mississippi River and Tributaries, Maintenance accounts and related budget development guidance is found in Annex C. As a matter of law and good environmental practice, the Corps provides stewardship of its projects lands and waters to sustain healthy natural resources and cultural resources that occur on this federal estate and takes action to minimize adverse environmental impacts.

d. The Formerly Utilized Sites Remedial Action Program has its own account and information required to develop the initial and capability level funding programs is found in Sub-Appendix 4 of this

EC 11-2-199  
31 Mar 10

Appendix. The purpose of the program is to clean up contaminated sites throughout the United States where work was performed as part of the Nation's early atomic energy program.

II-1-3. **Increments.** Increments identifying similar levels of effort towards completion of a study or project or contribution to various level of project operation have been identified for each funding account. Only the first increments for investigation, construction, and Formerly Utilized Sites Remedial Action Program and the first two increments for Operations and Maintenance are constrained by monetary criteria. Otherwise the increments for Investigation, Construction, and Formerly Utilized Sites Remedial Action Program relate primarily to progress against the schedules in Performance Management Plans. Increments are not funding levels nor are they ranking criteria.

II-1-4. **Additional Information.** More detailed information on the budget development, including minimum eligibility requirements and terms are found in the main section and budget account Annexes A, B, and C. The following sections describe the three components included in the Environment Business Line in more detail, including performance measures, ranking criteria and data requirements for development of the PY budget.

II-1-5. **Ranking.** Each of the three components in the Environment Business Line will be ranked individually. Ranking will be within the individual component only and not across the Environment Business line.

## SUB-APPENDIX II-2

### Ecosystem Restoration

II-2-1. **Background.** The Corps recognizes ecosystem restoration as one of its primary mission areas within the Civil Works Program. This Sub-Appendix provides guidance for preparing the FY12 budget request. It is consistent with and does not alter the plan formulation and project justification guidance contained in ER 1105-2-100 and other planning and policy guidance.

II-2-2. **Purpose.** The goal of ecosystem restoration is to restore degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition. Restored ecosystems should mimic, as closely as possible, conditions which would occur in the area in the absence of human changes to the landscape and hydrology with a minimum of continuing human intervention. This includes an emphasis on species native to the project location. Those restoration opportunities that are associated with wetlands, riparian and other floodplain, and aquatic systems are most appropriate for Corps involvement. The focus of projects/activities implemented under this section of the guidance is the restoration of ecosystems and ecological resources and not restoration of cultural and historic resources, aesthetic resources, clean up of hazardous and toxic wastes or recreation.

#### II-2-3. **Civil Works Program Five, Ten, and Twenty Year Development Plans.**

a. Table II-2-1 immediately below displays the Ecosystem Restoration Objectives and Performance Measures published in the March 2004 Civil Works Strategic Plan. Preparation of the FY12 Budget Request requires the recognition of the ongoing effort to link budget requests to program performance using the business line performance measures. Table II-2-2 displays the Ecosystem Restoration objectives, performance measures, and/or performance ranking and rating criteria which support and/or supplement Table II-2-1 objectives and performance measures to reflect the near term realities of a constrained budget environment. Additionally, the strategic plan emphasizes the development of projects within a watershed framework and collaboration with other agencies and organizations. This is reflected in the data requirements.

b. The purpose of the Civil Works Ten Year Development Plan is to present a funding stream for the Civil Works program over a ten-year period. See paragraph 9 (b) in the main Section "Civil Works Five and Ten Year Development Plans". The 10 year period (PY-PY+9) approximates the implementation life of a project from start to finish. The five year Development Plan (FYDP), a stand alone document, uses a subset of the 10 year plan to produce results that contribute to achievement of the strategic goals and objectives in the Civil Works Strategic Plan. The two multi-year plans for the Ecosystem Restoration Program focus on cost effective restoration of nationally and regionally significant resources while providing a budgetary framework that facilitates achievement of program goals.

c. The purpose of the Civil Works Twenty Year Plan is to allow the Corps to assess the 20 year investment requirements for the Civil Works Program. Development of the 20 year funding stream will be for investigations and construction projects. The Twenty Year Plan will build on the Ten Year Plan data. PY-10 through PY-19 will be added to the funding stream. This will be for Capability level funding only (see Main, EC paragraph 9.c).

TABLE II-2-1

Goals, Objectives and Performance Measures in the Civil Works Strategic Plan

<b>Goal 2: Repair past environmental degradation and prevent future environmental losses.</b>	
<b>Objective 2.1. Restore degraded, significant ecosystems structure, function, and process to a more natural condition.</b>	
Objective	Performance Measures
<u>Ecosystem Restoration</u>  2.1.1. Invest in restoration projects or features that make a positive contribution to the Nation's environmental resources in a cost-effective manner.	Acres of habitat restoration completed.  River miles of habitat restoration completed.  Acres/river miles of nationally significant habitat restoration completed per dollar invested.

**II-2-4. Ecosystem Restoration Performance Measures.**

a. Since 1986, the Corps has received increased authority to implement ecosystem restoration projects and the number of implemented projects has increased dramatically in the last decade. These projects range in size from a few acres to several thousand acres, such as the Everglades. A wide variety of ecosystems and habitat types are involved and the techniques used are as varied as the problems addressed. In order to support continued investment in ecosystem restoration activities the results need to be documented. This budget guidance establishes performance measures and ranking criteria, that when used to evaluate each study and project, will result in the formulation of a justified and supportable budget.

b. A nationwide perspective must be maintained to assure that available funding is used to provide the most cost effective restoration of nationally and regionally significant resources. It is also important to support timely completion of high performance studies and projects so that the expected benefits may be achieved as soon as possible. As our knowledge of ecosystem benefits and feasible restoration techniques increases, it is also important to have the capability to initiate new studies. The ranking criteria to be used in development of the PY budget are designed to assure that the available funding provides the greatest public benefit for the investment while continuing to investigate restoration opportunities and completing high performing projects in a timely manner so that benefits may be achieved as soon as possible. To achieve the Ecosystem Restoration goal, the budget objectives and ranking criteria contained in Table II-2-2 are established for the FY12 budget. Each of the objectives and criteria are designed to demonstrate that each budget item makes sense and contributes to the Civil Works objectives and the Ecosystem Restoration goal.

c. The data requested will also contribute to our ability to predict our performance regarding acres restored, the quantity of nationally significant acres restored, the cost to restore a nationally significant acre, and the percentage of the acres that are restored that are nationally significant. Quality of the restoration is a concern and seven of the criteria are designed to address this aspect of the ecosystem

restoration program. A subset of the quality criteria is used to identify projects that restore nationally or regionally significant habitat. Additional information about the ranking criteria is found in paragraph II-2-10 and in Table II-2-3.

TABLE II-2-2  
Ecosystem Restoration Budget Ranking Criteria

CW Program Objective	Budget Objective	Ranking Criteria
Invest in restoration projects or features that make a positive contribution to the Nation's environmental resources in a cost-effective manner	Keep ongoing high performing studies or PEDs proceeding at an efficient rate if likely to produce recommendation for project (I)	Watershed for studies Significance - scarcity - connectivity - special status species - hydrologic character - geomorphic condition - self-sustaining - plan recognition Acres for PED Years to complete Other purpose outputs
Same	Start new phase of high performing studies or PED (I)	Watershed for studies Significance Acres for PED Other purpose outputs
Same	Complete on-going high performing studies and PEDs (I)	Significance Acres for PED Other purpose outputs
Same	Complete ongoing high performing construction phases to start getting benefits (C)	Significance Acres Other purpose outputs
Same	Keep on-going high performing construction proceeding at an efficient rate. (C)	Significance Acres Years to complete Other purpose outputs
Same	Initiate new high performing construction (C)	Significance Acres Other purpose outputs Years to complete

d. In order to achieve the above objectives, an Initial increment has been defined to assure uniformity across the country in building annual budgets from the same point. A system of ranking criteria has been established that is more detailed than the criteria in the Strategic Plan and will permit objective evaluation of incremental investment choices to assure that budget requests above the initial increment provide the greatest benefit for that investment. The initial increment and the system of ranking criteria will facilitate making informed and wise budgetary decisions.

#### II-2-5. Performance Based Budgeting.

a. Performance should be a primary factor in ranking budget items. Additional budget items above the initial increment should consist of logical, needed items of work that contribute to the Civil Works program goals. The basis for adding items of work will be demonstrable beneficial impact resulting from accelerating project completion and/or improved performance, such as cost savings achieved by combining work items. Budget items should be added in priority order based on the performance components and ranking criteria shown in Table II-2-3. Rationale for any exceptions to this rule must be documented in the Narrative Justification column. Each contract in the Construction Account or for similar activities in the MR&T and Operations and Maintenance Accounts must be a separate line item. All contracts of \$20 million or less will be fully funded.

b. Inspections of ecosystem restoration projects/separable elements may be included in either Operations account increments one or two if they are determined to be critical based on complexity and age of the features and if the criteria in Annex C regarding the Operations and Maintenance account increment definitions are met. Non-critical inspections should be placed as appropriate in increments 3 and 4. Each District will have an entry for every state/system in which an inspection is proposed in accordance with the guidance in Annex C.

II-2-6. **Asset Management.** In order to further development of the USACE Asset Management Program, the PY Budget will link PED, construction and operation and maintenance costs to major assets using the constructed asset's Feature code. The spreadsheet contains two columns to link the work packages with constructed assets. Column 8, PRIMARY Feature Code, should be populated with the Feature Code for the major constructed asset that the budget work package supports. Column 9, ADDITIONAL Feature Codes, would list additional Feature Codes associated with other real property assets that the work package will address. These will typically be associated with operations and routine maintenance. Additional information about feature codes is found in the Main EC in the Definitions and Glossary section under "Common Data Field in all Business Lines". Consider the entire list and try to use the fields consistently within a Division. It appears that the codes most apt to apply to ecosystem restoration projects as primary features are 01 Land, 06 Fish and Wildlife Facilities, 09 Channels and canals (including weirs, vanes, etc.), 16 Bank stabilization, and 17 Beach Replenishment. Additional feature codes most apt to apply include 03 Reservoirs, 04 Dams, 05 Locks, 11 Levees, and 14 Recreation. An example might be that for the project to install sensors in locks to prohibit the gates from closing on Manatee the primary feature code would be 06 Fish and Wildlife and an additional feature code would be 05 Locks. Kissimmee might have a primary feature code of 09 – channels and canals. Seeding submerged aquatic vegetation might have a primary code of 01 Land.

#### II-2-7. Systems Approach.

a. Consistent with the Civil Works Strategic Plan a systems approach or watershed approach is needed to ensure that investments are integrated into a whole that preserves or enhances performance and sustainability at the system level. A systems approach requires consideration of the investment needs and priorities of all the business lines within the watershed. All PY budget items (studies, construction, and O&M) will include the USGS HUC sub-region (4 digits) codes. These codes may be found at [http://water.usgs.gov/GIS/huc\\_name.html](http://water.usgs.gov/GIS/huc_name.html). **A list of 52 Systems** has been developed (see **Table C-5.1**). MSCs will use the systems within their respective regions of the U.S. and develop budget priorities that are consistent with investing in one or more of the following aspects of the system: the highest risk portions of the system; that will result in the most improvement in performance; that contribute to increased navigation reliability and safety; that contribute to increased flood damages prevented; that contribute to addressing significant regional or national ecological problems. A system will generally be

identified as a watershed and may include multiple individual projects and components. For additional information see the Main EC Paragraph 7.b.

b. Studies (reconnaissance and feasibility) and PED that have multiple outputs (watershed or multi-purpose) will be budgeted in the primary business line. When the project moves into construction the construction requests will be by appropriate business line.

**II-2-8. Watershed Studies.** Watershed studies are multi-objective/multipurpose and encompass a relatively large geographic area. As a minimum, the study area must encompass the region of an 8 digit HUC. Following the reconnaissance study, a study may proceed as a watershed assessment using 75-25 cost-sharing (leading to a watershed management plan) in accordance with Section 729 or as a feasibility study accomplished in a watershed context in accordance with the standard feasibility study process and 50-50 cost-sharing when implementation of a Corps project is anticipated.

The key attributes of a watershed assessment, leading to a watershed management plan are as follows.

a. The study results in the identification of a combination of recommended actions (a Watershed Management Plan) to be undertaken by various partners and stakeholders in order to achieve local, tribal, regional, and national water resources management goals identified in the study and may or may not identify further budgetable Corps studies or implementation projects. The plans will be multi-objective and multi-purpose.

b. Team thinking about water resources development and management in the context of multiple purposes rather than single purposes is required. This facilitates the search for comprehensive and integrated solutions to a variety of issues.

c. The study provides a means for improving opportunities for public and private groups to identify and achieve common goals by unifying on-going and future efforts.

d. Leverage resources, including cost shared collaboration, and integrating programs and activities within and among Civil Works programs, and with other Federal, tribal state and non-governmental organizations, is a critical factor.

**II-2-9. Budget Screening Definitions.**

**a. New Start Definition.**

(1) A New start is defined as an active authorized study or project which has not received an initial work allowance and that fits into at least one of the following business lines: commercial navigation; inland navigation; flood and storm damage reduction; ecosystem restoration; water supply, hydropower; or recreation.

(2) The New Start definition will apply to Reconnaissance studies and Construction Projects, as well as any new efforts under the Remaining Items category. Any PED, which has not been funded in the Conference Report for the past three years, will also be considered a New Start. For Feasibilities, see New Phase definition. Except a new start decision would be needed for a feasibility study being initiated after, say, an O&M-funded appraisal without an intervening reconnaissance new start decision. Basic eligibility criteria for construction new starts are found in Annex B.

b. **New Phase Definition.** A study or project is considered to be in a NEW PHASE once it has completed the current phase that is funded and ready for budgeting in the follow-on phase, e.g. from Reconnaissance to Feasibility or Feasibility to PED, e.g. Seamless PEDs are a new phase.

II-2-10. **Increments.** The following paragraphs apply to Investigation, Construction and comparable items in MR&T Account. For information about the increments to use for Inspection of Completed projects and Everglades Operations and Maintenance refer to the Definitions/Glossary section of the Main EC and to Annex C.

a. The following increments are primarily process/schedule driven. Only the first Investigation increment has a funding constraint. The increments are not funding levels. The first funding line for any continuing study/project/separable element will probably fit the criteria for either the first or the second increment. The first funding line item for a new start or resumption will be labeled Increment 3. There may be more than one funding line for a study/project/separable element that meets the criteria for an increment. For example if a contract and significant staff time were required to meet the optimal schedule in the PMP, Increment 3, there might be two funding lines for that project with an increment 3 designation. Every contract in the Construction account and for construction in the MR&T account is a unique funding line. For an individual study/project/separable element an item may not be ranked before other items for that study/project/separable element that meet the definition for preceding increments. For example for project X an increment 3 item may not precede a project X increment 2 item in the rankings. The rankings are to be based on performance. This means that higher increments for some studies/projects/separable elements may be ranked higher than lower increments for other studies/projects/separable elements. For example Increment 3 of project X may precede Increments 1 and/or 2 for project Y in the ranking

b. **Definition.**

(1) **Work Increment.** A work increment is a discrete amount of work identified by an activity or a set of activities with specific resource requirements and a schedule.

(2) **Activity:** A component of work performed during the course of a project. An activity could be a process (e.g. collection of data) or lead to a deliverable (write a report). Activities are the building blocks of the P-2 system – they have assigned durations, resources, and relationships.

c. **Investigation.** Increments (for studies, and pre-construction engineering and design of specifically authorized and MR&T investigations):

(1) **Increment 1:** This increment will include only the minimum continuing and new study activities and the total request is limited to the budget amount for PY-1, by study. *Do not include new PED or study phases.* If a study is ready for changing phases or is no longer likely to produce a high performing project, then the Increment 1 level for that study will be zero. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(2) **Increment 2:** New phases of studies previously budgeted may be initiated in this increment. Studies that do not have an Increment 1 may reflect the study activities in Increment 2. Studies that have a high probability of recommending a project with high value output may include additional activities in this increment that will provide improvement to the study completion compared to the items submitted in increment 1. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(3) **Increment 3:** This increment will include the activities needed to sustain (not fall behind/not accelerate) the study schedule included in the PMP. New starts and resumptions may be included. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(4) **Increment 4:** This increment includes additional capability activities that can be supported by cost sharing sponsor and Corps resources. This increment can be viewed as enhancing (or advancing) the study schedule at a faster pace than shown in the PMP. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(5) **Increments 5-8:** Not used.

(6) **Increment 9:** Place unbudgetable studies in Increment 9.

d. **Construction Increments.** All contracts will be fully funded if the estimated contract total (total of both federal and non-federal shares) is \$20M or less. For all contracts that are proposed for full funding, the total estimated amount for E&D and S&A will be included with the contract. Each contract included in any increment must be shown separately to allow individual funding decisions based on the performance metrics and must be shown in priority order by District and MSC Rank. This section includes specifically authorized projects, MR&T construction, dam safety projects, deficiency corrections projects and dam safety, seepage, static instability studies.

(1) **Increment 1:** This increment will include only the minimum project activities budgeted in, and continuing from, PY-1. Only true continuing contract needs, and the Engineering and Design during Construction (EDC) and Supervision and Administration (S&A) of contracts fully funded in PY-1 and before may be included in this increment. Do not include any continuing incrementally funded contract requirements. Do not include new contracts, options, or funding for the engineering and design activities for new contracts. Only mandatory real estate activities for required project lands, easements, and right-of-ways may be included. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(2) **Increment 2:** This increment will include continuing incrementally funded contract requirements for ongoing projects, new contracts, engineering and design for future contracts or other activities (show each separately), and EDC and S&A for new contracts awarded in PY. Real estate activities for required project lands, easements, and right-of-ways may be included. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(3) **Increment 3:** This increment will include activities and contracts needed to sustain (not fall behind but not accelerate) the efficient project schedule based on the PMP. This increment may include projects that do not qualify for increment 2, and may include continuing incrementally funded contract requirements, new contracts, engineering and design for future contracts or other activities (show each significant activity separately), and EDC and S&A for new contracts awarded in PY. Real estate activities for required project lands, easements, and right-of-ways may be included. New starts and resumptions may be included. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(4) **Increment 4:** This increment will include additional capability activities that can be supported by the cost sharing sponsor and Corps resources and will advance the project schedule at a faster pace than shown in the PMP. Increment must be performance based and integral with a study or project high outputs and consistent with ranking.

(5) **Increments 5-7:** Not used.

(6) **Increment 8:** This increment will include projects that are consistent with Administration policy but are unbudgetable due to the decision document not yet being cleared by the Administration.

(7) **Increment 9:** This increment will include unbudgetable projects that are inconsistent with Administration policy, such as environmental infrastructure in the Water Supply business line. The Federal funds for shore protection projects that require beach renourishment (not associated with Federal navigation projects) should be identified and included in this increment.

II-2-11. **Ecosystem Ranking Criteria.** The ranking criteria developed evaluate studies and projects against the parameters of readiness, timeliness, cost effectiveness, and performance. Seven performance components provide an indication of the significance of the resources being restored and will have a substantial bearing on how projects are ranked. The seven performance components and maximum scores are as follows:

Habitat Scarcity	25 points
Connectivity	25 points
Special Status Species	10 points
Hydrologic Character	20 points
Geomorphic Condition	20 points
Self-Sustaining	20 points
Plan Recognition	10 points

National Significance is defined as studies and projects receiving the top scores in Scarcity (25 points) and Connectivity (25 points) and at least the second score (5 points) Special Status Species and Plan Recognition. Regional Significance is defined as studies and projects receiving at least the second highest score in each of these four criteria. Information about the physical scale of the restoration, cost, phase, relation to other purposes for multipurpose projects, watershed status for studies, and status of cost-share agreements will also be used to arrive at a balanced budget recommendation that insures continued positive contributions to the Nation's resources. The criteria apply to individual line item-funded studies, projects, and separable elements.

II-2-12. **Separable Elements.** Separable elements that upon completion provide ecosystem restoration benefits even if the remainder of the project is not completed should have unique P-2 project names and unique P-2 project numbers. Separable elements are to be entered as separate line items in the budget request. Existing project names should be reviewed to ensure that the items identified as projects are in fact separable elements. In rare instances separating a large project not previously divided into separable elements may be warranted to more accurately report performance. If a separable element will be constructed in phases or stages, phase and stage designations should not be part of the project name. Instead the phase/stage indicator should be included in the project description column and the budget item justification column should be used to indicate status such as initiate stage 1 or complete stage 2 as appropriate.

II-2-13. **Data Requirements.**

a. The data elements to be included in P-2 or derived from data in P-2 are described in Table II-2-3 and an example of the excel sheet that we will use to analyze the data provided is shown in Illustration II-2-1. A limited number of items will be required for the "Studies, Surveys and Inspection of Completed Works- Ecosystem Restoration" work category code in the Operations and Maintenance

account. The CCS is 640 and the PWI is 081816. The operations and maintenance requirements for Everglades projects should follow the guidance in Annex C.

b. Many of the data elements in P-2 will be the same for all entries related to a single project or separable element. Items which may vary for each contract include Approp Abbrev, CW type of funds, increment, phase, phase status, phase completion, project completion, dates of agreements, and narrative justification. Phase completion refers to the completion of the phase for the study, project or separable element not for the contract. In construction, LY should ONLY be used to describe the last year of the final contract or other budget item for a project or separable element that will result in physical completion of the project or separable element. It should NOT be used to describe the completion of any other contract or budget item for the project or separable element. Federal budget request, Budget Item ID, Budget Item Justification and Dist, MSC ranks must be unique for each entry. The remaining entries will be the same but unique for each project or separable element. However, the program code and name should be the same for each separable element.

c. Investigations account, Construction account and Operations and Maintenance account items will be ranked separately. Watershed and multipurpose Reconnaissance, Feasibility and PED phases will only be entered in the business line that is expected to be the primary purpose and not split among multiple business lines.

TABLE II-2-3  
Ecosystem Restoration Study and Project Information

The data provided in this table will allow for ranking the ecosystem restoration projects to develop a budget consisting of cost effective projects that efficiently provide significant ecosystem restoration benefits. The data in this table will be pulled from P-2 at the MSC and HQ levels. If the item required for this table is not applicable, do not leave it blank (the exception is the ranking columns for higher organizational levels). Enter NA so that it is clear the absence of information is not an oversight. This information will be available for incorporation into a spreadsheet similar to the one in Illustration II-2-1. Every column must have an entry. For columns where data is not required as indicated by the code at the bottom of the spreadsheet in Illustration II-2-1, if the data is entered directly into P-2 then the cells should auto fill with NA. Otherwise enter NA as necessary. Additionally, for a P-2 Project Number with more than one budget item, many fields will auto fill for subsequent budget items.

If the spreadsheet is used and items are entered in the order listed below and the P-2 data entry rules are followed, it may be uploaded directly into P-2. Dates should be entered in **YYYY-MM-DD format (2008-05 02)**, fiscal year should be entered as 4 digits (2006), all dollar and other numeric entries should be in thousands unless the data field definition specifically instructs otherwise.

Items funded in the MR&T account should follow the rules for the I, C, and O&M accounts as appropriate. The first 29 items are required for all budget items in all accounts.

Every contract in the Construction account including comparable MR&T items is a separate line item. For continuing contracts there may be multiple entries. New contracts for \$20,000,000 or less are to be fully funded.

1. **BUSINESS LINE** = ENR for Ecosystem Restoration
2. **EROC** = Two character code for District, such as B1 for Memphis District.
3. **MSC** = Three letter abbreviation for MSC, such as SAD. This is a display-only field which is auto-populated based on the EROC. Data entry is not required.
4. **DISTRICT** = Three letter abbreviation for District, such as NWK. This is a display-only field which is auto-populated based on the EROC. Data entry is not required.
5. **APPROP ABBREV** = An abbreviation for the Appropriation Account. The abbreviations are: I (Investigations), C (Construction), OM (O&M), MRT-I (MR&T Investigations), MRT-C (MR&T Construction), MRT-OM (MR&T O&M) , and FUSRAP. This is a display-only field which is auto-populated based on the CW TYPE OF FUNDS. Data entry is not required.
6. **CW TYPE OF FUNDS** = CW Account and Category/Class/Subclass (CCS) code – This is an 11 character numeric code that combines the numeric appropriation account codes with the numeric CCS codes. Appropriation Account codes are Investigation (96 3121), Construction (96 3122), Operations and Maintenance (96 3123), and Mississippi River and Tributaries (96 3112). These are followed by a space and then the three digit CCS code which can be found in the Main EC, Table 3.
7. **PROGRAM CODE** = The Program Code identifies the AMSCO/CWIS/PWI associated with a P-2 project. A Program Code should be assigned to every CW P-2 project for which funds are requested. The Program Code is a project level code which is entered in Oracle Projects (OP).

8. **PRIMARY FEATURE CODE:** Required for PED, Construction and O&M. This is the (only enter one) Feature Code that relates to the predominant/major constructed asset including land that the budget item supports. For inspection of completed works, if more than one project in a state will be inspected enter NA. A Feature Code number in 8.a. below will be selected and entered into OFA. For additional information see paragraph II-2-6 and the list of common data fields in the Definitions/Glossary section of the Main EC. Applicable Feature Codes (enter two-digit number only)

- 01 – Land
- 02 – N/A
- 03 - Reservoirs
- 04 - Dams
- 05 - Locks
- 06 - Fish and Wildlife
- 07 - Power Plants
- 08 - Roads, Railroads and Bridges
- 09 - Channels and Canals
- 10 - Breakwaters and Seawalls
- 11 -- Levees and Floodwalls
- 12 - Navigation Ports and Harbors
- 13 - Pumping Plants
- 14 - Recreation
- 15 - Floodway Control and Diversion Structures
- 16 - Bank Stabilization
- 17 - Beach Replenishment
- 18 - Cultural Resource Preservation
- 19 - Buildings, grounds and utilities
- 20 – Permanent Operating Equipment

9. **ADDITIONAL FEATURE CODE:** Required for PED, Construction and O&M. Using the two-digit number only list all Feature Codes associated with other real property assets that the budget item will address using the list in 8 above. For additional information see paragraph II-2-6 and the list of common data fields in the Definitions/Glossary section of the Main EC

10. **P-2 PROJECT NUMBER** = A six digit numeric code that identifies a project in P-2. Separable elements should have unique codes. Usually individual contracts and phases and stages of projects are not separable elements. (see paragraph II-2-12 for additional information regarding separable elements.)

11. **BUDGET ITEM ID** = A code to uniquely identify multiple entries within the same EROC, P-2 Project, CW Type of Funds (Approp/CCS), Business Line, Increment, and Phase. System generated, no entry required. See paragraph 14.c.(1)(j) in the Main EC for additional information.

12. **FUNDING INCREMENT** = Enter the appropriate number in accordance with the guidance in Paragraph II-2-10. Enter a "1" if the budget item meets the requirements for inclusion in the Initial increment as defined. Enter a "2" if the budgetable item should be considered for the second Increment, etc. Every project may not have a budget item in the first two Increments. A project may have multiple budget items in an increment. For (O&M) Inspection of Completed Environmental Works and Everglades related O&M assign an increment number 1- 5 in accordance with the guidance in the Definitions/Glossary section in the main EC (or Annex C).

13. **DIST RANK** = The budget item's rank in the district's request.

14. **MSC RANK** = The budget item's rank in the MSC request.
15. **HQ RANK** = The budget item's rank in the HQ request. HQ will complete this item. It is not available for District or MSC entry.
16. **ARMY RANK** = The budget item's rank in the Army request. HQ will complete this item. It is not available for District or MSC entry.
17. **PRESIDENT BUDGET RANK** = The budget item's rank in the President's budget. HQ will complete this item. It is not available for District or MSC entry.
18. **PHASE** = A letter code will be used to indicate phase. The codes that are applicable to ecosystem restoration studies and projects are: R = Reconnaissance; F = Feasibility; FW = Feasibility Study in a Watershed Context; WA = Watershed Assessment, P = Preconstruction Engineering and Design Phase; C = Construction; O = Operations and would apply to Inspections of Completed Projects. Joint activities on multi-purpose hydropower project (Cat-Class 300) will have a phase code of OJ or MJ as appropriate. The post-construction monitoring phase will have a phase code of CM. This is for post-construction environmental monitoring for ecosystem restoration and environmental mitigation and post-construction monitoring associated with other activities such as beach nourishment which occurs after construction is physically complete but prior to fiscal completion. This is not monitoring during construction to ensure construction is correct or ecosystem avoidance/mitigation is occurring as planned. It is also not Inspection of Completed Works. A complete list of phase codes may be found in the Main EC Table 3.
19. **PHASE STATUS** = Status of the Phase listed in column 18 will be indicated with a letter code. NP = New Phase; CN=Continuing; LY= Last year of phase. Only use LY if FY12 is the last year for which funding will be requested for the phase (not for a contract). For Reconnaissance and Construction initiation, a new start should be coded as a New Phase in this column. If a study or a project is completing one phase and starting a new one in the PY (e.g. finish Feasibility and start PED), each should be a separate entry (one LY and one NP). If there are multiple funding lines for one phase of a project (especially construction) this code may vary. Perhaps the first entry would be NP and the second one CN and the last one if funded would complete the phase and be LY.
20. **PHASE COMPL** = Required for all items in all accounts. The fiscal year the phase for which funds are being requested is scheduled to complete. This is a four-digit numeric. The Reconnaissance phase ends with execution of a Feasibility Cost Sharing Agreement, or a report recommending no Federal action. For budget development, use the date of the Division Engineer's Transmittal of the report to HQ as the end of the Feasibility phase. The PED phase ends with completion of first set of plans and specifications and execution of the Project Cooperation Agreement/Project Partnership Agreement (PCA/PPA). Construction completion is defined as physical completion. Use milestone CW450 for ecosystem restoration projects. The construction phase completion date is the date that will be used for various ecosystem restoration reports including development of the Five Year Development Plan performance estimates. **The date entered for each of multiple entries for a project/separable element should be determined based on the assumption that no subsequent items for the project/separable element will be funded.** For the post-construction monitoring phase the completion date should be within a year of fiscal project completion. For items in the O&M account, enter the PY unless the requested funds are scheduled to be carried over.
21. **PROGRAM NAME** = Name associated with the Program Code which is entered in Oracle Projects. This will be auto filled. In OFA it is a display-only data field.

22. **P-2 PROJECT NAME** = Name of the P-2 project. The project name is entered in Oracle Projects. In OFA it is a display-only data field.
23. **SYSTEM CODE** = Required for all items. This is a three letter code. The System Code is used to identify the primary system in which the project or study (Program Code) is located. See Annex C, Table C-5.1 for a list of valid system codes. .
24. **BASIN CODE** = Required for all items in all accounts. The USGS Hydrologic Unit Codes (HUC) will be used to identify watersheds. The four-digit code for the appropriate sub-region as defined by USGS will be entered for every budget item. These codes may be found at [http://water.usgs.gov/GIS/huc\\_name.html](http://water.usgs.gov/GIS/huc_name.html). Some programmatic elements may cover more than one sub-region. If there are separable elements enter the code that is appropriate for the separable element. If there are no separable elements enter the code applicable to most of the project or area where funding will be applied.
25. **STATE** = Enter the two letter abbreviation for the primary state in which the study, project, or separable element is located.
26. **CONTRACT TYPE** = Required for all contract items in Construction and any contract with a remaining amount over \$20,000,000 in any phase. Enter one of the following: CC for continuing contract; CF for fully funded contract; CB for base contract with options; or CI for incrementally funded contract. Enter NA if this line item is not a contract or if in I or O and remaining amount less than or equal to \$20,000,000. Each construction contract must be a separate budget item.
27. **CUR BUD FED** = This is a display-only field which is auto-populated from the project's current schedule in Primavera / Oracle Projects. It displays the PY 'At Completion Cost' Federal (Corps) amount for the budget item.
28. **CUR INF ADJ BUD - FED** = This is a display-only field which is auto-populated from the project's current schedule in Primavera / Oracle Projects. It displays the PY 'At Completion Cost' Federal (Corps) amount for the budget item, adjusted by the inflation rates contained in this EC.
29. **BUD REQ - FED** = Required for all items. The Federal (Corps) amount requested in FY12 for the work proposed to be accomplished with this budget item. This may or may not be the total FY12 budget request for the study, project, or O&M item. The sum of all entries for this P-2 Project Number will be its Capability. Additional budget items are not additive and each must provide measurable contributions to performance. Enter the amount in whole dollars rounded to the thousands. For example \$5,045,500 should be entered as \$5,046,000.
30. **AMOUNT NEXT CONTRACT** = Required for all items in Construction. Provide the total amount of the next new contract. Enter NA if this line item is the last contract for project/separable element.
31. **CONTINUING CONTRACT EARNINGS** = Required for all continuing contracts in Construction including both "true" and "special" continuing contracts. Provide the PY earnings for all continuing contracts continuing from the previous year. This number will change as additional items are included in the budget request for an individual continuing contract. Enter NA if this line item is not a Continuing Contract.
32. **CONTINUING CONTRACT VALUE** = Required for all continuing contracts in Construction including both "true" and "special" continuing contracts. Enter the total value of the contract in thousands.

EC 11-2-199  
31 Mar 10

33. **CONTINUING CONTRACT AMOUNT APPLIED THROUGH PY-1** = Required for all continuing contracts in Construction including both “true” and “special” continuing contracts. Enter the amount in thousands. This should be zero for a continuing contract initiating in FY12. Enter NA if this line item is not a Continuing Contract.

34. **LAST YEAR BUDGETED** = Required for items in the Investigation and Construction accounts. Enter the most recent Fiscal Year this study or project was included in the President’s Budget (any phase).

35. **LAST AMOUNT BUDGETED** – Linked to 34 above.

36. **LAST YEAR APPROPRIATED** = Required for items in the Investigation and Construction accounts. Enter the most recent Fiscal Year this study or project received an appropriation (any phase).

37. **LAST AMOUNT APPROPRIATED** = Enter the amount of funds (conference report amount) contained in the appropriation indicated in item 36 above for this study or project

38. **TOTAL PROJECT COST** = The Total Project Cost (TPC) includes the Federal and non-Federal cost of PED and Construction. The TPC also includes cost shared monitoring and adaptive management costs. During the Reconnaissance and Feasibility Phases use the estimate being developed for use in the appropriate report (needed for order of magnitude evaluations). Subsequently, the figure is to include all Federal and non-Federal costs for PED and Construction. The cost should be consistent with the fully funded cost in the J sheet.

39. **BALANCE TO COMPLETE STUDY/PROJECT/SEPARABLE ELEMENT** = The **PY+1** fully funded balance to complete (BTC) study (if in reconnaissance or feasibility) or project or separable element. BTC should be consistent with the Total Project Cost for projects in PED and Construction.

40. **LAST YEAR CONSTRUCTION FUNDS WILL BE REQUESTED** = The last year that funds other than O&M will be requested. This includes authorized monitoring/adaptive management funded in the construction account. If the budget line item accelerates the phase this date may change from date in a previous budget item. The date entered for each of multiple entries for a project/separable element should be determined based on the assumption that no subsequent items for the project/separable element will be funded.

41. **FCSA DATE** = Required for items in the Investigation and Construction accounts. The actual or scheduled date of the FCSA. Enter the date - **YYYY-MM-DD - e.g. 2005-03-30**. If the budget request is to accelerate the reconnaissance phase, this date may change from the initial entry.

42. **PED DATE** = Required only for items in the Investigation and Construction accounts. The actual or scheduled date of the PED Agreement. Enter the date - **YYYY-MM-DD - e.g. 2007-09-30**. If the budget request is to accelerate phase, this date should change from the initial entry. For a new Reconnaissance NA may be appropriate.

43. **PCA/PPA DATE** = Required only for items in the Investigation and Construction accounts. The actual or scheduled date of the PCA/PPA. Enter the date - **YYYY-MM-DD - e.g. 2010-11-01**. If the budget request is to accelerate phase, this date should change from the initial entry. For Reconnaissance and new Feasibility studies NA may be appropriate.

44. **ESTIMATED TOTAL PROJECT COST IN PCA/PPA** = Enter the dollar amount in thousands in the original PCA/PPA for the project. This amount will not change over time.

45. **MONITORING/ADAPTIVE MANAGEMENT** = Required for PED and Construction phases and is to be based on either the Chief's Report or project authorization. Enter the number of years subsequent to physical completion of the project. Enter 0 if no monitoring or adaptive management is recommended or authorized and NA for other phases.

46. **WATERSHED STUDY** = Required only for Investigations, excluding PED. The study may produce a watershed or regional needs analysis (watershed assessment in accordance with Section 729) that identifies opportunities and impediments; a range of alternatives; or a regional or basin-wide strategy that identifies implementable actions for the future for some or all of the stakeholders within the watershed or region; or result in a feasibility report for authorization. A watershed assessment in accordance with Section 729 will be given the phase code WA. (A watershed study that does not meet the criteria for Section 729 will be a feasibility study accomplished in a watershed context and will be coded FW.) The watershed assessment is independent of ranking criteria for the primary business line. Instead it is intended to be a unique evaluation tool that crosses business lines. The following criteria will be used:

a. HUC –the study area is an 8-digit complete watershed.

b. The study is multi-objective/multi-purpose.

c. The result is expected to be a watershed management plan; implementation is not substantially dependent on Congressional authorization.

If the study meets all three criteria above, column 46 is YES and the phase code in column 18 should be WA. If a. and b. are YES, but c is NO; the answer for column 46 is NO and the phase code in column 18 is FW. If the answer to either a. or b. is NO the phase code is F.

47. **WATERSHED DOC** = If column 49 is YES; provide narrative documentation for each of the three required points. (400 characters) For a. enter the name and number of the watershed. For b. list some of the objectives/purposes. For c. briefly describe the expected contents/uses of the management plan. If the response for column 49 was NO then enter NA.

48. **FUNDING OF OTHER PURPOSES** = Required for Construction phase. Displays the budget request amounts entered in other business lines for this project. System generated, no entry required.

49. **PROJECT DESCRIPTION** = Entry is required for all phases of the study/project. Entry needs to clearly and succinctly describe the project features and the intended outputs. Entries will be 125 words (625 characters) or less in total. Include information on type of project, list ecosystem features, and other pertinent information. Briefly describe phase or stage if a multi-stage implementation. If using dredged material, mention the navigation project source. Note the primary (1-3) habitat type(s) being restored using common names. Complete sentences are not required. The project description and work to be performed should be consistent with the J-sheets.

50. **PROJECT DESCRIPTION (CONTD)** = Because P-2 has a field limit of about 489 characters, if the project description (52. above) requires additional space use this field. (150 characters) other wise enter NA.

51. **NARRATIVE JUSTIFICATION** = In approximately 100 words (489 characters) or less provide additional support for the ranking of the study/project. Items a-c must be provided in this order or enter NA as appropriate. Use a., b, and c, to refer to the individual items. Do not repeat the project description or text used to justify significance criteria scores.

EC 11-2-199  
31 Mar 10

a. Legal requirements [specify court orders or lawsuits, reasonable and prudent alternatives to avoid jeopardy, settlement agreements, etc.].

b. If mitigation included – list type of habitat being mitigated and number of acres.

c. **For Inspection of Completed Works, list the projects to be inspected.**

The following may be provided. Use the letters to denote which items have been included.

d. Unresolved policy issues

e. Other significant descriptors.

f. Any other special factors that should be considered in ranking the project, such as urban area.

52. **TOTAL ECOSYSTEM PROJECT COST** = Required for PED and Construction phases. This is the figure that will be used when asked the cost of the ecosystem restoration outputs. **This entry is for the cost of ecosystem restoration elements only.** Be sure to exclude the costs of recreation or environmental education features in this column. For a multipurpose project, this column would include the separable and joint costs of the ecosystem restoration features only. For a single purpose ecosystem restoration project without recreation features the entries in columns 38 and 55 should be identical. Cost in \$1000s.

53. **ACRES** = Required for PED and Construction phases. **The area used for the Cost Effectiveness/Incremental Cost Analysis (CE/ICA) analyses is the quantity to enter.** This does not change the need for a quality component in the CE/ICA analyses. For budgeting purposes the quality of the aquatic habitat restored should be reflected in the subsequent significance criteria and in the project description and narrative justification. Enter the actual number of acres in **whole numbers**. Convert stream miles used as the basis for the benefits analyzed in CE/ICA to acres using table II-2.4 for the appropriate formulas. If a project includes a combination of actions the acres may be added but avoid double counting.

54. **COST PER ACRE RESTORED (\$HUNDREDS)** = Required for PED and Construction phases. The total ecosystem restoration cost in column 52 divided by the number of acres in column 53 expressed in **\$100s per acre**. This will be a calculated field and entered by the system.

**Significance.** Items 55 – 67 are required for all items funded in the Investigations and Construction accounts. Blank entries will equal zero. The scores for items 55, 57, 59, 61, 63, 65, , and 67 (for projects in PED or Construction) will be totaled and serve as an indication of the significance of the proposed restoration. Only one option may be selected in each of these items. For example if the proposed project contributes to a national plan (10 points) as well as a state plan (2 points) only 10 points may be entered. The first score is the maximum points available for each item. The basis for the ranking assigned for Habitat Scarcity, Connectivity, Special Status Species, Hydrologic Character, Geomorphic Condition, and Plan Recognition must be documented and where required with a citation in the Documentation cell (e.g. Smith 1990) and the full citation must be provided with the district's submittal to the division. The term "regional" is defined as involving two or more states; a state and comparable entity in Canada or Mexico; a state and a Tribe; two Tribes, an area of a size comparable to the previous items, or an area covered by an activity that has significant Federal legal and multi-agency support even though entirely within one state such as a Joint Venture area identified under the North American Waterfowl Management Plan, rather than a smaller geographic area.

Justification for the scores should relate to the project outputs in the project description or narrative justification.

**55. HABITAT SCARCITY AND STATUS** = This criterion addresses the scarcity of the type of habitat to be restored in the national and regional context. This criterion is based on historical losses, trend information and relative abundance of the habitat. All special aquatic sites as defined in the 404(b)(1) guidelines are nationally important and relatively scarce. This criterion is intended to identify specific habitat types with exceptional regional or national scarcity. It is not intended to address critical habitat of threatened or endangered species (address these under Special Status Species) or habitats located in priority regions of landscapes (address these under Plan Recognition). Scoring is as follows:

25 = Project will restore nationally scarce habitat that has experienced major historic losses as demonstrated by a Federal, regional, or state/Tribal report, or documented by peer-reviewed professional publications/societies. The report must refer to the specific habitat type and the region in which the project is located. This score may not be based on broad classifications of aquatic habitats such as wetlands that are recognized under programs such as the National Wetlands Inventory Status and Trends Study as declining

18 = Regionally scarce and becoming scarcer as demonstrated by a Federal, regional, or state/Tribal report, or general scientific agreement as documented by professional publications/societies.

10 = Nationally scarce and important habitat as demonstrated by a Federal, regional, or state/Tribal report, or general scientific agreement as documented by professional publications/societies. This score may be applied to broad classifications of aquatic habitats such as wetlands that are recognized under programs such as the National Wetlands Inventory Status and Trends Study as declining.

5 = Project will restore other declining or scarce aquatic and/or related habitats (e.g. riparian non-wetland).

0 = Project will restore a habitat type that is abundant, stable at natural levels or improving beyond natural levels.

56. Document the basis for the score in column 55 in 200 characters. Examples: 90% of (type of habitat) lost in x (size of or name of region) area since yyyy (year) as documented in... Examples of reports might be North American Waterfowl Mgt Plan documents and NOAA's Essential Fish Habitat documents. Additional potential sources may be found in "Significance in Environmental Project Planning: Resource Document" IWR Report 96-R-7 at <http://www.iwr.usace.army.mil/inside/products/pub/iwrreports/96r07.pdf>. Do not provide species information as justification in this cell; provide that information under Special Status Species. If species are cited as the justification the score will be changed to zero. **Failure to provide a specific citation may adversely affect the eventual project rank.**

**57. CONNECTIVITY** = This criterion addresses the extent to which a project facilitates the movement of native species by contributing to the connection of other important habitat pockets within the ecosystem, region, watershed or migration corridor, or adds a critical component to an ecosystem and contributes to increased biodiversity. If a fish passage project involved multiple obstructions at more than one site, credit the overall project for the highest score applicable to the project features. Scoring is as follows:

25 = There are two options:

1) The project fully restores a critical direct physical connection between existing habitat areas within a corridor or larger landscape reducing population isolation, expanding home ranges, or providing access to areas supporting life requisites (e.g. linking feeding and spawning areas). To fit this category the restored habitat must be of the same type, or an appropriate type for the target organism affected. Examples would include restoring the connection between an estuary and the ocean, or two pockets of bottomland hardwood forest separated by drained agricultural land, or removing a dam to reconnect upstream and downstream habitat. The project provides critical life requisites (sites or habitats providing foraging, breeding or cover) for species that complete or expand the functionality of the system contributing to the stability of the species or population.

2) The project establishes a network of related interconnected habitat lined by the appropriate travel habitat. Example: connecting freshwater mussel populations through river restoration. List the connecting habitat type and community or organism connected.

18 = Project creates a nodal connection between existing habitat areas within a corridor (as in restoring a wetland along a waterfowl flyway) or larger landscape facilitating animal migration or flow of genetic material for a nationally or internationally recognized species. The project would not be physical adjacent to other habitat areas in the corridor but would be spaced such that it provides a critical resting/feeding or other link between two other habitat areas. Examples would be restoring a marsh resting area along a defined migration corridor for a specific species or group of species such as the sand hill and whooping cranes or the creation of horseshoe crab spawning habitat to provide foraging habitat supporting internationally migratory Redknots. Also apply this score to nature-like fishways (e.g. ramps and by-pass channels).

10 = Project restores suitability of an existing connection or corridor; or expands functional area(s) within a splintered migratory corridor or home range; or provides an important scarce habitat type that complements adjacent existing habitat types by providing one or more missing life cycle requisites for a number of species. For example, expanding or adding resting or foraging areas that improve the functionality or carrying capacity of the system. Apply this score to technical fishways (i.e. fish ladders).

5 = Project provides a large expansion to an existing habitat increasing the carrying capacity of the system without substantially increasing the habitat or species diversity.

0 = The project is an isolated unit or adds a relatively small increment to a much larger habitat. For example, a project that takes advantage of an opportunity to restore a portion of a drained field or adds five acres to a 500-acre wetland.

58. Document the basis for the score in column 57 in 200 characters; such as: connect x National and y state wildlife areas, connect 5 tracts totaling x acres. Include a list of the primary species used to justify score. Failure to provide documentation of the areas and species may adversely affect the eventual project rank.

59. **SPECIAL STATUS SPECIES** = The project must provide a significant contribution to some key life requisite within the potential range of a species to receive points in this category. The demonstrated presence or potential presence of a species of concern in the project area is not sufficient to justify a score above zero. Scoring is as follows:

10 = Project provides specific restoration measures formulated to complete or add to existing life requisites within the project's footprint or area of influence for **Federally listed or candidate**

**threatened or endangered species.** This information must be documented in U.S. Fish and Wildlife Service/National Marine Fisheries Service Fish and Wildlife Coordination Act reports or correspondence and/or a Biological Assessment/Opinion as appropriate. This score is intended to identify projects that directly restore habitat for threatened or endangered species and requires a specific reference to the species in the documentation cell. Few projects will attain this rating.

5 = Project restores habitat for life requisites that complete or add to existing life requisites within the project's area of influence or footprint for species covered by international treaty, such as International Migratory Birds, or diadromous fish that are of special concern or have special significance. This rating would not include common or abundant migrants unless there is a specific concern about an individual species or species group that can be cited (such as listed on the American Bird Conservancy/Audubon Watch List or in correspondence from USFWS or state agencies). This scorer requires a specific reference to the species in the documentation cell.

3 = Project provides habitat for life requisites that complete or add to existing life requisites within the project's area of influence or footprint for State listed or candidate species.

0 = None.

60. Document the basis for the score in column 59 in 200 characters by listing species or group for waterfowl and diadromous fish and life requisite met (e.g. – roseate tern/nesting habitat). Cite specific reports or dates of correspondence with USFWS/NMFS/state agency and provide full report citation or full correspondence to MSC in backup information. Cite a federal recovery plan if applicable. The species must have a demonstrated presence in the area or a strong probability of occupying the site after restoration. Failure to provide a specific citation may adversely affect the eventual project rank.

Regarding Hydrologic Character and Geomorphic Condition (61-64 below) since the goal of Corps ecosystem restoration projects is "to restore degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition"; the project has in all probability been formulated with an implicit if not explicit target of achieving a more "natural" condition. Reference sites, historic stream gage data, the physical parameters required to restore and sustain the desired native habitat may be a means to define "natural" for each project.

**61. HYDROLOGIC CHARACTER:** This criterion recognizes the importance of appropriate hydrology in maintaining the ecological functions of aquatic, wetland, and riparian systems. The hydrologic character refers to the timing, magnitude, duration, frequency, and rates of change of the flows, water levels, and surface/subsurface exchange processes. Projects that restore and sustain the natural hydrologic "signature" of a system are more likely to provide sustainable environmental services. Scoring is as follows:

20= Project fully restores the natural hydrology to the system or site, as demonstrated by appropriate analyses and/or data.

15 = Project partially restores the natural hydrology to the system or site, and the restored hydrologic variables are demonstrated through appropriate analyses to overcome the factors causing impacts. This level of credit also applies to projects where measures have been identified and justified to address critical and unavoidable needs. Examples include pulsed flooding that triggers critical life history behavior or flows of materials and nutrients between channel and floodplain but that doesn't replicate fully normative magnitude, duration, frequency, etc. and full ecosystem benefits obtaining thereof.

EC 11-2-199  
31 Mar 10

10 = Hydrologic impairment does not exist at the site **OR** the hydrology is restored to the best attainable condition, but remains a limiting factor in ecosystem health.

5 = Some elements of the system or site hydrology are restored but most conditions necessary for a more natural hydrology are not attained.

0 = The project does not address hydrologic restoration, although hydrologic impairments exist on the system **OR** critical goals are not attained.

62. Document the basis for the score in column 61 in 300 characters discussing which aspects restored and basis for the target condition. Reference hydrologic attributes. Water quality is not an appropriation justification for a score. Be sure to link proposed actions to hydrologic outcomes. Include quantification of the change if possible, especially for projects in PED and Construction. Tie benefits to key thresholds or a reference system

63. **GEOMORPHIC CONDITION:** This criterion relates to the establishment of suitable structure and physical processes for successful restoration. The scale, form, and landscape position of the system, along with key processes such as erosion, sediment transport and deposition play a critical role in defining ecosystem health and resilience and must be considered in project development. The term "system" in the following criteria would apply to large-scale projects such as Everglades or projects with a substantial geomorphic impact on distinct areas adjacent to the site. Other projects will be evaluated at the site level. Scoring is as follows:

20= Project fully restores the natural or attainable geomorphic processes and form to the system or site, including the appropriate diversity and dynamics, as demonstrated by suitable analyses and/or data.

15 = Project restores the key geomorphic processes to the system or site, and the system is expected to recover full ecological function within an appropriate timeframe. This level of credit also applies to projects where measures have been identified and justified to address critical and unavoidable needs. Examples include sediment amendments or large woody debris insertion below dams.

10 = Geomorphic impairment does not exist at the site **OR** the geomorphology is restored to the best attainable condition, but remains a limiting factor in ecosystem health.

5 = The form of the project location or system is restored, but some key system processes remain degraded or non-functional. (An example might be restoration of an oxbow on a stream that is not allowed to meander naturally.)

0 = The project does not address geomorphic restoration, although geomorphic impairments exist on the system **OR** critical goals are not attained.

64. Document the basis for the score in column 63 in 300 characters discussing which aspects restored and basis for the target condition. Link project actions to pertinent geomorphic outcomes. Reference key attributes and include quantification of the change especially for PED and Construction. Tie benefits to key thresholds or a reference system.

65. **PLAN RECOGNITION** = This criterion recognizes Corp ecosystem restoration projects that contribute to watershed or basin plans as emphasized in the "Civil Works Strategic Plan". This criterion ranks the

importance of the plan that the Corps project supports. Recovery plans may not be used as a basis for a score. Scoring is as follows:

10 = A Corps study or project that contributes to a multi-agency comprehensive watershed or basin plan developed in support of Federal priorities as demonstrated in laws or specifically authorized programs such as; Everglades, CALFED, Chesapeake Bay plan, etc.

5 = A Corps study or project that contributes to a multi-agency regional watershed or basin plan. Examples of this would include plans developed by groups such as the Delaware Basin Commission, or plans pertaining to Joint Venture Areas under the National Waterfowl Management Plan.

2 = A Corps study or project that contributes to a State/Tribal or local watershed or basin plan.

0 = A Corps project that does not contribute to any collaborative comprehensive or watershed or basin plan.

66. Document the basis for the score in 65 in 200 characters. Include the name and date of plan used as the basis of the score.

67. **SELF-SUSTAINING** = This requirement applies to only the PED and Construction phases. Enter NA for Reconnaissance and Feasibility phases. The ideal goal of most restoration is a self-sustaining ecosystem consisting of natural processes. The cost of the average annual O&M per acre (using the number of acres in column 42) will be used as an indicator of the level of human intervention needed to maintain the restoration outcome. The most recent cost estimates or the actual costs of O&M (if greater than the latest estimate) will be used in this calculation. Scoring is as follows:

20 = Low relative O&M costs. The average annual O&M cost per acre must be \$15.00 or less.

10 = Medium relative O&M costs. The average annual O&M cost per acre is greater than \$15.00 but less than \$100.00.

0 = High relative O&M costs. The average annual O&M cost per acre equals or exceeds \$100.00.

68. **TOTAL SCORE** = The sum of the scores entered in columns 55, 57, 59, 61, 63, 65, and 67. P-2 will auto fill. Maximum is 130.

69. **NATIONALLY SIGNIFICANT** = If the study/project received the highest score possible in the Scarcity, and Connectivity, and at least a 5 in Special Status Species, and Plan Recognition then P-2 will enter a "Y" for yes in this column. If this criterion is not met an "N" for no will be entered.

70. **REGIONALLY SIGNIFICANT** – If the study/project received at least the second highest score in Scarcity, Connectivity, Special Status Species and Plan recognition columns, then P-2 will enter a "Y" for yes in this column. If this criterion is not met an "N" for no will be entered.

71. **NUMBER OF INSPECTIONS** = This item is to provide for funds to inspect completed ecosystem restoration projects and ecosystem restoration features of multi-purpose projects. These funds will be in the O&M account. The work category code is 60422. See subannex C-4 "Work Category Codes and Definitions – O&M Operations Accounts" in Annex C, for the full definition of "Inspections of Completed

EC 11-2-199  
31 Mar 10

Work, Ecosystem Restoration. Districts will enter amounts in P-2 in the same manner used for Inspection of Completed Works for Flood Damage Reduction. Enter the number of ecosystem restoration projects or features that will be inspected with the amount requested. This category is not for inspection of features completed as mitigation. The CCS is 640. The P-2 Program Number is 081816.

72. **BUDGET ITEM JUSTIFICATION.** In 75 words (375 characters) or less state proposed use of the line item amount (be as specific as possible) and what this amount accomplishes (what are we getting for this amount of \$). Key point is to be able to distinguish from other entries for the same project or other projects. For example: initiate or complete a study, contract, or project; reduce the study time x months; or contract work more efficiently, or link to other work in watershed more efficiently. This is where the phase or stage of a project or separable element should be mentioned; such as initiate stage 2 of 3 or phase 3 of 3. Do not use the same justification for multiple entries for a study/project.

73. **EXTERNAL PEER REVIEW** = Enter the amount (\$1,000) that is included in the Budget Request - Fed that is required to fund the Federal cost of external peer review panels in accordance to WRDA 2007, Section 2034. Enter zero if there are no Federal funds for peer review panels.

TABLE II-2-4

Formulas for Conversion of Stream Miles to Acres

Action	Formula	Example Calculation
Direct alterations of habitat in a channel (e.g. constructed riffle pool sequences, J-hooks)	Report the bank to bank width multiplied by the length of the reach within which the restoration measures are located.	
Dam removal	Measure the length of the impoundment created by the dam under normal flow conditions. Report the area represented by the length of the impoundment under normal flow conditions multiplied by the width of the river immediately upstream of the impoundment. <u>Also</u> , report the length of the <u>mainstem</u> river up to the next fish passage impediment multiplied by the width used above and multiplied by 0.25. (The 0.25 multiplier represents the fact that fish are restored to the reach, but that fish only represent one component of the habitat.)	[0.8 mi impoundment length X 100 ft channel width] + [10 mi reach length X 100 ft channel width X 0.25 habitat factor] = 40 acres
Fish passage projects other than complete dam removal	report the length of the <u>mainstem</u> river up to the next fish passage impediment multiplied by the width described under dam removal above and by 0.25 and by the efficiency of the fish passage. In the absence of project specific information on fish passage efficiency, use 0.9 for nature-like bypass channels, 0.8 for rock ramp, and 0.6 for fish ladders for the efficiency multiplier.	10 mi reach length X 100 ft channel width X 0.25 habitat factor X 0.6 efficiency factor = 18 acres

EC 11-2-199  
31 Mar 10

ILLUSTRATION II-2-1

Sample Spread Sheet  
Ecosystem Ranking Criteria and Additional Data  
(Revised spreadsheet for FY12)



III-2-1 Ecosystem  
Ranking Criteria FINA

EC 11-2-194  
1 Apr 09

## SUB-APPENDIX II-3

### Environment-Stewardship

**II-3-1. Introduction.** The Corps is responsible for the management of about 500 existing water resources projects located in 43 states. Each project's construction and operation is authorized under unique authorities for single or multiple-purposes such as navigation, flood control, hydropower, fish and wildlife, recreation and water supply. Included in those authorized projects and entrusted to Corps stewardship are streams, rivers, lakes, and their adjacent lands - totaling nearly 12 million acres and nearly 56,000 shoreline miles. In operating and maintaining its multi-purpose projects, the Corps integrates the management of the existing diverse natural resources (such as fish, wildlife, forests, grasslands, wetlands, soil, air, water) and cultural resources, with the provision of recreation opportunities. Guidance for accomplishing stewardship activities may be found in ER 1130-2-540. As a matter of law and good environmental practice, the Corps executes stewardship activities on project lands and waters to sustain healthy natural resources and cultural resources that occur on this federal estate and takes action to minimize adverse environmental impacts. The Environment-Stewardship vision is to provide healthy project lands and waters for future generations.

**II-3-2. Purpose.** The Corps Environment-Stewardship (E-S) mission is to manage, conserve and/or protect the natural and cultural resources at Corps operating water resources projects, consistent with project authorities and ecosystem sustainability approaches; consistent with the USACE Environmental Operating Principles; to meet environmental standards; and to serve the needs of present and future generations. Environment-Stewardship provides management of natural and cultural resources to achieve healthy, sustainable conditions, and fosters healthy lands and waters by balancing public uses and needs.

#### **II-3.3. Goals, Objectives and Performance Measures.**

a. Environment-Stewardship seeks to fulfill the Civil Works (CW) goal to ensure that projects perform to meet authorized purposes and evolving conditions. Table II-3-1 displays the Environmental Stewardship Objectives and Performance Measures described in the CW Strategic Plan for FY04 – FY09, dated March 2004. Preparation of the FY12 budget request requires the recognition of a constrained budget environment and the ongoing evolution of better budget linked performance measures. Table II-3-2 displays the FY12 Stewardship objectives and performance measures which support and/or supplement the CW Strategic objectives (Table II-3-1) and performance measures, to reflect the near term realities of a constrained FY12 budget environment.

TABLE II-3-1 Civil Works Strategic Plan Objectives and Performance Measures*	
<u>Environmental Stewardship Objectives</u>	<u>Performance Measure</u>
Ensure healthy and sustainable lands and waters associated with natural resources on Corps lands held in public trust, to support multiple purposes.	Percent of acres with completed natural resources inventories.
Protect, preserve, and restore significant ecological resources in accordance with Master Plans.	Percent of projects requiring Master Plans in accord with current regulations.
Ensure that the operation of all Civil Works facilities and management of associated lands complies with the environmental requirements of all relevant Federal, State, and local laws and regulations.	Percent of all significant findings corrected annually.  Percent of all identified major findings corrected annually.
Meet the mitigation requirements of authorizing legislation or applicable Corps decision document.	Corps administered mitigation projects that meet the requirements in the authorizing legislation or relevant Corps of Engineers decision document: Percent of completed projects that have successfully met mitigation goals.

\* From the FY04-09 Civil Works Strategic Plan, dated March 2004. **See Table II-3-2 for the adjusted FY12 budget-linked objectives and performance measures to be used in development of the FY12 E-S budget.**

b. Our ability to accomplish the Environment-Stewardship objectives depends heavily on certain key factors that are the focus of the FY12 budget-linked objectives and performance measure outputs as presented in Table II-3-2. The key factors associated with accomplishing E-S objectives include that basic information must be available about the natural resources that exist on Corps operating projects. Further, there must be some evaluation of the condition and significance of those resources, at the project and within the watershed ecosystem -- to manage them effectively and efficiently, and to comply with the law and other resource protection mandates, such as legislatively authorized mitigation, National Environmental Policy Act and Endangered Species Act mandates. Additionally, significant cultural resources that occur on project lands must be managed in accord with several federal protection mandates. Also, project Master Plans, which guide the manager in making informed and wise decisions on project land use proposals, must be up-to-date and in accord with regulations (ER and EP) 1130-2-550. These regulations require that Master Plans include a land classification that designates environmentally sensitive areas and include meaningful natural resources management objectives. The Master Plan promotes the identification, protection, conservation and sustainability of natural resources. To build a highly effective and efficient budget, performance measures are utilized to attribute priority to that work which contributes to accomplishing the E-S objectives and results.

TABLE II-3-2 FY12 Environment-Stewardship Budget-Linked Objectives and Performance Measures	
Budget-Linked Objectives	Performance Measure
Perform basic stewardship functions to ensure healthy and sustainable natural resources conditions.	<b>Basic Stewardship</b> – Percent of total Corps fee-owned acres that are classified as in healthy and sustainable condition. Budgeted under Basic Stewardship Efficiency
Assure compliance with natural resources environmental mandates and legal requirements	<b>Mitigation Compliance</b> - Percent of total Corps administered mitigation acres, or percent of total required pounds/or individuals of mitigation fish released, that meet the requirements in the authorizing legislation or applicable Corps authorization decision documents.
	<b>Endangered Species Protection</b> - Percent of Corps operating projects with federally listed species for which the Corps is meeting Endangered Species Act requirements or responsibilities.
Protect and preserve cultural resources	<b>Cultural Resources Management</b> - Percent of Corps operating projects that meet federally mandated cultural resources management responsibilities.
Balancing public uses of natural resources	<b>Master Plan Completion</b> - Percent of total projects requiring Master Plans for which the Master Plans are completed in accord with ER 1130-2-550 and EP 1130-2-550.

c. Full descriptions of the FY12 Environment-Stewardship budget-linked performance measures are provided in Illustrations II-3-1 to II-3-5.

**II-3-4. Environment-Stewardship Program Development – General Instructions.**

a. The Environment-Stewardship budget will be performance-based with Headquarters oversight. It will be built by the development of incrementally justified budget packages for prudent work, categorized by work category code (See Annex C of this EC, sub-annex C-4 “Work Category Codes and Definitions – O&M Operations Accounts” for current codes) that realistically may be accomplished during the budget year and that provides quantifiable, efficient, and increased outputs toward the current E-S performance measures. Each included budget package will provide quantified outputs toward a single primary performance measure that reflects the primary reason why the budget package is justified and the category of outputs anticipated from the work. So that stand-alone decisions may be made, each proposed budget package will consider and include all the costs (i.e. of the primary, as well as supporting, activities) that are necessary to accomplish the proposed work and result in performance output. The Environment-Stewardship Business Line Manager reserves the right to adjust budget packages in the final submission to best serve the overall stewardship program nationwide.

b. **Limitation:** In accord with guidance “USACE Policy for Collection of Civil Works Appropriation Reimbursement” (effective 1 Oct 08), the funds collected from the sale of commodities (e.g. timber, crops, sand, gravel, quarry) and from settlement of court cases (e.g. trespassing, illegal timber cutting) will be accumulated, and CECW-I and CERM will issue work allowances and funding authorization from the accumulated funds in the applicable appropriation to finance the cost of the sales activity and other natural resources management activities. Therefore, do not include in the Stewardship budget those commodity sales costs or other natural resources management activity costs that are expected to be funded by the proceeds from the sale of project commodities. This limitation applies to all performance measure budget packages.

c. **Joint Activities – Joint Costs.** See guidance provided in Sub-Annex C-2, paragraph C-2.3.b.

d. **Environment-Stewardship Budget Evaluation System (E-S BEST) and P-2.**

(1) E-S BEST is a web-based tool developed for field use in calculating Environment-Stewardship performance measure outputs for stewardship O&M activities and budget packages. E-S BEST must be used in developing the FY12 E-S budget. E-S BEST will use data provided by the project to calculate a value for each budget package’s performance measure output. Using these values, E-S BEST will facilitate ranking of all E-S budget packages at the District, MSC, and HQ levels. For the FY12 budget development, all budget and performance information entered in E-S BEST for FY12 can be pre-populated into the FY12 process unless the users choose not to. Most projects should take the advantage of retrieving data from the previous year in E-S BEST and review/update the existing budget packages in E-S BEST instead of creating new ones. Work category codes used in budget packages should also be confirmed to assure work is accurately characterized. See Sub-annex C-4 of this EC for current codes.

(2) The performance measure information must be updated in E-S BEST by 22 May 2010. These performance data will be extracted from E-S BEST and merged with budget data extracted from P-2 Primavera Project Manager in OFA on a nightly basis. When entering budget information into P-2 Primavera Project Manager, make sure the corresponding BEST\_ID’s are entered for all budget packages to ensure the proper performance measures can be matched in OFA. For most projects, the preliminary budget information and the matching BEST\_ID’s can be carried over from previous year’s data entry in P-2 or should be taken from the existing E-S BEST database. For projects that start FY12 budget development in E-S BEST first-- you should provide the budget information to your P-2 correspondent for data entry in P-2 before the deadlines set by the district/MS (must do this to get the BEST\_ID if this is a new package for FY12), to allow districts and MSC to review and evaluate their budgets comprehensively, across business lines. For projects that enter the budget directly into P-2 based on FY09 E-S BEST budget package information--make sure to revise your E-S BEST budget information accordingly. For either option, you must have the matching BEST\_ID when entering budget information in P-2. The information needed to provide your P-2 correspondents for data entry is available on the P-2 summary page in E-S BEST. See Illustration II-3-7 of this Appendix for the FY12 Environment-Stewardship Budget Development Work Flow diagram.

(3) For the FY12 budget, performance measure output data from E-S BEST will be loaded to OFA every night once the projects have submitted data input in E-S BEST and the budget items have been created in P-2-OFA. As the budget review continues, additional E-S budget review data and detailed roll-up spreadsheets will be available to the MSC’s and may be accessed through the NRM Gateway at <http://corpslakes.usace.army.mil/employees/esbest/esbest.html>.

(4) To maintain the integrity of the E-S Budget development process, the structure of stewardship increments in E-S BEST is fundamentally the same as the FY12 process. However, to achieve consistency with the overall O&M program structure and to meet the requirement for entering budget information into P-2, the E-S BEST budget increments should be matched in P-2 according to Table II-3-3. That is, the *E-S BEST Minimal* program increment will be entered in P-2 as increment 1; E-S BEST *“Critical” Sustaining (Within 25%)* increment budget packages (for additional critical/must-do’s within 25% MSC 5-year average O&M President’s budget) will be entered into P-2 as increment 3; E-S BEST *“Critical” Sustaining (Remaining)* increment packages (for remaining critical/must do’s ) will be entered in P-2 as increment 4; and all *“Non-Critical” Sustaining* increment packages (to sustain performance and to support/meet targets -- these packages will be given a special identifier in E-S BEST) and all Capability/enhanced packages in *E-S BEST* will be entered in P-2 as increment 5. There are no changes on the BEST\_ID’s. The BEST\_ID numbers should still be entered into P-2 as the way they are in E-S BEST.

TABLE II-3-3 Budget Increments Reference Table between E-S BEST and P-2	
E-S BEST Increment	P-2 Increment
<b>Minimal</b> - critical, time-sensitive, least-cost activities to meet the minimum legal mandates, environmental requirements, to prevent the loss of significant natural and cultural resources, and to meet minimum project operating and safety requirements of the budget year (within the MSC minimal program dollar limit of 75% of the 5-year average of O&M President’s budget by MSC)	<b>Increment 1</b> (critical routine <i>and</i> critical <i>non-routine</i> activities; within 75% of MSC amount in Sub-Annex C-2, Table C-2.2 )
<b>Not applicable in E-S BEST</b>	Increment 2 - <b>DO NOT BUILD/ OR USE</b> <b>Note:</b> Include both critical routine and critical non-routine work in P-2 Increment 1- up to MSC minimal program limit
<b>“Critical” Sustaining (Within 25%)</b> – additional critical (routine and non-routine) time-sensitive, least-cost type work that is <i>above the minimal</i> and within the amount limited to 25% of the 5-year average of the O&M President’s budget by MSC.	<b>Increment 3</b> (critical--both routine and non-routine—to sustain expected future benefits of project and support/meet the target level output/service; up to 25% of the minimal MSC program level in Sub-Annex C-2, Table C-2.3). This still may not represent full service levels.
<b>“Critical” Sustaining (Remaining)</b> - all remaining critical, time-sensitive, least-cost type work <i>beyond the minimal</i> and <i>“critical” sustaining (within 25%)</i> increments	<b>Increment 4</b> (all remaining critical—both routine and non-routine—to sustain expected future benefits of project and support/meet the target level output/service; added costs above total of Increments 1 & 3 )
<b>“Non-Critical” Sustaining and Capability</b> – sustain expected future benefits and recommended to meet targeted performance levels; enable greater levels of performance in future years, expected high return on investment	<b>Increment 5</b> (capability or enhanced) work recommended to meet target performance level; work to enable greater levels of performance in future years –exceeding performance targets; additional costs above Increment 4)

e. **Well-Written Budget Package Descriptions and Funding Justifications.** In this performance based budget, every E-S budget package must relate to an increase in program performance or results. These linkages must be clear to all levels of reviews, both internal and external (e.g., OMB or Congress) to the Corps. Care should be taken to write all budget package descriptions and justifications clearly and concisely so that the reader can understand and appreciate the work for which funds are being requested. Well-written justifications are essential to convince reviewers who are not familiar with the work to fund your needs. Quantification of needs within an ES-BEST description field limit of 489 characters is essential to a defensible budget, e.g. "This \$750K provides for repair of 10 miles of boundary, inspection of 800 dock permits, brush clearing/fire prevention of 50 acres, and herbicide control of 15 acres of kudzu. These are absolutely critical O&M requirements, without which serious degradation of the environment will occur," (less than 300 characters used). More than 489 gets truncated

f. Each budget package will be assigned to one of the E-S incremental funding categories based on the performance measure output criteria and ranking factors specified for each increment. These criteria and ranking factors are described in the paragraphs that follow. Budget packages assigned in the described increments will be used to develop the HQ proposed CW "Ceiling", "Recommended" and "Capability" programs.

II-3-5. **Budget Increments for Environment-Stewardship.** Please reference the definitions and guidance concerning O&M program Increments in the Project Operations and Maintenance Sub-Annex C-2 of this EC. The Environment-Stewardship budget increments are generally aligned with the overall O&M increment structure. However, the utility of Increment 2 as described in the O&M structure is not very meaningful for the E-S program. Therefore, a separate Increment 2 for E-S (that corresponds with the O&M increment descriptions) will not be built. Those critical, time-sensitive, minimal program level budget packages (for both routine and non-routine activities) will be combined into one increment for consideration in building the minimal E-S program. The minimal E-S program is defined as the E-S portion of the MSC minimal program. The total amount of the minimal E-S program must be assigned to Increment 1 in P-2 and must be within the MSC minimal program limit (75% of the amount in Table C-2.3 by MSC). 'This MSC minimal (75%) program is 'baseline scenario' planning; if an MSC places more than the 5 year historical average for E-S Increment 1s into this 75% program, the Increment 1 packages, ranked by ES-BEST score, above the historical cut line for that MSC will compete with Increment 3 packages for the remaining 25%. The E-S increments are defined by the type of work proposed in each, by outputs toward the current E-S performance measures (Table II-3-2) as assessed by performance measure output criteria, and by the priority work contained in each increment, as assessed through ranking factors. Each increment will include budget packages that must provide justified and quantifiable outputs toward one or more of the current performance measures. All five performance measures apply through each increment; however, the performance measure output criteria and ranking factors may vary. These are described specifically in paragraph II-3.6. General descriptions of each of the Environment-Stewardship Increments follow in the paragraphs below.

a. **Increment 1 - Minimal.** Each MSC will build an Environment-Stewardship minimal program budget that is based on performance measure outputs and that includes the least amount of funding necessary to accomplish only those critical and time-sensitive (must be performed in FY12) project work efforts that are necessary to meet the minimum legal mandates, environmental requirements, to prevent the loss of significant natural and cultural resources, and to meet minimum project operating and safety requirements of the budget year. All work outside the minimal program will be competed based on current program priorities and guidance from higher level authority. The minimal Increment should provide the greatest benefit for the investment, based on performance measure and efficiency outputs, and should support FY12 performance targets. This Increment will seek to avoid violation of: legal mandates

for natural and cultural resources stewardship, environmental compliance, operation, and safety. Work and funding included in this Increment contribute to the development of the HQ CW Ceiling program for the budget year. Minimal increment work packages will be assigned to Increment 1 in P-2.

**b. Increment 2 – NOT APPLICABLE – DO NOT USE.**

**c. Increment 3 - “Critical” Sustaining (Within 25%).** This increment is the next above the minimal program and the first of three increments used to assign *sustaining* program budget packages. Sustaining program activities are generally defined as “state of the practice” and needed to sustain the expected future benefits. In most cases activities will support continuing the level of service that customers, stakeholders, and others have come expect and depend-on for sustaining public safety and economic, environmental and social benefit. Packages in this increment also support meeting FY12 targeted levels of performance (see Table II-3-4). Increment 3 is limited in dollar value to 25% (or whatever % is remaining up to 100% after Increment 1s for each MSC) of the ‘normalized’ 5-year average O&M President’s budget by MSC. ‘Normalized’ means that Congressional adds/supplements after budget submission are not included. It is to incorporate only those additional “critical”, time-sensitive, least-cost activities that meet the description and work type criteria of Increment 1 (minimal program), but that are not accommodated in that increment due to the MSC minimal program dollar limitation. (The high priority budget packages in this increment will receive a special identifier in E-S BEST to distinguish them among all “critical” sustaining type packages.) The combined cost of Increments 1 and 3 must be within the MSC’s 5-year average of the O&M President’s budget amounts by MSC (see Table C-2.2). Budget packages included in this Increment must be performance based and provide quantified and increased output (in addition to the minimal increment) toward one or more of the E-S performance measures. This program increment will be prioritized for relative effectiveness and efficiency in accomplishing the performance objectives and outputs, and will realistically reflect work that can be accomplished or reflect necessary funds that can be obligated in the budget year, and as applicable, reflect realistic financing capability on the part of non-Federal sponsors. As fiscal constraints dictate and efficient performance outputs justify, budget packages of this increment will be evaluated in developing the HQ CW “Ceiling” and “Recommended” level programs for the budget year. Budget packages in the E-S BEST “Critical” *Sustaining (Within 25%)* Increment will be assigned to Increment 3 in P-2.

**d. Increment 4 - “Critical” Sustaining (Remaining).** This increment is the second of three used to assign the *sustaining* program budget packages and next above Increment 3. Sustaining program activities are generally defined as “state of the practice” and needed to sustain the expected future benefits. In most cases activities will support continuing the level of service that customers, stakeholders, and others have come expect and depend-on for sustaining public safety and economic, environmental and social benefit. Packages in this increment also support meeting targeted levels of performance (see Table II-3-4). This increment is to include all remaining “critical”, time-sensitive, least-cost activities that meet the description and work type criteria of Increment 1 (minimal program), but that are not accommodated in either Increments 1 or 3 due to their dollar limits. (Budget packages will receive a special identifier in E-S BEST to distinguish them within all “critical” sustaining activities.) Budget packages must be performance based and provide quantified and increased output toward one or more of the E-S performance measures. Budget packages will be prioritized for relative effectiveness and efficiency in accomplishing the performance objectives and outputs, and will realistically reflect work that can be accomplished or reflect necessary funds that can be obligated in the budget year, and as applicable, reflect realistic financing capability on the part of non-Federal sponsors. As fiscal constraints dictate and efficient performance outputs justify, only the highly efficient budget packages of this increment will be evaluated in developing the HQ CW “Ceiling” and “Recommend” level programs for the budget year. Budget packages in the E-S BEST “Critical” *Sustaining (Remaining)* increment have costs

that are in addition to (above) 100% of the MSC's 5-year average of the O&M President's budget amount (see Table C-2.3) and will be assigned to Increment 4 in P-2.

e. **Increment 5 - "Non-Critical" Sustaining and Capability.** This increment is the last of three used to assign *sustaining* program budget packages, and it will also include all *capability/enhanced* program budget packages. Sustaining program activities are generally defined as "state of the practice" and needed to sustain the expected future benefits. In most cases activities will support continuing the level of service that customers, stakeholders, and others have come expect and depend-on for sustaining public safety and economic, environmental and social benefit. These sustaining packages support meeting FY12 targeted levels of performance (see Table II-3-4). Capability/enhanced activities are defined as those expected to have a high return on investment that enable greater levels of performance in future years (above targets in Table II-3-4). As priority, Increment 5 will include those "non-critical" sustaining packages that directly support the achievement of targeted levels of performance, through prudent, realistic, and efficient operation, management and maintenance of project natural and cultural resources. In addition, and of less priority, this increment shall include *capability/enhanced* program budget packages which have a high expected return on investment that enable greater levels of performance in future years. (Special identifiers will be assigned in E-S BEST to distinguish "Non-Critical" *Sustaining* from *Capability/enhanced* level packages.) Budget packages in this increment will be evaluated in developing the HQ CW "Recommended" and "Capability" Programs for the budget year and will be assigned to Increment 5 in P-2.

II-3-6. **Performance Measure Output Criteria and Ranking Factors - by Increment.** All six Environment-Stewardship performance measures apply through each increment; however, the performance measure output criteria and associated ranking factors for budget packages may vary. Below, the overall outputs to be achieved are described for each performance measure, followed by the more specific performance output criteria and budget package ranking factors that are applicable in each E-S budget Increment. Budget packages in any increment must meet one or more of the performance output criteria for that increment. It is not necessary however to build or include budget packages for every performance measure in each increment. Build and include only those that are applicable to the project. Each budget package will be developed and assigned in E-S BEST to a single E-S performance measure, and in a single appropriate E-S increment in accord with the following.

a. **Basic Stewardship Efficiency (Healthy and Sustainable Lands).** Budget packages are for operations, management and maintenance requirements to meet Corps responsibilities pursuant to the National Environmental Policy Act, Section 101, which establishes the continuing obligation of Federal government to fulfill its responsibilities as trustee for the environment. The performance of these activities will be measured each year through inventories and condition assessment to determine progress in acres through the Healthy and Sustainable Land and Waters performance measure and reported to OMB through the Performance Rating Assessment Tool (PART). Managers will be required to annually enter progress of condition assessments of Sustainable Lands by September 30th into the Operations Management Business Information Link (OMBIL).

(1) **Basic Stewardship Efficiency– Minimal** – is for critical, time-sensitive (must be performed in the budget year) and efficient stewardship activities that may be accommodated within the total MSC minimal program dollar limit (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages necessary: to accomplish essential routine and/or basic stewardship functions for the protection of project natural resources on Corps fee-owned acreage; to protect Corps fee-owned lands and waters against encroachments and imminent loss

of significant natural resources (including soils, vegetation, and animal species) due to erosion, wildfire, pest outbreaks, trespass, or human activities and/or environmentally induced events (e.g. include activities such as minimal boundary monitoring/surveillance, essential evaluation of and response to land use requests such as road or utility right-of way requests by non-Corps entities, compensation requirements resulting from routine real estate out grants and routine O&M actions, fire/pest prevention, timber theft monitoring; fish and wildlife sustainability practices such as counts, evaluation and/or monitoring); to provide safe and efficient passage, collection, and/or transportation for adult and/or juvenile fish at multi-purpose Corps facilities as required in authorizing legislation and/or a relevant HQ approved decision document (e.g. fish passage facilities operation, water quality monitoring as required for fish health and safety, and transportation of fish) – [DO NOT INCLUDE the costs of Mitigation or ESA compliance activities related to fish passage, collection and or transport. Instead, use the Mitigation Compliance or Endangered Species Protection measure.]; to operate project facilities directly related to the stewardship of natural resources; to provide oversight and coordination of environmental stewardship activities related to the management of the Shoreline Management Program.

(b) Ranking Factors. Priority should be given to budget packages: that are necessary in the budget year to meet legal and regulatory requisites of the National Environmental Policy Act, or other federally legislated stewardship directives and efficient in acres managed and maintained, that benefit projects with efficient management of Shoreline Use Permits and/or Real Estate outgrants currently in effect; that directly controls, eradicates or prevents the introduction of, invasive species populations; that directly benefit significant species - not otherwise protected by legislated mitigation or ESA measures and that maximize efficiency of funds invested for these purposes.

(2) **Basic Stewardship Efficiency Increment 3** – *“Critical” Sustaining (Within 25%)* - is for above the minimal program, “critical” healthy and sustainable lands and waters management operations and maintenance activities that are necessary in the budget year. Budget packages in this increment are to sustain expected future benefits and levels of service, and support meeting FY12 performance targets of healthy and sustainable land and water outputs (see Table II-3-4). The cost of priority packages of this increment must be within the amount limited to 25% of the 5-year average O&M President’s budget by MSC (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages: that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages: that respond to same ranking factors as in the minimal increment of this measure.

(3) **Basic Stewardship Efficiency Increment 4** - *“Critical” Sustaining (Remaining)* - is for all **remaining “critical”** healthy and sustainable lands and waters management operations and maintenance activities that are necessary in the budget year. Budget packages in this increment are those packages which are **not** accommodated in the Increments 1 or 3 due to increment dollar limits. Work in this increment is needed to sustain expected future benefits and levels of service, and supports meeting FY12 performance targets of healthy and sustainable lands and water outputs (see Table II-3-4).

(a) Performance Output Criteria. Include budget packages: that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages: that respond to same ranking factors as in the minimal increment of this measure.

(4) **Basic Stewardship Efficiency Increment 5 – “Non-Critical” Sustaining and Capability/Enhanced** - is for above *Increment 4* program work. It includes two types of budget packages that will be distinguished by special identifiers given in E-S BEST. As priority, this increment will include “non-critical” sustaining budget packages (i.e. not critical, but recommended to be done in FY12) for healthy and sustainable lands and waters operations and maintenance activities. Such budget packages will result in the prudent and recommended operations, management and maintenance of project natural resources that prevent decline in resource condition or safety, or move those that resources toward a healthy and sustainable condition. Budget packages are to sustain expected future benefits of and levels of service for healthy and sustainable lands and waters, and meet FY12 performance targets of this performance output (see Table II-3-4). As the second priority, this increment will also include capability/enhanced level budget packages for work that is beyond mandates or requirements for healthy and sustainable lands and water. Such budget packages are expected to have a high return on investment and enable greater levels of performance (beyond FY12 targets in Table II-3-4) for healthy and sustainable lands and water outputs in future years.

(a) Performance Output Criteria and Ranking Factors. Include “*non-critical*” *sustaining level* budget packages: to implement management practices to meet operational goals and objectives presented in project Master Plan and Operations Management Plan (OMP) for Corps fee-owned properties (e.g. shoreline management planning, boundary maintenance, preparation of the OMP, evaluation of land use requests, fire or pest management, comply with federal natural resources protection laws); that will fulfill any additional requirements deemed necessary for meeting the fish passage criteria as outlined in a Corps approved fish passage plan; to implement management practices to meet operational goals and objectives presented in project OMP for Corps easement properties; for any discretionary activities, conditions and facilities requested by US Fish and Wildlife Service, National Marine Fisheries Service and/or a State that are in accord with a HQUSACE approved final decision document; and *capability/enhanced level* budget packages to enhance condition of project lands and waters.

(b) Ranking Factors. Priority should be given to “*non-critical*” *sustaining level* budget packages: to prevent natural resources degradation or loss; to protect environmentally sensitive areas designated in accord with ER/EP 1130-2-550 and identified in the project Master Plan; for work accord with the recommended schedule and management practices prescribed in the project OMP or Corps approved fish passage plan; for special status species; for work to be accomplished in partnership with public or private entities that result in leveraged resources (e.g. challenge partnerships); that maximize efficiency of funds invested for this purpose; followed by *capability/enhanced level* budget packages that maximize efficiency of funds invested for this purpose.

b. **Mitigation Compliance.** Budget packages are for operations, management and maintenance requirements identified and/or specified in project authorization legislation or project authorization decision documents that are necessary to mitigate for adverse impacts to ecological resources unavoidably induced by Corps project construction or operation (see Illustration II-3-1). (Note: since mitigation can occur on other than fee-owned land, no land ownership criteria are fixed to the location of outputs toward this performance measure as long as there is an authorized Corps obligation.) “Mitigation” considered under this performance measure does not include compensatory requirements that result from routine real estate out-grant actions or routine O&M actions. The “Mitigation Compliance” performance measure will be assigned in E-S BEST to those budget packages that provide this output. The amount of mitigation performance output to be generated by “Mitigation Compliance” budget packages (e.g. number of mitigation acres directly affected, number of pounds or number of individuals of fish released, etc.) will be recorded in E-S BEST.

(1) **Mitigation Compliance Increment 1 – Minimal** - is for critical, time-sensitive (must be performed in the budget year), least-cost mitigation compliance work that may be accommodated within the total MSC minimal program dollar limit (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages for specifically authorized mitigation work necessary in the budget year.

(b) Ranking Factors. Priority should be given to budget packages for the operations, management and maintenance of essential work as required by Congressional authorization or HQ approved project authorization decision document that maximize efficiency of funds invested for this purpose.

(2) **Mitigation Compliance Increment 3 - “Critical” Sustaining Increment (Within 25%)** - is for above the minimal program, “critical” mitigation compliance operations and maintenance activities that are necessary in the budget year to sustain expected future benefits and levels of service, and to support meeting FY12 performance targets of mitigation outputs (see Table II-3-4). The cost of priority packages of this increment must be within the amount limited to 25% of the 5-year average O&M President’s budget by MSC.

(a) Performance Output Criteria. Include budget packages that meet the same output criteria listed for minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages that respond to same ranking factors as in the minimal increment of this measure.

(3) **Mitigation Compliance Increment 4 - “Critical” Sustaining (Remaining)** - is for all remaining “critical” mitigation compliance operations and maintenance of the project activities that are necessary in the budget year. Budget packages in this increment are those priority packages which are not accommodated in the Increments 1 or 3 due to increment dollar limits. Work in this increment is needed to sustain expected future benefits and levels of service of, and to achieve performance FY12 targets of mitigation outputs (see Table II-3-4).

(a) Performance Output Criteria. Include budget packages that meet the same output criteria listed for minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages that respond to same ranking factors as in the minimal increment of this measure.

(4) **Mitigation Compliance Increment 5 - “Non-Critical” Sustaining and Capability** - is for above Increment 4 program work. It includes two types of budget packages that will be distinguished by special identifiers given in E-S BEST. As priority, this increment will include “non-critical” sustaining (i.e. not critical, but recommended to be done in FY12) mitigation operations and maintenance activities to sustain expected future benefits and levels of service of mitigation outputs. As the second priority, this increment will also include capability/enhanced level budget packages for work that is beyond activities which directly support the current management of mitigation activities and facilities. Such budget packages have a high expected return on investment and enable greater levels of performance in future years.

(a) Performance Output Criteria. Include “non-critical” sustaining level budget packages for inventory techniques and practices beyond a required evaluation that support operations, management

and maintenance requirements that are necessary for the project to manage authorized fish and wildlife mitigation activities and facilities for activities that beyond mitigation compliance requirements and beyond activities which directly support the current management of mitigation activities and facilities and *capability/enhanced level* budget packages that enhance or enable greater levels of mitigation performance in future years.

(b) Ranking Factors. Priority should be given to “*non-critical*” *sustaining level* budget packages for recommended practices included and described in approved Corps Feature Design Memoranda or other project authorization decision documents, or Operational Management Plans, that maximize efficiency of funds invested for this purpose, followed by budget packages for the *capability/enhanced level* that maximize efficiency of funds invested for this purpose.

**c. Endangered Species Protection.** Budget packages are for operations, management and maintenance activities necessary to comply with Endangered Species Act (ESA) requirements and for the protection of endangered and threatened species that occur on the project lands or that are impacted by project operation (see Illustration II-3-2). The “Endangered Species Protection” performance measure will be assigned in E-S BEST to budget packages that are to accomplish these outputs. [Note: the Bald Eagle, American Peregrine Falcon, Eggert’s Sunflower, American Alligator are no longer listed by the Fish and Wildlife Service as Threatened or Endangered species. Budget packages that address these species, or any other federally de-listed species, shall be competed under the Basic stewardship efficiency packages.] Budget packages will indicate the least amount of funding necessary to perform the work in the budget year.

(1) **Endangered Species Protection Increment 1 - *Minimal*** - is for critical, time-sensitive (must be performed in the budget year) and least-cost endangered species protection work that may be accommodated within the total MSC minimal program dollar limit (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages to conduct the necessary ESA coordination/consultation activities for project operation, to implement required “reasonable and prudent alternatives” (to avoid likely “jeopardy” or adverse critical habitat modification to federally listed species) or non-discretionary “reasonable and prudent measures” (outlined in incidental take statements); to implement other mandatory items specified in an applicable Final ESA Biological Opinion (Note: Do not include funding for the implementation of mitigation, or conservation recommendations, or other discretionary measures identified as a result of ESA consultation); that implement essential management practices on Corps fee-owned properties, for Federally-listed endangered or threatened species on Corps fee-owned properties (i.e. species that are not otherwise protected by “reasonable and prudent alternatives” and/or non-discretionary “reasonable and prudent measures”) to avoid direct adverse impacts to the species or their habitat, in the budget year.

(b) Ranking Factors. Priority should be given to budget packages for federally listed endangered or threatened species with Final Biological Opinions; for federally listed endangered or threatened species with Draft “Likely Jeopardy” Biological Opinion; for other federally listed endangered or threatened species; that maximize efficiency of funds invested for this purpose.

(2) **Endangered Species Protection Increment 3 – “*Critical Sustaining (Within 25%)*”** - is for *above the minimal* program, “critical” endangered species protection operations and maintenance activities that are necessary in the budget year to sustain expected future benefits and levels of service of, and to achieve FY12 performance targets of endangered species protection outputs (see Table II-3-4). The cost of priority packages of this increment must be within the amount limited to 25% of the 5-year average O&M President’s budget by MSC (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages that respond to same ranking factors as in the minimal increment of this measure.

(3) **Endangered Species Protection Increment 4 - "Critical" Sustaining (Remaining)** - is for all remaining "critical" endangered species protection operations and maintenance activities that are necessary in the budget year. Budget packages in this increment are those packages which are not accommodated in the Increments 1 or 3 due to increment dollar limits. Work in this increment is needed to sustain expected future benefits and levels of service of, and to achieve FY12 performance targets of endangered species protection outputs (see Table II-3-4).

(a) Performance Output Criteria. Include budget packages that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages that respond to same ranking factors as in the minimal increment of this measure.

(4) **Endangered Species Protection Increment 5 – "Non-Critical" Sustaining and Capability/Enhanced** - is for *above Increment 4* program work. It includes two types of budget packages that will be distinguished by special identifiers given in E-S BEST. As priority, this increment will include "non-critical" sustaining (i.e. not critical, but recommended to be done in FY12) endangered species protection operations and maintenance activities to sustain expected future benefits and levels of service of endangered species protection outputs. As the second priority, this increment will also include capability/enhanced level budget packages for work that is beyond ESA budget year compliance requirements. Such budget packages are expected to have a high return on investment and enable greater levels of performance in endangered species protection output in future years.

(a) Performance Output Criteria. Include "*non-critical*" *sustainable level* budget packages for research, monitoring or modeling required beyond evaluation to support the operations, management and maintenance requirements necessary for the project to implement "reasonable and prudent" project operation alternatives, or measures, on Corps fee-owned properties - as specified in Final ESA Biological Opinions, Final Recovery Plans, *Feature Design Memoranda*, Operational Management Plans, or other decision documents relating specifically to a particular operating facility; to implement Conservation Measures for federally listed species as described in Biological Opinions issued to the Corps by the U.S. Fish and Wildlife Service, and/or the National Marine Fisheries Service (USFWS/NMFS);; and *capability/enhanced level* budget packages that enhance endangered species protection activities.

(b) Ranking Factors. Priority should be given to "*non-critical*" *sustaining level* budget packages for federally listed endangered or threatened species with a final Biological Opinion; for federally listed endangered or threatened species with Final Recovery Plans; for state listed endangered or threatened species; that maximize efficiency of funds invested for this purpose; followed by *capability/enhanced level* budget packages for federally listed endangered or threatened species with Final Recovery Plans;; that maximize efficiency of funds invested for this purpose.

d. **Cultural Resources Management.** Budget packages are for operations, management and maintenance requirements to meet federally mandated responsibilities for the management of significant cultural resources. Authorities include, but may not be limited to, Sections 106 and 110 of the National

Historical Preservation Act (NHPA), Section 3 of the Native American Graves Protection and Repatriation Act (NAGPRA), and Sections 4 through 9 of the Archeological Resources Protection Act (ARPA). The term “significant cultural resources” means “historic property” as defined in Section 301 of NHPA and “inadvertent discoveries” as defined in Section 3 of NAGPRA; and “archeological resources” as defined in section 3 of ARPA (see Illustration II-3-3). The “Cultural Resources Management” performance measure will be assigned in E-S BEST to budget packages that are to accomplish these outputs. Budget packages will indicate the least amount of funding necessary to accomplish the work in the budget year.

(1) **Cultural Resources Management Increment 1 – *Minimal*** - is for critical, time-sensitive (must be performed in the budget year) and least-cost cultural resources management work that may be accommodated within the total MSC minimal program dollar limit (see Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages to prevent imminent threats to historic properties as defined in NHPA Section 301, inadvertent discoveries as defined in NAGPRA Section 3 and archeological resources having religious or cultural significance as defined in ARPA Sections 3 and 4 through preservation and protection or by implementing appropriate mitigation measures; to complete the NHPA Section 106 “process”, tribal consultation and coordination, law enforcement and other management measures identified in statutory, regulatory, and operational management directives; to complete requirements for specific cultural resources surveys, testing, evaluation, analysis needed prior to the initiation of critical O&M work; to house and curate archaeological collections to the standards outlined in 36 CFR Part 79 (Curation of Federally-Owned and Administrated Archaeological Collections).

(b) Ranking Factors. Priority should be given to budget packages for National Register of Historic Places (NRHP) listed and eligible resources on Corps fee-owned property; for projects with greater numbers of vandalized or threatened cultural resources sites and those requiring monitoring; for existing curation contracts that continue to meet 36 CFR Part 79 based on volume and condition; for NRHP listed resources on Corps administered, less-than-fee owned, properties; for required activities in support of the OMP proposed development or proposed land disturbances under Section 106 of NHPA; for work that completes or updates the development a project HPMP and land surveys during the budget year; that maximize efficiency of funds invested for this purpose.

(2) **Cultural Resources Management Increment 3 – *“Critical Sustaining (Within 25%)*** - is for *above the minimal* program, “critical” cultural resources management operations and maintenance activities that are necessary in the budget year to sustain expected future benefits and levels of service of, and to achieve FY12 performance targets of cultural resources management outputs (see Table II-3-4). The cost of priority packages of this increment must be within the amount limited to 25% of the 5-year average O&M President’s budget by MSC (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include (a) budget packages that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages that respond to same ranking factors as in the minimal increment of this measure.

(3) **Cultural Resources Management Increment 4 - *“Critical” Sustaining (Remaining)*** - is for all remaining “critical” cultural resources management operations and maintenance activities that are necessary in the budget year. Budget packages in this increment are those packages which are not accommodated in the Increments 1 or 3 due to increment dollar limits. Work in this increment is needed

to sustain expected future benefits and levels of service of, and to achieve FY12 performance targets of cultural resources management outputs (see Table II-3-4).

(a) Performance Output Criteria. Include budget packages that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages that respond to same ranking factors as in the minimal increment of this measure.

**(4) Cultural Resources Management Increment 5 – “Non-Critical” Sustaining and Capability/Enhanced** - is for *above Increment 4* program work. It includes two types of budget packages that will be distinguished by special identifiers given in E-S BEST. As priority, this increment will include “non-critical” sustaining (i.e. not critical, but recommended to be done in FY12) cultural resources management operations and maintenance activities -to sustain expected future benefits and levels of service of cultural resources management outputs. As the second priority, this increment will also include capability/enhanced level budget packages for work that is beyond cultural resources management mandated requirements. Such budget packages are expected to have a high return on investment and enable greater levels of performance cultural resources management in future years.

(a) Performance Output Criteria. Include “*non-critical*” *sustaining level* budget packages to manage cultural resources properties of unknown NRHP eligibility, but properties may still have consideration under various statutory authorities; and *capability/enhanced level* budget packages for work enhances efficiency in responsible management of cultural resources.

(b) Ranking Factors. Priority should be given to “*non-critical*” *sustaining level* budget packages to implement work on Corp fee-owned properties; that are in support of and in accord with the project OMP; to prepare a Historic Property Management Plan; that maximize efficiency of funds invested for this purpose; followed by *capability/enhanced level* budget packages for cultural resources on Corps properties; that maximize efficiency of funds invested for this purpose.

**e. Master Plan Completion.** Budget packages are for work to complete a Master Plan supplement or update for which the primary focus is to include natural resources management objectives, identify environmentally sensitive areas, and meet stewardship requirements of ER/EP 1130-2-550 (i.e. it is not appropriate for the entire master plan to be funded from the Environment-Stewardship budget), during the budget year (see Illustration II-3-6). The “Master Plan Completion” performance measure will be assigned in E-S BEST to budget packages that are to accomplish these outputs. Beginning in FY12, any remaining work to be performed in Level One Natural Resources Inventories will be included in the Master Plan performance measure and budget packages. Budget packages will indicate the least amount of funding necessary to accomplish the work in the budget year.

**(1) Master Plan Completion Increment 1 – Minimal** - is for critical, time-sensitive (must be performed in the budget year) and least-cost master plan work that may be accommodated within the total MSC minimal program dollar limit (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages: to initiate, continue, or complete a Master Plan supplement or update where the natural resources on Corps fee-owned lands face imminent threat from commercial, residential and industrial development on private lands immediately adjacent to the project boundary.

EC 11-2-199  
31 Mar 10

(b) Ranking Factors. Priority should be given to budget packages with the most effective combination of the following factors: one third or more of the project fee-owned boundary is immediately adjacent to developed (commercial, residential, and industrial) lands; age of Master Plan; budget package completes the project Master Plan or supplement in the budget year; maximized efficiency of funds invested for this purpose.

(2) **Master Plan Completion Increment 3 - "Critical" Sustaining (Within 25%)** - is for *above the minimal* program, "critical" master plan operations and maintenance activities that are necessary to complete, continue, or initiate required master plans, supplements or updates in the budget year. Budget packages in this increment sustain expected future benefits and levels of service and support meeting FY12 performance targets of master plan completion outputs (see Table II-3-4). The cost of priority packages of this increment must be within the amount limited to 25% of the 5-year average O&M President's budget by MSC (see Sub-Annex C-2, Table C-2.3).

(a) Performance Output Criteria. Include budget packages: that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages: that respond to same ranking factors as in the minimal increment of this measure.

(3) **Master Plan Increment 4 - "Critical" Sustaining (Remaining)** - is for all remaining "critical" master plan operations and maintenance activities that are necessary to complete, continue, or initiate required master plans, supplements or updates in the budget year. Budget packages in this increment are those packages which are not accommodated in the Increments 1 or 3 due to increment dollar limits. Work in this increment sustains expected future benefits and levels of service, and supports meeting FY12 performance targets of master plan completion outputs (see Table II-3-4).

(a) Performance Output Criteria. Include budget packages: that meet the same output criteria listed for the minimal increment of this measure.

(b) Ranking Factors: Priority should be given to budget packages: that respond to same ranking factors as in the minimal increment of this measure.

(4) **Master Plan Completion Increment 5 - "Non-Critical" Sustaining and Capability/Enhanced** - is for *above Increment 4* program work. It includes two types of budget packages that will be distinguished by special identifiers given in E-S BEST. As priority, this increment will include "non-critical" sustaining budget packages (i.e. not critical, but recommended to be done in FY12) for Master Plan completion operations and maintenance activities. Such budget packages are to complete, continue, or initiate master plans, supplements or updates that are recommended in the budget year. These budget packages are to sustain expected future benefits and levels of service, and to meet FY12 performance targets of this output (see Table II-3-4). As the second priority, this increment will also include capability/enhanced level budget packages for work that is beyond any mandated requirements for master planning. Such budget packages are expected to have a high return on investment and enable greater levels of performance in master plan completion in future years.

(a) Performance Output Criteria. Include "non-critical" sustaining level budget packages: to update Master Plans in accord ER 1130-2-550 for all fee-owned property on operating Corps

administered projects; and for *capability/enhanced level* budget packages that accelerate the completion of master plan, or master plan supplement, requisites beyond FY12 performance target levels.

(b) Ranking Factors. Priority shall be given to budget packages that provide the most effective combination of the following factors: factors included in the minimal increment of this measure; work is to update natural resources objectives, land use classification and the specific identification of all environmentally sensitive areas, on Corps fee-owned properties; age of the existing master plan; work is in accord with schedule to complete the plan; maximized efficiency of funds invested for this purpose; followed by *capability/enhanced level* that maximize the efficiency of funds invested for this purpose.

#### II-3-7. Risk Assessment.

Risk assessment involves identifying potential future condition for a performance measure area, assessing the likelihood or confidence level that the condition will occur and the consequences involved for that performance area. This PY budget improves on Stewardship performance measurement by incorporating risk assessment factors into the budget development process for the first time. This brings Stewardship in line with USACE asset management efforts in the Navigation, Hydropower and Flood Risk Management business lines, which use a common format to address risk. The common format is the Relative Risk Matrix Index, with values ranging from 1 through 5, where 1 is the most critical need and 5 is a non-critical need; this coincides with Dam Safety Action Classification (DSAC) rating scales of 1 through 5. The Relative Risk Matrix Index values are determined by cross referencing five levels of Consequence on the vertical axis of the table with five levels of Condition Assessment Classification across the horizontal axis at the top of the matrix table, as seen in Table II-3-5.

a. Consequences are identified in Table II-3.4. ES-BEST will ask for the level of consequence for each budget package to be identified, from Level I to level V, placing particular emphasis on legal risks and short term/long term risks to natural resources

b. Condition Assessment levels are identified and scored for each budget package (A to F) in ES-BEST, placing emphasis on stakeholder interest and mission impacts, in accordance with the Condition Classifications below.

F. Failed condition represents that the performance measure has failed or failure will occur within budget cycle and is no longer operable without further significant testing, repair, renovation or replacement. For example, in Basic Stewardship, if over 70% of the boundary line and boundary markers are vandalized, destroyed, or missing, that could be considered a failed condition.

D. Poor condition represents that the performance measure does not perform well under normal operating conditions - does not meet Corps design or industry standards. Expect to receive numerous stakeholder complaints. Physical signs of serious damage or deterioration are present. Extensive non-routine maintenance is necessary. For example, in Cultural Resources, if archeological artifacts are secured in a locked storage room, but have not yet been curated, that could be considered a poor condition.

C. Fair condition represents that the performance measure is performing within normal operating conditions – but may not meet Corps design or industry standards. Expect to receive stakeholder complaints. Non-routine maintenance is necessary. For example, under Mitigation, if a fish ladder is functioning but needs a new flow meter, that could be considered fair condition.

B. Good condition represents that the performance measure will perform well under normal operating conditions. Although the overall environmental condition may meet Corps design or industry standards, minor maintenance may be necessary. For example, with Master Plans, the plan may be up to date and complete, but the vegetative cover maps are three years old and need to be updated, that could be considered good condition.

A. Excellent condition represents that the performance measure will perform well under normal operating conditions and meets current Corps design or industry standards. Routine O&M is recommended. For example, with Endangered Species, all items in the Biological

Opinion which require action on the part of the Corps were accomplished using FY11 money and no actions are required in FY12, that would be considered excellent condition.

c. Answers in ES-BEST will be auto-filled in OFA, with Condition Assessment (A,B,C,D or F) going in column 'AI/34' and Consequence Category (I, II, III, IV, or V) going in column 'AJ/35.' ES-BEST will automatically cross reference answers for Consequence against Condition Assessment to determine the Relative Risk Value (1-25) and Relative Risk Index Matrix score for that particular budget package (from 1 to 5), and will auto-fill the numbers/score in columns 'AK/36' and 'AL/37' respectively of OFA. For this PY columns 'AE/30' thru 'AH/33' of OFA will not be used. The ES-BEST risk score for a budget package should roughly correspond with the determination of whether it is critical or non-critical, as indicated by the package Increment.. Increment 1 packages should generally receive a Relative Risk Index Matrix score of 1 or 2, and scores for Increment 3s and above should generally fall in the range of 3 to 5. There may occasionally be some Increment 3s that receive a risk score of 2, and only very rarely a score of 1. ES-BEST may be adjusted to take into consideration variables regarding the project current condition and performance measures to adjust risk scoring.

Consequence Category	TABLE II-3-4 ENS - Consequences Rating Criteria
I	<p><b>High:</b> Violation of Legal Requirement High stakeholder/political/environmental interest, Significant negative impact to the resource, complete loss of 1 or more other mission requirements</p>
II	<p><b>Medium - High:</b> Medium to high potential for violation of Legal Requirement, medium to high stakeholder/political/environmental interest, medium high negative impact to the resource, significant loss of other mission requirements.</p>
III	<p><b>Medium:</b> Moderate potential for violation of Legal Requirement, moderate stakeholder/political/environmental interest, moderate negative impact to the resource, some loss of other mission requirements.</p>
IV	<p><b>Low:</b> In violation of requirements from Engineer Regulations only, low stakeholder/political/environmental interest, low negative impact to the resource, low loss of other mission requirements.</p>
V	<p><b>Minimal:</b> Generally in compliance with Engineer Regulations, negligible stakeholder/political/environmental interest, negligible impact to the resource, very low loss of other mission requirements . Overall negligible impacts or risks.</p>

		TABLE II-3-5				
		Environmental Stewardship Risk Index Matrix				
		Condition Assessment Classification				
		F Failed	D Poor	C Fair	B Good	A Excellent
Consequences						
Consequence/Economic Impact	I	1	1	2	2	3
	II	1	2	2	3	4
	III	2	2	3	4	4
	IV	2	3	4	4	5
	V	3	4	4	5	5

1	High Risk
2	Medium - High Risk
3	Moderate Risk
4	Low Risk
5	Minimal Risk

**II-3-8. Five and Ten-Year Performance/Funding Glide Plans.**

a. The CW 10 Year Development Plan purpose is to present an overview of the funding required for the CW program over a 10 year period. The Five Year Development Plan (FYDP), a stand alone document, will be based on a subset of the ten year plan and will produce results that contribute to achievement of the strategic goals and objectives in the CW Strategic Plan. The 10 year plan focus is to undertake projects and activities that provide the highest net economic and environmental returns on the Nation's investment. See paragraph 9 (b) of the main part of this EC for details.

b. To accomplish development of the Environment-Stewardship 10 Year Recommended Performance/Funding Glide Plan, performance targets for each of the budgetary Environmental Stewardship Performance Measures (See Illustrations II-3-1 through II-3-6) have been established (Table II-3-4). These targets are set to achieve and maintain the E-S program compliance type outputs (e.g. Mitigation Compliance, Endangered Species Protection, Cultural Resources Management) as well as to achieve incremental progress in the other measured program outputs (Healthy and Sustainable Lands and Waters, Level One Natural Resources Inventory Completion, and Master Plans Completion).

c. Each project will submit the 10 year funding stream that is necessary to both maintain, from year to year, the achieved levels of performance and to increase performance output each year by the percentages noted in Table II-3-4. The total budget needed will be entered in E-S BEST and will be exported to OFA for review. The funding streams will be the basis for the PY budget and the FY12 – FY 20, 10Year Development Plan which will be submitted to Congress and Office of Management and Budget along with the budget submission. MSC 10year recommended programs must be included in the **25 June 2010** submission. After the MSC submit their 10 year funding streams, a CW 10 year Development Plan will be prepared which contains the recommended programs.

TABLE II-3-6.

FY12 Performance Targets for 10-Year Recommended Glide Plan

Performance Measure	Fiscal Year									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Budget (\$Million)</b>	109	115	120	126	132	139	146	153	160	166
Healthy and Sustainable Lands and Waters	55%	53%	55%	56%	58%	59%	61%	62%	64%	65%
Endangered Species Protection	70%	72%	74%	76%	78%	80%	82%	84%	86%	88%
Master Plan Completion	30%	32%	35%	36%	37%	38%	39%	40%	41%	42%
Cultural Resources Management	49%	51%	53%	55%	57%	58%	60%	61%	63%	64%
Mitigation Compliance	66%	68%	70%	73%	76%	79%	82%	85%	89%	92%

ILLUSTRATION II-3-1

Environment – Stewardship  
FY12 Performance Measure  
Mitigation Compliance

**GOAL:** Assure compliance with environmental mandates and legal requirements (Corps mitigation outputs meet the requirements of authorizing legislation or relevant Corps decision document.)

**Key Result Areas:** Environment Stewardship Results and Justification

**Customer:** Public

**Measure:** Percent of Corps administered mitigation lands (acres), or the percent of pounds/numbers of mitigation fish released from mitigation hatcheries, meeting the requirements in the authorizing legislation or relevant Corps of Engineers authorization decision document.

***Mitigation lands:*** Mitigation lands are those lands on which mitigation measures are taken to compensate for adverse ecological impacts unavoidably caused by Corps projects or activities. For the performance measure, these lands are those authorized by Congress or approved by HQUSACE in a formally documented authorization decision document.

***Mitigation fish hatcheries:*** Mitigation fish hatcheries are those facilities which are which are funded or operated by the Corps for the taking, fertilization, incubation and hatching of fish eggs, and/or rearing of young fish to be released, to compensate for unavoidable adverse impacts to fish species or their habitat caused by Corps projects. For the performance measure, these fish are those that were authorized by Congress or approved by HQUSACE in a formally documented authorization decision document.

***Corps administered*** lands: Lands either managed by the Corps or lands licensed permitted or leased from the Corps.

**Definition:** Number of designated Corps administered mitigation lands (acres) meeting mitigation requirements divided by the total number of designated Corps administered mitigation lands (acres); or the number of pounds (or number of individual) fish released from a mitigation hatchery, divided by the number of pounds (or number of individuals) of fish required to be released from that mitigation fish hatchery to meet the mitigation requirement for the budget year.

**Demonstrates:** Status of Corps efforts to meet mitigation requirements.

**Unit of Output:** Acres or number of pounds (or individuals) of fish

**Data Source:** OMBIL, E-S BEST

EC 11-2-199  
31 Mar 10

#### ILLUSTRATION II-3-2

Environment – Stewardship  
FY12 Performance Measure  
Endangered Species Protection

**GOAL:** Assure compliance with environmental mandates and legal requirements identified in Federal law

**Key Result Areas:** Environment-Stewardship Results and Justification

**Customer:** Public

**Measure:** Percent of Corps operating projects with Endangered Species Act requirements for which the Corps is meeting Endangered Species Act (ESA) requirements or responsibilities.

**Definition:** Total number of Corps projects that meet ESA compliance requirements in the budget year divided by the total number of projects that have ESA compliance requirements in the budget year.

**Demonstrates:** Status of Corps efforts to meet ESA requirements.

**Unit of Output:** Corps projects in compliance with ESA requirements.

**Data Source:** OMBIL

ILLUSTRATION II-3-3

Environment – Stewardship  
FY12 Performance Measure  
Cultural Resources Management

**GOAL:** Protect and preserve cultural resources.

**Key Result Areas:** Environment-Stewardship Results and Justification

**Customer:** Public

**Measure:** Percent of Corps operating projects meeting federally mandated cultural resources management responsibilities.

**Definition:** The total number of Corps projects meeting federally mandated cultural resources management responsibilities divided by the total number of Corps projects with federally mandated cultural resources management responsibilities.

**Demonstrates:** Status of Corps efforts to protect and preserve cultural resources.

**Unit of Output:** Projects complying with federally mandated cultural resources responsibilities.

**Data Source:** OMBIL

EC 11-2-199  
31 Mar 10

#### ILLUSTRATION II-3-4

Environment – Stewardship  
FY12 Performance Measure  
Basic Stewardship

**GOAL:** Manage natural resources to assure a healthy and sustainable condition and meet requirements of National Environmental Policy Act, Section 101

**Key Result Areas:** Environment-Stewardship Results and Justification

**Customer:** Public

**Measure:** Percent of healthy and sustainable acres on Corps fee-owned property.

**Sustainable:** Meets the desired state. The acreage is not significantly impacted by any factors that can be managed and does not require intensive management. The acreage also meets operational goals and objectives set out in project Operational Management Plan (OMP) or other applicable management document. These acres are considered healthy and sustainable for future generations. Only minor management practices may be required to maintain the health. For the purposes of this measure, Project Operations Lands (occupied by prime facilities such as the project office, dam, locks and other facilities) identified in the Master Plan are to be classified as “sustainable”.

**Fee-Owned:** Real property for which the U.S. has all rights, titles, and interest.

**Definition:** The number of Corps fee-owned acres classified as in a sustainable condition versus the total number of Corps fee-owned acres.

The result for this measure provides an indicator of the status of all Corps fee-owned acres (land and water). This indicator shall be the overall condition of project acreage as assigned during the inventory and classification of vegetation on Corps fee-owned land. The National Vegetation Classification System (NVCS) is the system that the Corps has adopted for the Level One Natural Resources Inventory and the vegetation classes of the NVCS will be the reference unit for which the condition will be assigned. The NVCS data collection will be supported in the Environment-Stewardship module of OMBIL beginning in FY05. The measure of sustainable acres will use the NVCS if the Corps fee lands have been classified using the NVCS. Special note: Many projects have used other vegetative classification systems in the conduct of their Level One Natural Resources Inventory. During the initial 4 years of implementation of this measure and of data transition to the NVCS, those other systems may be used along with “best professional judgment” to quantify the number of sustainable fee-owned acres.

Each project will identify and categorize their project fee-owned acres into the four following categories:

**a. Sustainable** – Meeting desired state. The acreage is not significantly impacted by any factors that can be managed and does not require intensive management. The acreage also meets operational goals and objectives set out in project OMP or other applicable management document. These acres are considered healthy and sustainable for future generations. Only minor management practices may be required to maintain the health.

**b. Transitioning** – Managed to meet desired goals. The acreage is impacted by human or other environmental factors that require management of the acreage to meet goals and objectives outlined in the project OMP or other applicable management document.

**c. Degraded** – Does not meet desired goals. The acreage is significantly impacted by human or other environmental factors that prevent the acreage from meeting desired goals outlined in the project OMP or other management documents. The acreage is not considered healthy. Intense management may be required to meet desired goals.

**d. Not Assessed** – The acreage has not been assessed against operational goals and objectives and thus a condition rating cannot be determined.

**Demonstrates:** Status of Corps efforts in achieving the goal of 100% environmental sustainability.

**Unit of Output:** Acres

**Data Source:** OMBIL

EXCEPTION: Select (or On a voluntary basis) projects may choose to enter data into a new worksheet in ES-BEST (and OMBIL?) on a test basis, to evaluate a revised, more objective method for assessing basic stewardship performance.

EC 11-2-199  
31 Mar 10

#### ILLUSTRATION II-3-5

Environment – Stewardship  
FY12 Performance Measure  
Master Plan Completion

**GOAL:** Foster healthy lands and waters by balancing public uses and needs, and fully integrate the Corps of Engineers Environmental Operating Principles (EOPs).

**Key Result Areas:** Environment-Stewardship Results and Justification

**Customer:** Public

**Measure:** Percent of Corps-operated water resource projects with completed Master Plans in compliance with Engineering Regulation (ER) 1130-2-550.

**Master Plan:** The Master Plan is a document that guides the development, management and public use of the project.

**Engineering Regulation (ER) 1130-2-550:** This regulation and its companion guidance, Engineering Pamphlet (EP) 1130-2-550, provide both the policy and guidance governing the preparation and development of Master Plans and Operational Management Plans.

**Definition:** The number of project required Master Plans in compliance with ER 1130-2-550 divided by the total number of project required Master Plans.

Master Plans shall be developed and kept current for all civil works projects and other fee-owned lands for which the Corps has administrative responsibility for management. To be considered compliant with policy and guidance in ER/EP 1130-2-550, a Master Plan shall address regional and ecosystem considerations, project resource capabilities and suitability, and expressed public interests and desires. Of critical importance to Environmental Stewardship, Master Plans shall include a land classification system in accordance with ER/EP 1130-2-550 (that recognizes environmentally sensitive areas) and includes specific natural resource management objectives that support the EOPs.

**Demonstrates:** Corps commitment to fully integrate environmental stewardship and the Corps Environmental Operating Principles in the management of operating projects.

**Unit of Output:** Compliant Master Plan

**Data Source:** OMBIL

**NOTE:** Level One Natural Resources Inventories have been dropped as a separate performance measure, however, some projects may still need to complete inventories, especially as part of the Master Plan process.

ILLUSTRATION II-3-6

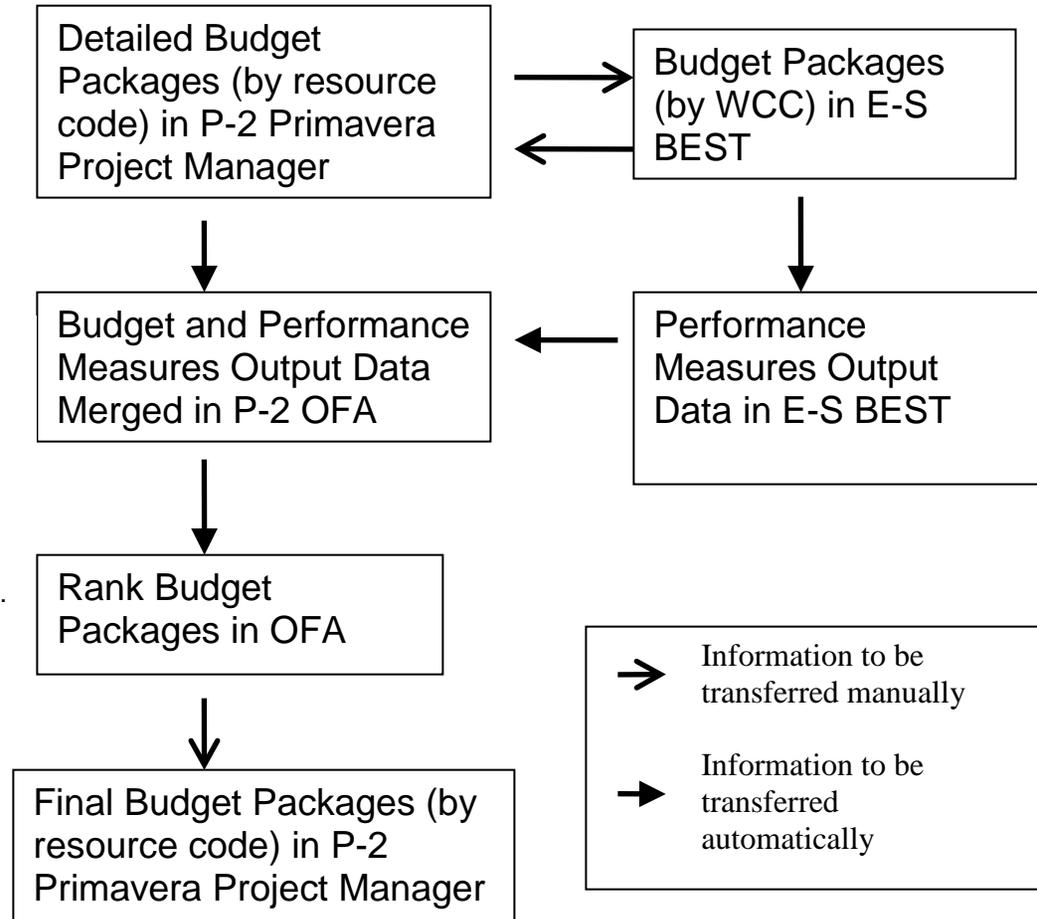
FY12 Environment-Stewardship Budget Development Workflow

Two options for building your FY12 budget: 1. Start in E-S BEST and then provide the budget information to your P-2 correspondent for data entry in P-2. 2. Start the budget development in P-2 then revise your E-S BEST budget information accordingly. For either option, it is recommended that the FY09 budget data entered in P-2 should be carried over to FY10 to minimize the effort of entering the same budget information again. Make sure to enter the matching BEST\_ID when entering budget information in P-2.

Performance measure output data calculated in E-S BEST will be uploaded to OFA on a nightly basis, to match with all budget packages entered in Project Manager. Direct access to E-S BEST database will be available for District and Division quality assurance review.

HQ and MSC business line managers recommend the nationwide program using budget and performance measures output data submitted in P-2 and E-S BEST. Environment-Stewardship budget is then submitted to HQ, ASA, and later OMB for budget appropriation.

Final budget adjustment in P-2 based on President's budget. Manually adjust budget information in P-2 Primavera Project Manager based on final budget appropriation recorded in OFA.



EC 11-2-199  
31 Mar 10

## SUB-APPENDIX II-4

### Formerly Utilized Sites Remedial Action Program

#### II-4-1. Introduction.

a. In 1998 Congress directed the Corps to conduct response actions on early atomic energy program sites subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency plan. This program, called the Formerly Utilized Sites Remedial Action Program (FUSRAP) was begun in 1970s by a predecessor agency to the Department of Energy. Response actions under CERCLA consist of: sampling and assessment of contaminated areas, characterization of site conditions, determination of the nature and extent of contamination, selection of the necessary and appropriate response actions as lead Federal agency, cleanup and closeout of sites and other actions necessary for remediation. In addition, the Corps assesses whether other potentially responsible parties are involved and addresses stakeholder environmental and regulatory issues.

b. Twenty-one sites still under evaluation and/or remediation were transferred from DOE to the Corps in FY98. Five of these sites have been remediated and transferred back to DOE for long-term stewardship. Since FY98 DOE has identified an additional 14 sites as eligible for FUSRAP. The Corps uses a Potential Sites budget line item to fund the Preliminary Analysis/Site Inspection (PA/SI) for new eligible sites referred by DOE. The Corps has completed the PA/SI on twelve of these sites, eliminating five of them from further consideration and adding seven of these sites into the program for the reason of budgeting additional activities after concluding that a release or threat of release of a hazardous substance exists that warrants response action under CERCLA. Congressional direction resulted in adding one of the sites. The Corps is completing the PA/SI on the two remaining sites (Middlesex Municipal Landfill and Staten Island Warehouse Dock). Funds were budgeted for a total of twenty-four sites in FY11.

II-4-2. **Purpose.** To cleanup contaminated sites throughout the United States where work was performed as part of the Nation's early atomic energy program.

II-4-3. **Goals and Objectives.** **The goal of the FUSRAP program is to protect human health and the environment from residual radioactive contamination at sites formerly utilized for by the Manhattan Engineer District and the Nation's early atomic energy program.** The major objectives of the FUSRAP program are to evaluate and remediate, as necessary, sites identified by the Department of Energy (DOE) as eligible for consideration under FUSRAP. Each FUSRAP divisions' multi-year program should be developed and conducted in such a manner that projects are completed as soon as possible and at the lowest cost consistent with cleanup criteria. Criteria utilized are those that are protective of human health and the environment, responsive to regulatory and community interests, and in accordance with the current and reasonably foreseeable future land use.

TABLE II-4-1

FUSRAP Environmental Performance Measures

Strategic Goal #2 - Repair past degradation and prevent future environmental losses. From the March 2004 Civil Works Strategic Plan
Strategic Objective 2.3 --- Assist in cleanup of contaminated, hazardous, toxic, and radioactive waste sites as authorized or requested by others.
Performance Measures:
#1 - Number of individual properties returned to beneficial use on a cumulative basis.
#2 – Cumulative percentage of FUSRAP funding that is expended on cleanup activities rather than studies.
#3 – Cubic yardage of contaminated material.
#4 – Number of Records of Decision (RODs) signed on a cumulative basis by the U.S. Army Corps of Engineers.
#5 – Number of Remedial Investigations Completed.
#6 – Number of Remedies in Place or Response Complete.
#7 – Total Cost of disposing of contaminated material as measured in cubic yards.
#8 – Number of Action Memorandums signed.

**II-4-4. Five and Ten Year Funding Streams.**

a. The five, ten, and twenty year development plans for FUSRAP projects will follow the guidance provided in paragraph 9 of the main part of the EC. The PY – PY+9, ten year plan and PY+10 – PY+19, twenty year plan for the program will be finalized at the FUSRAP PRP meeting in June 2010. The Five Year Development Plan (FYDP) will use a subset of the 10 year plan and will be developed separately.

b. The ten year funding stream (PY –PY+9) development for FUSRAP projects will follow the guidance provided in paragraph 9 of the main part of the EC.

c. The twenty year funding stream (PY+10 –PY+19) development for FUSRAP projects will follow the guidance provided in paragraph 9 of the main part of the EC and will only include capability level funding.

d. The Final PY budget amounts will be provided after OMB Passback and the Divisions' will update the 10 year program based on passback. A final 10-year plan will be prepared in support of the President's final submission to Congress in February PY-1. See paragraph 9 of the main part of the EC.

#### II-4-5. Ranking Process.

a. Project activities lending themselves directly to accomplishment of the FUSRAP objectives and sub-objectives will be prioritized using the following factors to assist in assuring that program goals are being met. The FUSRAP Civil Works Program Manager will hold a program meeting in the third quarter of the fiscal year to analyze the current year budget, and to project the 10-year requirement at a program level. The FUSRAP team will draft an initial budget increment and additional increments as discussed below. The ranking factors in order of importance are as follows:

- (1) Eliminate demonstrable threat to public health, safety, or the environment;
- (2) Federal Facility Agreements (FFA) or other legal/contractual/regulatory requirements;
- (3) Complete Preliminary Assessment to identify presence of demonstrable or potential threat
- (4) Completion of final response action;
- (5) Efficient design/construction schedule;
- (6) Completion of current study or removal phase (RI/FS, EE/CA, etc);
- (7) Eliminate potential threat to public health, safety or the environment;
- (8) Local support; and
- (9) Potentially responsible party issues.

b. The initial program is defined using the following criteria:

- (1) Activities necessary to maintain site security and meet legal mandates.
- (2) Preliminary Assessments/preliminary legal analysis of potential new sites at minimum sufficient level to determine if immediate human health or environmental safety threats exist. This criterion will be used to rank projects in the potential sites line item within the FUSRAP budget and from any available unobligated carryover funds.
- (3) Continue previously awarded contracts for design, removal, or remediation projects under construction phase of remediation.
- (4) Continue previously awarded contracts for Remedial Investigation, Feasibility Studies, and Records of Decision activities. Only award new RI/FS/ROD contracts where human health and/or environmental safety threats need to be characterized.
- (5) Site closeout activities sufficient to meet legal and health and safety requirements and transition sites to DOE in efficient fashion.
- (6) Removal Actions necessary to meet CERCLA criteria for time critical or non-time-critical removals.

EC 11-2-199  
31 Mar 10

(7) Activities necessary to facilitate participation by potentially responsible parties, either as performers of work or contributors of funds toward remediation and closeout.

(8) New contracts for design, removal, or remediation projects must be fully funded following established Civil Works policy in the most current Civil Works Execution EC.

II-4-6. **Performance Based Budget Increments.** Add additional budget items for logical, needed increments that contribute to the program performance measures in the table above.

II-4-7. **Program Phases.** Study/Implementation (Construction)

**a. The FUSRAP Study Phase includes the following CERCLA processes:**

(1) **Preliminary Assessment (PA).** A PA is a limited-scope investigation to collect readily available information about a site and its surrounding area. The PA is designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA also identifies sites requiring assessment for possible emergency response actions.

(2) **Site Inspection (SI).** SI is an on-site inspection to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

(3) **Remedial Investigation (RI).** RI is the process undertaken to determine the nature and extent of the problem presented by a release, which emphasizes data collection and site characterization. The remedial investigation is generally performed concurrently and in an interdependent fashion with the feasibility study.

(4) **Feasibility Study (FS).** FS is a study undertaken to develop and evaluate alternatives for remedial action.

(5) **Engineering Evaluation/Cost Analysis (EE/CA).** This document is prepared in the case of a non-time critical removal action. The EE/CA is an analysis of removal alternatives and must satisfy environmental review and administrative record requirements, and provide a framework for evaluating and selecting alternative solutions.

(6) **Record of Decision (ROD).** The ROD is a document prepared in accordance with the requirements of 40 CFR 1505.2 that provides a concise public record of the agency's decision on a proposed action. It identifies alternatives considered in reaching the decision, the environmentally preferable alternative(s), factors balanced by the agency in making the decision, and mitigation measures and monitoring to minimize harm.

(7) **Remedial Design (RD).** RD is an engineering phase that follows the Record of Decision when technical drawings and specifications are developed for subsequent remedial action.

**b. The FUSRAP Implementation (Construction) phase consists of the following CERCLA processes:**

(1) **Remedial Action (RA).** RA is the actual construction and implementation of a remedial design that results in long-term site cleanup.

(2) **Removal Action (EE/CA).** An Engineering Evaluation/Cost Analysis (EE/CA) documents a removal action that is used where a site presents a relatively time-sensitive, non-complex problem that can and should be addressed relatively inexpensively. But even expensive and complex response actions may be removal action candidates if they are relatively time-sensitive.

#### II-4-8. **Work/Activity Increment Guidance.**

a. Definition of Work Increment: A work increment is a discrete amount of work identified by an activity or a set of activities with specific resource requirements and a schedule.

b. Definition of Activity: A component of work performed during the course of a project. An activity could be a process (e.g. collection of data) or lead to a deliverable (write a report). Activities are the building blocks of the P-2 system – they have assigned durations, resources, and relationships. These increments do NOT define funding levels.

##### **(1) Investigation/Study Increments:**

**(a) Increment 1:** This increment will include only the minimum continuing study activities, which include all CERCLA study processes. The total request is limited to the budget amount for PY-1, by study. Do not include new studies. Increment must be performance based with high outputs and consistent with ranking.

**(b) Increment 2:** This increment will include the activities needed to sustain (not fall behind/not accelerate) the study schedule included in the PMP. The total of the activities included in this level is not limited by the PY-1 budget. New starts may not be included. Increment must be performance based with high outputs and consistent with ranking.

**(c) Increment 3:** This increment includes additional capability activities that can be supported by Corps resources. This increment can be viewed as enhancing the project schedule. Increment must be performance based with high outputs and consistent with ranking.

**(d) Increment 4:** Place new start studies in Increment 4, for example a new Remedial Investigation at a new site. Increment must be performance based with high outputs and consistent with ranking.

**(e) Increments 5 – 8: Not used.**

**(f) Increment 9:** Place unbudgetable studies for potential sites in Increment 9.

##### **(2) Implementation (Construction) phase Increments:**

**(a) Increment 1:** This increment will include only the minimum implementation processes continuing from PY-1 and is limited to no more than the budget amount for PY-1, by project. Engineering and Design during Construction (EDC) and Supervision and Administration (S&A), of contracts fully funded in PY-1 and before may be included in this increment. Real estate activities for required project lands, easements and right-of-ways may be included. Increment must be performance based with high outputs and consistent with ranking.

**(b) Increment 2:** This increment will include the activities needed to sustain (not fall behind/not accelerate) the efficient project schedule based on the PMP. The total of the activities included in this

EC 11-2-199  
31 Mar 10

level is not limited by the PY-1 budget. Multiple contracts should be submitted as separate increment requests and shown in priority order by District and MSC Rank. New starts may not be included. Increment must be performance based with high outputs and consistent with ranking.

**(c) Increment 3:** This increment includes additional capability activities that can be supported by Corps resources. This increment can be viewed as enhancing the project schedule. Increment must be performance based with high outputs and consistent with ranking.

**(d) Increment 4:** Place new start projects with decision documents (such as, a signed ROD) cleared by the HQ USACE in Increment 4. Increment must be performance based with high outputs and consistent with ranking.

**(e) Increments 5-9: Not used.**

#### II-4-9. P-2 Requirements.

a. P2 will be used for developing the FY12 budget for FUSRAP.

b. This section provides guidance for each program, but there are certain common structures for each program that will be represented within PPM. The program consists of a set of projects that are included in the budget. These projects consist of a set of activities that are required to fulfill the purpose of the project. For a project in FUSRAP, these activities are required to complete CERCLA phases for that project during the budget year. The activities within these projects require resources. These resources are labor, contracts, travel, supplies and materials, etc. The total cost of supplying these resources for a given activity represents the budget amount that the activity requires within the budget. The total cost of all activities represents the total budget required by the project.

c. The common structure of project – activities – resources is consistent across all programs and provides a hierarchy for summarizing the program as a whole. The performance based budget process also requires a different view of the budget by business. To accommodate this view of the program, each activity is assigned to a business. The tagging of each activity by business allows a view of the budget by business as well as program.

d. Identifying the activities that are part of the budget provides a level of detail and classification to help answer questions by all the various stakeholders for the Corps budget.

e. The instructions that follow describe the specific tasks that must be done to develop the FY12 budget for Corps FUSRAP projects using PPM:

##### (1) General Directions.

(a) The budget EC for FUSRAP has been changed to reflect the use of P2/OFA.

(b) Project managers must assign a program code, if one is not already assigned. The program code must be the six character CWIS code that has been assigned in PRISM for the project. If the project is new and does not have a PRISM created CWIS, the P2 Project number is to be assigned as the CWIS and program code. If multiple P2 projects have been created from one CWIS, then each P2 project must be assigned the same program code. The program code will allow proposed budgets in P2 to be matched to PRISM and CEFMS. A P2 OP local configuration manager has the permission to add the program code to a project.

A current list of program codes is available to select in Oracle Projects. The program code can be added after the budget activities are added to a P2 project.

(c) Each program manager will direct a LCM to create a separate WBS for budget development. The WBS should be named Budget. The WBS should be "Inactive" so that proposed budgets will remain in PM alone until ready for transfer to Oracle Projects. Additional child WBS levels can be added if needed to help prepare the budget. At a later date, the WBS will be marked as "Planned" so that the budgets can be transferred to OP. The proposed budgets will not be transferred to CEFMS.

(d) Each project manager must add the activities and resources needed to complete FY12 work. This document will guide the content of the work added to P2. All work will be described as one or more activities that require resources to complete.

(2) **Budget Data Required for FUSRAP.** The following is a brief description of the budget data elements required:

#### **Program Code**

The Program Code links the CWIS used to identify FUSRAP projects in the Civil Works budget with the P2 project. In most cases, there will be only one P2 project per CWIS, but there are many cases where there are two or more P2 projects per CWIS. Assigning the program code to each P2 project allows a matching of CWIS to P2 projects. A new code has been added to P2. It is called WBS CODE (OVERRIDE). For WBS's that are not showing up properly, PM's can assign this code at the WBS to resolve any UNKNOWN WBSs. The P2 team will have to assign a code on each of the WBS's so they show up properly in OFA.

In Oracle Projects, these codes would need to be defined on each project:

FUSRAP SITE ID NO: Defines the FUSRAP site location  
PRIMARY BUSINESS PROGRAM: ENV - FUSRAP  
REGULATORY DRIVER: CERCLA

#### **Project ID**

This is the P2 project ID assigned when the project is created in OP.

#### **Project Name**

This is the P2 project name.

#### **Primary Business Program**

The primary business program is Civil Works Environmental -- FUSRAP.

#### **Civil Works FY10 Funding Increment**

This data element identifies the business funding increment for each activity. Each activity must be assigned to one and only one increment. The data element, CW FY10 Funding Increment, is used to assign the increment number to each activity. This code will be used to identify an activity as a FY10 budget activity, and will be used to extract FY10 budget activities for both PRISM and OFA. Please do not assign this activity code to any activities that are not part of the FY10 budget. This data element is similar to the funding requirements for FY09.

#### **WCC – CEFMS (Civil Works)**

The project manager must assign each activity to a work category code.

EC 11-2-199  
31 Mar 10

### **Activity ID**

The activity ID is an alphanumeric code assigned to each activity. The code must be unique within each project.

### **Activity Name**

This data element describes the work that will be done under the activity.

### **Task Organization**

The task organization is assigned to each activity. The purpose of the task organization is to represent the office where non-labor dollars are scheduled and potentially costed.

### **Budgeted Total Cost**

The budgeted total cost is the sum of the cost of the budgeted amounts for each resource assigned to an activity. All resources required to complete the activity must be entered for each activity to get a correct total.

### **Start**

This is the expected start date for the activity.

### **Finish**

This is the expected finish date for the activity. For the FY10 budget estimates, the resources for each activity within the limits of the fiscal year must equal the appropriate budget amount.

### **Ranks – Project, District, Division, Headquarters**

These four data elements can be used to specify a rank for each activity within the project, district, division, or Corps. Ranks are not strictly used in the new performance based budget, but these data elements are available for use by each district or MSC, if desired.

### **Type of Funds**

The type of funds describes the appropriation and catclass. This field is usually set at the WBS.

### **Type of Funds (Override)**

This data element overrides the Type of Funds. Some projects may receive multiple types of funds. The override can be used to set the type of funds for some activities.

### **Area of Responsibility**

This data element is set for each project and is the same as the EROC that had been assigned in ABS.

### **Activity Justification**

There is a notebook element called work package justification that must be used to record the justification for an activity. The justification can be “pasted” into the Work Package Justification notebook topic from any Windows document. The term “work package” is a holdover from ABS.

### **Additional Activity Codes**

There may be additional activity codes added to classify an activity. These activity codes will be used to identify special interest codes that may be added to the budget EC.

### **Budget Data Review**

Each District and MSC Program Managers, Business Line Managers, Division Chiefs, Commanders, and other interested parties can begin review of the FY12 budget data as soon as it is added by the

project manager. Each District and MSC will likely have their own processes to review budget data. Much of the review can be done using Primavera Project Manager and some can be done using Oracle Financial Manager. Budget reports will be developed to show detail and summary data needed to review the budget.

### **Evaluation of Budget Increments**

At the end of the review and approval process for each MSC, the budget data will be extracted. The level of detail of the data, either project-business-increment or process-business-increment-activity, will be determined by the HQ Business Line Manager. Once the data is extracted, each MSC will be responsible for adding performance measure data for each increment. HQ will evaluate each increment in the business area and set the overall rank of each increment.

#### **(3) Milestone Data Requirements.**

(a) In keeping with the Civil Works Program Integration Division initiative of tracking milestones for projects, three tracking goals have been identified for FUSRAP:

Eligibility Determination  
Remedy Selection  
Remedial Action (RA) Completion

(1) Eligibility Determination: The leading indicator for this goal is the completion of the PA/SI which will be "ENF 1". The milestone is the start of the remedial investigation (RI). This milestone is identified as "ENF 2".

(2) Remedy Selection: The leading indicator for this goal is the completion of the RI which will be "ENF 3." The milestone is the signing of the Record of Decision (ROD). This milestone is identified as "ENF 4".

(3) Remedial Action Completion: The leading indicator for this goal is the awarding of the initial construction contract, "ENF 5". There are two milestones identified for this goal: (1) the completion of the RA (identified as "ENF 6") and (2) financial project closeout (identified as "ENF 7").

(b) Schedules will need to be developed and entered into P2 for these goals and milestones, as applicable from the current project phase to project financial completion/close-out. This information will be entered in the same format as the performance measure data requirements.

APPENDIX III

Flood Risk Management Business Line

TABLE OF CONTENTS

Subject	Paragraph	Page
Background .....	III-1 .....	III-1
Purpose .....	III-2 .....	III-1
Civil Works Program Objectives.....	III-3 .....	III-1
Performance Measures .....	III-4 .....	III-4
Budget Increments .....	III-5 .....	III-4
Budget Ranking.....	III-6 .....	III-10
Data Required .....	III-7 .....	III-11
TABLES		
	Table	Page
Performance Measures and Budget Ranking Criteria .....	III-1 .....	III-2
DSPMT Funding Priority Codes .....	III-2 .....	III-7
Condition Assessment Standards .....	III-3 .....	III-16
Consequence Rating Criteria .....	III-4 .....	III-17
Relative Risk Value Matrix .....	III-5 .....	III-18
Relative Risk Index Matrix.....	III-6 .....	III-19
Budget Development Data Requirements and Definitions.....	III-7 .....	III-20

EC 11-2-199  
31 Mar 10

## APPENDIX III

### Flood Risk Management Business Line

#### **III-1. Background.**

a. Historically, the Corps has had the mission of reducing flood damages since the mid-1800's. We continue to plan, design, implement, and operate projects that reduce the threat to life and reduce property damages from both riverine and coastal flooding. Corps flood and coastal storm damage reduction efforts range from technical assistance to small local protection projects (levees or non-structural flood damage reduction measures) to major dams. Many of these projects provide other outputs such as hydropower, water supply, aquatic ecosystem restoration, and recreation. Most flood protection projects constructed by the Corps are owned and operated by sponsoring states, cities, towns, and special use districts. However, the Corps continues to maintain and operate 383 dams and reservoirs for flood damage reduction as well as some levee systems, and is authorized to continue renourishment of shorelines at over 90 hurricane and storm damage reduction projects along the ocean coasts and the Great Lakes shorelines.

b. Today, we as an agency have realized that floods can not be fully controlled, nor can damages be prevented completely. For this reason, the Corps' mission is transforming into one of "flood risk management" (FRM). Many regions which have historically developed near water are continuing to grow, their populations are increasing, and economic development in low lying areas is expanding. Even with continued maintenance and upkeep, structural projects in these areas can fail or be overwhelmed. Thus, the need for flood risk management becomes of paramount importance. In addition, efforts to communicate this residual risk are needed to reduce complacency within flood risk areas.

**III-2. Purpose.** The Corps FRM goal is to reduce the Nation's flood risk to both human life and property by investing in flood and coastal storm damage reduction solutions in environmentally sustainable ways when the benefits exceed the costs. FRM strives to operate on a system, or watershed basis, in a manner that more fully assesses flood risk and its consequences, communicates that risk and educates the populace, and then manages the risk through projects and programs. The FRM program enhances the quality of American life by reducing flood risk to both life and property and providing benefits to individuals, communities, and the national economy.

#### **III-3. Civil Works Program Objectives.**

a. The draft Civil Works (CW) Strategic Plan 2010 -2014, no longer includes an explicit assumption of an unconstrained resource environment to encourage an unconstrained assessment of the nation's water resources needs and potential Corps responses. The plan has an overarching strategy of integrated water resources management which depends using a variety of tools including a systems approach, increased collaboration and partnering, risk-based decision making and communication, innovative financing, adaptive management, and state-of-the-art technology to address the Nation's water resources needs. In line with this, preparation of the FY12 Budget Request requires the recognition of a constrained budget environment and the ongoing effort to evolve better budget linked performance measures. Table III-1 presents program objectives, performance measures and/or performance ranking and rating criteria which support and/or supplement the CW program objectives and performance measures for FRM to reflect the near term realities of a constrained FY12 budget environment.

TABLE III-1 Performance Measures and Budget Ranking Criteria		
CW Strategic Goal/Objective	Budget Objective	Metric [Metric Column Number]
1.2, 2.1, 2.2, 3.2, and 3.3	Keep ongoing studies or PEDs going if likely to produce recommendation for project (I) or start new phase of studies or PED (I) to address critical needs.	<ul style="list-style-type: none"> <li>• Date of agreement – executed or expected [50,51,52]</li> <li>• Population at Risk (PAR) [61]</li> <li>• Population Affected [62]</li> <li>• High Combined flood risk factors (depth, velocity and warning time, <i>PAR</i> or Threatened Population at Risk (<i>TPAR</i>) [64,65,66,61,67]</li> <li>• Estimated average annual damages (without project) [59]</li> <li>• Benefit to Cost Ratio – only for PED [54]</li> <li>• System or Watershed study score [73,74]</li> <li>• CRS Score [63]</li> </ul>
2.1, 2.2, 3.2 and 3.3	Complete ongoing construction to start achieving benefits and reduce future flooding impacts with new construction (C)	<ul style="list-style-type: none"> <li>• Benefits Cost Ratio (<i>BCR</i>) for project [54]</li> <li>• Net Benefits (col. [57] minus [58])</li> <li>• Combined risk factors (depth, velocity and warning time, <i>PAR</i> or <i>TPAR</i>) [ 64,65,66,61,67]</li> <li>• Risk Index [64,65,61,66,95]</li> </ul>
1.2, 2.4, and 3.1	Initiate and complete dam safety projects (C) Prioritize based on life safety risks.  Conduct dam safety, seepage or static instability studies (C)	<ul style="list-style-type: none"> <li>• Dam Safety Action Classifications (<i>DSAC</i>) [83, 84]</li> <li>• Relative Risk Matrix Value from Condition Assessment, Consequence Category [30-37]</li> <li>• Probability of Failure [30,34,83]</li> <li>• Population at Risk (<i>PAR</i>) [61]</li> <li>• Population Affected (<i>POP AFFECTED</i>) [62]</li> <li>• Dam Safety Program Management Tools (<u><i>RISK REMARKS</i></u>) [68]</li> </ul>
1.2 and 3.1	Conduct levee screenings and levee inspections (OM)	<ul style="list-style-type: none"> <li>• Percent of all required levee screenings that can be accomplished with a given work increment [82]</li> <li>• Percent of all required levee inspections that can be accomplished with a given work increment [82]</li> </ul>
1.2, 2.1, 2.4, 3.1, and 3.2	Operations – Assure that projects perform as designed (OM)	<ul style="list-style-type: none"> <li>• % of time available [81]</li> <li>• O Index [76,77,78,93]</li> <li>• % of all required inspections, surveys that can be accomplished with a given budget increment [82]</li> <li>• Dam Safety Action Classifications (<i>DSAC</i>) [83, 84]</li> <li>• Probability of Failure [30,34,83]</li> <li>• Population at Risk (<i>PAR</i>) [61]</li> <li>• Dam Safety Program Management Tools (<u><i>RISK REMARKS</i></u>) [68]</li> </ul>

TABLE III-1 (continued)		
Performance Measures and Budget Ranking Criteria		
CW Strategic Goal/Objective	Budget Objective	Metric [Metric Column Number]
1.2, 2.1, 2.4, 3.1 and 3.2	Maintenance - Assure that projects perform as designed (OM)	<ul style="list-style-type: none"> <li>• Relative Risk Matrix Value from Condition Assessment, Consequence Category [30-37]</li> <li>• % of design level available (may be less than 100% due to reduced conveyance, pool restrictions or storage limits, seepage, or other reduced level of protection) [80]</li> <li>• M Index as total damages prevented divided by cumulative M costs [ 76,77,79,94]</li> <li>• Dam Safety Action Classifications (<i>DSAC</i>) [83, 84]</li> <li>• Probability of Failure [30,34,83]</li> <li>• Population at Risk (PAR) [61]</li> <li>• Dam Safety Program Management Tools (<u>RISK REMARKS</u>) [68]</li> <li>• Special legal mandates – Y or N (describe in remarks) [85]</li> <li>• Safety issues – Y or N (describe in remarks) [86]</li> </ul>

b. Multiyear Programs. The Civil Works Five and Ten Year Development Plans present an overview of the funding required for the Civil Works program over a ten-year period. The Five Year Development Plan (FYDP), a stand alone document, is based on a subset of the 10 year plan and produces results that contribute to achievement of the strategic goals and objectives in the Civil Works Strategic Plan. Additionally, a Twenty Year Development Plan is being developed by building on top of the Ten Year plan data at the capability level. (See paragraph 9 “Multiyear Programs” in the main EC.) The multi-year plans for the FRM business line provide a regional (system and/or watershed) management tool for use in accomplishing the Corps of Engineers’ flood risk management mission while providing the budgetary framework necessary for program development. It presents an opportunity to objectively evaluate planning, design, construction, and operations and maintenance phases of new, continuing, and existing projects broken down into the three major appropriations and the Mississippi River and Tributaries (MR&T) program.

c. Consistent with the Civil Works Strategic Plan, a systems, or watershed approach is needed to ensure that investments are integrated into a whole that preserves or enhances performance and sustainability at the system level. This requires consideration of the investment needs and priorities of all the business lines within the watershed. A systems based approach is a logical step toward coordination and focusing on requirements for making informed investments while providing maximized benefits to the public. It provides the structure for managing entire systems rather than separate elements. Systems and/or watershed principles approach flood risk management on a system-wide basis, taking into account varied land use, and flood risk reduction needs. They integrate planning and flood risk management while promoting regional funding and planning which offer regional benefits and information for making wise investments, in order to provide maximized safety to communities and stakeholders.

d. HQUSACE has established the national Dam Safety Program for studies, construction, and interim risk reduction measures, and long-term investment plans to minimize risk at high risk projects. The holistic USACE portfolio of dams shall be considered for risk based prioritization, versus regional or District rankings. In cases where projects pose unacceptable risks to public safety (i.e. DSAC I, II and III), interim risk reduction measures shall be budgeted and implemented. Interim measures shall include emergency response planning. These investments are captured through long range planning and multi-year development plans. A Levee Safety Program is also establishing a levee portfolio risk management process that will assess and recommend risk reduction measures for levees that have identified levee safety issues.

#### **III-4. Performance Measures.**

a. The Corps FRM program is well established and valued, however our ability to continue to reduce flood risks to meet the needs of current and future generations is dependent upon adequate investments. Such investments provide for the necessary investigations of problems and development of solutions, timely implementation of authorized projects, proper inspections of Corps and local projects, preventative maintenance or facility modernization or improvement, improvements to ensure the reliability and safety of projects, adequate data collection or improvements to increase operational efficiencies. The purpose of this budget guidance is to ensure the development of convincing rationale and justification of the budget request to accomplish the goal of reducing flood risk while meeting prescribed targets.

b. Accordingly, a nationwide perspective must be maintained to assure that available funding provides the greatest public benefit for the investment. Effective risk management requires an inventory of each class of assets, some form of standardized condition assessment, and a method to evaluate the reliability of these assets and consequences of unsatisfactory performance. But to effectively balance tradeoffs and integrate mission objectives through a risk management approach will require some common objectives or metrics and an integrated framework. Risk management evaluates which risks identified in the risk assessment process require management and selects and implements the plans or actions that are required to ensure that those risks are controlled. These risks must be communicated effectively to our stakeholders. Risk communication takes place and involves an interactive dialogue between stakeholders, risk assessors, and risk managers which actively informs the other processes.

c. The safety and security of our critical existing infrastructure must be maintained, periodic evaluations of the effectiveness and reliability of that infrastructure conducted, new investigations to address serious flood risks must be conducted, and our uncompleted projects must be brought on line quickly so that benefits may be achieved as soon as possible. Interim operational and structural measures must also be considered, to mitigate risks until permanent solutions are identified. A life cycle approach must be implemented, distributing investments between studies, interim actions, repairs, and new construction starts. In some cases decommissioning may be recommend to reduce risks associated with unsatisfactory performance. To achieve the FRM program goal, budget objectives and ranking criteria have been established for the FY12 program. Each of the objectives and criteria are designed to demonstrate that each budget item makes sense and contributes to the CW objectives and the FRM program goal.

**III-5. Budget Increments.** In order to achieve the objectives shown in Table III-1, budget increments have been established to assure uniformity across the country in building annual budgets. Budget increments must reflect the eligibility criteria described in the following paragraphs. These increments in conjunction with the business line budget objectives and ranking criteria will assist in making informed and wise budgetary decisions to support the FRM business line goals. All increments must be prioritized by each MSC and across appropriations except for increment "9" which is not budgetable. Multiple work items may be identified within each budget increment for a project. Each additional work item and each

additional funding increment should represent increasing levels of discrete logical project execution which contributes to the program goals. The project capability is the summation of all the work items and increments for each project.

a. Investigations (I). For a description of the FRM budget increments for the investigations appropriations refer to the Main EC, Definitions and Glossary Section, Increments, Investigation Increments. All Programs, Projects, or Activities in the budget request for ongoing studies or meaningful portions of PED, and for new phases of studies, will be placed in the proper increments and will be included in an MSC prioritized program. Amounts and priorities for each increment must be justified based on the performance measures and ranking criteria displayed in Table III-1. There may be more than one budget line item for a study. For any exceptions to these identified increments, the rationale must be documented in the REMARKS field(s).

b. Construction (C). The FRM construction items include: specifically authorized projects, replacement projects, initial fill for beach nourishment projects and renourishment cycles, dam safety projects, deficiency correction projects, and dam safety, seepage, static instability studies. For new start or continuing construction projects, project economics must be justified as indicated in paragraph 11 b. Evaluation in the main EC. There may be more than one budget line item for a project, or separable element meeting the criteria for an increment. For example: If a contract and significant staff time were required to meet the "optimal" schedule in the PMP, there may be two funding lines for that project in the increment. (However, required funds for contract management activities should be included in the contract work item total.) All construction activities will be budgeted in accordance with the Main EC, Definitions and Glossary Section, Increments, Construction Increments, in addition to the following paragraphs.

(1) Each contract included in the initial increment and any additional increments must be shown separately to allow individual funding decisions based on the performance metrics and must be shown in priority order by District and MSC Rank. Contracts will be budgeted as fully funded if their estimated total value is \$20M or less and must include associated contract management, E&D during construction, and mandatory real estate activities. Additional increments must clearly show what the additional funding would accomplish and shall be described in the REMARKS field(s). Funding decisions must be based on performance metrics for that project.

(2) Only Dam Safety work items at projects identified as DSAC = 1 and 2 shall be budgeted in Construction Increment 2 unless there is an ASA approved continuing contract requirement. Then it can be included in Increment 1.

(3) If beach nourishment or re-nourishment projects include a mitigation component to restore sand lost solely due to the impacts of a Federal navigation project, that mitigation component should be budgeted under the Navigation business line in the Construction appropriation and reflect the appropriate Construction Increment; or the appropriate Increment in the Continuing Authorities Program. (Beach nourishment or re-nourishment projects or components for FRM purposes are identified in the appropriate FRM construction increments.)

c. Operations and Maintenance (OM). All operations and maintenance increments will be budgeted in accordance with the Main EC, Definitions and Glossary Section, Increments, Operations and Maintenance Increments, in addition to the following guidance. In general, within MSCs and across the Corps, O&M expenditures in increments 1 and 2 are limited to 75% of the average O&M amounts in the last five year's President's budgets (see table C-2-3 of Annex C). (These amounts do not include recovery act funds or supplemental appropriations.) Increment 3 would include the remaining 25% of the five year average plus reports for Major Maintenance and Rehabilitation. This should not be treated as a

EC 11-2-199  
31 Mar 10

pro-rated amount within business lines or districts. Districts are responsible for identifying the O&M increments according to the definitions in this EC. MSC's will rank order the O&M activities across business lines and Districts. If the total of increments 1-3 exceed the MSC's allotted 5-year average amount, those prioritized work items in excess of the 5-year average amount should be annotated in the remarks section and sufficient information provided to help justify increasing the O&M allocations. Additional guidance on developing budget increments within the FRM business line follows.

(1) Increments 1, 2, and 3 will seek to provide the greatest benefit for the investment consistent with performance measures and sufficient to meet a minimum level of service requirements for operation and maintenance of the existing infrastructure. A minimum level of service is further defined as the ABSOLUTE minimum requirements needed to maintain basic project operations without jeopardizing project purpose and function. Detailed project descriptions, justifications, and purpose of the increment funds strengthen the funding request. Use approved inspection reports (with dates) to strengthen justification. The philosophy is to use the initial increment as the minimum level of service to account for critical routine and non-routine operation and maintenance activities. As stated above, simple pro-rata allocations by district and/or project will not result in the expected performance based budget and should not be used. Contracts shall be developed according to current guidance as provided by in the Main EC, Definitions and Glossary Section, Contracts.

(2) The following items may be included in Increment 1 and 2 for all MSC's O&M requirements as prioritized below.

(a) Minimum Level of Service operations costs (usually dams) – may not be full 24-hour operation on site.

(b) Minimum Level of Service maintenance (usually dams) – not all maintenance needs.

(c) Dam Safety Interim Risk Reduction Measures (IRRM) Plans and Approved Interim Risk Reduction Measures. These shall be budgeted in increments 1 and 2 to address deficiencies that pose unacceptable risks to public safety. Effective 31 May 2007, USACE issued new guidance to develop IRRM Plans for DSAC 1, 2, and 3 projects, and to implement actions to reduce the probability and consequences of catastrophic failure to the maximum extent that is reasonably practicable while long term remedial measures are pursued; including updating Emergency Action Plans and Conducting Emergency Exercises. Funding for IRRM Plan preparation and implementation will be from the O&M account for the project. For IRRM work funded from the O&M account, the WCC will be 61230 for flood risk management, 61130 for navigation, 61330 for hydropower, and 61630 for joint activities. See Annex C – Operations and Dam Safety. Dam Safety Program Management Tools codes (see table III-2), assigned by the HQ Senior Oversight Group, shall be referenced in the justification for Dam Safety IRRM budgeting, and assigned within appropriate budget increments based on these codes. Proposed work must have a maximum DSPMT code of 3.

(d) On-going major maintenance – does not include new major maintenance.

(e) Critical routine maintenance – does not include routine maintenance.

TABLE III-2

DSPMT Funding Priority Codes

PRIORITY LEVEL	DSPMT CODE	DESCRIPTIONS
CFY = 1	1	Serious dam safety deficiency exists that needs remediation immediately. If not corrected, item has an unacceptable dam safety risk. May require operational restrictions placed on the project. Reprogramming of funds is appropriate.
CFY+1 1+1=2	2	Remediation should be initiated within 12 months. May require operational restrictions placed on the project. Reprogramming of funds is appropriate.
CFY+2 1+2=3	3	Study and remediation (as applicable) should be initiated within 24 months. This is the program year that funds are being currently budgeted.
CFY+3 1+3=4	4	Study and remediation (as applicable) should be initiated within next budget cycle or 36 months.
CFY+4 1+4=5	5	Study and remediation (as applicable) should be initiated within next budget cycle or 48 months.
CFY+5 1+5=6	6	Needs to be resolved within 5 years. This work will probably not get funded unless the deficiency worsens. Monitoring is appropriate.

Funding priority code format is "X.YY" where:

X = Funding year (3 = FY07, 4=FY08), as shown on following chart

YY = Relative code within a funding year (i.e. 1 is highest)

3.1 is not equal to 3.10, 3.10 is tenth highest priority.

Do NOT rank multiple deficiencies at the same priority level.

Deficiencies can cross funding years and should be represented as additional line items in the spreadsheet.

(f) Operation and maintenance requirements for Critical Infrastructure Security Program (CISP) projects.

(g) Dam Safety Program. On-going (National Priority studies (dam safety work in Construction) and work) replacements of high risk projects – does not include new replacements initial increment.

EC 11-2-199  
31 Mar 10

Routine monitoring, inspections, instrumentation data collection, instrumentation maintenance, surveys, training, emergency notification / Emergency Action Plan Updates, and dam safety exercises budgeted to ensure safe operations, and implementation reported to HQ quarterly via the Dam Safety Program Management Tools. Care must be taken to properly budget using existing WCCs to allow accurate tracing of routine dam safety expenditures.

Non Routine dam safety O&M work items shall reference action codes established in the Dam Safety Program Management Tools (DSPMT) database. These codes have been assigned to all identified deficiencies. These codes reflect priorities in reducing risk, and shall be considered in concert with the over project DSAC rating and shall be identified in the RISK REMARKS column.

Periodic Assessments (PA), which expand the scope of our currently scheduled Periodic Inspections (PI), were initiated in FY11. Approximately one half of the PIs scheduled for FY12 will be expanded with new requirements for Potential Failure Mode Analysis (PFMA) and Risk Analysis. HQ will provide an independent risk cadre to facilitate the PFMA for initial PAs. Districts will need to budget for additional effort to support risk assessment beyond traditional PI costs. Specific activities included in the PA that differ from a PI are: (a) Compilation of existing historic documents from design, analysis, and construction photos and records for PFMA session; (b) Compilation and evaluation of project performance, instrumentation readings, and any recent remediation or improvements for PFMA session; (c) cursory site visit by the PFMA team. (Risk cadre and select District personnel); (d) District participation of a facilitated PFMA. (Documented by the risk cadre); and (e) District integration of a risk assessment report of the identified significant risk drivers PFMs and comparison to tolerable risk guidelines by a risk cadre. Districts must distinguish the projects selected for PAs in their REMARKS field(s), and budget for additional data collection and technical and administrative support.

(h) Levee Safety Program activities – for levee systems in which USACE operates and maintains or has major maintenance responsibilities, Levee Safety Program activities such as routine and periodic inspections; levee screening; emergency notification; emergency action plan updates for these levee systems should be included in the O&M allocation for these specific levee systems. Funding for the National Flood Insurance Program (NFIP) Levee System Evaluations (or otherwise known as Levee Certifications) for levee systems in which USACE operates and maintains or has major maintenance responsibilities may be included in the O&M budget request for these levee systems.

(i) Inspection of Completed Works (ICW), Flood Damage Reduction and Federally Authorized Shore Protection Systems and the Levee Safety Program. Recognizing that ICW includes more than levee systems, due to the threat to life and property, Levee Safety Program activities funded by ICW are considered highest priority. This work covers federally authorized levee systems that USACE has turned over to a local sponsor for operations and maintenance, in addition to, Levee Safety Program management activities. Budgeting for Levee Safety Program activities for non-federal levee systems in the USACE Rehabilitation and Inspection Program (RIP) should be done through Flood Control and Coastal Emergencies (FCCE) when appropriate and as noted below. The Levee Safety Program will be based on systems approach using the System codes and is to be budgeted accordingly. Districts will develop increments by state and indicate in the REMARKS field(s), the total projects in the state and the total to be inspected (both Routine and Periodic Inspections) during this budget cycle in addition to, other Levee Safety Program activities to be accomplished. The number of inspections by state to be performed will also be used as a performance metric to evaluate program performance in addition to other program metrics to be developed. See Annex C – Operations and Maintenance – Levee Safety Program.

Increment 1 for ICW shall include the following activities:

General Levee Safety Program coordination and management requirements including;

#### Funding LSPM and LSO responsibilities and program activities

Coordination efforts with public sponsors or stakeholders (e.g. inspection results, screening results, interim risk reduction measures, etc.)

#### FEMA coordination and support

Routine and Periodic Inspections at pre-defined inspection intervals for Federal authorized/locally operated and maintained levee systems based upon current program implementation guidance and regulation. (Note: Routine Inspections (also called Initially Eligibility Inspections or Continuing Eligibility Inspections) for non-Federal RIP levee systems shall be funded out of FCCE. No Periodic Inspections will be conducted on non-Federal RIP levees. Ensure the next 20% of projects due for Periodic Inspections that were not funded under ARRA are budgeted starting with highest consequence levee systems first. See Annex C – Operations and Maintenance – Levee Safety Program.

Complete levee screening of the remaining federally authorized/locally operated and maintained inventory using the web-enabled Levee Screening Tool. (Note: For nonfederal RIP levee systems, levee screenings should be funded from FCCE).

Maintenance and updating of the National Levee Database as needed to maintain data accuracy and freshness. To include uploading all inspection reports and data needed to support performance metrics.

Increment 2 for ICW shall include the following activities:

Evaluate non-federal sponsor requests for project modifications such as alternations, improvements, excavations, or construction which are in accordance with Corps policy and guidance for such proposals, under vegetation variance request, or system-wide improvement plans.

(j) Scheduling of reservoir operations, including necessary instrumentation, etc.

(k) Cooperative gauging program costs.

(l) Water management program costs.

(m) Critical sedimentations surveys – limited to projects where sedimentation would have imminent adverse impact on flood control storage

(n) Update of water control manuals, limited to coordination, and dam tender instruction costs.

(o) Studies and surveys for updating flood damage functions for oldest 10% of projects.

(p) Legally required water quality modeling.

(q) O&M for environmental compliance for threatened/endangered or other federally recognized significant species.

(r) Update drought contingency management plans in areas of severe droughts.

(3) The following items may be included in Increment 3:

(a) Additional program requirements in increments 3 not included in the initial increments 1 and 2 and prioritize accordingly such as updating project O&M manuals or other program requirements not otherwise indicated above. (Note: Levee System Evaluations for the National Flood Insurance Program (otherwise known as Levee Certifications) shall not be budgeted for in ICW or FCCE).

(b) Dam Safety work items identified as DSAC = 3 shall be budgeted within Increment 3.

(4) Additional increments (up to Increment 5) for both operations and maintenance may be included, but it must be clearly shown what the additional funding would accomplish. Dam Safety work items identified as DSAC = 4 and 5 shall be budgeted as capability level funding priorities.

(5) The OM items will be aggregated by increment and by phase code. You can elect to have items transfer to OFA individually to keep track of important high priority items. In order to keep individual line items from being aggregated during transferring there will be an Activity Code to allow lines to transfer individually.

(6) For projects, or segments of projects, that have dam safety issues, special effort should be made to ensure that all funding requests are prioritized based on life safety risk, including reducing the probability of failure and preparing for emergency responses. Major studies, repairs, monitoring, instrumentation, modifications and rehabilitation should be prioritized as part of the USACE-wide screening for Portfolio Risk Assessment screening (*SPRA*). The results of the *SPRA* should include rankings (DSAC CLASSIFICATION) based on probability of failure, human risk and economic risk; and lists of risk reduction for major types of problems. Normal O&M activities that impact on the safety of the structure but are not specific dam safety study activities (WCC=60233) should continue to requested in O&M.

(7) Joint Activities and Joint Costs on non-Cat/Class 300 projects, activities previously considered as "Joint Activities" will be included in the project's predominant business line. See Annex C, Paragraph C-2.3.b. Joint Activities and Joint Costs for guidance.

**III-6. Budget Ranking.** Ranking of the program will be based on performance measures and risk-based indices as indicated in Table III-1 and detailed information provided in the FRM data spreadsheet. Ranking consideration will also be consistent with the following priorities. Those numbers in brackets are the metric column numbers that will be identified as the primary metrics used to formulate the budget. These data should have a high level of QA/QC to assure the importance of the project is captured.

a. In order to address the on-going Dam Safety Program, dam safety projects will be ranked using the Dam Safety Action Classifications (*DSAC*) values and as established by HQUSACE. These classifications have been determined for USACE dams which have undergone Screening for Portfolio Risk Assessment (*SPRA*) by agency dam safety experts, and concurred with by USACE Senior leaders. For further information see SUB-Annex B-3 Construction - Safety of Dams Project.

b. Work items in Increment 1 will receive priority consideration for budget development, and additional increments will be prioritized and added sequentially to the program, by considering MSC rank and their relative efficiencies and effectiveness in accomplishing approved performance objectives, goals and missions.

c. Systems or Watershed studies and/or projects will be given priority in accordance with the following criteria:

(1) Considers water resources development and management in the context of multiple purposes rather than single purposes, and, thus, facilitates the search for comprehensive and integrated solutions.

(2) Improves opportunities for public and private groups to identify and achieve common goals by unifying on-going efforts and leveraging resources.

(3) Identifies a combination of recommended actions (a System or Watershed Management Plan) to be undertaken by various partners and stakeholders in order to achieve local, tribal, regional, and national water resources management goals identified in the study and may or may not identify further budgetable Corps studies or implementation projects.

(4) Leverages resources, including cost shared collaboration, and integrates programs and activities within and among Civil Works programs, and with other Federal, tribal state and non-governmental organizations, to improve consistency and cost effectiveness.

### **III-7. Data Required.**

a. The data used for ranking budget requests as the national budget will be built using criteria provided in this appendix and information contained in the FRM Business Line spreadsheet as provided by each MSC. The common metrics in Columns 1-29 are defined in the Main EC, Definitions/Glossary Section, Common Data Fields in All Business Lines. The definitions for individual data metrics are on the "Definitions" tab of the attachment to this appendix. Data elements required for the FY12 budget submission are contained in the "Criteria Matrix" tab of the attachment. Additional information is provided below to further guide your budget development.

b. Asset Based Budget. In order to further the development of the USACE asset management program, the FY12 Budget will link operation and maintenance costs to major assets using the two-digit Feature Code number. Two columns have been added to the Business Line Spreadsheets to link the work packages with constructed assets.

(1) Column 8, PRIMARY FEATURE CODE, is the Feature Code that relates to the predominate major constructed asset that the budget work package supports.

(2) Column 9, ADDITIONAL FEATURE CODE(S), are all the additional Feature Code(s), if any, that are secondarily supporting other feature code asset categories in the budget work package.

c. Combined Flood Risk Factors capture the non-monetary aspects of flood risk management projects to elevate their priority and are used when other metrics do not reflect the risk. The Risk-Depth, Risk-Velocity, and Risk Warning factors should be assessed for the with-out project condition and should be representative of the average hydrologic conditions in the project area. They should represent conditions in the flooded area that are, in general, the most likely to cause severe injury or loss of life. Similarly, the population at risk and threaten population at risk (PAR and TPAR) help quantify the potential population in the affected area. Any special considerations should be highlighted in the RISK-REMARKS field. While not currently being used, a proxy for residual economic damages will be calculated from the Average Annual Damages and Average Annual FDR Benefits fields for additional use as an added flood risk factor.

d. The Population At Risk (PAR) is defined as the number of people (living, working, and transient) located in the floodplain without the project in place. The Population Affected (POP AFFECTED) is the number of people (living, working, transient) located in the floodplain (subset of the PAR) afforded risk reduction by the project at its design level. Threaten Population At Risk (TPAR) is defined as a subset of

EC 11-2-199  
31 Mar 10

the PAR which represents the residual population or number of people who remain in the flood plain for a flood event greater than the project design event.

e. Individual dam safety studies will be submitted in coordination with HQ risk based prioritizations and ranked accordingly. The highest ranking DSAC I and II studies will be combined, by HQ, into "the wedge" as part of the Remaining Items account and included in the final budget presentation. This information is needed for defending the amount of the dam safety "wedge" in the Construction program and the expected overall cost of the dam safety program. Dam Safety Issue Evaluation Studies (IES) will be centrally funded from "the wedge" for both phase I and II level studies. An approved IES study with a recommendation to proceed into Dam Safety Modification Evaluation Report is required before entering the resource queue before further work can continue.

f. Dam Safety Modification Study for Dam Safety Assurance Projects/Safety, and Seepage/Stability Correction Projects, and Levee Safety projects which the Corps still retains responsibility will be submitted under the construction appropriation. Each dam safety assurance study (or group of similar studies for the same project) should be a line item in the submission and identified with phase code (PHASE = SS) and the Dam Safety Action Classification code (DSAC = 1, 2, 3, 4, or 5). Use CCS codes 541, 641, etc., for Modification studies that will be cost shared in accordance with Dam Safety Assurance Program requirements (i.e. for studies addressing hydrologic and seismic deficiencies). Use CCS code 801 for Modification studies that will be cost shared in accordance with Major Rehabilitation Program requirements (i.e. studies for seepage and stability deficiencies). The expected report completion date should be entered into the Phase Completion column. The additional funding required to complete the study should be entered into the Balance to Complete column. The final determination for Dam Safety studies and projects will be made at HQUSACE.

The BUDGET ITEM JUSTIFICATION field should include what is being studied and estimated cost (magnitude) of the construction cost. Additional increments may be included but it must be clearly shown what the additional funding would accomplish. In general, the initial increment will be to continue existing contract/proceed at existing level of effort, and additional increments would be to accelerate the work due to criticality of the study.

g. RELATIVE RISK.

(1) For each project or maintenance budget item increment in the budget requests the Relative Risk at the project level shall be developed in accordance with the following. For all increments in the budget, both a prior condition assessment (end of PY-1) and a with-PY request condition assessment will be made to demonstrate what can be achieved by adding each budget increment. The Prior Relative Risk factor for a budget item is the existing risk for the project in whatever condition it is at the end of PY-1. The with PY resulting risk is determined as that condition the project would attain assuming the FY12 budget increment is funded and the work is completed. Each additional increment may or may not result with an improved condition assessment thus decreasing the Relative Risk. We want to see how the condition is expected to improve as we invest in the asset by increments.

(2) It is important to differentiate between relative risk (which determines to a large extent where we spend our dollars) and the condition or design intent of the project. With reference to relative risk, a consequence category I project will always have a medium to high relative risk and can never move to a minimal level of relative risk. By definition these have highest levels of population and damageable property, hence highest potential for adverse impacts. In our view of risk management, there will always be a significant relative risk because of the adverse impacts that occur if the system is faced with a flood /storm greater than the capacity of the project to handle it (or from failure due to other factors, in spite of appropriate O&M). Similarly a consequence category 2 project could go from low to medium relative risk

even if the structure remains completely intact with perfect O&M if population changes or property development occurs behind levees that increase the residual risk. We can design a project for a given level of protection and maintain that project perfectly, but will not remove the relative risk compared to other projects. A consequence category 1 project should retain an edge for getting dollars to ensure maintenance is continued at a high level.

(3) It is also important that the condition assessments and risk information must be provided in terms of the projects performance, not a change in the condition of a project increment. For example, if a budget increment involves replacing the roof of a control room, the project risk must reflect the impact of replacing the roof on the project's performance. Depending upon the condition, there may not be any imminent impact, but left undone, eventually the leaking roof could affect operation of the project by affecting incoming data, ability of operators to control gates, or other impacts. While this given increment may improve from Condition Classification B to A, it may take several increments to improve the projects condition classification. By concentrating on the condition of the individual increments in the FY09 budget, we saw projects show an actual decrease in condition as more increments were added to the list. By concentrating on project condition, we should not see these anomalies. With respect to individual increments, if multiple actions are required to modify the project performance this should be noted in the REMARKS. Where these multiple actions are required, the increments should be ranked and risk assessments made assuming the higher priority increments are accomplished. The REMARKS should identify the dependences. From a project standpoint, it should also be noted that if the tables show numerous increments being funded with no change in the project condition, this is a good indication that there is a serious problem that needs attention.

(4) For each budget increment the following four items will be provided for both the prior and with PY Request conditions:

(a) Condition Assessment: A Condition Assessment involves identifying for each increment of proposed work, the condition of the project before and after the addition of that increment and assessing the likelihood or confidence level that they will permit the project to operate as designed. Project level condition assessments for budget requests shall be developed for each project/maintenance budget item in accordance with the Table III-3. These assessments will provide for the initial basis for capturing the state of the infrastructure or component thereof. In addition, these classifications provide the foundation for managing USACE infrastructure uniformly and consistently using asset management principles, systems, and risk-based condition indices for operating and maintaining projects while directly embracing the Program Assessment Rating Tool initiative.

(b) Consequence Rating: The consequence rating permits a comparison of the magnitude of potential impacts that could occur as a result of unsatisfactory project performance. This does not necessarily include catastrophic failure, but rather poor performance under a given condition or operations and under constraints resulting in a reduction of project benefits or preventing the project from fully operating as authorized. In order to capture and incorporate the "consequences" effects of unsatisfactory performance, a series of factors have been developed. These factors represent the potential impacts to the project from a national, regional, and local perspective and are defined in Table III-3. These factors include the PAR and TPAR in the affected area of the facility, the disruptive and economic impacts, and potential environmental mitigation costs. The project level consequence category for budget requests shall be developed for each project/maintenance budget item in accordance with the Table III-4. Note that the consequence rating is not expected to change between the with and without increment conditions.

(c) Relative Risk Value Matrix: The "Relative Risk Value" is determined from Table III-5 using both the project "Condition Classification" and the "Consequence Category" values established for each project

or budget item above. The Relative Risk Value Matrix values which are indicated from 1-25 have been retained as a convenience for the use of the MSC and Districts and for use in developing the various rankings of budget increments. The Relative Risk Value Matrix values, which use values of 1-5 and are consistent between business lines (see paragraph g.(4)(d)) will be used to develop comparisons across business lines at the HQUSACE level. A value of 1 indicates a project with a high relative risk, while a 25 indicates a project with a low relative risk. Matrix values will be used in making informed and wise investments, minimizing risk and providing maximized benefits to the public. It is critical that an honest, defensible assessment and evaluation of each project be made for the ranking process in order to accurately provide a snapshot of where scarce resources need to be allocated to provide for a "risk-based" solution, efficient, effective, reliable and safe operations for projects and facilities in accordance with their authorized purposes; and the unmet FRM business line needs.

(d) Relative Risk Index Matrix: To get consistency between business lines and related ranking systems, this table is used to reduce the number of risk indices from 25 to 5 and uses agreed upon definitions between business lines. The five levels are: 1 = High Relative Risk; 2 = Med-High Relative Risk; 3 = Medium Relative Risk; 4 = Low Relative Risk; and 5 = Minimal Relative Risk. Like the Relative Risk Value, these values are determined automatically using the inputs of project "Condition Classification" and "Consequence Categories" established for each increment in columns 32 & 33 and 36 & 37 and the Relative Risk Index Matrix in Table III-6.

h. WATERSHED STUDY and WATERSHED DOC information is required only for Investigations (excluding PED). Watershed studies are multi-objective/multi-purpose and encompass a relatively large geographic area. Following the reconnaissance study, the feasibility study may produce a watershed or regional needs analysis (watershed assessment in accordance with Section 729) that identifies opportunities and impediments a range of alternatives, or a regional or basin-wide strategy that identifies implementable actions for the future for some or all of the stakeholders within the watershed or region, or result in a feasibility report for authorization. A watershed assessment in accordance with Section 729 will be given the phase code WA. (A watershed study that does not meet the criteria for Section 729 will be a feasibility study accomplished in a watershed context and will be coded FW.) The watershed assessment is independent of ranking criteria for the primary business line. Instead it is intended to be a unique evaluation tool that crosses business lines. The following criteria will be used:

(1) HUC –the study area is an 8-digit complete watershed.

(2) The study is multi-objective/multi-purpose.

(3) The result is expected to be a watershed management plan; implementation is not substantially dependent on Congressional authorization.

See the "Definitions" tab on the spreadsheet for details on phase codes and required definitions.

i. The CUM DAMAGES is the Cumulative Damages prevented by the project and the YEAR CUM DAMAGES START is the year in which the Cumulative Damage record started on the given project.

j. The Cumulative O and M are provided by project from Operation and Maintenance Business Information Link (OMBIL) data to capture the last 5 years of data which will help define the current condition of the facilities. The data contains the fiscal years 2004 -2008 expenditures.

k. The BUDGET ITEM JUSTIFICATION, CONSEQUENSES, and REMARKS fields are used to help rank the budget increments. It is not useful to repeat notes for the purpose of populating PBS/OFA. Read the definition of these data fields before developing these notes. The justification should identify

amounts for dam safety, hydraulic gate, and bridge inspections with a short description of the work included in the budget. Legal mandates and safety issues should be described in the REMARKS field(s). For example: Safety Issue: Project loses power several times a year due to vulnerable above ground power lines; or Legal Mandate: Treaty established by order of the International Joint Committee (IJC) in 1938. Also, if there is a waiver for economics, describe the circumstances in the REMARKS field(s). When all metrics are fully described, these fields should be crafted to compel the reviewer to fund these items.

l. The O and M Indexes will be used to help prioritize the operation and maintenance activities in the budget and are automatically computed in the OFA spreadsheet program. The O Index will be computed in Column 93 and the M Index will be in Column 94.

$$\text{O Index} = \frac{\frac{(\text{CUM DAM})}{2008 - (\text{YCDS})}}{\frac{\text{Cum O}}{5 \text{ (yrs)}}}$$

$$\text{M Index} = \frac{\frac{(\text{CUM DAM})}{2008 - (\text{YCDS})}}{\frac{\text{CUM M}}{5 \text{ (yrs)}}}$$

m. The combined flood Risk index will be automatically computed in the OFA spreadsheet program in Column 95. The risk velocity times the risk depth times the population at risk divided by the warning time.

$$\text{RISK INDEX} = \frac{(\text{RISK-VELOCITY}) \times (\text{RISK-DEPTH}) \times (\text{POP AT RISK})}{(\text{RISK-WARNING})}$$

TABLE III-3 Condition Assessment Standards	
Condition Classification	Definitions
<b>A Adequate</b>	<ul style="list-style-type: none"> <li>- There is a high level of confidence that the project will perform well under the designed operating conditions. This confidence level is supported by data, studies or observed project characteristics which are judged to meet current engineering or industry standards.</li> <li>- There is a limited probability that the verified degraded conditions will cause an inefficient operation, or degradation or loss of service.</li> </ul>
<b>B Probably Adequate</b>	<ul style="list-style-type: none"> <li>- There is a low level of confidence that the project will perform well under designed operating conditions, and may not specifically meet engineering or industry standards. The project may require additional investigation or studies to confirm adequacy.</li> <li>- There is a low probability that the verified degraded conditions will result in inefficient operation, or degradation or loss of service.</li> </ul>
<b>C Probably Inadequate</b>	<ul style="list-style-type: none"> <li>- There is a low level of confidence that the project will not perform well under designed operating conditions. The project does not meet current engineering or industry standards. The project may require additional investigation or studies to confirm adequacy.</li> <li>- There is a moderate probability that the verified degraded conditions will result in inefficient operation, or degradation or loss of service.</li> </ul>
<b>D Inadequate</b>	<ul style="list-style-type: none"> <li>- There is a high level of confidence that the project will not perform well under designed operating conditions. Physical signs of distress and deterioration are present. Analysis indicates that factors of safety are near limit state. The project deficiencies are serious enough that the project no longer performs at a satisfactory level of performance or service.</li> <li>- There is a high probability that the verified degraded conditions will result in inefficient operation, or degradation or loss of service.</li> </ul>
<b>F Failed</b>	<ul style="list-style-type: none"> <li>- The project has <b>FAILED</b>.</li> <li>- Historically the project regularly experiences scheduled or unscheduled closures or loss of service for repairs.</li> </ul>

TABLE III-4 Consequence Rating Criteria	
Consequence Category	Definitions
I	<p><b>High:</b>            PAR → &gt;100,000, TPAR → &gt;1,000            National to Multi-Region/Basin disruption of essential facilities and access.            Economic Impact – Massive Losses (&gt;\$1B).            Environmental Impact – National; massive environmental mitigation cost.</p>
II	<p><b>Medium High:</b>            PAR → 50,000 to 100,000, TPAR → 500 to 1,000            Multi-Regional/Basin disruption of essential facilities and access.            Economic Impact – Multi-regional losses. (\$500M to \$1B) major public and private facilities.            Environmental Impact – Very large environmental mitigation cost.</p>
III	<p><b>Medium:</b>            PAR → 25,000 to 50,000, TPAR → 250 to 500            Regional disruption of essential facilities and services.            Economic Impact – Regional losses, (\$250M to \$500M).            Environmental Impact – Large environmental mitigation cost.</p>
IV	<p><b>Low:</b>            PAR → 10,000 to 25,000, TPAR → 125 to 250            Local to Regional disruption of essential facilities and access.            Economic Impact – Local to regional (&gt;\$125M to \$250M).            Environmental Impact – Medium Environmental mitigation cost.</p>
V	<p><b>Minimal:</b>            PAR → &lt;10,000, TPAR → &lt;125            Local disruption of essential facilities and access.            Economic Impact – local to regional (&lt;\$125M).            Environmental Impact – Minimal to no Environmental mitigation cost.</p>

TABLE III-5						
Relative Risk Value Matrix						
Condition		Condition Classification				
		F	D	C	B	A
Consequence		(Failed)	(Inadequate)	(Probably Inadequate)	(Probably Adequate)	(Adequate)
Consequence Category	I	1	2	6	10	15
	II	3	5	9	14	19
	III	4	8	13	18	22
	IV	7	12	17	21	24
	V	11	16	20	23	25

	High Relative Risk
	Med-High Relative Risk
	Medium Relative Risk
	Low Relative Risk
	Minimal Relative Risk

TABLE III-6						
Relative Risk Index Matrix						
Condition		Condition Classification				
			D	C	B	A
Consequence		(Failed)	(Inadequate)	(Probably Inadequate)	(Probably Adequate)	(Adequate)
Consequence Category	I	1	1	2	2	3
	II	1	2	2	3	4
	III	2	2	3	4	4
	IV	2	3	4	4	5
	V	3	4	4	5	5

	High Relative Risk
	Med-High Relative Risk
	Medium Relative Risk
	Low Relative Risk
	Minimal Relative Risk

TABLE III-7

Budget Development Data Requirements and Definitions



Table III-7 Budget  
Development Data R€

APPENDIX IV

Hydropower

TABLE OF CONTENTS

Subject	Paragraph	Page
Background.....	IV – 1	IV - 1
Mission.....	IV – 2	IV - 1
Hydropower Performance Goals and Performance Measures .....	IV – 3	IV - 1
General.....	IV – 3	IV - 1
Performance Goal #1 .....	IV – 3	IV - 1
Performance Goal #2 .....	IV – 3	IV - 2
Hydropower Budget Guidelines .....	IV – 4	IV - 3
General.....	IV – 4	IV - 3
Asset Management.....	IV – 4	IV - 3
Risk Management .....	IV – 4	IV - 3
Component Condition Assessment.....	IV – 4	IV - 4
Consequence Criteria.....	IV – 4	IV - 5
Relative Risk Matrices.....	IV – 4	IV - 7
FY 2012 Hydropower Budget Submission.....	IV – 5	IV - 9
General.....	IV – 5	IV - 9
Budget Data Requirements .....	IV – 5	IV - 9
Funding Increments .....	IV – 5	IV - 9
Work Item Descriptions.....	IV – 5	IV - 11
Initial Funding Level.....	IV – 5	IV - 12
Joint Costs.....	IV – 5	IV - 12
FY 2012 Special Budget Data Requirements .....	IV – 6	IV - 13
Recurring Baseline Project Costs.....	IV – 6	IV - 13
Asset Based Management – Code Changes.....	IV – 6	IV - 13
FY 2012 Budget Schedule .....	IV – 7	IV - 14
Tables	Table	Page
HydroAMP Condition Index Categories.....	IV – 1	IV - 5
Consequence Rating Criteria .....	IV – 2	IV - 6
Hydropower Relative Risk Values (1-25).....	IV – 3	IV - 7
Hydropower Relative Risk Index Matrix .....	IV – 4	IV - 8
Hydropower Relative Risk Categories .....	IV – 5	IV - 9
NERC Reliability Compliance Activities .....	IV – 6	IV - 14
Budget Ranking Criteria .....	IV – 7	IV - 14
Recurring Baseline Project Costs (Format) .....	IV – 8	IV - 14



## APPENDIX IV

## Hydropower

**IV-1. Background.**

a. The Corps is the largest owner/operator of hydroelectric power plants in the United States.

b. The earliest Corps hydropower plants were constructed at navigation dams, as joint efforts with electric utility companies. The utilities built the power plants as the Corps built the navigation project. Later, Congress authorized the Corps to construct its own power plants at Corps projects being built for other purposes. Most of the Congressionally authorized hydropower projects were placed into service during the decades following World War II.

c. The Corps' 75 hydropower plants have a total of 353 generating units with a total installed capacity of 20,474 megawatts and produces about 70 billion kilowatt-hours of average annual energy a year. All hydropower facilities provide other outputs such as navigation, flood damage reduction, water supply, ecosystem restoration, and recreation.

**IV-2. Mission.** The mission of the Corps Hydropower Business Line is to provide reliable hydroelectric power services at the lowest possible cost, consistent with sound business principles, in partnership with other Federal hydropower generators, power marketing administrations and preference customers, to benefit the Nation.

**IV-3. Hydropower Performance Goals and Performance Measures.**

a. General. Civil Works strategic objectives and performance goals provide the framework for funding (budgeting) projects and activities. Therefore, the hydropower budget must be developed using the concepts, goals, and strategic objectives found in these Corps documents and in accordance with the goals which follow:

- USACE Campaign Plan
- Civil Works Strategic Plan for 2010-2014 (Sept 09 draft)
- Five and Ten Year Development Plans
- MSC Implementation Plans
- Infrastructure Management Plans (O&M)

b. Performance Goal #1: To provide sustainable development and integrated management of the Nation's water resources. The hydropower objectives and performance indicators for this goal are as follows:

(1) Hydropower Objective: To invest in hydropower modernization and infrastructure improvement solutions when benefits exceed costs to increase the Nation's renewal energy output.

(2) Hydropower Performance Indicator: The availability of hydroelectric generating units during peak power-demand periods, their generating capacity and forced outage rates are indicators of success in meeting this objective.

c. Performance Goal #2: This goal ensures that projects perform to meet authorized purposes and evolving conditions. The hydropower objectives and performance indicators for this goal are as follows:

(1) Hydropower Objective: To improve the efficiency and effectiveness of existing Corps hydropower projects by maintaining the highest level of reliability and peak availability of hydroelectric power-generating capability at the lowest cost.

(2) Hydropower Performance Indicators for this objective: The performance indicators listed below will be used to measure progress in attaining this objective.

Percent of time units are available to produce power: the amount of time hydroelectric generating units are available to the Power Marketing Administration's interconnected system during the year. The program performance target is 95% availability.

Percent of time units are available during periods of peak demand: the amount of time hydroelectric generating units are available to the Power Marketing Administration's interconnected system during daily peak-demand periods. The program performance target is 98% peak availability.

Percent of forced outages: the percent of time generating units are in an "unscheduled" or "unplanned" outage status. The lower the forced outage rate, the more reliable, and less expensive, the hydroelectric power provided to the customer. The program performance target is 2%.

FERC Electrical Reliability Standards met: the percent of Federal Energy Regulatory Commission (FERC) and the National Electric Reliability Corporation-approved electric reliability standards that are voluntarily met or exceeded by the program. The objective is to maintain the highest level of reliability and peak availability of hydroelectric power-generating capability at the lowest cost. The program performance target is 100%.

#### IV- 4. **Hydropower Budget Guidelines.**

a. General. The Corps' Hydropower Program is well established and highly valued by its customers and stakeholders. Hydropower provides clean, reliable, and sustainable energy at the lowest possible cost. The purpose of this budget guidance is to ensure there is alignment between the Hydropower Business Line's performance goals and risk/asset management priorities and its budget request.

(1) Funding that is focused on performance goals and risk management is needed to: (a) ensure reliable operation and availability of generating units; (b) provide preventive maintenance of equipment and facilities; (c) allow for adequate data collection, monitoring, condition assessments, and investigations of problems; and (d) implement improvements to increase operational efficiencies.

(2) Development of new or existing projects, timely rehabilitation of aging projects, and facility modernization or improvement is also a priority of budget funding.

(3) A nationwide perspective must be maintained to ensure that available funding provides the greatest public benefit for the investment. Within the funds available, the safety, security, and environmental sustainability of existing hydropower infrastructure must be maintained, new evaluations to address high yield modernization of hydropower infrastructure must be conducted, critical maintenance backlog activities must be reduced, and uncompleted projects must be brought on line quickly so that benefits can be achieved as soon as possible.

b. Asset Management. Successful strategic planning for the management of hydropower assets requires consideration and balancing of many factors, including the risks and consequences of equipment failure. Aging and deteriorating infrastructure poses significant risk to hydropower equipment reliability, and will eventually result in reduced generating unit capacity, availability, and efficiency.

c. Risk Management.

(1) Effective risk management requires an inventory of each class of asset, some form of standardized condition assessment, a method to evaluate the reliability of these assets and the consequences of unsatisfactory performance. Risk management balances tradeoffs and integrates mission objectives through common objectives or metrics and an integrated framework.

(2) Risk management evaluates which risks identified in the risk assessment process require management. Risk managers then select and implement the plans or actions that are required to ensure that those risks are controlled. These risks must be communicated effectively to Corps stakeholders. Risk communication involves an interactive dialogue between stakeholders, risk assessors and risk managers.

(3) The Hydropower Business Line has developed risk management tools, interim risk reduction measures, and long-term investment plans to minimize the risk of forced outages or catastrophic equipment failure. These risk considerations must be integrated into long range planning and multi-year development plans.

(4) An important new tool in the Corps Hydropower Business Line Asset Management strategy is the hydroAMP Condition Assessment framework. The Corps will use hydroAMP to streamline and improve the evaluation and documentation of hydroelectric equipment and facility condition assessments to support prioritization of hydropower asset funding. The hydroAMP Condition Index will be used by hydropower asset managers to develop and support budget priorities for the following reasons:

hydroAMP assessment guides provide consistent techniques for evaluating component condition.

Condition ratings provide an important tool for evaluating the risk of hydropower equipment not performing as expected within a planning window.

hydroAMP ratings support Risk Assessment Condition Profile Analysis, and Age Profile Analysis for different investment scenarios.

#### d. Component Condition Assessment (hydroAMP)

(1) Component condition is a critical factor in risk management because the likelihood of failure increases as component condition degrades. Routine maintenance and inspection activities are intended to identify and address deficiencies prior to their posing threats to equipment reliability. However, even with an effective maintenance and inspection program, equipment condition may eventually deteriorate to the point at which sustained outages will result. To effectively recognize and understand risks, it is imperative that the condition of major components be assessed and managed.

(2) Condition assessments are intended to assist management and other decision-makers regarding replacement or rehabilitation of assets when faced with competing demands and limited resources. To reduce the risk of unexpected failure and forced outages, it is imperative that the condition of major components be identified and managed.

(3) Table IV-1 below provides definitions for hydroAMP Condition Index Categories (Good, Fair, Marginal, Poor or Failed). If no hydroAMP assessment is available, the definitions in the table can be used to guide the condition assessment and classification.

TABLE IV-1

. HydroAMP Condition Index Categories

<b>Condition Classification Guidelines</b>	
<b>Condition Classification</b>	<b>Definitions</b>
<b>A</b> <b>Good</b>	There is a high level of confidence that the feature will perform well under normal operating conditions. This confidence level is supported by data, studies, or observed characteristics which are judged to meet current engineering or industry standards. Routine O&M is recommended.
<b>B</b> <b>Fair</b>	There is a medium level of confidence that the feature will perform well under normal operating conditions, although it may not specifically meet engineering or industry standards. The feature may require additional investigation or studies to confirm adequacy. Minimal restrictions to operation and/or minor maintenance may be necessary.
<b>C</b> <b>Marginal</b>	There is a low level of confidence that the feature will perform well under normal operating conditions, and it does not meet engineering or industry standards. The feature requires additional investigation or studies to confirm adequacy. Restricted operation and/or non-routine maintenance are necessary.
<b>D</b> <b>Poor</b>	The feature does not perform well under normal operating conditions, and it does not meet engineering or industry standards. Physical signs of serious damage or deterioration are present. Significant restrictions to operation and/or extensive non-routine maintenance are necessary.
<b>F</b> <b>Failed</b>	The feature has FAILED and is not longer operable without further tests, repairs, or replacement.

e. Consequence Criteria. Consequence Rating Criteria include public or life safety issues, legal mandates, economic loss, decrease in performance, increase in life cycle costs, and/or increase in maintenance backlog. Proposed maintenance or capital investments must be evaluated based on the consequences associated with the affected component/system. The consequences of not performing the proposed activity range from High (impact) to Minimal (impact). Use Table IV-2 below to evaluate and rate the consequences of a component's or system's failure to perform as intended.

TABLE IV-2

.Consequence Rating Criteria

Consequence Category	Consequence Rating Criteria
<b>I</b>	<p><b>High:</b></p> <ul style="list-style-type: none"> <li>- Public or Life Safety Impact and/or</li> <li>- Violation of Legal Requirement(s) and/or</li> <li>- Forced Outage /Closure resulting in Highest Economic Loss and/or</li> <li>- Greatest Decrease in Performance (e.g., efficiency, capacity, reliability) and/or</li> <li>- Greatest Increase in Life Cycle Costs and/or</li> <li>- Greatest Increase in Critical Maintenance Backlog</li> </ul>
<b>II</b>	<p><b>Medium-High:</b></p> <ul style="list-style-type: none"> <li>- Forced Outage / Closure resulting in High Economic Loss and/or</li> <li>- Great Decrease in Performance (e.g., efficiency, capacity, reliability) and/or</li> <li>- Great Increase in Life Cycle Costs and/or</li> <li>- Great Increase in Critical Maintenance Backlog</li> </ul>
<b>III</b>	<p><b>Medium:</b></p> <ul style="list-style-type: none"> <li>- Forced Outage/Closure resulting in Moderate Economic Loss and/or</li> <li>- Moderate Decrease in Performance (e.g., efficiency, capacity, reliability) and/or</li> <li>- Moderate Increase in Life Cycle Costs and/or</li> <li>- Moderate Increase in Critical Maintenance Backlog</li> </ul>
<b>IV</b>	<p><b>Low:</b></p> <ul style="list-style-type: none"> <li>- Forced Outage/Closure resulting in Minor Economic Loss and/or</li> <li>- Minor Decrease in Performance (e.g., efficiency, capacity, reliability) and/or</li> <li>- Minor Increase in Life Cycle Costs and/or</li> <li>- Minor Increase in Critical Maintenance Backlog</li> </ul>
<b>V</b>	<p><b>Minimal:</b></p> <ul style="list-style-type: none"> <li>- Forced Outage/Closure resulting in Minimal Economic Loss and/or</li> <li>- Minimal Decrease in Performance (e.g., efficiency, capacity, reliability) and/or</li> <li>- Minimal Increase in Life Cycle Costs and/or</li> <li>- Minimal Increase in Critical Maintenance Backlog</li> </ul>

## f. Relative Risk Matrices.

(1) Risk is defined as the probability of failure multiplied by the resulting consequences. Since condition is generally related to the likelihood of failure, the Risk Matrix utilizes the Condition Classification (Table IV-1), and the Consequence Criteria (Table IV-2) to determine a risk index. Risk indices range from a low of 5 to a high of 1, and the associated Risk Rating ranges from Minimal Risk to High Risk. Components in deteriorated condition with the greatest consequences of failure are assigned the highest risk index. These ratings are useful in identifying the highest priority investments and **only** apply to Construction Replacement (CR), extraordinary non-routine maintenance (Phase Code M), Major Maintenance (Phase Code MM), and Major Rehabilitation (Phase Code MR) activities. The Relative Risk Index Matrix for the Hydropower Business Line is shown in Table IV-4 and the Relative Risk Categories are shown in Table IV-5.

(2) Hydropower Relative Risk Values. Table IV-3 provides further refinement of relative risk indexes shown in Table IV-4. Each Condition/Consequence box in Table IV-3 is assigned a value from 1-25 for use in determining relative risk within categories.

TABLE IV – 3

## Hydropower Relative Risk Values (1-25)

A – I = 11	B – I = 5	C – I = 4	D – I = 2	F – I = 1
A – II = 16	B – II = 12	C – II = 7	D – II = 6	F – II = 3
A – III = 18	B – III = 17	C – III = 13	D – III = 9	F – III = 8
A – IV = 23	B – IV = 20	C – IV = 19	D – IV = 14	F – IV = 10
A – V = 25	B – V = 24	C – V = 22	D – V = 21	F – V = 15

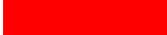
TABLE IV – 4

Hydropower Relative Risk Index Matrix

		Condition	Condition Classification				
			F Failed	D Poor	C Marginal	B Fair	A Good
Consequence/Economic Impact	Consequence						
	I	1	1	2	2	3	
	II	1	2	2	3	4	
	III	2	2	3	4	4	
	IV	2	3	4	4	5	
	V	3	4	4	5	5	

Table IV – 5

## Hydropower Relative Risk Categories

	<b>High Risk</b>
	<b>Med- High Risk</b>
	<b>Moderate Risk</b>
	<b>Low Risk</b>
	<b>Minimal Risk</b>

**IV-5. FY 2012 Hydropower Budget Submission.**

a. General. The FY 2012 Hydropower budget will be submitted in accordance with the schedule shown in the EC, Table 2 – Summary of Submission Requirements, FY 2012 Budget.

b. Budget Data Requirements. The data required from each MSC for the PY Hydropower Business Line budget request is contained in the body of the EC, this appendix and in the Budget Ranking Criteria spreadsheet (Table IV-7). Definitions for each data element are contained in the “Definitions” tab of the spreadsheet. All data fields in P2/OFA related to the hydropower business line must be populated as required to be considered for the PY hydropower budget.

c. Funding Increments.

(1) General. Each MSC must begin the formal budget process by prioritizing work items for all business lines and across appropriations using funding increments. Prioritization within the Hydropower Business Line must be based on performance goals and objectives and risk-based indices. Funding increments have been established to ensure uniformity across Civil Works in developing annual budgets from the same perspective. Funding increments reflect ranking (eligibility) criteria and are described in detail in the paragraphs below. Increments 1 and 2 will receive priority consideration for budget funding and represent the Hydropower Business Line minimum budget (Initial Funding Level) for routine and non-routine activities. Funding increments, in conjunction with the business line performance goals (para. IV-3) and relative risk matrices (para. IV-4 e.) will assist in making informed budgetary decisions.

(2) Increment 1. Activities in this initial increment include only: (a) critical routine activities that can be completed in the PY, such as Critical Power Specific Operations & Maintenance Activities (Work Category Codes 603XX & 613XX) and Critical Joint Operation & Maintenance Activities (Work Category Codes 606XX & 616XX) and/or, (b) critical cyclical routine activities that are needed on a regular

recurring basis but not every year, and/or, (c) activities to avoid maintenance staff reductions to a level that will preclude performance of basic routine preventive maintenance activities, forced facility closure, public or worker life safety concerns, or violation of court orders, legal or treaty obligations in the PY.

(3) Increment 2. Activities in this initial increment include major maintenance and major rehabilitation activities and critical non-routine activities. Critical non-routine activities are those that: (a) must be accomplished to insure project safety, and/or, (b) critical maintenance actions that are required to keep the project operating and delivering benefits. Non-routine activities are defined as “project like” in that they are a unique action with a specific beginning and end. Each non-routine activity must be shown separately to allow for individual funding decisions based on performance metrics and risk-based indices. **NOTE: The total O&M funding for Increments 1 and 2 (all business lines) must not exceed the applicable amounts in Table C-2-3 for each MSC.**

(4) Increment 2.5 (NERC Reliability Compliance Activities). Activities in this increment include only those necessary to meet reliability standards of the NERC (see Table IV- 6). These activities: (a) must not be included in Increments 1 & 2, (b) must be ranked separately (Increment 2.5) and (c) will be given special funding consideration within the PY O&M budget.

(5) Increment 3. This Increment includes only: (a) O&M activities that are necessary for minimum operation and maintenance of the facility and/or (b) for remaining critical activities above Increments 1& 2. Preparation of reports for Major Maintenance (MM) and Rehabilitation (MR) can be included in this increment. MM and MR activities must have approved and signed reports before they can be included the PY budget.

(6) Increment 4. This increment includes O&M activities that are both routine and non-routine and that are needed to sustain the expected future benefits of the project. These activities provide funding for: (a) the level of service that customers, stakeholders, and others have come to expect and depend upon, (b) sustaining public safety and (c) economic, environmental and social benefits.

(7) Increment 5. This increment includes O&M activities that do not specifically meet the requirements above but are deemed to be prudent and necessary. Activities that have a high expected return on investment and that enable greater levels of performance in future years should be included in this increment.

d. Work Item Descriptions. The description of individual work items (packages) must be specific in nature and written in clear and concise terms. The use of generic language is unacceptable and may result in a lower ranking for the work item. Work that is critical to the project must be clearly identified and ranked higher in the budget. For line item comparison purposes, the following repair and replacement activities shall not be combined with other work items in the development of the budget:

(1) funding to restore a regionally critical generating unit that is in Forced Outage status. Benefits for ranking purposes must be included in the P2 database and expressed in MW-Yrs (MW of nameplate capacity of generating unit multiplied by remaining life of generating unit in years).

(2) funding to restoring the de-rated capacity of a generating unit. Benefits for ranking purposes must be included in the P2 database and expressed in MW-Yrs (MW of de-rated capacity restored multiplied by remaining life of generating unit in years).

(3) funding to improve the condition or reduce the failure of a critical power component under the hydroAMP condition assessment methodology. In lieu of MW-Yrs, a numeric code must be entered in the P2 database to reflect the component type as follows:

- 1 = Generator
- 2 = Turbine
- 3 = Governor
- 4 = Exciter
- 5 = Transformer
- 6 = Circuit Breaker
- 7 = Surge Arrestor
- 8 = Batteries
- 9 = Cranes
- 10 = Compressed Air System
- 11 = Emergency Closure Gate and Valve

(4) funding to extend the life of a generating unit. Benefits for ranking purposes must be included in the P2 database and expressed in MW-Yrs (MW of nameplate capacity of generating unit multiplied by number of years the generating life has been extended in years).

e. Initial Funding Level. The Initial Funding Level for each appropriation is defined as follows:

(1) Investigations. There are no projects in this category for the Hydropower Business Line.

(2) Construction. Each construction project or separable element in the Initial Funding Level is limited to the amount needed for earnings (no more or less) on the contracts funded in the PY-1 budget and continuing into the PY, plus engineering and design, supervision and administration, and real estate activity costs associated with continuing construction of that project or separable element. Construction projects identified in the PY-1 budget for consideration for suspension and other projects not budgeted in PY-1 will have an Initial Funding Level of zero.

(3) Operations & Maintenance. The Initial Funding Level for Hydropower Operations and Maintenance will consist of Increments 1 and 2 only. Work Category Codes must be entered into P2 for each O&M work item regardless of increment. Increments 1 & 2 will seek to provide the greatest benefit for the investment consistent with performance objectives, performance goals and risk-based indices and be sufficient to meet minimum legal responsibilities for environmental compliance, operation and safety. Subsequent increments will provide additional benefits as measured by performance measures. Increments 1 & 2 for all business lines must not exceed the values in Table C-2-3 for each MSC. Simple pro-rata allocations by district and/or project will not result in the expected performance based budget and should not be done. All increments must document performance according to the appropriate Business Program criteria. NOTE: Operations activities should be submitted separately from maintenance activities, i.e., do not aggregate or sum operations and maintenance activities together as one activity. Additionally, do not aggregate operations or maintenance activities with a joint activity.

f. Joint Costs. Project activities with Cat/Class 300 (Multipurpose with Power) must be funded in individual "joint cost" work packages and given an "OJ" (Operations - Joint) or "MJ" (Maintenance - Joint) designation in the budget spreadsheet.

(1) Cost Allocation for Multipurpose Projects - the joint costs allocation process used in HQ to distribute budgetary funding among the various project purposes (business lines) for Cat/Class 300 projects involves the use of a cost allocation table. The percentages used in the table for various project purposes correspond to the cost allocations contained in approved and signed project planning reports. The percentages for each business line in the cost allocation table are applied to the total joint cost budget amount submitted for each Cat/Class 300 project and the individual business line funding amounts are thus determined.

(2) Joint Costs – joint costs (all business lines) for each Cat/Class 300 project **must be assigned to the Hydropower Business Line** for the purpose of developing the PY O&M budget. Once the joint costs are allocated by business line (see paragraph above), they are evaluated and distributed to individual HQ Business Line Managers for inclusion in their PY O&M budget.

(3) For non-Cat/Class 300 projects, costs must be assigned to the project's predominant business line.

(4) See Annex C – 2.3.b of this EC for further guidance on managing Joint Cost Activities in the PY budget process.

#### **IV-6. FY 2012 Special Budget Data Requirements.**

##### **a. Recurring Baseline Project Costs.**

(1) Reference the database developed for the FY 2011 hydropower budget wherein each District was required to identify recurring routine baseline projects costs. See Table IV-7 for the Recurring Baseline Project Costs (Format).

(2) HQUSACE will use the Recurring Baseline Project Cost database to aid in the development of the PY hydropower budget request. To assure accuracy and completeness of the database, MSCs are requested to update their spreadsheets as needed and submit them to the HQUSACE Hydropower Business Line Manager when their PY hydropower budget request is submitted.

##### **b. Asset Based Management – Code Changes**

(1) In order to further development of the USACE Asset Management Program, the FY 2012 budget will link operations and maintenance costs to major assets using two-digit Feature Code numbers. Note that the column headings in P2 (see Budget Ranking Criteria, TABLE IV – 7 below) have been changed as follows to reflect this new approach:

Column 8, PRIMARY FEATURE CODE, must be populated with the Feature Code for the predominant major constructed asset that the budget work package supports.

Column 9, ADDITIONAL FEATURE CODE(S), must be populated with all of the additional Feature Code(s), if any, that are secondarily supporting other feature code asset categories in the budget work package.

(2) See the main budget EC, page 34, for additional guidance regarding the use of Feature Codes for the purpose of Asset Management.

**IV-7. FY 2012 Budget Schedule.** Submission dates for budget events are provided in the budget EC, Table 2 entitled Summary of Submission Requirements, FY 2012 Budget. Field elements are required to meet budget deadlines to allow sufficient time for HQ,

EC-11-2-199  
31 Mar 10

USACE review and comment and maintain submission schedules to ASA(CW) and OMB.

**TABLE IV - 6**  
**NERC Reliability Compliance Activities**



Table IV-6 FINAL.xls

**TABLE IV - 7**  
**Budget Ranking Criteria**



Table IV-7 FINAL.xls

**TABLE IV - 8**  
**Recurring Baseline Project Costs (Format)**



Table IV-8 FINAL.xls

APPENDIX V

Navigation

TABLE OF CONTENTS

Subject	Paragraph	Page
Background.....	V-1.....	V-1
Purpose .....	V-2.....	V-1
Civil Works Program Objectives .....	V-3.....	V-1
Navigation Performance Measures .....	V-4.....	V-2
Budget Screening Criteria .....	V-5.....	V-3
Rating and Ranking Criteria for PY Budget Development .....	V-6.....	V-3
Increments .....	V-7.....	V-4
Performance Based Budget Increment(s) .....	V-8.....	V-8
Risk Assessment of Navigation Assets .....	V-9.....	V-8
Asset Based Budget .....	V-10.....	V-24
Special Considerations or Special Rating Criteria.....	V-11.....	V-24
Ten Year Development Plans.....	V-12.....	V-24
Definitions .....	V-13.....	V-25
Low Use Navigation Projects.....	V-14.....	V-26
Joint Costs .....	V-15.....	V-26
Watershed Studies .....	V-16.....	V-27
Navigation Criteria Matrix .....	V-17.....	V-27

TABLES

	Table	Page
Navigation Objectives and Performance Measures .....	V-1.....	V-1
Navigation Budget Performance Measures.....	V-2.....	V-3
Navigation 1-25 Relative Risk Values Matrix .....	V-3.....	V-10
Navigation 1-5 Relative Risk Index Matrix.....	V-4.....	V-12
Component/Activity Hierarchy .....	V-5.....	V-13
Inland Navigation Condition Classification .....	V-6.....	V-15
Inland Navigation Consequence/Economic Impact Category .....	V-7.....	V-16
Navigation Channels and Harbors Condition Classification.....	V-8.....	V-17
Navigation Channels and Harbors Consequence/Economic Impact Category.....	V-9.....	V-18
Navigation Structures Condition Classification.....	V-10.....	V-20
Navigation Structures Consequence/Economic Impact Category .....	V-11.....	V-21
Bridges Condition Classification .....	V-12.....	V-22
Bridges Consequence/Economic Impact Category.....	V-13.....	V-23
Low-Use Channels and Waterways Screens and Indicators .....	V-14.....	V-26
Navigation Budget Ranking Criteria - Submission Matrix .....	V-15.....	V-35

FIGURES

	Figure	Page
Channel Availability .....	V-1.....	V-19



APPENDIX V

Navigation

V-1. **Background.** The Corps has had the navigation mission since 1824. Today we plan, design, operate and maintain projects that support 2.48 billion tons of commerce annually. Many of the projects provide other outputs such as Flood Risk Management, Hydropower, Water Supply, Ecosystem Restoration and Recreation. The Corps operates and maintains 926 navigation projects ranging from shallow draft harbors; coastal, inland, and intracoastal navigation systems with 241 locks at 196 sites, to major deep draft ports.

V-2. **Purpose.** The Corps' Navigation goal is to provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation. The purpose of this effort is to develop a risk informed, performance based budget for carrying out the Navigation mission.

V-3. **Civil Works Program Objectives.** Table V-1 displays the Navigation program objectives and Performance Measures related to the current Civil Works Strategic Plan. The CW Strategic Plan was developed with an explicit assumption of an unconstrained resource environment to encourage an unconstrained assessment of the nation's water resources needs and potential Corps response. Preparation of the Program Year (PY) Budget Request requires the recognition of a constrained budget environment and the ongoing effort to evolve better budget linked performance measures. Table V-2 displays the program objectives, performance measures and/or performance ranking and rating criteria which support and/or supplement Table V-1 program objectives and performance measures to reflect the near term realities of a constrained PY budget environment.

TABLE V-1	
Navigation Objectives and Performance Measures	
Program Objectives	Performance Measures
Invest in navigation infrastructure when the benefits exceed the costs.	<ul style="list-style-type: none"> <li>- BCR (project specific measure)</li> <li>- Annual net benefits</li> </ul>
Support sustainable regional, basin-wide, or watershed planning and activities in partnership with others.	<ul style="list-style-type: none"> <li>- Percent of projects recommended in Chief's reports that apply watershed principles</li> </ul>
Enhance Life-Cycle Infrastructure Management. Improve the reliability of water resources infrastructure using a risk informed asset management strategy.	<ul style="list-style-type: none"> <li>- Percent of navigation asset inventory with recent structural/operational risk assessments, including SPRA assessments.</li> <li>- Percent of navigation asset inventory risk assessments that reveal a significant level of risk (including DSAC Class I, II and III projects).</li> <li>- Number of funded actions underway that address assets where there is a significant level of risk.</li> </ul>
Operate and manage the navigation infrastructure so as to maintain justified levels of service in terms of the availability to commercial traffic of high use navigation infrastructure (waterways, harbors, channels).	<ul style="list-style-type: none"> <li>- Risk and Reliability: Facility Condition Assessment and Impacts</li> </ul>

**V-4. Navigation Performance Measures.**

a. Competition for Federal funds is very keen and getting tighter each year. In recent years, we have had to make very hard choices in distributing scarce Federal dollars. In a constrained funding environment, we must prioritize the many worthwhile investment opportunities and ongoing maintenance needs across the entire spectrum of projects. This means that we have to concentrate available resources on the highest priority projects in terms of reducing risk and providing optimal reliability to maximize benefits. In the Navigation program, we are directing funds primarily to those harbors and waterways systems and segments that provide the highest return from commercial navigation. The Corps' Navigation program is well established and valued, however our ability to continue to provide safe, efficient, and reliable navigation to our ports, waterways and harbors to meet the needs of current and future generations is dependent upon adequate investments. Such investments provide the necessary investigations of problems, development of solutions, timely implementation of authorized projects, reliable operation and availability of our infrastructure, preventative maintenance, facility modernization or improvement, and adequate data management information systems, which are all directed at increasing operational capabilities and efficiencies. The purpose of this budget guidance is to ensure the development of convincing rationale and justification of the budget request.

b. Accordingly, a nationwide perspective must be maintained to assure that available funding provides the greatest public benefit for the investment. The safety, security, and reliability of our existing, high performing infrastructure must be maintained; new investigations to assure high yield navigation investments are advanced; and projects that are under construction must be brought on line quickly so that benefits may be achieved as soon as possible. Coastal ports and harbors and inland and intracoastal navigation have been and continue to be significant contributors to the national and international movement of commodities. A cursory review of the Corps navigation assets reveals that on a nationwide basis: Over half of all inland navigation projects have exceeded their original 50-year service life; our top 59 coastal ports have full project depth on average only 30 – 35 percent of the time, and only for one-half of the middle channel width; a substantial portion of the bridge inventory is approaching or has exceeded its service life; and our coastal jetties and breakwaters are deteriorating. In response, the Corps must pursue an on-going program to rehabilitate, modernize, or replace structures and components, and maintain channels exhibiting a deteriorating ability to meet system demands.

c. To achieve the Navigation objectives in Table V-1, the following budget strategies and performance measures are established for the PY budget development. Each of the budget strategies and measures are designed to demonstrate that each budget item makes sense and contributes to the Navigation goals and supporting objectives.

TABLE V-2 Navigation Budget Performance Measures	
Budget Strategy	Ranking Criteria
Keep ongoing studies or PEDs going if likely to produce recommendation for project (I) or start new phase of studies or PED (I)	Date of Agreement – executed or expected Commercial tonnage increase % reduction in delay costs Years to complete Watershed study –y/n Benefit to Cost Ratio (BCR) – Feasibility & PED only
Complete ongoing construction to start getting benefits of high performing navigation projects (each contract should be separate line item) (C)	BCR  Other Business Line purpose outputs
Initiate and complete replacements and rehabilitations (each contract should be separate line item) (C)	Inland Waterways Users Board priority Relative risk of failure (OCA & DSAC) BCR Years to complete
Initiate and complete dam safety assurance/seepage control/static instability correction projects (C)	Relative risk of failure – risk compared to other Corps dams (portfolio risk assessment if available in PY) Critical loss of pool and /or navigation Other Business Line purpose outputs
Operations - Assure that projects perform as designed (O&M)	Cumulative benefits Cumulative O&M costs for above benefits (over set time period)
Maintenance - Make sure projects are safe to operate (managing risk) (O&M)	Navigation channel availability Lock closures exceeding 24 hours and one week duration due to mechanical failure – scheduled and unscheduled Condition assessment and consequences/impact Cumulative benefits Cumulative O&M costs for above benefits (over set time period)
Fund adequate data collection (Remaining Items, I, C, O&M)	Consequence of inadequate data

**V-5. Budget Screening Criteria.**

- a. New Start Definition – See paragraph II-2.8, of EC.
- b. New Phase Definition - See paragraph II-2.8, of EC.

**V-6. Rating and Ranking Criteria for PY Budget Development.**

a. Stakeholders' Perspectives for Funding Needs and Development of Five-Year Management Plans. From the National Navigation Performance Metrics workshops and regional stakeholders' conferences, contributions from the Stakeholders and Corps leadership were derived to help frame the Navigation program performance-based budgeting concept. The key

Stakeholders' themes were reliability improvements, risk reduction, linking investments to underpinning the national economy, durability of Navigation systems, Navigation systems responsiveness to International trade growth, and justified efficiency improvements in Navigation. Stakeholders' perspectives must be considered, and the legitimate input should be incorporated into the Navigation budgetary process. Accordingly, each MSC, district, project manager or project management team will work with appropriate local/regional partners and stakeholders to develop a Five-Year Management Plan for their respective projects. The plans will incorporate performance based budgeting concepts and develop the future direction based on the current restricted funding environment. The plans should be comprehensive and address anticipated study, construction, and operation and maintenance requirements.

b. In order to achieve the objectives shown in Table V-2, we are establishing budget increments to assure uniformity across the country in building annual budgets from the same point. Budget increments reflect the eligibility criteria described in the following paragraphs. Increments 1 and 2 will receive priority consideration for budget development. These budget increments in conjunction with the objectives and ranking criteria will go a long way to making informed and wise budgetary decisions to support our program goal.

c. Systems Approach. The system relationship of each project/segment will be considered when developing the Civil Works program. A systems approach is needed to ensure that investments are integrated into a whole that preserves or enhances performance at the system level. This approach will help to implement the goals of the Strategic Plan. Analytical perspectives should be developed for each system to help determine the mix in the PY of investments in maintenance, operations improvements, replacements and rehabilitations, new construction, planning, and design that will maximize system efficiency, safety, and reliability over time. A list of systems was refined for the FY 10 Budget and will continue to be used in the PY. See Annex C (O&M) for the list of systems. These systems will be cross-referenced to USGS Sub-Region Hydrologic Unit Codes (HUC) for budget presentation purposes.

#### V-7. **Increments.**

a. **Increment 1** definitions. For definitions of increments for the Investigations and Construction accounts see Definition/Glossary section in the main EC.

(1) Investigations (for studies and preconstruction, engineering, and design).  
Remaining Items (R&D, data collection, PAS, etc.) – initial level will be established by HQ.

(2) Construction (Includes: specifically authorized projects, replacement projects, major rehabilitation projects, dam safety assurance/seepage control/static instability correction projects, dredged material disposal facilities, sand mitigation, beneficial use, and CAP projects).

(3) Operation and Maintenance (O&M).

(a) Navigation Segments. Inland waterway operation and maintenance costs should be broken out by major waterway segment.

(b) The first increment will seek to provide the greatest benefit for the investment consistent with performance measures and sufficient to meet minimum legal responsibilities for operation, environmental compliance and safety. Subsequent increments will provide additional benefits as measured by the performance measures. All increments must document performance according to the appropriate Business Lines criteria. The last increment for each project is the capability level. Operation increments will be submitted separately from maintenance increments. This

means that for some projects there will be an operation line item and a maintenance line item in the initial level and subsequent levels.

(c) For each MSC combined amount among all Business Lines for operation and maintenance for Increments 1 and 2, see Table C-2.2. This initial amount is for all the MSC's O&M requirements as prioritized below. Simple pro-rata allocations by district and/or project will not result in the expected performance based budget and should not be done.

(d) The philosophy is to use Increment 1 as the minimum level to account for critical routine operation and maintenance activities and to use Increment 2 to account for critical non-routine activities on projects. The total of Increment 1 plus Increment 2 represents the minimal program and is limited to 75% of the MSC five-year average amount shown in Table C 2.2 by MSC. The total of Increments 1, 2, and 3 represents no more than 100% of the MSC five-year average.

(e) Additional O&M criteria. (Definition of terms will follow)

- Sufficient to meet minimum legal responsibilities for operation, safety and environmental compliance, such as:

Subsistence Harbors

Caretaker activities

Critical Harbors of Refuge

Project Condition Surveys

Environmental Compliance requirements

- Multipurpose projects when those projects are included in the minimum programs of other business lines and not a separable element

- Work required by treaties

- Removal of Aquatic Growth

(Note: Items for Surveillance of Northern Boundary Waters previously included in the Navigation Business Line is now included in the Flood Risk Management Business Line.)

b. **Initial Increment 1.** Only critical routine and critical cyclical activities can be included in this increment. These activities are required to minimally operate or maintain the project and may not provide a full service operation. Routine activities are those that must be performed every year for example the operation of a lock, or are required to meet legal mandates, environmental (ESA/Biological Opinion) requirements, authorized mitigation requirements, and historic preservation. Cyclical activities are those that are required on a regular basis, but not each year. An example of a cyclical routine activity would be projects where dredging is needed on a regular recurring basis, but not every year, e.g. dredging is needed only every two years. Work packages in Increment 1 must be performance based and integral with a study/project with high outputs and consistent with ranking. **What is included and what is not:**

(1) Bare Bones lock Operations: May not be full 24-hour or 7-day operation.

- (2) Bare Bones routine lock maintenance: Would not be all maintenance needs.
- (3) Critical routine minimal level of dredging for high and moderate use segments of commercial deep draft, shallow draft and inland projects: No advanced maintenance dredging.
- (4) Minimal level of dredging for Subsistence Harbors: Does not include point of origin harbor.
- (5) Minimal level of dredging for Critical Harbors of Refuge: Does not include all Harbors of Refuge.
- (6) Caretaker funding for projects or segments not expected to be funded.
- (7) Critical routine maintenance of dredged material placement sites for Item 3 above: Does not include non-routine maintenance of dredged material placement sites.
- (8) Water/Environmental Certification for critical maintenance dredging for Item 3 above: Does not include all certification needs.
- (9) Bare Bones Project Condition Surveys (PCS) including low use: Does not include all anticipated PCS needs.
- (10) Critical studies for high risk coastal structures: Does not include studies of all structures.
- (11) Bare bones debris/drift removal/obstruction removal at high use ports: Does not include all anticipated removal needs.
- (12) Critical routine minimal level Removal of Aquatic Growth (RAG) for high use projects: Does not include all Removal of Aquatic Growth.
- (13) Critical minimum routine dam safety activities to ensure USACE meets fundamental safety standards. Includes inspections, data collection, surveys, drain cleaning, relief well maintenance, updating Emergency Action Plans, and Dam Safety training. Does not include all dam safety activities.
- (14) Critical inspections, studies and routine repair for high level bridges. Does not include all bridges.

c. **O&M Increment 2.** Only critical non-routine activities may be included in this increment. Critical non-routine activities are those that must be accomplished to ensure project safety, and critical maintenance actions that are required to keep the project operating and delivering benefits. Non-routine activities are actions that are “project like” in that they are a unique action with a specific beginning and end. Examples of non-routine actions would be the replacement of wire ropes or valves, or the repair of failing lock, dam, or bridge components. This increment includes major maintenance (MM), as will fit, when combined with Increment 1 activities, within the overall limit of the 75% constraint. Each non-routine activity must be shown separately to allow individual funding decisions based on the performance metrics and must be shown in priority order by District and MSC Rank. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

- (1) Critical on-going non-routine maintenance.
- (2) On-going major maintenance of high use projects or segments: could include new major maintenance.
- (3) Critical non-routine maintenance of dredged material placement sites at high use commercial deep draft, shallow draft and inland projects or high use segments of projects.
- (4) Construction of Dredged Material Disposal Facilities (DMDFs) for high and moderate use segments of commercial deep draft, shallow draft and inland projects are no longer included in O&M and should be budgeted under Construction.
- (5) Critical studies to complete Dredged Material Management Plans (DMMP) for construction of dredged material placement sites for high and moderate use segments of commercial deep draft, shallow draft and inland projects.
- (6) On-going major rehabilitation studies of high and moderate use projects, which could include new major rehabilitation studies.
- (7) Critical non-routine repair for high level bridges. Does not include all bridges.
- (8) Critical non-routine dam safety maintenance and repairs to reduce the highest risk contributors for DSAC I and II projects.

d. **O&M Increment 3.** This increment includes only critical operation and maintenance activities, both routine and non-routine, for the up to 25% above the minimal program level, that are defined by the state of the practice and are needed to sustain public safety and the expected future benefits of the project. This will generally include critical activities that qualified for Increments 1 or 2, but exceeded the 75% limit. This still may not represent full service levels. Dam Safety work items identified as DSAC 3 can be included in this increment. Preparation of reports for MM and MR can be included in this increment. MM and MR activities must have approved reports before they can be included for implementation. Each Increment 3 activity must be shown separately to allow funding decisions based on the performance metrics, and must be shown in priority order by the District and MSC Rank. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking. This may include:

- (1) Critical Advanced Maintenance dredging on high and moderate use projects. Does not include all advanced maintenance.
- (2) Critical minimal level of dredging and operations of low-use projects that have commerce, commercial fishery, multi-agency requirements, and/or public transportation.
- (3) Removal of Aquatic Growth for other high and moderate use projects.
- (4) Other Project Condition Surveys (PCS) including low use beyond Bare Bones annual routine level.
- (5) Additional critical dredging, debris removal, lock operation and maintenance, and bridge maintenance.

e. **O&M Increment 4.** This increment includes critical and non-critical operation and maintenance activities, both routine and non-routine, above critical work in Increments 1 through

EC 11-2-199  
31 Mar 10

3, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project. In most cases, activities in this increment will support continuing the level of service that customers, stakeholders, and others have come to expect and depend on for sustaining public safety and economic, environmental and social benefits. Multiple Increment 4 activities should be submitted that reflect the logical pieces of routine or non-routine activities beyond the 5-year average level shown in Table C 2.2. Each Increment 4 activity must be shown separately to allow funding decisions based on the performance metrics, and must be shown in priority order by the District and MSC Rank. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

f. **O&M Increment 5.** Activities that have a high expected return on investment that enable greater levels of performance in future years should be included in this enhanced or capability Increment. Each Increment 5 activity must be shown separately to allow funding decisions based on the performance metrics, and must be shown in priority order by the District and MSC Rank. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

**V-8. Performance Based Budget Increment(s).** Add additional budget items for logical, needed increments that contribute to the program goals. Ranking will be based on ranking criteria shown in the spreadsheet Table V-5 and listed below. The basis for adding increments in terms of budget request for a project will be based on the demonstrable beneficial impact on increasing average annual net benefits by accelerating project completion, or improved performance, additional outputs or increased reliability in the PY. There are three key performance measures that will be considered: (1) reduction in years to completion, (2) increase in annual net benefits, and (3) BCR for PEDs, construction, and rehabilitations.

**V-9. Risk Assessment of Navigation Assets.** The PY budget continues to improve on USACE asset management efforts with the Navigation, Hydropower and Flood Risk Management business lines using a common format to address risk. For PY, the Relative Risk Rankings will change from the 25 through 1 and 5 through 1 rating scales, where 25 and 5 represented the most critical needs, to 1 through 25 and 1 through 5 rating scales, where 1 is the most critical need, to coincide with the DSAC and LSAC rating scales of 1 through 5. Navigation assets are established under 4 groups: (1) Inland Navigation, (2) Coastal Navigation, (3) Navigation Structures including jetties, breakwaters, bank stabilization and training works and (4) Bridges. There will be five levels of Probability/Condition and five levels of Consequences/Economic Impact associated with each of the Navigation asset groups. These will be used to develop a Relative Risk Ranking Matrix shown in Table V-3. The Relative Risk Ranking Matrix values will be applied to each budget work package and will be generated automatically in OFA. In addition to the Relative Risk Ranking 1 through 25, for consistency across Business Lines OMB has requested uniform rankings. Therefore, the Relative Risk Rankings in Table V-3 will be converted to 1 through 5 rankings as shown in Table V-4. The 1 through 5 Ranking will be automatically generated in OFA from the 1 through 25 Rankings.

a. A risk assessment involves identifying sources of potential conditions, assessing the likelihood or confidence level that they will occur and the consequences if it does occur. Operational Condition Assessments (OCA) must be performed on all inland and intracoastal navigation infrastructure during FY 10. If an OCA has been completed for a project, that OCA should be used to determine the Probability/Condition rating for the project. All inland projects will use OCAs for the FY 13 budget preparation. Project condition classifications for budget requests shall be developed for each project/maintenance budget item in accordance with the Tables V-6, V-8, V-10, or V-12, which ever is applicable. These classifications will provide for the initial basis for capturing the true state of the infrastructure or component thereof. In addition,

these classifications provide the foundation for managing USACE infrastructure uniformly and consistently using asset management principles, systems and risk-based condition indices for operating and maintaining projects while embracing the concept of high performance priority goals. It is critical that an honest, defensible assessment and evaluation of each project be made for the ranking process in order to accurately provide a snapshot of where scarce resources need to be allocated. Therefore OCAs should be used when possible.

b. Activities, components, and projects will be evaluated for the consequences and economic impacts of failure and ranked in accordance with Tables V-7, V-9, V-11, or V-13, whichever is applicable.

c. Tables V-6 and V-7; Tables V-8 and V-9; Tables V-10 and V-11; and Tables V-12 and V-13, together form the basis of the "Relative Risk" based methodology which supports the Corps risk-based direction for making investments decisions and provide the information to populate Table V-3, Navigation Relative Risk Ranking Matrix. The "Relative Risk Ranking" values are determined from Table V-3 using both the "Probability/Condition" classification and the "Consequence/Economic Impact" category values established for each project or budget item. These values will be auto-populated by P2 OFA. Note that more than one project/item can populate a box. Matrix values will be used in making informed and wise investments, minimizing risk and providing maximized benefits to the public. Ranking within each box (if required) will be determined as appropriate and based on supporting justification from the MSC for projects that appear to be "out of place" in their matrix table.

		TABLE V-3 Navigation 1-25 Relative Risk Values Matrix				
		Condition Classification				
		F	D	C	B	A
Consequence	Condition	Failed	Inadequate	Probably Inadequate	Probably Adequate	Adequate
		Consequence/Economic Impact	I	1	2	4
II	3		5	8	12	16
III	6		9	13	17	20
IV	10		14	18	21	23
V	15		19	22	24	25

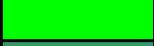
	High Relative Risk
	Med-High Relative Risk
	Medium Relative Risk
	Low Relative Risk
	Minimal Relative Risk

		TABLE V-4 Navigation 1-5 Relative Risk Index Matrix				
		Condition Classification				
		F	D	C	B	A
Consequence	Condition	Failed	Inadequate	Probably Inadequate	Probably Adequate	Adequate
		Consequence/Economic Impact	I	1	1	2
II	1		2	2	3	4
III	2		2	3	4	4
IV	2		3	4	4	5
V	3		4	4	5	5

d. **Inland Navigation** Consists of Navigation Locks and channels that combine to determine system availability for movement of commercial goods.

(1) **Navigation Lock Components.** This will be based on the FEM Hierarchy currently being developed. An example is:

- Lock
  - Lock Chamber
    - Air System
    - Gates
    - Infrastructure
    - Tow Haulage
    - Valves

TABLE V-5  
Component/Activity Hierarchy

Designator	Component/Activity	Component /Activity Rank	Critical or Non Critical
Z	Backup Electrical Power system	45	NC
Q	Buildings	20	NC
AQ	Communication/IT Equip	22	NC
AF	Compressed Air generation & distr	62	NC
P	Culvert Intakes	89	NC
AL	Dam closure hoisting machinery, crane & lifting beam	74	C
X	Dam gate controls & position indicators	77	C
AH	Dam gate emerg closure & bulkheads	85	C
AI	Dam gate maint closures & bulkheads	30	NC
W	Dam gate oper equip	84	C
V	Dam gate struc & seals	125	C
R	Dam Piers/Walls	114	C
BF	Dewaterings	116	NC
B	Dredging	116	C
AS	Elevators	5	NC
AT	Fixed Cranes	7	NC
AE	HVAC	13	NC
AB	Hydraulic pumping & distr	116	C
AK	Lock closure hoisting machinery, crane & lifting beam	37	C
D	Lock Gates	111	C
C	Lock Wall	147	C
BC	Lock/Dam/Other Misc (Lighting, Esplanade, Railings, Drainage, etc...)	20	NC
A	Minimum Acceptable Operations Service Level	195	C
BE	Misc Ops	13	NC
AN	Mooring bits	66	NC
F	Mooring Cells	39	NC
BB	New Real Estate Outgrants/Disposals/Actions	10	NC
Y	Primary elec serv & distr	160	C

EC 11-2-199  
31 Mar 10

BD	Recreation Dredging	13	NC
T	Service Bridge	18	NC
AM	Service Bridge Crane	27	NC
S	Spillway & downstream dam features	67	C
AO	Tow Haulage System	65	NC
AG	US & DS Lock maint lock closures/bulkheads (7 items)	32	NC
E	Utility Cross-overs	67	NC
AJ	Valve Culvert maint closures & bulkheads	24	NC
L	Valves	101	C
AD	Water & sewage svc, treatment & distr	15	NC
BA	Waterway Safety Critical Signs	20	NC

(2) **Condition Assessment.** Begins with a determination of which components are critical (potential to halt navigation) and which are non-critical (limited potential to halt navigation). Predicted component conditions should be determined by completed Operational Condition Assessments (OCA). If OCAs are not available, predicted component conditions should be assessed by a review of multi-disciplined inspection reports, on-site reviews, rating criteria, and/or FEM operation and maintenance records (when available) and projected to the end the PY-1. The predicted condition of the component is a critical factor in determining the risk of unscheduled closures. Output of the process is shown in Table V-6 below.

TABLE V-6 Inland Navigation Condition Classification		
Condition Classification		Condition Description
GOOD	A	ADEQUATE (Failure unlikely within budget cycle)
MODERATE	B	PROBABLY ADEQUATE (Less than 50% probability of failure within budget cycle)
POOR	C	PROBABLY INADEQUATE (Failure could occur within budget cycle)
FAILING	D	INADEQUATE (High probability for failure within budget cycle)
FAILED	F	FAILED (Already failed or failure will occur within budget cycle)

(3) **Consequences of diminished Navigation feature performance** are computed for each budget line item that could result in an unscheduled closure or diminished channel depth and/or width.

TABLE V-7 Inland Navigation Consequence/Economic Impact Category	
Consequence Category	Consequence Rating Criteria
1	Maximum risk to mission Highest economic loss; Over 5 billion ton-miles. <i>Economic level thresholds are in development.</i> Probable life safety impact Minimum Acceptable Operations Service Level (see definitions) Court Decree Mandated Action Shutdown of energy generation or distribution facilities for national public use with no alternative modes of transportation (e.g. power plants and oil distribution facilities)
2	High risk to mission No life safety impact High economic loss; Between 3 billion and 5 billion ton-miles. <i>Economic level thresholds are in development.</i> Diminished cost efficiency of energy generation or distribution facilities for national public use with higher cost alternative modes of transportation (e.g. power plants and oil distribution facilities)
3	Moderate risk to mission No life safety impact Moderate economic loss; Between 1 billion and 3 billion ton-miles. <i>Economic level thresholds are in development.</i>
4	Low risk to mission No life safety impact Low economic impact; Between 500 million and 1 billion ton-miles. <i>Economic level thresholds are in development.</i>
5	Negligible risk to mission No life safety impact Least economic; Under 500 million ton-miles. <i>Economic level thresholds are in development.</i>

e. **Coastal Navigation** Consists of Navigation channels and the availability of the maintained depth for movement of commercial goods. The 59 coastal ports with over 10 million tons of cargo per year operated at an average middle half width channel availability of 30% to 35%. This restriction results in tidal delays for import/exports and missed opportunities. A concentrated effort to improve the channel half-width availability will commence with a deliberate tracking program implemented to illustrate successful investment.

(1) **Condition Assessment.** Asset Management principles provide a uniform condition assessment of each component. The predicted condition of the component is a critical factor in determining the risk of unscheduled closures. Channel condition is determined from the latest hydrographic surveys or published hydrographic survey reports and projected to the end of PY-1

based on historical information. The condition level is determined from Table V-8 below. The percentage listed under the probability/condition listed below refers to the middle half channel availability that would occur just prior to the PY without the requested funding increment.

TABLE V-8		
Navigation Channels and Harbors Condition Classification		
Condition Classification		Condition Description
GOOD	A	95% at Half Channel Availability at maintained Depth
MODERATE	B	75% at Half Channel Availability at maintained Depth
POOR	C	50% at Half Channel Availability at maintained Depth
FAILING	D	25% at Half Channel Availability at maintained Depth
FAILED	F	0% at Half Channel Availability at maintained Depth

(2) **Consequences of diminished Navigation feature performance.** These are computed for each budget line item that could result in diminished channel depth and/or width. Each consequence or economic impact listed below is independent of each other. For a work package to qualify for a particular consequence level it only has to satisfy only one of the listed consequences. For work packages that fit into more than one consequence level, choose the consequence level that most closely fits the work package. The consequence level is determined by Table V-9 below.

TABLE V-9	
Navigation Channels and Harbors Consequence/Economic Impact Category	
Consequence Category	Consequence Rating Criteria
1	Demonstrated <sup>1</sup> highest economic impact or >10 million Tons Imminent life safety impact Court Decree Mandated Action (to include environmental) DoD Strategic Ports Shut down of Energy Distribution Facilities with no alternate modes of transportation
2	Demonstrated <sup>1</sup> high economic impact or 5 - 10 million Tons Probable life safety impact Alternate modes of transportation exist for Energy Distribution Facilities, but at a higher cost than water borne transportation
3	Demonstrated <sup>1</sup> moderate economic impact or 1 - 5 million Tons Possible life safety impact
4	Low economic impact <sup>1</sup> or <1 million Tons No life safety impact
5	Negligible economics (Recreation Harbors, No commercial Activity) No life safety impact.

<sup>1</sup> Thresholds and basis for economic impact are under development. One measure of economic impact can be demonstrated using rate savings benefits, transportation cost savings, or damages avoided.

(3) **Risk Matrix** (follows the 5x5 matrix established above)

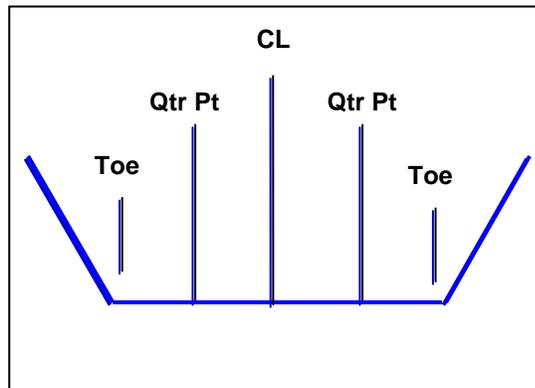
(4) **Definitions.**

(a) Channel Availability Percentage - Determined by the amount of time the channel is available/needed at maintained depths. Does not include channel availability due to tidal fluctuations.

(b) Energy Distribution - Includes impacts to harbors which serve as principal import/export ports of coal, natural gas, and other products required to produce energy.

(c) Middle Half Channel availability - Channel availability between quarter points, see figure 1 below.

FIGURE V-1  
Channel Availability



(d) Harbor of Refuge - Section 175.400 of Title 46 (Shipping), Chapter I (Coast Guard) of the Code of Federal Regulations defines a Harbor of Refuge as "Harbor of safe refuge means a port, inlet or other body of water normally sheltered from heavy seas by land and in which a vessel can navigate and safely moor."

(e) Life Safety Impacts - Includes impacts to subsistence harbors and critical harbors of refuge.

(f) Subsistence Harbor - Communities dependent for survival on harbors that provide principal means of receiving essential goods and services for which alternative means of delivery are not practical.

f. **Structures**

(1) **Components:** This will be based on the FEM Hierarchy currently being developed,

(2) **Condition Assessment:** Asset Management principles provide a uniform condition assessment of each component. The predicted component condition is a critical factor in determining the risk of jetty, breakwater, and other structure failures resulting in channel closure.

TABLE V-10		
Navigation Structures Condition Classification		
Condition Classification		Condition Description
GOOD	A	Failure to the point navigation will be measurably impacted is unlikely within budget cycle Project fully accomplishing its intended purpose
MODERATE	B	Low risk of failure to the point navigation will be measurably impacted within budget cycle
POOR	C	Medium risk of failure to the point navigation will be measurably impacted within budget cycle
FAILING	D	High risk of failure to the point navigation will be measurably impacted within budget cycle
FAILED	F	Condition severely restricts or halts navigation within budget cycle

**(3) Consequences of diminished Structure performance** are computed for each structure or major component.

TABLE V-11 Navigation Structures Consequence/Economic Impact Category	
Consequence Category	Consequence Rating Criteria
1	Demonstrated highest economic impact <sup>1</sup> <b>Imminent</b> life safety impact Critical to safe navigation by commercial vessels at High Use Navigation Project (>10 million tons) Critical to safe navigation at DoD Strategic Ports
2	Demonstrated High economic impact <sup>1</sup> <b>Probable life safety impact.</b> <b>Probable impacts to subsistence harbors/critical harbors of refuge.</b> High economic loss (5 - 10 million Tons) Alternate modes of transportation exist for Energy Distribution Facilities, but at a higher cost than waterborne transportation
3	Demonstrated Moderate economic impact <sup>1</sup> <b>Possible life safety impact.</b> <b>Possible impacts to subsistence harbors/critical harbors of refuge.</b> Moderate economic loss (1 - 5 million Tons)
4	<b>Low economic impact<sup>1</sup>. Little impacts to subsistence harbors/critical harbors of refuge.</b> Low economic impact (<1 million Tons) No life safety impact
5	<b>Negligible economic impact. No impacts to subsistence harbors/harbors of refuge.</b> Negligible economics (Recreation Harbors, No commercial Activity) No life safety impact.

<sup>1</sup> Thresholds and basis for economic impact are under development. One measure of economic impact can be demonstrated using rate savings benefit, transportation cost savings, or damages avoided.

**(4) Risk Matrix** (follows the 5x5 matrix established above)

**g. Bridges.** A substantial portion of the Corps bridge inventory is approaching or has exceeded its design life.

**(1) Components:** This will be based on the FEM Hierarchy currently being developed, using info from CEBIS, the USACE bridge database and input from the Districts. An example is:

- Bridge
  - Decks
  - Superstructure
  - Substructure
  - Infrastructure

Channel Culverts  
Scour Ratings

(2) **Condition Assessment:** Asset Management principles provide a uniform condition assessment of each component. The predicted component condition is a critical factor in determining the risk of bridge closures. Bridge condition is determined from data in the Corps of Engineers Bridge Information System (CEBIS).

TABLE V-12		
Bridges Condition Classification		
Condition Classification		Condition Description
GOOD	A	Fully operational at design loading and capacity Bridge Condition Rating greater than 80 pts
MODERATE	B	Bridge Condition Rating greater than 65 pts
POOR	C	Operational at reduced capacity or load Bridge Condition Rating greater than 50 pts
FAILING	D	Bridge is posted for load restrictions Bridge Condition Rating greater than 35 pts
FAILED	F	Not operational Bridge Condition Rating less than 35 pts

(3) **Consequences of diminished Bridge performance** are computed for each bridge (or major component).

TABLE V-13	
Bridges Consequence/Economic Impact Category	
Consequence Category	Consequence Rating Criteria
1	Potential for loss of life on: High Use Bridges Lifeline Bridges Important Bridges ADT > 5000 Results in USACE mission failure Life Safety Concern – Potential for loss of life should the member(s) fail or not function as intended Economic Impact (?)
2	Probable life safety impact on Bridges with ADT between 2500-5000 Ability to carry traffic to maintain the required use of the route and serve the Nation's needs (commerce, defense, lifeline). Significant impact to the ability to conduct USACE missions
3	Possible life safety impact on Bridges with ADT between 1000-2500 public access bridge Minimal life safety impact Moderate impact to the ability to conduct USACE missions
4	Possible life safety impact on Bridges with ADT between 0-1000 No life safety impact Minimal impact to the ability to conduct USACE missions
5	Routine maintenance that extends the life of the bridge. Repairs that delay replacement Negligible economic impact No life safety impact.

(4) **Risk Matrix** (follows the 5x5 matrix established above)

(5) **Definitions.**

(a) Bridge Use, Average Daily Traffic (ADT); Bridges with ADT > 5000 vehicles will be considered high use. Bridges will be ranked in descending order of ADT.

(b) Lifeline Bridges; Lifeline bridges will be considered high risk. In lieu of more definitive data, bridges with detour lengths greater than 10 miles will be considered lifeline routes.

(c) Important Bridges; Bridges with multiple importance (commerce, national defense, and impacts to navigation) will be considered high risk with higher ranking given to those bridges with a greater number of importance factors.

EC 11-2-199  
31 Mar 10

NOTE: BRIDGE CONDITION ASSESSMENT TRIAGE: a qualitative assessment will be made to identify those conditions where an in-depth analysis may yield favorable results, either in reduced scope and cost of repair and/or delay in repairs. Identify conditions where in-depth analysis will likely be of benefit; e.g., the analysis shows that the members are adequate for the given conditions and that repairs can be delayed, reduced, or eliminated. The costs of the analysis should be offset by reduction or elimination of repair costs.

V-10. **Asset Based Budget.** In order to further development of the USACE asset management program, the PY Budget will link operation and maintenance costs to major assets using the constructed asset's Feature Codes. Two columns were added for the FY 11 Budget submission to the Business Line spreadsheets to link the work packages with constructed assets. Column 8, Primary Feature Code, should be populated with the Feature Code for the major constructed asset that the budget work package supports. Column 9, Additional Feature Codes, would list additional Feature Codes associated with other real property assets that the work package will address. These will typically be associated with operations and "little m" maintenance.

V-11. **Special Considerations or Special Rating Criteria.**

a. Funding for minimum fleet dredges follows the dredge. If the requirements for the minimum fleet dredge do not materialize, the funds programmed for the dredge will be reprogrammed to other minimum fleet dredging requirements.

b. Replacement and Rehabilitation Construction will be included as unique line items, not hidden under the parent project. For example, the rehabilitation items for Markland Locks and Dam will not be included in the Ohio River project items. These items migrated to O&M from Construction in the FY07 cycle and migrated from O&M back to Construction for FY10 and need to remain identifiable. Rehabilitations are characterized as repairs to restore capability and are to be included in Construction.

c. Rehabilitation or replacement studies will be included as unique line items, not hidden in a general Operation line item for the parent project, marked with the appropriate Phase code.

d. Dredged Material Disposal Facilities (DMDFs) will be included as unique line items in Construction, with the appropriate Phase and Category/Class/Subclass (CCS) codes. These items migrated to O&M from Construction in the FY07 cycle and migrated from O&M back to Construction for FY11 and need to remain identifiable.

e. Sand Mitigation Projects will be included as unique line items in Construction, with appropriate Phase and CCS codes. These items migrated to O&M from Construction in the FY07 cycle and migrated from O&M back to Construction for FY11 and need to remain identifiable.

f. Ecosystem Restoration projects in part or in whole previously budgeted in the Ecosystem Restoration Business Line for Construction were moved to O&M in FY07. These projects migrated back to Construction for FY11 and will be budgeted in the Ecosystem Restoration Construction Account for the FY12 cycle.

V-12. **Ten Year Development Plans.**

a. Each year the navigation asset condition assessments will be reviewed and updated to reflect work accomplished and changes to condition and therefore priority. For inland river systems a prioritized maintenance list will be developed. Based on funding assumptions such as if only Increments 1 and 2 are funded, Districts, MSC's and HQ will be able to establish O&M

program glide paths. See Paragraph 9 of the Main EC. Similar process will be developed for the coastal ports and harbors and will be better defined when channel condition assessment criteria are finalized for use in the PY (FY12) budget development process. Setting long-term performance targets to be provided.

b. End State Performance target: For all navigation channels the goal is to attain and maintain channel availability at the justified level of service for the target years. For inland navigation the goal is to halt the trend of increasing navigation lock outages and maintain lock availability at the FY01-02 baseline level on a national basis.

c. Ongoing Construction funded efforts will be a consideration in overall funding, however a similar backlog of work in this program is anticipated beyond the FY16 5-year horizon.

V-13. **Definitions.** The following definitions refer to the O&M criteria.

a. High-Use Projects – those deep and shallow draft navigation projects with 10 million tons or greater, and those waterways with three billion ton-miles or greater.

b. Moderate-Use Projects – those deep and shallow draft navigation projects with one to 10 million tons, and those waterways with one to three billion ton-miles.

c. Project Condition Surveys (PCS) – those hydrographic surveys needed to determine the program year conditions of projects in caretaker status or that are not funded separately in the PY. This work does not include testing, sampling or any other activity that should be included in a specific project funded budget package. The PCS items will be by state and will indicate the total number of projects that could be surveyed and the number of projects that will be performed as part of the line item. All PCS will not be included in a single line item.

d. Water/Environmental Certification – those activities needed to acquire certification in the PY to allow dredging to proceed that are not funded separately in the PY. This work does not include any activity that should be included in a specific project funded budget package. The Certification items will be by state and will indicate the total number of projects that could be certified and the number of certifications that will be performed as part of the line item. This will be handled like the PCS line items. All Certifications will not be included in a single line item.

e. Subsistence Harbors – those harbors that are dependent upon the navigation project as there principal means of receiving goods and services, and for which alternative means of delivery are not practicable. An example would be Tangier Island off the coast of Virginia or the Channel Islands off the California coast. This does not include point of origin harbors.

f. Critical Harbors of Refuge – those harbors that offer safe haven to boaters that represent the sole site for protection based on a public safety based regional distance criteria. Authorization as a Harbor of Refuge does not automatically make a harbor critical.

g. Caretaker Activities – There are navigation systems and projects that will not be funded. Some minimal level of funding will be required to place these projects in a caretaker mode. We should address concern for the public's health and safety, environmental impacts resulting from full cessation of operations and how best to address them, review legal requirements placed on that project and ensure that litigation issues are addressed in a caretaker plan, review any unintended consequences on other waterways, and establish a communication plan to include messages, FAQ, roll out strategy, web site information, and draft media release. Caretaker status is an extremely low level of funding for minimal effort.

**V-14. Low-Use Navigation Projects.**

a. There are two performance indicators that flag work as Low-Use navigation features. These are: (1) Waterway project has less than one billion ton-miles of commercial cargo annually and (2) harbor projects have less than one million tons of commercial cargo annually. Activities meeting criterion (1) will be included as a low-use waterway segment, and activities meeting criterion (2) will be included as a low-use harbor channel. Use the additional performance criteria provided in Table V-14 for assisting in the evaluation of activities and projects.

TABLE V-14

Low-Use Channels and Waterways Screens and Indicators

	<b>SCREEN</b>	<b>SCREEN</b>	<b>Indicators</b>	<b>Indicators</b>	<b>Indicators</b>	<b>Indicators</b>	<b>Indicators</b>
	Minimum						
Low-Use Nav channels	<1 million tons	5-Year Avg cost per ton	Supports Public Transportation	Public Health and Safety	BCR, caretaker	Results of investment	Commercial fishery outputs
Low-Use Waterway segments	< 1 billion ton-miles	5-Year Avg cost per ton	Multipurpose Values	Public Health and Safety	BCR, Caretaker	Investment Issues	

**Low-Use Harbor Channels Minimum:**

- Supports public transportation (ferries, tour boats);
- Ensures boater safety (inlet dredging to reduce breaking wave hazards);
- Project costs yield outputs/benefits exceeding costs;
- Purpose should reflect results of investment (the “So what?”).
- Supports some commercial fishery output;

**Low-Use Waterway Segments Minimum:**

- Compute BCR based on transportation savings (average tons per year table);
- Supports other business line purposes (Flood Risk Management, Hydropower, Recreation, Environmental, Water Supply, etc.);
- Port investment status (recent or planned port expansion/investments);
- Commercial tonnage trends upward;
- Ensures basic public health and safety;
- Caretaker costs for non-budgeted segments.

b. **Navigation System Funding Needs.** See the discussion for O&M Systems in Annex C (O&M). Operation and Maintenance projects including Navigation projects will be combined in systems. For example, the South Oregon Coast Ports will be combined as appropriate in the Pacific Northwest System (PNW). The linkage of individual projects in a systems evaluation must be done in a rational way. This is not a gambit to get additional funds for projects that do not merit it.

V-15. **Joint Costs.** See Annex C, Paragraph C-2.3.b. for Joint Activities - Joint Costs. All Joint costs will be budgeted under the Hydropower Business Line. The appropriate share of Joint Cost work packages will be distributed to the appropriate business lines once the budget submission is uploaded for HQUSACE review and prioritization.

V-16. **Watershed Studies.** Watershed studies are multi-objective/multipurpose and encompass a relatively large geographic area. As a minimum, the study area must encompass the region of an 8 digit HUC. Following the reconnaissance study, a study may proceed as a watershed assessment using 75-25 cost-sharing (leading to a watershed management plan) in accordance with Sec.729 or as a feasibility study accomplished in a watershed context in accordance with the standard feasibility study process and 50-50 cost-sharing when implementation of a Corps project is anticipated.

The key attributes of a watershed assessment, leading to a watershed management plan are as follows.

a. The study results in the identification of a combination of recommended actions (a Watershed Management Plan) to be undertaken by various partners and stakeholders in order to achieve local, tribal, regional, and national water resources management goals identified in the study and may or may not identify further budgetable Corps studies or implementation projects. The plans will be multi-objective and multi-purpose.

b. Team thinking about water resources development and management in the context of multiple purposes rather than single purposes is required. This facilitates the search for comprehensive and integrated solutions to a variety of issues.

c. The study provides a means for improving opportunities for public and private groups to identify and achieve common goals by unifying on-going and future efforts.

d. Leveraging resources, including cost shared collaboration, and integrating programs and activities within and among Civil Works programs, and with other Federal, tribal state and non-governmental organizations, are critical factors.

V-17. **Navigation Criteria Matrix.** ADDRESS THE RISK MATRIX RESULT Below are the data elements and definitions for the embedded Navigation Criteria Matrix (Excel worksheet).

a. Note that dollars amounts should be in thousands (\$000), EXCEPT columns 29, BUDGET REQUEST - FED and 32, BUDGET REQUEST - IWTF. Waterborne Commerce data should also be in thousands, but this data are already rounded to thousands in OMBIL and Waterborne Commerce data sources.

b. Unique Entries. Fields marked with an \* are expected to be different for each increment amount. It would be expected that additional funds would show improvement in appropriate performance indicators. Other items would be the same for the same CWIS numbers *and hopefully will populate automatically.*

c. Criteria Matrix Data Elements and Definitions.

**Col #. Column Title: Definition.**

(1) **BUSINESS PROGRAM:** Common data field for P2 OFA. NHS=Shallow Draft Channel, NHD=Deep Draft Channel, NIL=Low Use Inland Waterway, NIH=High Use Inland Waterway, and NOTH=Navigation Other. These codes should be consistent with the assigned codes for HW Type in Column 60.

(2) **EROC:** Common data field for P2 OFA.

- (3) **MSC:** Common data field for P2 OFA.
- (4) **DISTRICT:** Common data field for P2 OFA.
- (5) **APPROP ABBREV:** Common data field for P2 OFA.
- (6) **CW TYPE OF FUNDING:** Common data field for P2 OFA.
- (7) **PROGRAM CODE:** Common data field for P2 OFA. Refer to Definition/Glossary section.
- (8) **PRIMARY FEATURE CODE:** Common data field for P2 OFA. Required for all PED, Construction and Operation and Maintenance work packages associated with real property assets. The "Primary" Feature Code will be the major constructed asset that the budget work package supports.
- (9) **ADDITIONAL FEATURE CODE(S):** Common data field for P2 OFA. Required for all PED, Construction and Operation & Maintenance work packages associated with real property assets. List all Feature Codes associated with other real property assets that the work package will address.
- (10) **P2 PROJECT NUMBER:** Common data field for P2 OFA.
- (11) **BUDGET ITEM ID\*:** Common data field for P2 OFA.
- (12) **FUNDING INCREMENT\*:** Common data field for P2 OFA.
- (13) **DIS RANK\*:** Common data field for P2 OFA.
- (14) **MSC RANK\*:** Common data field for P2 OFA.
- (15) **HQ RANK\*:** Common data field for P2 OFA. Will be completed by HQ.
- (16) **ARMY RANK\*:** Common data field for P2 OFA. Will be completed by HQ.
- (17) **PRESIDENT BUDGET RANK\*:** Common data field for P2 OFA. Will be completed by HQ.
- (18) **PHASE\*:** Common data field for P2 OFA. Refer to **Table 3** contained in the main EC.
- (19) **PHASE STATUS\*:** Common data field for P2 OFA.
- (20) **PHASE COMPL\*:** Required for all items in all accounts. The fiscal year the phase for which funds are being requested is scheduled to complete. The Reconnaissance phase ends with execution of a Feasibility Cost Sharing Agreement, or a report recommending no Federal action. For the PY, use the date of the Division Engineer's Transmittal of the report to HQ as the end of the Feasibility phase. The PED phase ends with completion of first set of plans and specifications and execution of the Project Cooperation Agreement/Project Partnership Agreement (PCA/PPA). Construction completion is defined as physical completion of the project and would not include follow-on post-construction monitoring. The date entered for each of multiple entries for a project/separable element should be determined based on the assumption

that no subsequent work packages for the project/separable element will be funded. For items in the O&M account, enter the PY unless the requested funds are scheduled to be carried over.

- (21) **PROGRAM NAME:** Common data field for P2 OFA.
- (22) **P2 PROJECT NAME:** Common data field for P2 OFA.
- (23) **SYSTEM CODE:** Common data field for P2 OFA. See Annex C (O&M) for list of designated systems and codes.
- (24) **BASIN CODE:** Common data field for P2 OFA. Enter the 4 digit USGS HUC sub-basin code for the increment request - <http://water.usgs.gov/nawqa/sparrow/wrr97/geograp/geograp.html>.
- (25) **STATE:** Common data field for P2 OFA.
- (26) **CONTRACT TYPE:** Common data field for P2 OFA.
- (27) **CURRENT BUDGET – FEDERAL:** Common data field for P2 OFA.
- (28) **CURRENT BUDGET INF ADJ – FEDERAL:** Common data field for P2 OFA.
- (29) **FEDERAL (CORPS) BUDGET REQUEST\*:** Common data field for P2 OFA. Amount should be full dollar amount rounded to nearest thousand.
- (30) **CURRENT BUDGET – IWTF:** IWTF amount.
- (31) **CURRENT BUDGET INF ADJ – IWTF:** IWTF amount inflation adjusted.
- (32) **BUDGET REQUEST - IWTF\*:** The Inland Waterways Trust Fund amount requested for this increment; for C the sum of all Federal (Corps) and IWTF increments for this CWIS will be its capability. Each increment should provide measurable positive contributions to the applicable business line performance measures. Amount should be full dollar amount rounded to nearest thousand.
- (33) **COMPONENT/ACTIVITY DESIGNATOR\*:** Component/activity designator from FEM hierarchy (see Table V-5 in the Navigation Appendix Para. V-9). Required only for navigation locks and dams.
- (34) **CRITICAL/NON-CRITICAL\*:** “C” for “Critical”/”NC” for “Non-Critical” (see Table V-5 in the Navigation Appendix Para. V-9). Required only for navigation locks and dams.
- (35) **COMPONENT/ACTIVITY RANK\*:** Relative importance of the component or activity to the functioning of the project (see Table V-5 in the Navigation Appendix Para. V-9). Required only for navigation locks and dams.
- (36) **PRIOR - CONDITION ASSESSMENT CLASS\*:** The condition assessment (A, B, C, D or F) of the budget item, based on risk assessment analysis, at the time of or just prior to PY budget year. Reference the Relative Risk Index Matrix and Condition Classification Guidelines in the business line budget EC Appendix, see applicable Tables in Para. V-9.

(37) **PRIOR – CONSEQUENCE CATEGORY\***: The consequence assessment (I, II, III, IV or V) of the budget item, based on risk assessment analysis, at the time of or just prior to PY budget year. Reference the Relative Risk Index Matrix and the Consequence/Economic Impact Rating Criteria in the business line budget EC Appendix, see applicable Tables in Para. V-9).

(38) **PRIOR - RELATIVE RISK VALUE (1-25)\***: The value (1-25) obtained from the Relative Risk Values table in the business line budget EC Appendix after applying the prior Condition Classification and Consequence/Economic Impact assessment values. This value will be generated automatically in OFA. See Para. V-9.

(39) **PRIOR – RELATIVE RISK MATRIX INDEX (1-5)\***: The value (1-5) obtained from the Relative Risk Matrix in the business line budget EC Appendix after applying the prior Condition Classification and Consequence/Economic Impact assessment values. This value will be generated automatically in OFA. See Para V-9.

(40) **WITH PY REQUEST – CONDITION ASSESSMENT CLASS\***: The condition assessment (A, B, C, D or F) that is anticipated or estimated for the budget item assuming the PY budget work package is funded. Reference the Condition Classification Guidelines in the business line budget EC Appendix, see applicable Tables in Para. V-9.

(41) **WITH PY REQUEST – CONSEQUENCE CATEGORY\***: The consequence assessment (I, II, III, IV or V) that is anticipated or estimated for the budget item assuming the PY budget work package is funded. Reference the Consequence/Economic Impact Rating Criteria in the business line budget EC Appendix, see applicable Tables in Para. V-9.

(42) **WITH PY REQUEST – RELATIVE RISK VALUE (1-25)\***: The value (1-25) obtained from the Relative Risk Values table in the business line budget EC Appendix after assuming the PY budget work package is funded and the anticipated or estimated Condition Classification and Consequence/Economic Impact assessment values are applied. This value will be generated automatically in OFA. See Para. V-9.

(43) **WITH PY REQUEST – RELATIVE RISK MATRIX INDEX (1-5)\***: The value (1-5) obtained from the Relative Risk Matrix in the business line budget EC Appendix after assuming the PY budget request is funded and the anticipated or estimated Condition Classification and Consequence/Economic Impact assessment values are applied. This value will be generated automatically in OFA. See Para. V-9.

(44) **AMOUNT NEXT CONTRACT\***: Required for all items in Construction. Provide the total amount of the next new contract. Enter the total value of the contract in thousands

(45) **CONTINUING CONTRACT EARNING\***: Required for all continuing contracts, including both “true” and “special” continuing contracts. Provide the PY earnings for all continuing contracts continuing from the previous year. This number will change as additional items are included in the budget request for an individual continuing contract. Enter NA if this line item is not a Continuing Contract.

(46) **CONTINUING CONTRACT VALUE**: Required for all continuing contracts including both “true” and “special” continuing contracts. Enter the total value of the contract in thousands. Enter NA if this line item is not a Continuing Contract.

(47) **CONTINUING CONTRACT AMOUNT APPLIED THROUGH PY-1**: Required for all continuing contracts including both “true” and “special” continuing contracts. Enter the amount in

thousands. This should be zero for a continuing contract initiating in the PY (FY12). Enter NA if this line item is not a Continuing Contract.

(48) **LAST YEAR BUDGETED:** Enter the last fiscal year this study or project had funds included in the President's Budget. Funds must have been in the final President's Budget, not just the District's request.

(49) **LAST AMOUNT BUDGETED:** Enter the amount included for this study or project in the President's Budget indicated in "LAST YEAR BUDGETED" entry.

(50) **LAST YEAR APPROPRIATED:** Enter the last fiscal year this study or project was appropriated funds (conference report).

(51) **LAST AMOUNT APPROPRIATED:** Enter the appropriated amount (conference report amount) for this study or project contained in the appropriation indicated in "LAST YEAR FUNDS APPROPRIATED" entry.

(52) **TOT STUDY COST:** The Total Study Cost (TSC) includes the Federal and non-Federal costs of the particular Investigation phase: the total cost of each phase while in that phase for the Reconnaissance, Feasibility and PED Phases. This is also required for study activities included in Operation and Maintenance, such as Major Rehabilitation reports, DMMPs, Section 216 studies, etc.

(53) **BALANCE TO COMPLETE STUDY\*:** The **PY+1** Federal share fully funded balance to complete (BTC) the study (if in reconnaissance or feasibility) or PED. This number should vary with each work package in the budget for each specific study (the balance to complete will decrease with each successive work package). This is also required for study activities included in Operation and Maintenance, such as Major Rehabilitation reports, DMMPs, Section 216 studies, etc.

(54) **TOT PROJ COST:** The Total Project Cost (TPC) includes the Federal and non-Federal costs of PED and Construction. During the Reconnaissance and Feasibility Phases use the estimate being developed for use in the appropriate report (needed for order of magnitude evaluations). Subsequently, the figure is to include all Federal and non-Federal costs for PED and Construction. The cost should be consistent with the Total Project Cost.

(55) **BALANCE TO COMPLETE\*:** The **PY+1** Federal share fully funded balance to complete (BTC) the study (if in reconnaissance or feasibility), construction project or separable element, Major Maintenance or Major Rehabilitation, diked disposal facility, sand mitigation, or beneficial use project. BTC should be consistent with the Total Project Cost. This number should vary with each work package in the budget for each specific project (the balance to complete will decrease with each successive work package).

(56) **LAST YEAR CONSTRUCTION FUNDS WILL BE REQUESTED\*:** Last year funds (other than O&M) will be required. This includes authorized monitoring/adaptive management funded in the construction account.

(57) **FCSA Date:** The actual or scheduled date of the FCSA. If increment request is to accelerate phase, this date should change from initial one.

(58) **PED Date:** The actual or scheduled date of the PED Agreement. If increment request is to accelerate phase, this date should change from initial one.

EC 11-2-199  
31 Mar 10

(59) **PCA/PPA Date:** The actual or scheduled date of the PCA/PPA. If increment request is to accelerate phase, this date should change from initial one.

(60) **HW TYPE:** Navigation Activity, Harbor or Waterway Type. HSD=High Use Shallow Draft Harbor; MSD=Moderate Use Shallow Draft Harbor; LSD=Low Use Shallow Draft Harbor; HDD=High Use Deep Draft Harbor; MDD=Moderate Use Deep Draft Harbor; LDD=Low Use Deep Draft Harbor; HWW=High Use Waterway; MWW=Moderate Use Waterway, LWW=Low Use Waterway; PCS=Project Condition Surveys; RAG=Removal of Aquatic Growth; RSM=Regional Sediment Management.

(61) **HMTF (Y/N):** For all navigation projects, indicate if navigation costs for this project are eligible for reimbursement from the HMTF, Yes or No. Data will be entered automatically from OMBIL

(62) **HW TYPE USE CODE – CARETAKER (Y/N):** Use Code for Navigation Activity, Harbor or Waterway Type. Required for all projects/items that are High, Moderate or Low Use. Indicate Yes or No for Caretaker. A brief explanation should be provided in the Remarks Column.

(63) **HW TYPE USE CODE – SUBSISTENCE HBR (Y/N):** Use Code for Navigation Activity, Harbor or Waterway Type. Required for all projects/items that are High, Moderate or Low Use. Indicate Yes or No for Subsistence Harbor. A brief explanation should be provided in the Remarks Column.

(64) **HW TYPE USE CODE – CRITICAL HBR OF REFUGE:** Use Code for Navigation Activity, Harbor or Waterway Type. Required for all projects/items that are High, Moderate or Low Use. Indicate Yes or No for Critical Harbor of Refuge. A brief explanation should be provided in the Remarks Column.

(65) **HW TYPE USE CODE – SAFETY (Y/N):** Use Code for Navigation Activity, Harbor or Waterway Type. Required for all projects/items that are High, Moderate or Low Use. Indicate Yes or No for Safety (Search & Rescue, USCG Station, etc.). A brief explanation should be provided in the Remarks Column.

(66) **HW TYPE USE CODE – NATIONAL SECURITY (Y/N):** Use Code for Navigation Activity, Harbor or Waterway Type. Required for all projects/items that are High, Moderate or Low Use. Indicate Yes or No for National Security. A brief explanation should be provided in the Remarks Column.

(67) **HW TYPE USE CODE – PUBLIC TRANSPO (Y/N):** Use Code for Navigation Activity, Harbor or Waterway Type. Required for all projects/items that are High, Moderate or Low Use. Indicate Yes or No for Ferry (Public) Transportation. A brief explanation should be provided in the Remarks Column.

(68) **DSAC CLASSIFICATION:** Each dam safety project, assurance study or group of similar studies for the same project should be identified with the appropriate phase code and the Dam Safety Action Classification code (DSAC = 1, 2, 3, 4, or 5)

(69) **DAM SAFETY IMPACTS:** For dam safety/seepage project - what other purposes (by Business Line) would be impacted if there was a failure. Maximum of 160 characters.

(70) **LEGAL MANDATE:** Special legal mandates – Y or N and then describe in remarks.

- (71) **SAFETY ISSUES:** Safety issues – Y or N and then describe in remarks.
- (72) **LATEST COM TON:** The commercial tons for the latest available year from OMBIL (Waterborne Commerce data). Data will be entered automatically from OMBIL.
- (73) **5-YR AVG COM TON:** The last five-year average annual commercial tons from OMBIL (Waterborne Commerce data). Data will be entered automatically from OMBIL.
- (74) **LATEST SYS TON MILES:** The system or trip ton-miles for the latest available year from OMBIL (Waterborne Commerce data). Data will be entered automatically from OMBIL.
- (75) **5-YR AVG SYS TON MILES:** The last five-year average annual system or trip ton-miles from OMBIL (Waterborne Commerce data). Data will be entered automatically from OMBIL.
- (76) **LATEST TON MILES:** The ton-miles for the latest available year from OMBIL (Waterborne Commerce data). Data will be entered automatically from OMBIL.
- (77) **5-YR AVG TON MILES:** The last five-year average annual ton-miles from OMBIL (Waterborne Commerce data). Data will be entered automatically from OMBIL.
- (78) **5-YR AVG O&M \$/TON:** Five-year average total O&M costs divided by five-year average annual commercial tons for the same period from OMBIL for Waterborne Commerce and O&M financial data. Data will be entered automatically from OMBIL.
- (79) **TOTAL VALUE OF FOREIGN CARGO:** Total dollar value of the foreign cargo for the project at current price levels. Available from Waterborne Commerce data. Data will be entered automatically from OMBIL.
- (80) **VALUE OF EXPORT CARGO:** Dollar value of the export cargo for the project at current price levels. Available from Waterborne Commerce data. Data will be entered automatically from OMBIL.
- (81) **% TIME AVAIL\*:** Percentage of time project is available to perform as designed with limits from deferred maintenance, dam safety issues, etc. It would be expected that additional increment requests would show improvement in appropriate performance indicators. Explain in Remarks.
- (82) **BCR AT 7% RATE:** The project's benefit cost ratio at 7% and current price levels.
- (83) **RBRCCR AT 7% RATE:** The project's remaining benefits - remaining costs ratio at 7% and current price levels. See Annex B for discussion.
- (84) **BCR – Applicable:** The project's benefit cost ratio at the applicable interest rate.
- (85) **RBRCCR – Applicable:** The project's remaining benefits - remaining costs ratio at applicable rate.
- (86) **APPLICABLE RATE:** The applicable interest rate - See main EC paragraph 10.
- (87) **BCR – Current:** The project's benefit cost ratio at the current interest rate. See main EC paragraph 10.

EC 11-2-199  
31 Mar 10

(88) **RBRCR – Current:** The project's remaining benefits - remaining costs ratio at current rate. See main EC paragraph 10.

(89) **PROJECT DESCRIPTION:** Main features/Navigation segment, 50 words or less. Complete sentences are not required. Maximum of 250 characters.

(90) **BUDGET ITEM JUSTIFICATION\*:** State proposed use of the increment amount (be as specific as possible) and what the increment amount accomplishes (what are we getting for this amount of \$). Key points to be able to distinguish from other increment or other projects. For dam safety items (inspections and studies), the "Purpose" field should include what is being studied, the expected report completion date, if not completing in the PY, the additional \$ needed to complete, and estimated cost (magnitude) of the construction cost. It would be expected that additional increment requests would show improvement in appropriate performance indicators. Maximum of 160 characters.

(91) **CONSEQUENCES\*:** What is penalty (consequence) if not funded this PY - increment amount needed to comply with safety, settlements, loss of service, structural failure, etc. It would be expected that additional increment requests would show improvement in appropriate performance indicators. Maximum of 160 characters.

(92) **REMARKS\*:** Additional critical information to support increment amount that is not in the other fields and what is called for from other fields. Use to explain District & Division ranks, lack of data in required fields, special legal or other requirements, safety issues, etc. Provide rationale to support funding of O&M Major Maintenance Items under C. Document infrastructure at significant risk to justify budget requests. It would be expected that additional increment requests would show improvement in appropriate performance indicators. For projects with an N/A in any field, such as BCR and RBRCR, explain why they are not required. Maximum of 600 characters.

(93) **REMARKS (CONTD)\*:** Additional critical information to support increment amount that does not fit in REMARKS column.

(94) **OTHER PURPOSES:** The other outputs provided by the project. N=Navigation; F=Flood Risk Management; H=Hydropower; E=Environmental; R=Recreation; W=Water Supply.

(95) **FUNDING OF OTHER PURPOSES:** Displays the budget request amounts entered for other business lines for the project. System generated, no entry required.

(96) **EXTERNAL PEER REVIEW:** Enter the amount in thousands included in the Budget Request – Fed that is required to fund the Federal cost of external peer review in accordance to WRDA 2007, Section 2034.

(97) **WATERSHED:** Is this a watershed study or project? Y or N based on criteria in EC.

(98) **WATERSHED DOCUMENTATION:** If Watershed Study column is "Y", then provide a narrative documentation of why the study is a Watershed Study (400 characters). The Phase Code in Column 18 should be "WA".

TABLE V-15

Navigation Budget Ranking Criteria - Submission Matrix



Table V-15 FINAL.xls

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APPENDIX VI

Recreation

TABLE OF CONTENTS

Subject	Paragraph	Page
Background .....	VI-1 .....	VI-1
Recreation Mission and Goal .....	VI-2 .....	VI-1
Recreation Budget Goals and Objectives .....	VI-3 .....	VI-2
PY Recreation Budget Focus Areas .....	VI-4 .....	VI-2
Recreation Maintenance .....	VI-5 .....	VI-3
Increased Recreation Fee Collection .....	VI-6 .....	VI-4
Visitor Centers .....	VI-7 .....	VI-4
Customer Comment Card Program .....	VI-8 .....	VI-4
Definitions of Funding Increments .....	VI-9 .....	VI-4
Initial and Sustaining Program Definition .....	VI-10 .....	VI-6
Increments Above Initial and Sustaining .....	VI-11 .....	VI-7
Service Levels .....	VI-12 .....	VI-7
Work Package Indicators .....	VI-13 .....	VI-10
Recreation Budgetary Performance Measures .....	VI-14 .....	VI-11
Recreation Budget Construction .....	VI-15 .....	VI-12
Operations and Maintenance Business Information Link (OMBIL) .....	VI-16 .....	VI-12
Data Requirements		
Recreation Budget Evaluation System (Rec-BEST) and P-2 .....	VI-17 .....	VI-13
Ten-Year Glide Path .....	VI-18 .....	VI-13
Risk Assessment of Recreation Assets .....	VI-19 .....	VI-18

TABLES

	Table .....	Page
Strategic Plan Objectives and Performance Measures .....	VI-1 .....	VI-1
Budget Increments Reference Table Between Rec-BEST and P-2 .....	VI-2 .....	VI-5
Acceptable Levels of Service .....	VI-3 .....	VI-9
Ten-Year Ceiling Program Performance Targets .....	VI-4 .....	VI-15
Ten-Year Recommended Program Performance Targets .....	VI-5 .....	VI-17
Recreation 1-5 Relative Risk Index Matrix .....	VI-6 .....	VI-19
Recreation Condition Classification .....	VI-7 .....	VI-20
Recreation Consequence/Economic Impact Category .....	VI-8 .....	VI-22

ILLUSTRATION

	Illustration	Page
PY Recreation Budget Development Work Flow	VI-1 .....	VI-23



APPENDIX VI

Recreation

VI-1. **Background.** The Corps is the nation's leading Federal provider of outdoor recreation opportunities. As the host of more than 375 million visitors a year, the Corps plays a major role in meeting the outdoor recreation needs of Americans. Corps recreation projects contribute economically and socially to the communities in which they are located, providing a natural resource setting for visitors to reap the benefits to their physical, mental and spiritual health from engaging in outdoor activities.

VI-2. **Recreation Mission and Goal.** The Corps Natural Resources Management (NRM) mission statement is:

“The Army Corps of Engineers is the steward of the lands and waters at Corps water resources projects. Its Natural Resources Management Mission is to manage and conserve those natural resources, consistent with ecosystem management principles, while providing quality outdoor public recreation experiences, to serve the needs of present and future generations. In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, and compliance and restoration practices. The Corps manages for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector. The Corps integrates the management of diverse natural resources components such as fish, wildlife, forests, wetlands, grasslands, soil, air, and water with the provision of public recreation opportunities. The Corps conserves natural resources and provides public recreation opportunities that contribute to the quality of American life”.

a. The NRM mission statement recognizes the strong interrelationship between the health of the natural resources and the quality of the recreation experience provided. The portions of the above mission statement that are directly related to recreation are underlined. Our recreation program goal is to enhance the quality of American life by providing benefits to individuals, communities, the national economy and the environment.

b. Table VI-1 immediately below displays the Recreation Program Objectives and Performance Measures published in the March 2004 Civil Works Strategic Plan. Preparation of the PY Budget Request requires the recognition of a constrained budget environment and the ongoing effort to improve the linkage of budget to performance. The performance measures which support and/or supplement Table VI-1 program objectives and performance measures to reflect the near term realities of a constrained PY budget environment are described in paragraph VI-15 below.

TABLE VI-1	
Strategic Plan Objectives and Performance Measures	
Program Objectives	Performance Measures
Provide justified outdoor recreation opportunities in an effective and efficient manner at Corps operated water resources projects.	National Economic Development Benefit Benefits/Costs Ratio Cost Recovery
Provide continued outdoor recreation opportunities to meet the needs of present and future generations.	Park Capacity Customer Satisfaction (only used to identify facility/service improvement needs)
Provide a safe and healthful outdoor recreation environment for Corps customers	Visitor Health and Safety Services Facility Condition Index; Facility Service

**VI-3. Recreation Budget Goals and Objectives.** Although the Corps recreation program is well established, stable and well regarded, our ability to continue to provide high quality recreation experiences to meet the needs of current and future generations is jeopardized by constrained funding. Years of sub-optimal funding have precluded preventative maintenance or facility modernization or improvement, including improvements to increase operational efficiencies, resulting in an aging and outdated recreation infrastructure.

a. Accordingly, a concentrated nationwide emphasis must be placed on assuring available funding provides the optimum nationwide recreation program for the nationwide investment. To achieve this goal, the following recreation budget objectives are established for the PY program.

(1) Initial investments must provide equivalent public opportunity, at consistent service levels, across the Corps national recreation program.

(2) Initial and incremental investments must reflect the results of operational efficiencies analyses and implementation.

(3) Existing recreation infrastructure critical to meeting current and future needs must be maintained and protected.

(4) Recreation opportunities must provide a safe, healthful and accessible experience.

(5) All recreation opportunities must be provided consistent with environmentally sustainable development and environmentally friendly business practices for the benefit of future generations.

b. In order to achieve the above objectives, two tasks must be accomplished:

(1) We must conscientiously and objectively determine equivalent initial funding levels, to assure all projects across the country are starting annual budgets from the same point.

(2) We must establish a system of performance measures that will permit objective evaluation of various investment choices to assure incremental investments above initial provide the greatest benefit for the investment, while maintaining consistent public service levels. The FY06 through FY11 budgets provided a great deal of information about the performance of alternative investment choices. In the PY budget, we must continue to improve our investment choices, using refined performance measures to improve data accuracy.

c. Once an appropriate and equivalent initial funding level has been established and a system of effective performance measures is implemented, informed and wise decisions can be made to meet our goal of providing the greatest public benefit for the nationwide budgetary investment.

**VI-4. PY Recreation Budget Focus Areas.** The following focus areas should be considered when developing incremental recreation budget packages for PY.

a. Critical Maintenance (non-routine). Critical non-routine maintenance defined as non-recurring maintenance that if not performed in the budget year will result in the loss of a necessary component of the recreation infrastructure should be included in the improvement increment. Work packages to fund critical non-routine maintenance should be identified with an indicator in Rec-Best so the total program requirement can be quantified. Critical non-routine maintenance items may be new items in the PY. It is not required that they were identified in the previous year's budget to qualify as critical. Identifying a work package as critical non-routine maintenance indicates this is a higher priority work than routine O&M for the recreation program. Critical routine maintenance defined as recurring maintenance necessary to

keep a necessary component of the recreation infrastructure properly maintained should be included in the initial, sustaining or remaining increment as appropriate (see paragraph VI-10 below).

b. **Accessibility Improvements for Persons With Disabilities.** The Corps has a legal obligation to provide accessibility to public recreation sites, facilities and programs in accordance with statutory requirements and codified guidelines. Non-compliance with these requirements and guidelines constitutes a civil rights violation. Accordingly, improvements required to meet these requirements and guidelines are a priority for funding. Funds allocated in the President's budget for this purpose and subsequently appropriated must be expended for this purpose. Improvements required to meet statutory requirements and codified guidelines, and for which budget packages should be developed, include:

(1) Improvements to facilities constructed after 1984, when the Uniform Federal Accessibility Standards (UFAS) were published, which do not meet UFAS guidelines. UFAS guidelines may be found at <http://www.access-board.gov/ufas/ufas-html/ufas.htm>. Accessibility improvements made to such facilities (i.e. those constructed after 1984 which do not meet UFAS guidelines) must comply with current guidelines, which may be found at <http://www.access-board.gov/ada-aba/final.htm>.

(2) Improvements required to make recreation programs, i.e. camping, picnicking, boating, swimming, etc., accessible. For the purposes of budgeting Corps recreation program requirements, a program is defined on a project basis. Therefore, if a camping program is available at recreation areas operated by the Corps on a water resources development project, at least one camping opportunity (campsite, plus associated facilities, plus the route between associated facilities) on the project must be accessible. Improvements required to meet program accessibility requirements must comply with current guidelines.

c. **Efficiency Improvements.** Investments in efficiency improvements to support and maintain current performance levels at justifiable Initial cost optimize the nationwide recreation program for the nationwide investment. Work packages should be developed to fund efficiency improvements that will result in decreased future O&M costs.

d. **Recreation Area Modernization.** The modernization of recreation sites and facilities involves updating existing facilities to meet current guidelines and user needs, as well as modifying facilities and services to improve efficiency and effectiveness. Ongoing identification of modernization needs and budgeting to accomplish the most critical of these needs is important to the Corps overall, long-term management of its recreation program. Modernization activities will be funded through O&M work packages above initial. A new Work Category Code (WCC), 61515, was developed in FY07 to facilitate submittal and evaluation of modernization work. All costs for the modernization, replacement or additions for modernization to recreation facilities and structures such as trails, campgrounds, picnic areas, restrooms, showers, boat ramps, parking areas, roads, grounds, utilities associated with recreation use, buildings used for recreation purposes should be included in WCC 61515. Work using this WCC must meet current standards as identified in EM 1110-1-400 and should be bundled in logical packages that assure the biggest return on investment can be realized in the shortest amount of time. Only those packages that make "good business sense" should be included. Packages using this WCC cannot be included in the Initial funding level.

e. **Joint Activities – Joint Costs.** See guidance provided in Sub-Annex C-2, paragraph C-2.3.b.

**VI-5. Recreation Maintenance.** See Annex C (O&M) for Operation and Maintenance Unfunded Requirements Reporting Requirements. It is important to identify and budget for all justified unfunded maintenance requirements for recreation within capability for the budget year. (Capability is described in main section of the EC). Work packages should be developed in Improvement Increment to address all requirements for unfunded maintenance. Unfunded maintenance is defined as those unfunded

EC 11-2-199  
31 Mar 10

maintenance work items that are required and should have been funded in the previous year (PY-1) to provide reasonable assurance that project performance goals can continue to be met and that undue risk of failure is avoided. If these maintenance requirements are not identified, we have an incomplete understanding of our total budgetary requirements, regardless of what is or is not funded. Recreation maintenance may be identified further as critical in accordance with paragraph VI – 4(a) above. An indicator code for critical maintenance activities is provided in Rec-BEST.

**VI-6. Increased Recreation Fee Collection.** Efforts continue to obtain legislative authority for the Corps to retain all or a portion of the recreation use fees collected, with the primary objective of funding maintenance and improvement of recreation sites and facilities. Accordingly, in conjunction with the PY budget development, efforts should be made to identify opportunities to enhance fee collection as appropriate and in accordance with existing policy and guidance. Implementation guidance will be developed for any additional authorities obtained. Our success in increasing recreation use fee collection will impact directly our success in meeting goals related to the Cost Recovery performance measure discussed in paragraph VI-14 below.

**VI-7. Visitor Centers.** Two Work Category Codes (WCC's) were developed for the FY07 budget for Visitor Center Operations, WCC 60514, and Visitor Center Maintenance, WCC 61514. Visitor Center costs previously (prior to FY07) included under WCC's 60511 and 61511 respectively should now be included in the new WCC's. This includes costs for officially designated visitor centers. For maintaining and operating information centers that are not designated as visitor centers this year, the necessary costs should be included in the Initial Increment using WCC's 60511 and/or 61511. This should not result in an increase in total budget. The sum of 60511 and 60514 should not be more than the previous total for 60511. The sum of 61511 and 61514 should not exceed that previously budgeted for 61511. The new WCC's simply allow us to distinguish between costs for visitor centers and costs for other recreation sites and facilities. The descriptions for the new Visitor Center WCC's are:

a. WCC 60514: Includes all costs associated with the operation of visitor centers, including personnel costs; custodial services; snow, ice and debris removal; lawn and shrubbery maintenance; landscaping; grounds; tour operator services; utilities and supplies; exhibits (interior and exterior); supporting costs of cooperating associations, heating and cooling systems, audio visual programs, building material and equipment costs.

b. WCC 61514: Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of, visitor center buildings, displays, audiovisual systems, heating and cooling systems, landscaping, grounds, exhibits and utilities.

**VI-8. Customer Comment Card Program.** The customer comment card program is administered by Corps project staff to obtain feedback systematically from visitors on the quality of facilities and services at Corps managed recreation areas. The written comments offered by visitors can be especially helpful for identifying the facility and service improvements that are most needed at recreation areas. Accordingly, visitor comments obtained through the comment card program should be considered when developing recreation program budget packages. Visitor comments that demonstrate the need for a particular budget package should be referenced in the budget package description.

**VI-9. Definitions of Funding Increments.** There are four funding increments for the recreation business line: the Initial funding level for each project is for the most critical, time-sensitive, least-cost activities to meet the MSC minimal program dollar limit of 75% of the 5-year average of O&M President's budget by MSC (see Sub-Annex C-2, Table C-2.3). This MSC minimal (75%) program is 'baseline scenario' planning; if an MSC places more than the 5 year historical average for Initial increment into this 75% program, the Increment 1 packages, ranked by Rec-BEST score, above the historical cut line for that MSC will compete with Sustaining Increment 3 packages for the remaining 25%; the Sustaining increment

will include budget above the Initial to support continuing the current level of service. This amount should not exceed the dollar limit set by MSC, which should typically be another 25% above the initial program of MSC amount; the Remaining increment will include remaining costs to serve existing visitors at the acceptable service levels not accommodated in Initial and Sustaining increments because of budget limits; and the Improvement increment will include most critical non-routine maintenance activities and all facility improvements and enhancements, modernization, and new facility construction.

In order to achieve consistency with the overall O&M program structure and to meet the requirement for entering budget information into P-2, the Rec-BEST budget increment definitions have been modified and should be matched in P-2 according to Table VI-2. That is, the Initial increment will be entered in P-2 as Increment 1; the Sustaining increment will be entered into P-2 as Increment 3; the Remaining increment will be entered into P-2 as increment 4; and all the improvement packages will be entered in P-2 as increment 5 (including critical non-routine maintenance packages, which will be identified in Rec-BEST but entered in P-2 as increment 5 as well). There is no change on the BEST\_ID's. The BEST\_ID numbers should still be entered into P-2 as the way they are in Rec-BEST.

TABLE VI-2 Budget Increments Reference Table between Rec-BEST and P-2	
Rec-BEST Increment	P-2 Increment
<b>Initial Increment:</b> Critical, time-sensitive, least-cost activities to meet the MSC initial program dollar limit of 75% of the 5-year average of the previous five O&M President's budgets by MSC	<b>Increment 1:</b> Critical routine <i>and</i> critical non-routine activities; within 75% of MSC amount in Table C 2.3
Not Applicable in Rec-BEST	Do not Use <b>Increment 2.</b> <i>Note: Include both critical routine and critical non-routine work in P-2 Increment 1- up to MSC initial program limit</i>
<b>Sustaining Increment:</b> Additional costs above the initial to support continuing the current level of service. This amount should not exceed the dollar limit set by MSC, which should typically be another 25% above the initial program of MSC amount	<b>Increment 3:</b> Support continuing the acceptable level of service, for the 25% above the initial program of MSC amount in Table C 2.3
<b>Remaining Increment:</b> Additional costs to serve 100% existing visitors at the acceptable service levels not accommodated in Initial and Sustaining Increments	<b>Increment 4:</b> Support continuing the acceptable level of service, above the 100% of MSC amount in Table C 2.3
<b>Improvement Increment:</b> For all other packages - critical non-routine maintenance activities and all facility improvements and enhancements, modernization, and new facility construction	<b>Increment 5:</b> Activities enable greater levels of performance in future years

VI-10. **Initial, Sustaining and Remaining Increment Definitions.** Pursuant to the Recreation Budget Goals and Objectives established in paragraph VI.3, the following definition of Initial and sustaining increments for the Corps recreation program is established. The **combination** of Initial, Sustaining, and Remaining increments for recreation will not be based upon any previous year's budget, but solely based on the need to provide acceptable service levels to existing visitors. However, to achieve consistency with the overall O&M program structure and to meet the requirement for entering budget information into P-2, the initial increment will have to meet the minimal program dollar limit of 75% of the 5-year average of O&M President's budget by MSC, and the sustaining service increment will be set by the MSC, which generally will be the remaining 25% of the 5-year average of the President's O&M budget.. Budget increments above Initial must be justified by the incremental benefits to be delivered, as described by the performance measures.

a. **Initial Increment.** Operations & Maintenance and Mississippi River and Tributaries Maintenance. The Initial funding level for each project is the minimum funding for the most critical, time-sensitive, least-cost activities to meet the MSC minimal program dollar limit of 75% of the 5-year average of O&M President's budget by MSC. The parks or facilities that represent the most efficient program in serving a portion of existing visitors should be included in Initial. The less efficiently operating parks that serve the remaining visitors at acceptable levels should be included in Sustaining and Remaining Increments.

b. **Sustaining and Remaining Increments.** Sustaining and Remaining Increments will include the minimum funding needed to provide acceptable service to the remaining of the existing visitors not accommodated in Initial. These Increments serve only the remaining visitors. The Sustaining increment has to meet the budget limit set by MSC's, while the Remaining increment should include additional costs needed to provide acceptable service levels to existing visitors not accommodated under the Initial and Sustaining increments because of budget constraints. They do not include any facility improvements or non-routine maintenance, other than those maintenance costs critical to provide acceptable service IN THE BUDGET YEAR, as defined in paragraph VI – 11.

NOTE: This definition will be used for budget development purposes only, to establish an equivalent platform among projects on which to build a performance based budget. This budget development guidance will not be used to determine the appropriate execution of the recreation program following appropriation of funds. Guidance to assist decision making regarding major changes in recreation program operation, to include park closures, is available elsewhere as operational guidance, not budget development guidance.

c. The definition of "acceptable service" is provided in paragraph VI.13. Care should be taken to use the service level criteria properly to assure accurate computations. "Existing recreation visitation" means visitation occurring at currently open recreation areas managed by the Corps.

d. Funding for all activities encompassed by Work Category Codes 60511, 60513, 60514, 60520, 60541, 60542, 60550, 60560, 60591, 60592, 61511 and 61514 that serve existing recreation visitation in designated recreation areas (excluding access points, overlooks, and Class E campgrounds) at acceptable service levels in the most efficient program will be included in Initial and Sustaining increments. Annual recurring costs for non-recurring work items, such as minor roof repairs, painting of comfort stations, road patching, sign replacements, exhibit repairs, etc., should be budgeted in 61511 and 61514 (for visitor centers only) in Initial and in Sustaining Increment. Maintenance requirements which are scheduled, such as roof replacement, road re-paving, renovation of comfort stations, fabrication or installation of visitor center replacement exhibits, etc. should be budgeted in 61511 and 61514 (for visitor centers only) in Improvement Increment. Only those maintenance costs essential to provide acceptable service IN THE BUDGET YEAR should be included in the Initial Increment or Sustaining Increment.

e. The minimum funding to assure the health and safety of visitors to areas outside designated recreation areas, including access points, overlooks, Class E campgrounds and dispersed areas will be included in Initial. This includes maintenance of buoys and lake-wide navigation aids necessary to assure the health and safety of visitors.

f. For WCC 60550, Real Estate Management for the Recreation Function, the minimum funding necessary to perform only the most basic oversight of existing recreation outgrants will be included in Initial and Sustaining. Costs to accomplish real estate activities required to issue a new recreation outgrant should be included in Initial also, if the new outgrant will result improved program efficiency, i.e. public recreation opportunities will be provided at less cost to the government. WCC 61550 and WCC 61510 have been revised to reflect only those real estate activities directly related to the recreation program.

g. For recreation projects with no Corps operated recreation areas (PL 89-72 projects and/or projects where all recreation areas are outgranted), the minimum costs to provide necessary oversight of existing recreation outgrants will be included in Initial in WCC 60550. Minimum costs to fulfill Corps requirements for visitor health and safety should be included in Initial in WCC 60511. (Costs for non-routine maintenance, i.e. facility replacement and for minimum health and safety should be included in Improvement Increment.)

h. For WCC 60560, Environmental Compliance Management for the Recreation Function, the work required to comply with environmental protection mandates (i.e., laws, executive orders and court orders) will be included in Initial. Include the amount of funds required to meet minimum environmental compliance and safety standards and to satisfy other legally binding requirements.

i. For Construction and MR&T construction, see Annex B. In PY, there will be no work packages developed for recreation in Investigations or MR&T studies.

**VI-11. Increments Above Initial, Sustaining and Remaining.** The Recreation program will have 1 budget increment above Initial, Sustaining and Remaining.

**Improvement Increment.** This Increment will include most non-routine maintenance activities and all facility improvements and enhancements, modernization, and new facility construction. No WCC's for Operations Features may be used in Improvement Increment. Budget packages submitted in Improvement Increment should focus on a primary purpose which can be identified by the appropriate indicator as defined in paragraph VI – 13. Inappropriate bundling of work items should be avoided. A detailed description of the planned work should be provided in the description field in Rec-BEST. A clear description could improve consideration of a budget package for funding. Descriptions should be clear, concise and accurately identify the work to be accomplished. Identify the risks and consequences if not funded, as well as the benefits/performance improvements, if funded. Include items such as: current conditions, deteriorated/outdated features, annual cost savings, health, safety and management issues resolved, increased revenues, improved efficiencies, and other pertinent information that quantifies the work to be accomplished. If the work package includes work that can be broken into subparts, with associated costs, the breakdown should be included in the description.

**VI-12. Service Levels.**

a. Developing our budgets using "acceptable service levels" will help us achieve more consistent public service levels across the country. Acceptable service levels protect the safety of our customers and the integrity of Government assets, as well as assure satisfactory interaction between agency staff and visitors. The guidelines provided in Table VI-3 should be used to determine requirements for

EC 11-2-199  
31 Mar 10

acceptable service during the three consecutive peak months of project visitation in your budget submittal for camping, day use, and/or multipurpose recreation areas. Do not apply the service guidelines to access points, overlooks or Class E camp areas.

b. Acceptable service levels range from 32 – 42, with low-intensity use parks at 32 to 36, medium-intensity use parks at 35 to 39, and high-intensity use parks at 38 to 42. The range is established based upon the use or visitor demand placed on facilities rather than the kind or degree of development in the park. A 200 site Class A campground, which has moderate occupancy on a typical summer weekend may require less service than a small day use park located near a city that gets intensive use all week long. Service levels above the target should be reduced actively through the budget process to achieve consistent public service across the Corps. You should develop your Initial and Sustained Increment budget to provide services within this range as appropriate by intensity of use level. These guidelines were adapted from those developed by the Southwestern Division, as part of their Justified Levels of Service effort. Please note that “Visitor Contacts” has been added as an element of “Visitor Assistance” below.

TABLE VI-3

Acceptable Levels of Service

Services (Peak Season)				Current service level range	Target <sup>0</sup> Service level range
Facility Cleaning <sup>1</sup>	2 days per week (4)	5 days per week (8)	Daily (10)	0 - 10	2 - 10
Facility Mowing <sup>2</sup>	6 in. or less 50% of time (4)	6 in. or less 75% of time (8)	6 in. or less 95% of time (10)	0 - 10	2 - 10
Visitor Assistance <sup>3</sup>	Ranger Patrols, Daily; Visitor Contacts Daily (3)	Ranger Patrols; Daily; Law Enforcement Agreement in Place; Visitor Contacts daily with periodic water <b>safety/interpretive</b> programs (6)	Ranger Patrols, More than once daily on weekends; Weekend law enforcement patrols; Visitor contacts daily with water <b>safety/interpretive</b> programs weekly (8)	0 - 8	2 - 8
Gate Attendant/Park Host <sup>4</sup>	Gate staffed on weekends only (3)	Gate staffed less than 7 days per week but always on weekends (6)	Gate staffed 7 days per week (8)	0 - 8	0 - 8
Reservations <sup>5</sup>	Yes (2)			0 - 2	0 - 2
Urgent Repairs <sup>6</sup>	Correct within 4 or more days (4)	Correct within 1-3 days (8)	Correct within 24 hrs (10)	0 - 10	4 - 10
Routine Repairs <sup>7</sup>	Correct within 14-30 days (2)	Correct within 5-14 days (4)	Correct within 1-4 days (6)	0 - 6	2 - 6
<b>Grand Total</b>				<b>0 - 54</b>	<b>12 - 54</b>

Rating	Points <sup>8</sup>
Below	Low Intensity Use - 0-31 Points Medium Intensity Use - 0 -34 Points High Intensity Use - 0-37 Points
<b>Acceptable</b>	<b>Low Intensity Use - 32 - 36</b> <b>Medium Intensity Use - 35 - 39</b> <b>High Intensity Use - 38 - 42</b>
Above	Low Intensity Use - 37 or More Medium Intensity Use - 40 or More High Intensity Use - 43 or More

0. The lower range amounts for elements listed in the Target Service Level Range Column that have a numerical value greater than zero represent the minimum acceptable service level to meet minimal public health and safety standards. One should

never submit a budget request that does not at least meet minimal public health and safety considerations. If you are currently not meeting this standard or cannot meet that standard consideration should be given to closing the area until adequate funding can be obtained to provide to provide a safe environment for our visitors. It is unacceptable to meet an acceptable service point range total score without at least meeting the minimum point totals listed for each of the 7 components of service.

1. Includes such things as cleaning of restrooms, shower/toilet buildings, vault toilets, change houses, and bath houses.
2. Includes improved mowing areas located around such things as buildings, facilities, sites, beaches, playgrounds, trail heads, multi-purpose fields/activity areas and along park roadways. Arid areas that require little or no mowing should be scored as "7".
3. A ranger patrol equals a minimum of one trip by one or more uniformed Corps rangers through a park.
4. Gate is staffed by volunteer, contractor or Corps employee. Staffed gate is person on site during 3 peak months of visitation.
5. Reservations for camp sites, shelters or other facilities.
6. "Urgent repairs" are to correct problems that render a site or park unusable or unsuitable for use. This includes such things as electric and plumbing repairs. Examples: A major water leak would be an urgent repair, but a dripping faucet would not. Replacing a stop sign would be an urgent repair. Pruning a storm damaged limb above a campsite would be an urgent repair, but pruning a broken limb in a natural area would not. Without urgent repairs, our customer cannot have full use of the site or facility. (NOTE: All deficiencies or hazards which threaten health or safety must be corrected immediately or the affected site or facility closed to public access.)
7. "Routine repairs" are repairs that should be completed in a fairly short time, but are not urgent. Routine repairs would not require an important visitor facility to be shut down if not completed. Routine repairs do not include major or periodic maintenance, unfunded maintenance, modernization activities, new construction, facility replacement or other work budgeted in Improvement Increment. Routine repairs do not include operational maintenance or services such as facility cleaning, mowing or trash pickup. Routine repairs may include non- recurring work items budgeted in 61511 such as roof patching, sign repair or replacement of damaged non-critical signs, graffiti removal, blading roads and camp pads to repair ruts and potholes, dripping faucet repair, repairing a nonfunctional hand dryer, repair of broken picnic tables, grills and fire rings, repair or replacement of damaged partitions and window screens and other non-urgent repairs to structures and facilities.
8. Use your best professional judgment supplemented with your estimate of the area's occupancy rate when determining use intensity. High Intensity Use -- an area with 100% to 75% of the sites/parking lots occupied on weekends during the peak use season; Medium Intensity Use -- an area with 75% to 25% of the sites occupied on weekends during the peak use season; Low Intensity Use -- an area with less than 25% of the sites/ parking lots occupied on weekends during the peak use season.

VI-13. **Work Package Indicators.** When developing work packages above the Initial program, Operations Project Managers should consider the goals and objectives for the recreation program and PY budget development, as described in this Appendix. Accordingly, the following recreation packages are suggested as appropriate and should be identified with the appropriate indicator(s) in Rec-BEST. Work packages with other purposes may be appropriate and may be included without an indicator.

a. Two sets of indicators are provided to categorize work packages. The first set describes the primary purpose of the work package. Only one of the primary purpose indicators should be applied to a single work package.

(1) Packages for non-operational, non-routine maintenance, such as road paving, roof replacement, erosion control, or utility infrastructure repairs or replacement, i.e. water or sewer systems.

(2) Packages for accessibility improvements, to accommodate persons with disabilities, including packages to fund inventory assessments. A sub-indicator is provided to indicate the budget package corrects a legal deficiency resulting in a civil rights violation, as defined in paragraph VI – 4(b).

NOTE: Any facility construction or major renovation must meet current standards. Accordingly, any budget package to construct or renovate facilities should incorporate the costs to meet accessibility requirements, as it would include costs to meet safety requirements or other engineering guidelines. The

accessibility indicator is not appropriate for such budget packages unless the primary reason to do the work is for accessibility improvements. If the work would not be done if the site or facility were already accessible, a different indicator should be used.

(3) Packages for efficiency improvements for existing sites and facilities to realize future O&M savings. A field is provided in Rec-BEST to capture the estimated average annual O&M savings resulting from the investment in the first 10 years following the investment.

(4) Packages for new facility construction within an existing recreation area, when such facility construction can be justified on a benefit cost basis.

(5) Packages for critical non-routine maintenance work. Critical non-routine maintenance is defined as work that, if not accomplished in the Budget Year, will result in failure of a necessary component of recreation infrastructure. Work that will restore an inoperable facility to operability may be defined as critical maintenance, if the facility is a necessary component of recreation infrastructure. For example, if the only shower building in a Class A campground was damaged in a storm and rendered unsafe for visitor use, the costs to repair the building and restore it to public use could be identified as critical non-routine maintenance.

b. The secondary set of indicators further describes the work. More than one indicator may apply to a single work package. All indicators that apply should be attached to each work package.

(1) Packages for work to be done in partnership with other private or public entities, such as challenge partnerships, which results in leveraging Corps resources. A field is provided in Rec-BEST to capture the estimated leveraged value of the budget package, i.e. the amount of partner investment in funds, goods or services that would be realized from funding the package.

(2) Packages that will result in expected increased recreation use fee collection of 10% or more for the recreation area or areas affected by the work.

(3) Packages for work that includes a **critical** health and safety component.

**VI-14. Recreation Budgetary Performance Measures.** The following performance measures have been developed for application in the FY12 budget development, review and defense. The incremental change in performance values for these measures will be calculated for each work package developed in Rec-BEST. The three performance measure values will then be normalized to achieve a single value that will be used to rank all work packages at the district, MSC and national levels. See paragraph VI-17. Recreation Budget Evaluation System (Rec-BEST), below for more information.

a. Park Capacity - This is an output performance measure of recreation capacity or opportunity. Total possible recreation opportunities in site days/nights provided at a recreation area.

b. Facility Condition and Facility Service - This is an output measure of the quality of the opportunities provided to our visitors. Acceptable facility condition standard 4.0 is a facility that requires no more than routine minimal maintenance (changing light bulbs, painting, caulking, asphalt patching, and filling cracks). Reduces visitor health & safety risks and reduces environmental degradation.

c. National Economic Development (NED) Benefit and Benefit/Cost Ratio - This is an efficiency measure of our provision of quality opportunities. NED benefits are the economic benefits of project recreation opportunities to the visitors themselves. B/C Ratio is ratio of NED benefits to actual expenditures or program budget.

d. Health and Safety Services Measure- This is an outcome measure of our provision of health and safety services to visitors. Acceptable level of service is a typical park in peak season provides cleaning 5 days a week, 2 to 3 ranger patrols and visitor contacts daily, law enforcement in place, periodic public safety programs, and ability to correct urgent repairs within 1 to 3 days.

e. Cost recovery, calculated by dividing recreation use fees collected by recreation funding/expenditure, has been identified as a Recreation Program performance measure. The nationwide values for this measure will be reported to OMB as a part of the overall program efficiency. In FY12, this measure will also be used as a budgetary factor in computing project's B/C ratio efficiency.

**VI-15. Recreation Budget Construction.** The recreation budget will be constructed using the information delivered as requested in paragraphs VI-9 through VI-14 above. The Recreation Program Team will evaluate the information available and construct a coherent budget that addresses the Recreation Program Mission, Goals and Objectives; the Recreation Budget Goals and Objectives; and focus areas identified above.

a. The Initial program is the starting point on which the performance based recreation budget is constructed. This Initial program will be developed starting with the Initial packages submitted by each project. The total amount of the Initial program will be balanced with above Initial requirements to construct an overall, affordable program that best addresses the Recreation Program Goals and Objectives within the context of the total Corps budget. The Initial program will deliver quantified performance values for the 3 budgetary performance measures – Park Capacity, FCI, and NED Benefit.

b. The sum of the Initial program and Sustained Increment represents the total funding requirement to provide acceptable service to 100% of our customers. This is important information, and care should be taken to assure it is an accurate reflection of that requirement. This total requirement is considered when the ceiling level service program is constructed. An indicator with a text field is provided in Rec-BEST to document if the total of Initial and Sustained Increment increased significantly in PY because of increased O&M requirements resulting from Congressional Adds in prior years. The year and description of the Congressional Add should be noted in the text field.

c. Work packages in Improvement Increment will be evaluated based on the incremental change in the 3 budgetary performance measures resulting from accomplishing the work. This will provide a single ranking value that will permit ranking of all work packages from 1 to X, from highest to lowest performing work.

d. Work packages in Improvement Increment will also be identified by work package indicators, which further describe the work to be done. This will permit the segregation of work into categories within which the highest performing work can be identified. For example, the highest performing critical non-routine maintenance can be identified. The highest performing accessibility improvements to be accomplished in partnership with others can be identified. All modernization work can be evaluated based upon its expected increase in fee collection. The combinations of these various data elements result in the capability to create an overall program that is responsive to the Corps requirements, as well as to the interests of OMB, Congress and our customers, within a performance based environment.

**VI-16. Operations and Maintenance Business Information Link (OMBIL) Data Requirements.** Data to compute recreation performance measures will be maintained in OMBIL. Operations Project Managers should assure that all recreation projects are properly identified in OMBIL with a project site area of type "recreation" and that all OMBIL data required for budget development has been entered and is up to date prior to budget development. For PY, the following OMBIL data will be required by recreation area:

a. Visitation

- b. Recreation Area Managing Agency
- c. Recreation Area sub-type
- d. Numbers of camp sites
- e. Numbers of day use parking spaces
- f. Visitor Center Type
- g. Campground Class

VI-17. **Recreation Budget Evaluation System (Rec-BEST) and P-2.** A web-based tool was developed and first deployed for field use in calculating recreation performance measures for O&M activities in FY06. Rec-BEST uses OMBIL data, supplemented with data provided by the Operations Project Manager, to calculate a value for each of the performance measures associated with each budget package. Using the incremental change in these performance values, Rec-BEST ranks all recreation budget packages at the district, division and HQs levels. Most projects should take the advantage of retrieving data from the previous year in Rec-BEST and review/update the existing budget packages in Rec-BEST instead of creating new ones.

a. The performance measure information must be updated in **Rec-BEST by 21 May 2010**. These performance data will be extracted from Rec-BEST and then merged with budget data extracted from P-2 Primavera Project Manager in OFA on a nightly basis. When entering budget information into P-2 Primavera Project Manager, make sure the corresponding BEST ID's are entered for all budget packages to ensure the proper performance measures can be matched in OFA. For most projects, the preliminary budget information and the matching BEST\_ID's can be carried over from previous year's data entry in P-2 or should be taken from the existing Rec-BEST database. For projects that start FY11 budget development in Rec-BEST first, you should provide the budget information to your P-2 correspondent for data entry in P-2 before the deadlines set by the district/division to allow districts and MSC to review and evaluate their budgets comprehensively, across business lines. For projects that enter the budget into P-2 first based on FY11 Rec-BEST budget package information, make sure to revise your Rec-BEST budget information accordingly. For either option, you must enter the matching BEST\_ID when entering budget information in P-2. The information needed to provide your P-2 correspondents for data entry is available on the P-2 summary page in Rec-BEST. For the PY budget, performance measure output data from Rec-BEST will be loaded to OFA every night once the projects have submitted data input in Rec-BEST and the budget items have been created in P-2-OFA. As the budget review continues, additional Recreation budget review data and detailed rollup spreadsheets will be available to the MSC's and, may be accessed through the NRM Gateway at <http://corpslakes.usace.army.mil/employees/recbest/recbest.html> along with directions for its use.

b. Rec-BEST will not be used for Construction work packages. No Investigation work packages will be developed for recreation.

VI-18. **Ten-Year Glide Path.** The Civil Works Ten Year Development Plan purpose is to present an overview of the funding required for the Civil Works program over a ten-year period. The Five Year Development Plan (FYDP), a stand alone document be based on a Subset of the 10 year plan and will produce results that contribute to achievement of the strategic goals and objectives in the Civil Works Strategic Plan. The multi year plan's focus is to undertake projects and activities that provide the highest net economic and environmental returns on the Nation's investment. See paragraph 9 (b) of the main part of the EC for details.

EC 11-2-199  
31 Mar 10

a. To help in preparing the 10 year (PY- PY+9) Development Plan, the HQ recreation business line manager will work with each MSC/Division to develop 10 year funding streams for each project. The funding streams will be the basis for the PY budget, the 10 year Development Plan and the FYDP. Divisions' 10 year programs must be included in the 25 June 2010 submission. After the Divisions submit their 10 year funding streams, a CW 10 year plan will be prepared.

b. The targeted ceiling program shown in Table VI-4 is to maintain "current services" compared to the PY budget, as indicated in the Fiscal Year PY-1 Army Civil Works Budget Guidance. Performance goals will focus on providing the same levels of service to visitors to Corps operated parks compared to PY-1. The table below displays estimated ten-year performance results for the ceiling program.

TABLE VI-4

Ten Year Ceiling Program Performance Targets

<b>Fiscal Year</b>	<b>PY</b>	<b>PY+1</b>	<b>PY+2</b>	<b>PY+3</b>	<b>PY+4</b>	<b>PY+5</b>	<b>PY+6</b>	<b>PY+7</b>	<b>PY+8</b>	<b>PY+9</b>
<b>Budget (\$ million)</b>	<b>\$284</b>	<b>\$298</b>	<b>\$311</b>	<b>\$325</b>	<b>\$339</b>	<b>\$355</b>	<b>\$371</b>	<b>\$388</b>	<b>\$406</b>	<b>\$424</b>
<b>Visitor Health and Safety Services<sup>1</sup></b>	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%
<b>Park Capacity<sup>2</sup> (in millions)</b>	74	74	74	74	74	74	74	74	74	74
<b>Facility Condition<sup>3</sup></b>	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
<b>Facility Service<sup>4</sup></b>	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
<b>NED Benefits<sup>5</sup> (\$ million)</b>	1,168	1,229	1,284	1,341	1,402	1,465	1,531	1,601	1,675	1,753
<b>B/C<sup>6</sup></b>	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13
<b>Cost Recovery<sup>7</sup></b>	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%

1. Percent of visitors served at Corps managed recreation areas with acceptable service levels\*.

2. Total possible recreation opportunities (in site days/nights) provided at Corps managed recreation areas. The strategy to address budget short fall may include a combination of reduced service levels and reduced recreation opportunities implemented through partial and/or compete park closures

3. Acceptable facility condition standard\*\* = 4 or better. Based on a seven point scale: 1 = poor to 7 = excellent.

4. Percent of visitors served with facilities at acceptable condition standards.

5. Economic benefits to visitors of recreation opportunities at Corps managed parks.

6. Benefits/Cost ratio. Ratio of NED benefits to program actual expenditures or budget.

7. Percent of total Operations and Maintenance budget spending paid thru recreation user fee receipts.

\* A typical park in peak season provides cleaning 5 days a week, 2 to 3 ranger patrols and visitor contacts daily, law enforcement in place, periodic public safety programs, and ability to correct urgent repairs within 1 to 3 days.

\*\*Facility that requires no more than routine minimal maintenance (changing light bulbs, painting, caulking, asphalt patching, and filling cracks). Reduces visitor health & safety risks and reduces environmental degradation.

EC 11-2-199  
31 Mar 10

c. The Recommended program shown in Table VI-5 contains funding for improvements that address visitor health and safety needs, modernize electrical service at high performing campgrounds, improve operational efficiency and improve access to facilities for disabled visitors. In addition, the recommended program includes funding to increase visitor assistance services by rangers to conduct water safety programs and increase patrols in beach areas and Corps operated parks. The program also includes funding for visitation surveys to maintain the capability to monitor visitation levels at Corps projects to enhance the capability of tracking program performances.

d. Ten year performance projections reported here are based on estimates provided by field managers in Rec-BEST during the past three years. Under the recommended program, service levels at individual recreation sites will be maintained and/or adjusted to reflect the level of visitation, relative to the cost of such maintenance, at those sites. Levels of service will be held steady at a higher level compared to the ceiling program, through limited investments in service, site and facility improvements. Program efficiency, as measured by B/C, will increase by about 10 percent in ten years. The downward trend in facility condition projected under the ceiling program will be reversed and facility condition will gradually increase as a result of facility improvement investments in high performing parks, and visitors served at facilities rated at "fair-good" or better will increase by four percent. The facility improvement is also needed to meet the increasing recreation demand from population growth. The table below displays estimated ten-year results for the recommended program.

TABLE VI-5

Ten Year Recommended Program Performance Targets

<i>Fiscal Year</i>	<i>PY</i>	<i>PY+1</i>	<i>PY+2</i>	<i>PY+3</i>	<i>PY+4</i>	<i>PY+5</i>	<i>PY+6</i>	<i>PY+7</i>	<i>PY+8</i>	<i>PY+9</i>
<b>Budget</b> (\$ million)	\$332	\$348	\$363	\$380	\$397	\$415	433	\$453	\$474	\$496
<b>Visitor Health and Safety Services</b> <sup>1</sup>	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
<b>Park Capacity</b> <sup>2</sup> (in millions)	74	74	74	74	74	74	74	74	74	74
<b>Facility Condition</b> <sup>3</sup>	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.9	3.9
<b>Facility Service</b> <sup>4</sup>	47%	48%	49%	50%	51%	52%	53%	54%	55%	56%
<b>NED Benefits</b> <sup>5</sup> (\$ million)	1,490	1,577	1,647	1,721	1,799	1,880	1,965	2,055	2,149	2,249
<b>B/C</b> <sup>6</sup>	4.49	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53	4.53
<b>Cost Recovery</b> <sup>7</sup>	16%	16%	17%	17%	17%	17%	17%	17%	17%	17%

1. Percent of visitors served at Corps managed recreation areas with acceptable service levels\*.
2. Total possible recreation opportunities (in site days/nights) provided at Corps managed recreation areas.
3. Acceptable facility condition standard\*\* = 4 or better. Based on seven point scale: 1 = poor to 7 = excellent.
4. Percent of visitors served with facilities at acceptable condition standards.
5. Economic benefits to visitors of recreation opportunities at Corps managed parks.
6. Benefits/Cost ratio. Ratio of NED benefits to program actual expenditures or budget.
7. Percent of total Operations and Maintenance budget spending paid thru recreation user fee receipts.

\* A typical park in peak season provides cleaning 5 days a week, 2 to 3 ranger patrols and visitor contacts daily, law enforcement in place, periodic public safety programs, and ability to correct urgent repairs within 1 to 3 days.

\*\*Facility that requires no more than routine minimal maintenance (changing light bulbs, painting, caulking, asphalt patching, and filling cracks). Reduces visitor health & safety risks and reduces environmental degradation.

EC 11-2-199  
31 Mar 10

**V-19. Risk Assessment of Recreation Assets.** The Recreation business line beginning with this PY is implementing a risk assessment process and is considered as transitional. The business line's risk assessment process will undergo upgrades and further development in future budget years. This PY budget initiates the Recreation program's USACE asset management efforts in line with the Navigation, Hydropower and Flood Risk Management business lines using a common format to address risk. The Relative Risk Rankings will use 1 through 5 rating scale, where 1 is the most critical need, to coincide with the Dam Safety Action Classification (DSAC) and Levee Safety Action Classification (LSAC) rating scales of 1 through 5. There will be five levels of Probability/Condition and five levels of Consequences/Economic Impact. These will be used to develop a Relative Risk Ranking Matrix shown in Table VI-6 below. The Relative Risk Ranking Matrix values will be applied to all work packages and will be generated automatically in OFA.

a. A risk assessment involves identifying conditions for sources of potential failures, assessing the likelihood or confidence level that they will occur and the consequences if it does occur. Facility condition classifications for budget requests shall be developed for each budget work package. These classifications will provide a basis for capturing the state of the infrastructure or component thereof. In addition, these classifications provide a foundation for managing USACE infrastructure uniformly and consistently using asset management principles, systems and risk-based condition indices for operating and maintaining projects while embracing the concept of high performance priority goals. It is critical that an honest, defensible assessment and evaluation of each work package be made for the ranking process in order to accurately provide a snapshot of where scarce resources need to be allocated. These will be used to develop a Condition Classification Ranking Matrix shown in Table VI-7 below.

b. A risk assessment involves identifying sources of potential consequences. Consequences of diminished project National Economic Development Benefits of each work package will be categorized based on economic loss and visitor impacts. These will be used to develop a Consequence/Economic Impact Category Ranking Matrix shown in Table VI-8 below.

Condition Consequence		TABLE VI-6 Recreation 1-5 Relative Risk Index Matrix Condition Classification				
		F Failed	D Inadequate	C Probably Inadequate	B Probably Adequate	A Adequate
		Consequence/Economic Impact	I	1	1	2
II	1		2	2	3	4
III	2		2	3	4	4
IV	2		3	4	4	5
V	3		4	4	5	5

	High Relative Risk
	Med-High Relative Risk
	Medium Relative Risk
	Low Relative Risk
	Minimal Relative Risk

(1) **Condition Assessment.** Begins with a determination of which budget packages are critical and which are non-critical as identified in Rec-BEST for the budgeted year. In addition, the itemized Facility Condition Index (FCI) for key recreation facilities will be used to assess the overall condition classification.

- F. Failed condition represents that the feature has failed or failure will occur within budget cycle and is no longer operable without further tests, repairs, or replacement.
- D. Poor condition represents that the feature does not perform well under normal operating conditions - does not meet Corps design or industry standards. Expect to receive numerous customer complaints. Physical signs of serious damage or deterioration are present. Extensive non-routine maintenance is necessary.
- C. Fair condition represents that the feature will perform under normal operating conditions - does not meet Corps design or industry standards. Expect to receive customer complaints. Non-routine maintenance is necessary.
- B. Good condition represents that the feature will perform well under normal operating conditions. Although the overall facility condition may have met Corps design or industry standards, minor maintenance may be necessary.
- A. Excellent condition represents that the feature will perform well under normal operating conditions and meet current Corps design or industry standards. Routine O&M is recommended.

Output of the process is shown in Table VI-7 below.

TABLE VI-7		
Recreation Condition Classification		
Condition Classification		Condition Description
Failed	F	FAILED (Already failed or failure will occur within budget cycle) - Packages identified as "critical maintenance" and/or with "critical health and safety component" in Rec-BEST
Poor	D	INADEQUATE (High probability for failure within budget cycle) - Overall FCI is below acceptable and has at least two items identified as "Poor" conditions
Fair	C	PROBABLY INADEQUATE (Failure could occur within budget cycle) - Overall FCI is below acceptable
Good	B	PROBABLY ADEQUATE (Less than 50% probability of failure within budget cycle) - Overall FCI is above acceptable and below the top 10 percent
Excellent	A	ADEQUATE (Failure unlikely within budget cycle) - Overall FCI in the top 10 percent.

**(2) Consequences of diminished Project National Economic Development Benefits feature.**

Begins with a determination of the uniqueness of recreation opportunities provided in places with and without substitutions as identified in Rec-BEST to evaluate impacts to our visitors. The National Economic Development (NED) benefits computed in Rec-BEST are used to evaluate the economic benefits of the recreation opportunities to the visitors themselves. In addition, impacts of the proposed budget items to the provision of health and safety to the visitors and cost recovery will be used to categorize the consequences.

- I. Highest economic loss and visitor impacts. Projects with the highest NED benefits and visitors and facility/feature has no substitute within 2 hours travel time from project. Failure has already resulted or will occur within budget cycle in public fatalities, serious injuries, spread of infectious diseases, and/or loss of public property with the lodging of claims against the government and/or claims paid by government. Project collects significant camping and day use fees.
- II. Medium to high economic loss and visitor impacts. Projects with high NED benefits and visitors and facility/feature has no substitute within 1 hour travel time from project. Existing hazardous condition(s) are present which have a significant potential to result in public fatalities, serious injuries, spread of infectious diseases, and/or loss of public property that could result in the lodging of claims against the government. Project collects significant camping or day use fees.
- III. Medium economic loss and visitor impacts. Projects with medium size NED benefits and visitors. If existing condition(s) are not addressed during the current budget cycle, they COULD create a public health environment with significant potential for serious injury, loss of/damage to public property, or public illness created through the spread of infectious disease. Project collects some or low camping and day use fees.
- IV. Low economic loss and visitor impacts. Projects with low NED benefits and visitors. Currently no reported conditions affecting public or employee safety or public health exists, but the potential exists for the creation of a public health environment with a low potential for serious injury, loss of/damage to public property, or public illness created through the spread of infectious disease. Project collects of camping and day use fees are insignificant.
- V. Minimal economic loss and visitor impacts. Projects with minimal NED benefits and visitors. Currently no reported conditions affecting public or employee safety or public health exists, any potential for a significant condition developing lies 10 or more years beyond current year. Project collects no camping and day use fees.

Output of the process is shown in Table VI-8 below.

TABLE VI-8		
Recreation Consequence/Economic Impact Category		
Consequence Category		Consequence Rating Criteria
High	I	Highest economic loss and visitor impacts. Project NED benefits in the top 10 percent, or no substitutions within 2 hr. travel time.
Medium - High	II	Medium to high economic loss and visitor impacts. Project NED benefits in the top 25 percent, or no substitutions within 1 hr. travel time
Medium	III	Medium economic loss and visitor impacts. Project NED benefits in the top 45 percent
Low	IV	Low economic loss and visitor impacts. Project NED benefits between 45 to 70 percent
Minimal	V	Minimal economic loss and visitor impacts. Project NED benefits in the bottom 30 percent

ILLUSTRATION VI-1

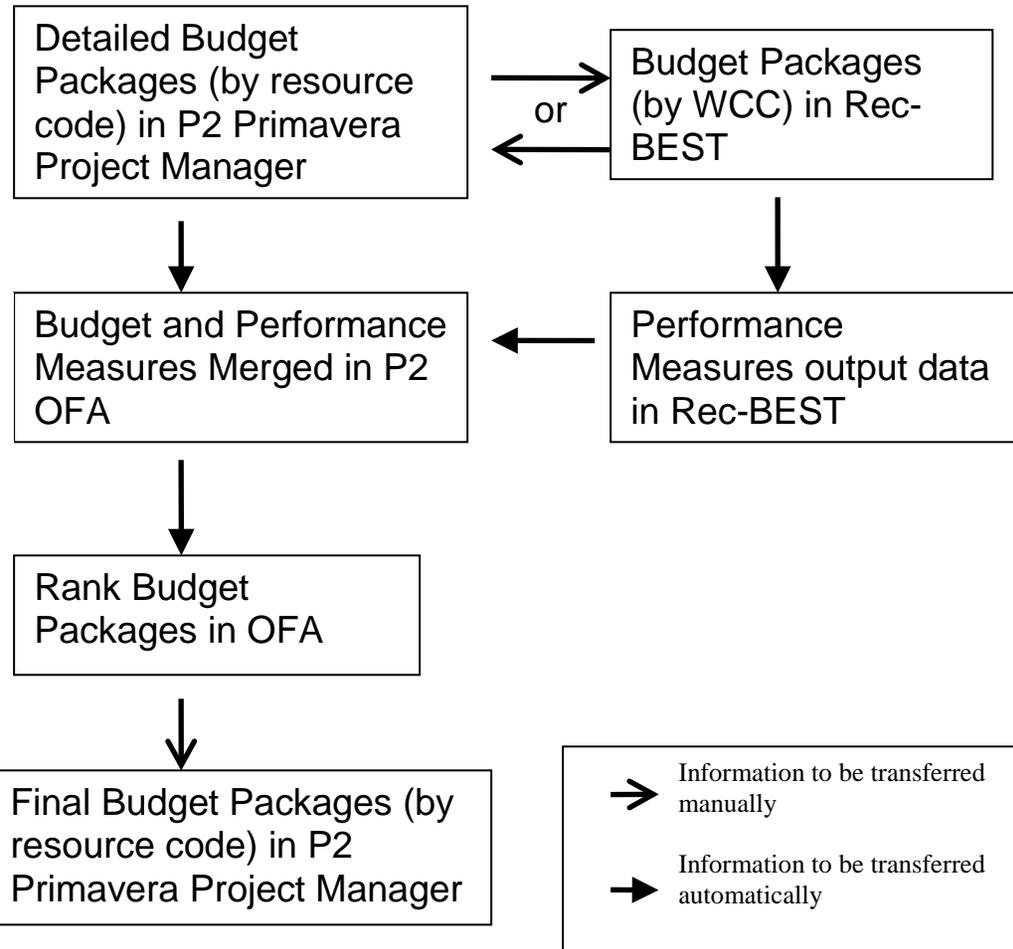
PY Recreation Budget Development Work Flow

Two options for building your FY10 budget: 1. Start in Rec-BEST and then provide the budget information to your P2 correspondent for data entry in P2. 2. Start the budget development in P2 then revise your Rec-BEST budget information accordingly. For either option, it is recommended that the FY11 Rec budget entered in P2 should be carried over to FY10 to minimize the efforts of entering the same budget information again. Make sure to enter the matching BEST\_ID when entering budget information in P2.

Performance measure output data calculated in Rec-BEST will be uploaded to OFA to match with all budget packages entered in Project Manager. Direct access to Rec-BEST database will be available for District and Division quality assurance review.

HQ and MSC business line managers develop the nationwide program using budget and performance measures submitted in P2 and Rec-BEST. Recreation budget is then submitted to HQ, ASA, and later OMB for budget appropriation.

Final budget adjustment in P2 based on President's budget. Manually adjust budget information in P2 Primavera Project Manager based on final budget appropriation recorded in OFA.



APPENDIX VII  
Regulatory  
TABLE OF CONTENTS

Subject	Paragraph	Page
Background .....	VII-1 .....	VII-1
Objectives.....	VII-2 .....	VII-1
Civil Works Ten-Year Development Plan .....	VII-3 .....	VII-1
Activities.....	VII-4.....	VII-1
Performance Measures.....	VII-5 .....	VII-4
General Submission Guidance .....	VII-6 .....	VII-4
Types of Activities (Projects) and Work Functions.....	VII-7 .....	VII-4
Definition of Activities (Project) Categories .....	VII-8.....	VII-5
Definition of Resources .....	VII-9 .....	VII-6
Funding Levels and Increments .....	VII-10 .....	VII-6
FTE Output Measures .....	VII-11 .....	VII-8
Points of Contact.....	VII-12 .....	VII-8
Submission Requirements .....	VII-13 .....	VII-8
Division Funding & Staffing Summary.....	VII-14.....	VII-8
 TABLES		
	Table	Page
Regulatory Goals and Performance Measures .....	VII-1 .....	VII-3
Funding Summary.....	VII-2 .....	VII-9

## APPENDIX VII

### Regulatory

VII-1. **Background.** The Regulatory program protects the aquatic environment by regulating dredge and fill and other construction-related activities in jurisdictional waters of the United States. This responsibility is mandated by the Clean Water Act and the Rivers and Harbors Act of 1899 and other laws. During the past decade, the Corps Regulatory program evaluates and issues, on average, over 80,000 permits a year for projects that impact waters of the United States, including wetlands.

VII-2. **Objectives.** The goal of this EC is to provide guidance to all Districts to accurately request funds to perform its Regulatory mission as determined by specific levels in the performance measures. The Regulatory Objectives and Performance Measures are provided below in Table VII-1, "Regulatory Goals and Performance Measures." The Performance Measures were developed in efforts to link the Regulatory Budget to performance and supporting data that would provide information on the effectiveness of the program. For example, the Objective "No Net Loss of Aquatic Resources" would be defined by data captured through Performance Measures 1 through 6. Based on the national budget priorities, the Corps would be provided funds to administer the Program. Because the Corps Regulatory program is predominantly a labor-based program, dollars allocated to the Program are directly correlated to the target percentages for each of the Performance Measures. The percentage targets for each of the performance measures are designed to evaluate performance of these objectives based on available budget and to provide information on the veracity of data for the overall Program Goals. For example, data collected during compliance visits (i.e., percent of sites meeting performance criteria and are in compliance with the issued permit) provide information on the success of the Program Goal of "Avoidance and Minimization of Impacts" by confirming the requirements placed on applicants are completed as permitted and entered in the database. Higher target percentages for Performance Measures will result in more comprehensive data and more first time compliance site visits which will provide a better measure of success for the Objectives.

VII-3. **Civil Works Ten-Year Development Plan.** The purpose of Civil Works Ten Year Development Plan is to present an overview of the funding required for the Civil Work Program over a 10 year period. The Five Year Development Plan (FYDP), a stand alone document will be based on a subset of the 10 year plan and will produce results that contribute to achievement of the strategic goals and objectives in the Civil Works Strategic Plan. For the Regulatory program, the proposed increments included in this EC were developed to provide the glide path to get the program to its target goals within the proposed ten-year plan

VII-4. **Activities.** The program has historically categorized, allocated, and expended funds within the following categories:

<b>Activity</b>	<b>Category</b>
Permit Evaluation	100
Enforcement and Resolution	210
Studies	300
Other Regulations	400
Environmental Impact Statements	500
Administrative Appeals	600
Compliance: Authorized activities and mitigation	800

EC 11-2-199  
31 Mar 10

This categorization allows the program managers to distribute funds in particular categories and track utilization. These accounts will also provide information on the effectiveness of the program within each of the categories.



**VII-5. Performance Measures:**

a. **Performance Measure 1.** Individual Permit Compliance. The Corps shall complete an initial compliance inspection on XX% of the total number of all individual permits (including LOPs) issued during the preceding FY where authorized work is underway.

b. **Performance Measure 2.** General Permit Compliance. The Corps shall complete an initial compliance inspection on XX% of the total number of all General Permits (including NWP) issued during the preceding FY where authorized work is underway.

c. **Performance Measure 3.** Mitigation Site Compliance. The Corps shall complete field compliance inspections of XX% of active mitigation sites each fiscal year. Active mitigation sites are those sites authorized through the permit process and are being monitored as part of the permit process but have not met final approval under the permit special conditions (success criteria).

d. **Performance Measure 4.** Mitigation Bank/In Lieu Fee Compliance. The Corps shall complete compliance inspections/audits on XX% of active mitigation banks and in lieu fee programs annually.

e. **Performance Measure 5.** Resolution of Non-Compliance Resolution with Permit Conditions. The Corps will reach resolution on XX% of all pending non-compliance actions for permits with special conditions and/or mitigation requirements that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year.

f. **Performance Measure 6.** Resolution of Unauthorized Activities. The Corps shall reach resolution on XX% of all pending enforcement actions (i.e., unauthorized activities) that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year.

g. **Performance Measure 7.** Processing of General Permits. The Corps shall reach permit decisions on XX% of all General Permit applications within 60 days.

h. **Performance Measure 8.** Processing of Individual Permits. The Corps shall reach permit decisions on XX% of all Standard Permits and Letters of Permission (LOPs) within 120 days. This standard shall not include Individual Permits with Formal Endangered Species Act (ESA) Consultations.

**VII-6. General Submission Guidance.** Data will be entered into the P2 Program and District/Division resource requests will be generated in a report. A separate Budget (inactive) WBS will be added below the existing WBS. Data will be input to reflect resource needs for the funding levels outlined in VII-9. MSC's must insure that submissions reflect uniform and consistent levels of work effort among the districts and those submissions accurately reflect the required level of service. Resources required by the division should be programmed under Expenses. However, one Level 1 Regulatory activity should be submitted to cover costs for a single GS-13/YD-2 Appeal Review Officer at the division. It will not be submitted under a selected district but as a division project.

**VII-7. Types of Activities (Projects) and Work Functions.** Resource needs under the Regulatory appropriation should be submitted for up to seven activities. Resources will be further identified according to P2 Resource codes. The seven Regulatory activities are Permit Evaluation- 100, Enforcement- 210, Studies-300, Other Regulations-400, Environmental Impact Statements (EISs)-500, Administrative Appeals-600, and Compliance- 800.

VII-8. **Definition of Activity (Project) Categories.** Regulatory is divided into seven activity categories:

a. **Permit Evaluation (100).** Includes all costs related to the review and evaluation of permit applications under Section 9, 10, 103 and 404 as well as environmental assessments supporting this review. Cultural resource investigations, jurisdiction determinations, public hearings, and other activities related to application evaluation are included as are general permit development and consideration of activities under general permits. Cost for support items such as automated permit tracking systems or other computer or micrographic support and equipment purchases should be identified in description/argument. All resource requests will be entered in the sub-accounts 110 for Standard Permits (Individual, Letter of Permission and Denial), 120 (General Permits – including development) and 130 (Other permit work not involving specific permits).

b. **Enforcement (210).** Includes all costs related to those activities associated with unauthorized activities and jurisdiction determinations related to enforcement actions, ground and aerial surveillance, and follow-up on violations. Historically, approximately 18% to 25% of national resources were allocated for enforcement, including compliance costs. Establishment of the Compliance category has necessitated a re-appraisal of the enforcement costs without inclusion of compliance efforts.

c. **Studies (300).** Includes all costs related to studies such as jurisdiction studies (actual jurisdiction determinations are included under permit evaluation), mapping, wetland studies, shoreline inventories, and collection of data for environmental databases. Resource requests must be grouped by an identified and defined specific study. Studies may be submitted at any level depending on their priority; however, it is recommended that funds for studies be prioritized after all on board (mid FY06) labor is covered.

d. **Other Regulations (400).** Includes all costs related to administration of the miscellaneous regulations such as danger zones and restricted areas, plus review of Section 402 applications. Recent security concerns may require a need for funds for administration of restricted areas and danger zones.

e. **Environmental Impact Statements (EISs) (500).** Includes all costs required for preparation of EISs when Corps is the lead or a cooperating agency. In most cases, these costs are associated with Corps review and management only; applicants are responsible for development and analysis. Approval by the MSC and Headquarters is required where the Corps Regulatory Program proposes to provide more than management and review services for any EIS. Resource requests will be grouped by identified and defined EISs. Any new project-specific EISs will be resourced under the Branch organization codes since review will occur in the Regulatory branch. Some resource requests for programmatic EISs may require support from other offices and those organization codes should be used. All EISs must be identified as either ongoing or projected and the percent probability of the EIS being required should be indicated. Costs associated with the review of non-Corps EISs are included under Permit Evaluation, unless the review is of an in-depth nature requiring more than \$5,000. No request for EIS may be submitted where the EIS is not specifically identified. Costs for EIS's may be submitted at Level 1 and 2 if the EIS is on going or a determination has been made it will be undertaken. An EIS, where there has been a preliminary decision that it will likely be needed, should be placed in Level 3, ranked below any request tied to performance.

f. **Administrative Appeals (600).** Costs to support one grade 13/YD-2 Appeal Review Officer, in Level 1, for Regulatory decisions, including travel and related costs, at division offices; and any appeals costs at districts.

g. **Compliance (800).** Includes all costs related to compliance inspections of authorized work for a percentage of the authorized activities and the associated mitigation sites (including mitigation banks, in-

lieu fee programs, and site specific mitigation). This category includes costs associated with resolution of non-compliance found as part of inspections as well as administrative civil penalties for non-compliance.

#### VII-9. **Definition of Resources.**

a. **Labor (LABOR).** Fully burdened labor costs required to pay salaries and benefits of personnel (except contracted personnel) and normal office operational costs to support these personnel according to the service provided at each level, i.e., only manpower and costs related to manpower necessary to meet the performance measures should be included at that level. Labor will be input by organization code (Regulatory, all support by other District elements, and work by other Corps elements). At the third level, additional manpower may be shown but in requests ranked below those needed to meet the performance goals. Items to include are: overhead costs not separately charged under another P2 resource code such as rent, utilities, communications, computer systems, travel, training, reproduction, supplies, etc.

b. **Vehicle Costs (GSAVEH).** All projected vehicle costs to perform work at the identified activity level.

c. **Printing (PRINTING).** All printing costs associated with the identified activity level.

d. **Other contractual services (OTHCONSVC).** Any contractual services required at the identified activity level. All mission support type contracts must be listed (new or renewal of existing contracts). Examples of work to be shown are: aerial photography; inspection contracts; cost sharing agreements with states or other Federal agencies; contractual personnel; personnel from other agencies paid with Regulatory funds; data gathering contracts.

e. **Travel (TRAVEL).** All direct-charged travel costs required to meet goals of identified activity level.

f. Any other appropriate P2 resource code required to meet stated Regulatory Program goals. Resources shall be entered at the appropriate activity and funding level.

g. **Data and Database Costs.** Costs associated with the required hardware support for the spatial database (ORM-2) should be provided in supplemental comments and be included in the totals for Level 2 funding. Districts should coordinate with the local ACE-IT support staff and the ORM 2 help desk to develop a strategy to maintain computer hardware that meet the minimum ORM-2 hardware requirements (or greater) and that meet the federal buy program standards for staff work stations. Districts should consider submitting budget requests for priority data acquisition (beyond that provided by HQ and other sources) if it is determined to be critical for analysis of project impacts, cumulative impacts, and mitigation within targeted watersheds.

VII-10. **Funding Levels and Increments.** District Regulatory resource requirements should be submitted in three Funding Levels including Increments for performance, non-performance mandatory work, and non-mandatory non-performance related work as described below. The Level 1 Funding program is designed to provide a balanced, fully operational, albeit reduced, program with the performance targets specified in Increment 1.

Costs to support more than one performance measure may be combined provided the request includes only costs to meet the measures for one of three program categories (permit evaluation, enforcement, and compliance). For Performance Measure 8, insure funds are included to process all Individual Permits while meeting the standard for those permits with no Formal ESA requirement. Funding arguments should indicate differences or similarities with current levels of effort. Requests for new FTEs (not authorized in mid FY10) must be identified as new FTEs in the Labor resource description. Increment 2

and Increment 3 reflect the additional resources required to meet performance measure targets indicated below. Total Funding levels for Level 1 should include Increment 1 and any additional resources required for Increment 4, mandatory non-performance related work (Includes work in categories 130, 400, and 600. Resource requests for Increment 5 (high priority SAMPS and/or other watershed management plans, GIS analytical tools, acquisition of spatial data sets, and/or development of spatial assessment tools may be submitted within Total funding for Level 2 or 3 if they will provide significant benefit to management of the program workload.

a. **Increment 1.** Resource requests should be submitted with Increment 1 (minimum) requirements allowing the performance as defined below. Increment 1 reflects the FY09 performance targets that are currently in place. Increment 1 was designed to provide a balanced, fully operational, albeit reduced, program with the following performance targets.

Compliance requests(s) to meet the following levels of performance:

Performance Measure 1	Individual Permit Compl Insp	Level 1 Target: 10%
Performance Measure 2	General Permit Compl Insp	Level 1 Target: 5%
Performance Measure 3	Mitigation Site Compl Insp	Level 1 Target: 5%
Performance Measure 4	Mitigation Bank/ILF Compl Insp	Level 1 Target: 20%
Performance Measure 5	Resolution of Non-compliance	Level 1 Target: 20%

Enforcement requests(s) to meet the following level of performance:

Performance Measure 6	Resolution of Unauthorized Activities	Level 1 Target: 20%
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Permit Evaluation requests(s) to meet the following levels of performance:

Performance Measure 7	Processing of General Permits	Level 1 Target: 75%
Performance Measure 8	Processing of Individual Permits	Level 1 Target: 50%

b. **Increment 2.** The incremental increase of all resource requests at Increment 2 should allow the district to provide the following increased levels of service and performance. Increment 2 was designed to meet the performance goals for permit processing along with an increase in compliance and enforcement efforts from Increment 1. Some additional requests, not directly contributing to meeting the measures may be submitted provided they are essential to support the other resources needed to meet the performance targets below.

Compliance request(s) to meet the following levels of performance:

Performance Measure 1	Individual Permit Compl Insp	Level 2 Target: 20%
Performance Measure 2	General Permit Compl Insp	Level 2 Target: 10%
Performance Measure 3	Mitigation Site Compl Insp	Level 2 Target: 20%
Performance Measure 4	Mitigation Bank/ILF Compl Insp	Level 2 Target: 75%
Performance Measure 5	Resolution of Non-compliance	Level 2 Target: 30%

Enforcement request(s) to meet the following level of performance:

Performance Measure 6	Resolution of Unauthorized Activities	Level 2 Target: 30%
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Permit Evaluation request(s) to meet the following levels of performance:

Performance Measure 7	Processing of General permits	Level 2 Target: 90%
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Performance Measure 8                      Processing of Individual Permits                      Level 2 Target: 75%

c. **Increment 3.** Additional incremental requests should be submitted to meet the increased performance standards identified below for Level 3. The requirements for the Level 3 requests represent the fully funded program, meeting all stated Program Objectives. After requests have been submitted to meet the performance targets, additional, non-mandatory requests to enhance the program may be submitted. NOTE: Districts which are currently exceeding any of the performance measure targets in Level 3, costs for manpower in these areas should be redirected to work to support the other performance measures.

Compliance package(s) to meet the following levels of performance:

Performance Measure 1	Individual Permit Compl Insp	Level 3 Target: 50%
Performance Measure 2	General Permit Compl Insp	Level 3 Target: 20%
Performance Measure 3	Mitigation Site Compl Insp	Level 3 Target: 30%
Performance Measure 4	Mitigation Bank/ILF Compl Insp	Level 3 Target: 100%
Performance Measure 5	Resolution of Non-compliance	Level 3 Target: 40%

Enforcement package(s) to meet the following level of performance:

Performance Measure 6                      Resolution of Unauthorized Activities                      Level 3 Target: 40%

Permit Processing Requirements                      None required  
(Level 2 meets stated goal for Measures 7 and 8).

d. **Increment 4.** All mandatory, non-performance related work (e.g. work in categories 130, 400, 600)

e. **Increment 5.** All non-mandatory, non-performance related work (e.g. work in categories 300 and 500)

VII-11. **FTE Output Measures.** All requests for Regulatory labor shall result in a calculation of FTEs by one of the P2 tools. *IMPORTANT:* In order to insure that labor requests are funded, districts should be certain that the appropriate number of FTEs is reflected; a zero will result in a resource request being ranked below most labor-related requests and possibly not being funded. Districts must also enter the base number of hours used to calculate FTE. Division Offices should check FTE calculations thoroughly.

VII-12. **Points of Contact.** Questions pertaining to policies, procedures, or format of the Regulatory Program activity should be referred to HQUSACE, Ms. Margaret Gaffney-Smith, (202) 761-8560 or Jon Soderberg at (202) 761-7763.

VII-13. **Submission Requirements.** The suspense date for submission of required materials from divisions is **XX XXX XXXX**.

VII-14. **Division Funding & Staffing Summary.** Each district will prepare and submit electronically to its division office the funding and staffing information summary in Table VII-2. Staffing summary should be developed from the resource requirements of each Funding Level and created in P2. Divisions will consolidate the districts responses and forward these to HQUSACE (Margaret Gaffney-Smith and Jon Soderberg) electronically in an excel table format.. The division table will sum district amounts for each category and level (cumulatively and by district). Divisions will include the division office amounts for Administrative Appeals to the summary table.

TABLE VII-2								
Division/District: Example								
Funding Summary								
(\$000)								
Funding Level	Increment 1. Performance for Mandatory Accounts	Increment 2. Performance for Mandatory Accounts	Increment 3. Performance for Mandatory Accounts	Increment 4. Mandatory, Non-performance related work	Increment 5. Non-Mandatory, Non-performance related work	Funding Level Total	FTE Totals (Reg Staff/All)	FTE Base Hours
Funding Level 1								
Funding Level 2								
Funding Level 3								



EC 11-2-199  
31 Mar 10

APPENDIX VIII

Water Supply

TABLE OF CONTENTS

Subject	Paragraph	Page
Background.....	VIII-1 .....	VIII-1
Purpose .....	VIII-2 .....	VIII-1
Goals and Objectives .....	VIII-3 .....	VIII-1
Performance Measures .....	VIII-4 .....	VIII-1
Budget Increments for PY Budget Development.....	VIII-5 .....	VIII-2
Rating and Ranking Criteria for FY12 Budget Development.....	VIII-6 .....	VIII-4
Civil Works Five-Year Development Plan .....	VIII-7 .....	VIII-4
Special Considerations or Special Rating Criteria.....	VIII-8 .....	VIII-5
Water Supply Business Line Budget Ranking Criteria Matrix .....	VIII-9 .....	VIII-5
<b>TABLES</b>	<b>Table</b>	<b>Page</b>
Water Supply Objectives and Performance Measures.....	VIII-1 .....	VIII-1
Budget Ranking Criteria Application Matrix Spreadsheet .....	VIII-2 .....	VIII-5

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APPENDIX VIII

Water Supply

**VIII-1. Background.** The Corps of Engineers has provided water supply storage space in its multi-purpose reservoirs for many years. Based on current data, approximately 11.2 million acre feet of municipal and industrial (M&I) water supply storage space are included in 133 reservoir projects in 26 states. Approximately 94% of this storage is under contract for present or future use and 56% of the investment cost of the storage space (estimated at \$1.5 billion) has been repaid and the money deposited into the U.S. Treasury. Although the primary responsibility for developing water supplies for domestic, municipal, industrial and other purposes rests with State and local interests, M&I storage space may be recommended for inclusion in any Corps reservoir pursuant to the Water Supply Act of 1958. Studies associated with reallocation of water for M&I and/or environmental purposes; although not considered low priority, must compete with all activities in a constrained budget environment.

**VIII-2. Purpose.** As one of the nation's largest water management agencies, the U.S. Army Corps of Engineers plays an important role in ensuring that Americans have enough water to meet their needs. The Water Supply program currently is capable of providing almost 5 billion gallons of water per day to allow State and local interests to supply cost-effective water to homes, businesses and farms nationwide.

**VIII-3. Goals and Objectives.** Table VIII-1 displays the Water Supply Program Objectives and Performance Measures published in the March 2004 Civil Works Strategic Plan. The CW Strategic Plan was developed with an explicit assumption of an unconstrained resource environment to encourage an unconstrained assessment of the nation's water resources needs and potential Corps response. Preparation of the FY12 budget request requires the recognition of a constrained budget environment and the ongoing effort to evolve better budget linked performance measures.

TABLE VIII-1

Water Supply Objectives and Performance Measures

<u>Program Objectives</u>	<u>Performance Measures</u>
In partnership with non-Federal water management plans and consistent with law and policy, manage Corps reservoirs to provide water supply storage in a cost efficient and environmentally responsible manner.	Acre-feet of storage under contract versus acre-feet available.  Percentage of costs covered by revenues returned to Treasury.

**VIII-4. Performance Measures.**

a. The Corps Water Supply program is well established and valued, however our capability to continue to supply storage is dependent on our ability to demonstrate cost-efficiency of water storage and need for additional storage space for water supply purposes. OMB suggested the performance measures contained in Table VIII-1 as part of the deliberations on the Corps Strategic Plan. Both measures reflect on the ability of the Water Supply program to return revenues to the Treasury. In that regard a secondary program objective will be to increase revenues to the Treasury through the reallocation of storage space from other authorized purposes and the timely collection of payments from existing water supply contracts. The Corps water supply program is very cost effective. For 2008 we collected \$15.2 million in principal and interest (P&I) payments and an additional \$11.0 million for O&M expenditures. The water supply

budget included about \$2.5 million to collect this \$26.2 million for an efficiency ratio of about 9 to 1. All collections are returned to the U.S. Treasury as miscellaneous receipts.

b. In the above table the term "acre-feet of storage under contract" refers to both present and future use contracts and "acre-feet available" is defined as acre-feet of storage authorized for M&I water supply to include both originally authorized storage space as well as that storage space reallocated for which a water supply agreement has been signed. For the performance measure "percentage of costs covered by revenues returned to Treasury" is a measure of the total costs of the storage space minus the costs recovered. The development of these values is the product of the water supply module of OMBIL.

**VIII-5. Budget Increments for PY Budget Development.** In order to achieve the above objectives, we are establishing budget increments, to assure uniformity across the country in building annual budgets from the same point. For water supply, budget increments will be established by funding category. See the Definition/Glossary section of the main EC for detailed and additional budget definitions.

a. **Investigations (I):** This is for water supply studies funded under the Investigation budget and includes the funding for the Feasibility phase of water supply reallocation reports and the associated water supply agreement for those reallocations which have received additional authority.

(1) Increment 1. This increment will include only the minimum continuing activities and the total request is limited to the budget amount for PY -1, by study. Do not include new PED or study phases. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(2) Increment 2. New phases of studies previously budgeted may be initiated in this increment. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(3) Increment 3. This increment will include the activities needed to sustain (not fall behind/not accelerate) the study schedule included in the Project Management Plan (PMP). New starts and resumptions may be included. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(4) Increment 4. This increment includes additional capability activities that can be supported by cost sharing sponsor and Corps resources. This increment can be viewed as enhancing (or advancing) the study schedule at a faster pace than shown in the PMP. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(5) Increment 5-8: Not used

(6) Increment 9: This increment will include unbudgetable studies that are inconsistent with Administration policy, such as environmental infrastructure.

b. **Construction (C):** There will be no new starts for single purpose water supply projects. Should a multipurpose project with water supply as one of those purpose, be placed under construction and/or should a modification or reallocation of storage in an existing project occur, all costs allocated to the water supply feature will be repaid by the local sponsor prior to or during the period of construction.

(1) Increments 1-4: Not appropriate (see above paragraph b)

(2) Increment 5-8: Not used.

(3) Increment 9: This increment will include unbudgetable projects that are inconsistent with Administration policy, such as environmental infrastructure.

c. **Operation & Maintenance (O&M):** For the operation and maintenance of specific water supply facilities and for the development, renegotiation and billing and collection of water supply agreements to include the maintenance of the water supply module of the Operation and Maintenance Business Information Link (OMBIL). The sum of Increment 1 and Increment 2 represents the minimal program and is limited to the amount in Table C-2-3 by MSC based on 75% of prior five year fiscal year Budgets. New starts are not applicable to funding for the operation and maintenance of specific water supply facilities.

(1) Increment 1. Only critical routine activities can be included in this increment. Critical cyclical routine activities may be included in Increment 1. Routine activities are those that have been conducted every year for at least the last five years, for example activities required by billings and collections of water supply agreements. Cyclical activities are those required on a regular basis, but not each year such as expenses related to maintaining specific water supply conduits. It is anticipated that most all water supply operation and maintenance funding will occur in this increment. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(2) Increment 2. Only critical non-routine activities may be included in this increment. Critical non-routine activities are those that must be accomplished to insure project safety, and critical maintenance actions that are required to keep the project operating and delivering benefits. Non-routine activities are actions that are "project like" in that they are unique actions with a specific beginning and end. Examples of non-routine activities would be the replacement of a part of the specific water supply conduit. Each non-routine activity must be shown separately to allow individual funding decisions based on the performance metrics and must be shown in priority order by District and MSC Rank. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(3) Increment 3. This increment includes critical operation and maintenance activities, both routine and non-routine, for the 25% above the minimal program level, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project, such as sedimentation surveys. Preparation of reports for Major maintenance (MM) and rehabilitation (MR) can be included in this increment. MM and MR activities must have approved reports before they can be included for implementation. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(4) Increment 4. This increment includes operation and maintenance activities, both routine and non-routine, above the 100% level of the Table C 2.2 level by MSC, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project. Activities to support the water supply module in OMBIL should be placed in this increment. In most cases, activities in this increment will support continuing the level of service that customers, stakeholders, and others have come to expect and depend-on for sustaining public safety and economic, environmental and social benefits. Multiple Increment 4 activities should be submitted that reflect the logical pieces of routine or non-routine activities beyond the 5 year average limit. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(5) Increment 5. Activities that have a high expected return on investment that enable greater levels of performance in future years should be included in this enhance or capability increment. Increment must be performance based and integral with a study/project with high outputs and constituent with ranking.

d. **Operation and Maintenance for Water Supply Studies (O&M Studies):** This is for studies and surveys for water supply and includes all costs to prepare reports associated with the water supply feature of the project including the Reconnaissance phase of reallocation studies. If additional authority is not required, funding to complete the reallocation remains in the O&M account. If additional authority is required funding is to be in the Investigation account (see above paragraph VIII-5.a.).

(1) Increment 1. This increment is applicable only to the two studies included in the FY10 President's budget (ACT/ACF and the Texas Water Assessment). Funding will be limited to 75% of the amount shown in Table C-2.2 by MSC. Do not include new study phases. Previously budgeted reallocation studies migrate to I after initial assessments (see Annex C).

(2) Increment 2. Only studies to support critical non-routine activities may be included in this increment. Critical non-routine activities are those that must be accomplished to insure project safety, and critical maintenance actions that are required to keep the project operating and delivering benefits. Studies of non-routine activities are actions that are "project like" in that they are a unique action with a specific beginning and end. Increment must be performance based and integral with a study with high outputs consistent with ranking.

(3) Increment 3. This increment includes studies of both routine and non-routine activities for the 25% above the minimal program level, by MSC of the amount shown in Table C-2.2. This increment would be applicable only for the two studies of Increment 1. Increment must be performance based and integral with a study with high outputs consistent with ranking.

(4) Increment 4. This increment includes studies of both routine and non-routine activities above the 100% level of the Table C 2.2 level by MSC, that are needed to sustain the expected future benefits of the projects such as sedimentation surveys. In most cases, activities in this increment will support continuing the level of service that customers, stakeholders and others have come to expect and depend on for sustaining public safety and economic, environmental and social benefits. Studies for multiple Increment 4 activities should be submitted that reflect the logical pieces of routine or non-routine activities beyond the 5 year average limit. Increment must be performance based and integral with a study with high outputs consistent with ranking.

(5) Increment 5. Studies of activities that have a high expected return on investment that enable greater levels of performance in future years should be included in this enhanced or capability Increment. Increment must be performance based and integrated with a study/project with high outputs and consistent with ranking.

(6) Increment 6-8: Not used;

(7) Increment 9: This increment will include unbudgetable studies that are inconsistent with Administration policy, such as environmental infrastructure.

**VIII-6. Rating and Ranking Criteria for FY12 Budget Development.** Studies evaluating reallocation of storage space from other project purposes to municipal and industrial water supply that will otherwise increase revenues to the Treasury will be given priority for budgeting purposes. As such, all budget requests for water supply studies must be accompanied by the following set of criteria: "anticipated cost of the study versus the anticipated capital costs to be recovered" and "degree of local support" (little), (some) or (strong).

**VIII-7. Civil Works Five-and Ten Year Development Plans.** The purpose of the Civil Works Ten Year Development Plan is to present an overview of the funding required for the Civil Works program over a 10-year period. The Five Year Development Plan (FYDP), a standalone document will be based on a subset of the 10 year plan and will produce results that contribute to achievement of the strategic goals and objectives in the Civil Works Strategic Plan. See paragraph 9 b "Civil Works Five Year Development Plan" of the main EC for additional

information. This plan for the Water Supply Program focuses on labor and associated costs involved in the development of new water supply agreements; costs required for existing water supply agreements such as renegotiations and for billings and collections including delinquencies, law suits and modifications; as well as the costs associated with the operation and maintenance of specific water supply features of the projects. Studies may be considered in accordance with the guidance of above paragraph VIII-5.

**VIII-8. Special Considerations or Special Rating Criteria.** The work category codes for water supply are described in Annex C. Phase codes are defined in Table 3 of the main EC. Districts will use P2 and the appropriate work category and phase codes to request funds for water supply activities for each project. These requests should be placed in the appropriate increment based on performance metrics. For joint activities on O&M multipurpose hydropower (Cat/Class 300) projects activities will be ranked in the Hydropower business line according to its criteria. All other joint activities – joint costs, including water supply related work on non-Cat/Class 300 projects will be included in the project’s predominate business line. Additional instructions on Joint Activities – Joint Costs are contained in paragraphs C-2.3b and e of Annex C.

**VIII-9. Water Supply Business Line Budget Ranking Criteria Matrix.** The data required for ranking the FY12 budget requests is shown in Table VIII-2 (*spreadsheet*).

TABLE VIII-2  
Budget Ranking Criteria Application Matrix Spreadsheet



Table VIII-2  
Worksheet FINAL.xls

ANNEX A  
Investigations  
TABLE OF CONTENTS

Subject	Paragraph	Page
SUB-ANNEX A-1 - GENERAL (RCS: CECW-B-12)		
Applicability.....	A-1-1.....	A-1-1
Organization and Structure .....	A-1-2.....	A-1-1
Definitions.....	A-1-3.....	A-1-1
SUB-ANNEX A-2 - SPECIFICALLY PROGRAMMED STUDIES AND PROJECTS - NEW AND CONTINUING		
Performance Based Budget Increments .....	A-2-1.....	A-2-1
Program Description and Procedure.....	A-2-2.....	A-2-1
Program Considerations .....	A-2-3.....	A-2-5
Submission Requirements .....	A-2-4.....	A-2-5
SUB-ANNEX A-3 - CECW PROGRAMMED ITEMS		
Program Procedure.....	A-3-1.....	A-3-1
Submission Requirements .....	A-3-2.....	A-3-1
Special Investigations.....	A-3-3.....	A-3-1
FERC Licensing Activities .....	A-3-4.....	A-3-2
Interagency Water Resources Development .....	A-3-5.....	A-3-2
National Estuary Program (NEP) .....	A-3-6.....	A-3-2
North American Waterfowl Management Program (NAWMP).....	A-3-7.....	A-3-2
Interagency and International Support .....	A-3-8.....	A-3-3
Coordination with Other Water Resources Agencies.....	A-3-9.....	A-3-3
Planning Assistance to States.....	A-3-10.....	A-3-3
International Waters Studies .....	A-3-11.....	A-3-4
Flood Plain Management Services (FPMS) .....	A-3-12.....	A-3-4
Hydrologic Studies.....	A-3-13.....	A-3-4
National & International Water Resources Coordination .....	A-3-14.....	A-3-5
ILLUSTRATIONS		
	Illustration	Page
New Start Reconnaissance Phase Study.....	A-2-1.....	A-2-7
Cost-Shared Feasibility Study .....	A-2-2.....	A-2-8
Full Federal Expense Feasibility Study .....	A-2-3.....	A-2-9
Preconstruction Engineering and Design .....	A-2-4.....	A-2-10
District Breakdown .....	A-3-1.....	A-3-6
Special Investigations Work Accomplished .....	A-3-2.....	A-3-8
Planning Assistance to States - Priority Listing .....	A-3-3.....	A-3-9
International Waters Studies .....	A-3-4.....	A-3-10
Flood Plain Management Services.....	A-3-5.....	A-3-11



## SUB-ANNEX A-1

### Investigations General

A-1-1. **Applicability.** This annex provides Program guidance and procedures for all activities in the Investigations (I) appropriation title and comparable ones from the Flood Control, Mississippi River and Tributaries (MR&T) appropriation title, where appropriate

A-1-2. **Organization and Structure.** Sub-annex A-2 includes all specifically Programmed activities – Reconnaissance and Feasibility Studies, Restudies/Reviews, and Preconstruction Engineering and Design (PED). It provides guidance on feasibility studies and PEDs, including new starts. Sub-Annex A-3 covers all other activities funded by the Investigations appropriation title and the Flood Control, Mississippi River and Tributaries counterparts.

A-1-3. **Definitions.** The following definitions are provided to assist you in identifying surveys and projects to be included in the submission of the Investigations program.

a. **Navigation Studies.** Navigation studies seek to provide safe, reliable, and efficient waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation.

b. **Flood Risk Management Studies.** Studies seek to reduce risk, including threat to life and flood damages, through the use of structural or non-structural measures. Structural measures include dams with reservoirs, dry dams, channelization measures, levees, walls, diversion channels, ice-control structures, and bridge modifications. Non-structural measures reduce flood damages without significantly altering the nature or extent of flooding by changing the use made of the flood plains, or by accommodating existing uses to the flood hazard. Non-structural measures are flood proofing, permanent relocation of structures, flood warning/preparedness systems, education and communication, and regulation of flood plain uses.

c. **Shoreline Risk Management Studies.** Studies seek to reduce risk, including threat to life and hurricane and storm damages caused by wind-generated and tide-generated waves and currents along the nation's ocean coasts, Gulf of Mexico, Great Lakes and estuary shores.

d. **Ecosystem Restoration Studies.** Studies seek to identify means to restore degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition. This does not include actions normally considered to be remediation of hazardous material.

e. **Watershed/Comprehensive Studies.** Watershed studies are planning initiatives that have a multi-purpose and multi-objective scope and accommodate flexibility and collaboration in the planning process. Possible areas of investigation include flood risk management activities, ecosystem restoration, navigation, water supply, and recreation. Districts are encouraged to pursue this approach.

(1) Requires consideration about water resources development and management in the context of multiple purposes rather than single purposes, and, thus, facilitates the search for comprehensive and integrated solutions.

(2) Improves opportunities for public and private groups to identify and achieve common goals by unifying on-going efforts and leveraging resources.

EC 11-2-199  
31 Mar 10

(3) Identifies a combination of recommended actions (a Watershed Management Plan) to be undertaken by various partners and stakeholders in order to achieve local, tribal, regional, and national water resources management goals identified in the study and may or may not identify further budgetable Corps studies or implementation projects.

(4) Leverages resources, including cost shared collaboration, and integrates programs and activities within and among Civil Works programs, and with other Federal, tribal state and non-governmental organizations, to improve consistency and cost effectiveness;

f. **Special Studies.** This category should be used only in special cases, where the survey or project has a National perspective and is not tied to one project purpose or business line; most often these will be HQ funded items.

g. **Reconnaissance Phase completion:** The Reconnaissance phase ends with the execution of a Feasibility Cost Sharing Agreement (FCSA) or a report recommending no Federal action.

h. **Feasibility Phase completion:** The Feasibility phase ends on the date the Division Engineer's Transmittal of the final feasibility report to Headquarters.

i. **Preconstruction Engineering and Design (PED) Phase completion:** The PED phase ends after completing the first set of plans and specifications or when the Project Cooperation Agreement/Project Partnership Agreement (PCA/PPA – See Definitions/Glossary Section) is executed.

j. **New Phase:** A study or project is considered to be in a NEW PHASE once it has completed the current phase that is funded and is ready for budgeting in the follow-on phase (e.g., from Reconnaissance to Feasibility or Feasibility to PED). A value must be entered in the data field named "Phase Status" for every budget item (row) in P-2(OFA). The valid values are New Phase (NP), Continuing (CN), and Last Year of Phase (LY). For a new Recon, you should enter New Phase (NP) in this column. If a study is completing one phase and starting a new one in the PY (e.g., finish Feas and start PED), each should be a separate entry (one LY and one NP).

## SUB-ANNEX A-2

### Investigations Specifically Programmed Studies and Projects - New and Continuing

#### A-2-1. **Performance Based Budget Increments.**

a. **Ranking criteria.** To be considered for inclusion in the PY program each study must meet the following criteria prior to applying the business line performance/ranking criteria:

- be in accord with current policy
- urgency of implementation of problem solution
- have local support for continuation of activity
- likely participation of non-Federal sponsor in implementation of solution
- scheduled activity completion date
- compliance with NEPA and other environmental regulations appropriate for the stage of the effort.

b. **CECW Program.** CECW will review the I portion of the Civil Works Program considering the national criteria in effect mid-summer PY-2 and guidance from ASA(CW) and OMB. CECW may increase or decrease the total for I. Once the initial level is established, investment increments will be added in accordance with priorities in each business line.

#### A-2-2. **Program Description and Procedure.**

a. **Project Development Process.** In General, the development of each new project or separable element will adhere to the standard project development process, as follows.

(1) **Studies.** There will be a two-phased study leading to a feasibility report in accordance with sections 905 and 105 of the Water Resources Development Act (WRDA) of 1986, as amended. A feasibility report is needed to support environmental compliance, policy review, engineering and design, and a project cooperation agreement (PCA/PPA). A feasibility report will be prepared even in those instances where the project or separable element is authorized before completion of the feasibility report. The feasibility phase will be carried out under a cost shared feasibility cost sharing agreement (FCSA), except for feasibility studies carried out before WRDA 1986 took effect, feasibility studies for inland waterway projects, and studies to dispose of or reduce costs at existing Federal projects.

(2) **Watershed Assessments.** Watershed assessments are conducted in accordance with Section 729 of the Water Resources Development Act of 1986, as amended, and lead to a Watershed Management Plan. An initial assessment, comparable to a reconnaissance study, is conducted at full Federal funding. This is followed by a Final Watershed Assessment leading to a Watershed Management Plan. The Final Watershed Assessment is cost-shared 75% Federal and 25% non-Federal. All of the non-Federal share may be in-kind.

(3) **Preconstruction Engineering and Design (PED).** PED will begin after approval of the Feasibility Report and allocation of funds. Issuance of the Division Engineer's Transmittal Letter of the final feasibility report and will be carried out under a design agreement until execution of the applicable PCA/PPA. The design agreement will provide for concurrent financing of design 75 percent Federal and 25 percent non-Federal. When construction is initiated, the design costs will be folded into total project costs and the Federal and non-Federal shares will be brought into balance in accordance with the cost sharing in the applicable PCA/PPA. A design agreement is not required for the following: an inland waterway project; a dam safety assurance, seepage correction, or static instability correction project; a

EC 11-2-199  
31 Mar 10

replacement project; deficiency correction at a Federally operated project; or a project or separable element for which the non-Federally financed portion of engineering and design during construction costs alone would exceed the total non-Federal cash share for the project or element, the non-Federal share is reduced under ability to pay rules, engineering and design during construction costs are less than \$100,000, or engineering and design was initiated before FY97.

(4) **Budgeting.** All studies and all post-feasibility, pre-PCA/PPA engineering and design activities for new projects and separable elements that are consistent with policy will be budgeted as studies and PED, respectively, in the Investigations account or the study/design portion of the Flood Control, Mississippi River and Tributaries (MR&T) account. However, post-feasibility, pre-PCA/PPA engineering and design may be budgeted as construction in the Construction account or the construction portion of the MR&T account if the applicable project or element is authorized is supported by the Administration for construction, and either is budgeted as a new start or has received construction appropriations. There is no seamless process for going from Feasibility to PED in the Investigations account. The Feasibility start must be approved by HQ prior to budgeting for PED.

(5) **Post-Feasibility Modifications.** Once the feasibility report has been completed for a project, additional engineering and design, economic and environmental analyses, and evaluations often result in the identification of potential project modifications. Each potential modification that is identified (whether during PED or construction) should be subjected to a reconnaissance-level examination to determine whether the modification so changes or would change project scope or functions, beyond the scope and functions described in the completed feasibility report, that it required or would require additional authorization, beyond the current authorization or the authorization contemplated in the completed feasibility report.

(a) Examination and documentation of a simple cost increase without a change in scope or functions may be undertaken as part of PED or construction. If additional authorization is required as a consequence of the simple cost increase, a Post-Authorization Change Report should be prepared.

(b) Examination and documentation of design changes that would not require additional authorization may be undertaken as part of PED or construction. However, if such design changes are material changes to the basic project features or output levels and the original project already is covered by a PCA/PPA, design of the material changes should be undertaken under a design agreement, and construction of the material changes should not be commenced until the PCA/PPA has been amended to reference an approved report that incorporates the material changes.

(c) A modification that required or would require authorization beyond the current authorization or the authorization contemplated in the completed feasibility report, and that extends, expands, or adds functions to the original project described in the completed feasibility report, is beyond the scope of the original project. If such an added function is physically integral to the original project, the modification will be treated as a substitute plan and, if the substitute plan is pursued, work on the original project will be suspended, then concluded in an orderly manner. An extension, expansion, or physically separable added function will be treated as a new project if it is unauthorized or is separately authorized, or it will be treated as a new separable element if it is authorized as a modification to the original project. Following the reconnaissance-level examination, the substitute plan, new project, or new separable element will be developed in accordance with the standard project development process discussed above, beginning with its own feasibility study.

(d) The development of a new project (including a substitute plan) or a new separable element will not be undertaken as a "reevaluation" of the original project, and will not be funded as part of engineering and design or construction of the original project. However, once the feasibility report for a new separable element has been completed, the new separable element may be included in PED for the

project along with other separable elements, and may be included in construction of the modified project if the new separable element is authorized and has received construction funds.

**b. Feasibility Studies - Eligibility and Selection for Funding.** This encompasses all studies, Federally funded and cost-shared, and new starts for reconnaissance phase studies. Cost sharing is not applicable to single purpose inland navigation studies on the nations inland waterways system in accordance with ER 1105-2-100, para 2-12.b.(4).

**(1) New Starts**

(a) Authorized Feasibility Studies. All active authorized feasibility studies are considered new starts if they have not received an initial work allowance and are eligible for funding based on their justification or (1) was not included in the PY-1 Program or was not funded in the conference report which accompanied the PY-1 appropriation act and (2) was not funded in the conference report which accompanied the PY-2 appropriation act (Resumption). The needs to be addressed should be of broad national scope and significance and should include at least one of the following: commercial navigation; inland navigation; flood or hurricane and storm risk management; ecosystem restoration, and reallocation of existing storage or addition of storage to an existing project that would increase vendible outputs where there is no construction cost to the Federal government;. Final selection for inclusion in the program will require justification on the specifics and history of the need or problem and evaluation of the extent to which the proposed effort meets the appropriate business line performance and ranking criteria. The justification should be able to demonstrate the urgency for funding of the reconnaissance phase in the PY. In addition, based on recent expression of community interest, the Division Commander should believe there is a potential sponsor for the feasibility phase, one who understands the two-phase process and who would be willing to participate.

Feasibility studies resulting from an approved 905b reconnaissance report and a certified reconnaissance phase may be budgeted as "spinoff" feasibility studies; however, they must have been clearly identified in the certified reconnaissance report to be included in the budget. When a certified reconnaissance phase identifies more than one "spin-off" feasibility study, one of those feasibility studies may carry the same PWI number as the parent reconnaissance study. Each additional "spin-off" study will be given a new PWI number and each one must be budgeted separately. Normal feasibility cost-sharing rules apply. Justification sheets should identify the original 905b authorization for continuity and to provide an audit trail. "Spin-off" feasibility studies should be clearly identified in the parent reconnaissance phase. Studies not clearly identified in the reconnaissance phase may not be considered continuing studies and will require a new start decision.

Funds to initiate a new reconnaissance study will be issued with initial FY work allowances; however, the 12-month reconnaissance phase will be measured from the date of initial obligation of funds. Proposals for new Reviews of Completed projects must be accompanied by the completed initial appraisal or reconnaissance report prepared with O&M funds.

(b) Watershed Assessments. Watershed studies may take the form of watershed assessments in accordance with Section 729 leading to a Watershed Management Plan or feasibility studies in a watershed context, using 50-50 cost-sharing. In either case, the reconnaissance study would be fully Federally funded. Watershed assessments conducted under the authority of Section 729 of WRDA 1986, as amended, will compete as new phases. Selection will be based on how well the proposed assessments meet the key attributes of a watershed assessment. The initial assessment is comparable to a reconnaissance study and will be accomplished at 100% Federal cost. In accordance with Section 729, as amended, the cost sharing of the final watershed assessment will be 75% Federal and 25% non-Federal. All of the non-Federal share may be in-kind. The final watershed assessment will result in a

watershed management plan. Specific criteria for distinguishing between watershed assessments and feasibility studies in a watershed context are included in the guidance for the flood, navigation and ecosystem restoration business lines. Watershed assessments should be submitted in the business line most appropriate to the specific problems and opportunities they address.

(2) **Continuing.** All active authorized continuously funded studies or previously funded cost shared studies that local interests fully support and that are judged likely to lead to implementation of a solution are eligible for funding in the PY. In addition, the study must address at least one of the needs of commercial navigation, flood or hurricane and storm risk management, or ecosystem restoration.

(a). Preconstruction Engineering and Design (PED). PED is concurrently financed with non-Federal sponsors. Sponsors must assure that they understand and are ready to sign a design agreement and have funds available to finance the PED portion of the design of a project. PED will ultimately be cost shared at the rate for the project to be constructed but will be initially financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction. There are four programs of PED.

(b) PED Under the Concepts of Two-phase and Cost-shared Planning. PED that are justified and result from cost shared studies conducted under the two phase procedures will be programmed and justified as a new phase. Subject to the availability of funding, initial funding will be programmed in the fiscal year after the feasibility report with engineering annex is completed. A non-Federal sponsor must be ready to contribute 25% of the PED cost during PED by stating their readiness to sign a design agreement. The PED estimate will include the cost of all engineering efforts (including inflation through the PED period) that are necessary to ready the project for construction, including in most cases the plans and specifications for the first significant contract. Only justified PED efforts funded in the prior FY will be considered continuing.

(c) PED for Projects Authorized for Planning and Engineering Only. PED for projects authorized for planning and engineering by the Water Resources Development Act of 1986 are included in this group. These projects will be Programmed for initiation of PED only after new start selection by ASA(CW) and concurrence by OMB. By definition, the planning and engineering phase will include all work required to submit a feasibility report with engineering annex, and will be cost shared 50/50 with a non-Federal sponsor. In accordance with Section 301 of Water Resources Development Act of 1990, if the sponsor provides 50 percent of the cost of the feasibility study the design phase will be treated as cost of construction. The design phase will include all work after the feasibility phase, including the Design Documentation Report (DDR) and plans and specifications for the first significant contract, and will be cost shared according to project purpose. Normally, there will be no reconnaissance phase for these projects. The PED estimate will include the cost of all engineering efforts (including inflation through the PED period) that are necessary to ready the project for construction.

(d) PED for Inland Navigation Projects. PED for inland navigation projects will be programmed in accordance with the instructions in paragraph c(1)a above, except that it is funded 100% Federally funded.

(e) Other PED. - Eligibility and Selection Criteria. PED for projects which are not adequately described by the preceding subparagraphs of section A-2.2.c. These projects will have to compete for new start status and will not be included in a program request as a new start unless specifically approved by the ASA(CW) and concurred in by the OMB and a non-Federal sponsor is ready to contribute 25% of the PED cost during PED by stating their readiness to sign a design agreement. The PED estimate will include the cost of all engineering efforts (including inflation through

the PED period) that are necessary to ready the project for construction, including in most cases the plans and specifications for the first significant contract. New Starts must meet the following:

A Division Engineer Transmittal Letter recommending the project will be issued by June of the PY, or the project was authorized for planning and engineering only by the Water Resources Development Act of 1986; and

The project has net economic benefits at the current interest rate, or ecosystem restoration benefits that exceed the cost; and

The primary project outputs are commercial navigation, inland navigation; flood or hurricane and storm risk management; or aquatic ecosystem restoration; and

There is no major unresolvable controversy or issue; and

There is an identified and willing sponsor who understands and has the ability to finance PED at the 25% rate and has the ability to finance the items of local cooperation for construction.

The project is in compliance with applicable environmental statutes appropriate to the current stage. Or below

An Environmental Assessment/Finding of No Significant Impact has been signed, or final EIS has been filed, or final EIS supplement is scheduled for filing with EPA by August of the PY-2.

Prioritization will be based on the criteria for the appropriate business line as discussed in Appendices 1-8.

(f) Continuing projects. Continuing projects may be included if the following are met:

There is a strong probability of implementing a solution; and

The activity meets all criteria under subparagraph (a) above.

#### A-2-3. **Program Considerations.**

a. **Study and PED cost estimates.** Study and PED cost estimates are to include an allowance for inflation in accordance with the instruction of paragraph 6 of this EC. The construction project cost estimated displayed in the justification sheet will be based on 1 October of the PY-1 price level. (Do not include an allowance for inflation through the construction period).

b. **Annual funding requests.** Annual funding requests for new reconnaissance phase studies are to be only for the amount required to carry out the anticipated activities during that FY.

c. **Submissions for funding.** Submissions for funding of continuing studies and projects not included in the PY-1 program request must be accompanied by a supplemental (page 2, see paragraph A-2.4.a.) justification describing the changed conditions that now warrant inclusion of the study/project in the PY request.

#### A-2-4. **Submission Requirements.**

a. **Justification Statements.** See Table 2 of this Engineer Circular for the due dates for draft justification materials for new starts, draft justification materials for continuing work, revisions to

EC 11-2-199  
31 Mar 10

justification materials, and final justification materials for submittal to Congress. Supporting data for each study or project in the Division's programs, that has a funding requirement in the PY, both new and continuing, contained in the final program "recommended" to Congress in support of appropriations, will consist of a Justification Sheet, two part where necessary. The mandatory first page is the Congressional Justification. See Illustrations A-2.1 through A-2.4 for format and content for new start reconnaissance phase, feasibility phase (cost shared), continuing surveys (full Federal expense), and PED. The second page, is required when funds are being requested to continue a study or project not included in PY-1 program or appropriations but proposed for funding in the PY program, is to be used to provide any additional information or expansion of data more appropriately classified as supporting data not appropriate for inclusion in the congressional justification, but may be necessary for proper and complete consideration for inclusion in the President's Program. The appropriation title and division must be typed as the first line in the body of the first page of the survey and PED justification package. Do not underline any headings. The District must be identified under the survey or PED name. Justifications for new starts and continuing studies and projects are to be submitted electronically through HQUSACE to RITs.

b. **P-2.** All studies and projects, including new starts, will be coded into the P-2 system as discussed in section 13 in the main portion of this EC. A feasibility study will use the same P-2 Project ID number as the reconnaissance study when there is only one feasibility study as a result of the reconnaissance, however, the feasibility will use a separate CW Type of Funds (ccs) identifying the phase and project purpose associated with that level of work. In the situation where more than one feasibility study results from a reconnaissance study, then a new system generated Project ID number will be provided from P-2. In addition, a PED project will use the same P-2 Project ID number as the feasibility study when there is only one project coming out of the parent study.

ILLUSTRATION A-2-1  
New Start Reconnaissance Phase Study

APPROPRIATION TITLE: Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-1) \$	Allocation FY (PY-1) \$	Tentative Allocation FY (PY) \$	Additional to Complete After FY (PY) \$
SURVEYS - NEW ( Insert Type)					
Study Name	100,000	0	0	100,000	0
EFG District					

Furnish a brief description of the study area, water resource development problems, and principle purposes of the study. For example, for flood risk management studies any information available on recent flood history (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. For ecosystem restoration studies, include information that addresses the performance components in Appendix II (do not enter the scores) and information about the physical area involved.. For all purposes, provide any pertinent information concerning coordination with Federal and state resource agencies.. Identify relationship to other project purposes if appropriate. Do not include irrelevant data such as "mild summers or harsh winters"; do include all the data that would tell why this study should be selected out of the many recommended. Also cite any matters known to be of concern to the Congress and identify the tentative local sponsor who has indicated intent to share equally in the feasibility phase cost that may follow the reconnaissance study. (There may be multiple sponsors for watershed and multi-purpose studies) Describe briefly the general scope and key areas of concern that are to be addressed in the reconnaissance study, probable solutions if this type of information is available, and the work to be performed in the program year. This paragraph should present specific arguments and evidence that it is important to initiate the study in the program year and similar evidence that makes it clear that the study and its anticipated outputs are in accord with Administration policy. The reconnaissance phase is scheduled to be completed in (Month xxxx), which is (12 or less) months after initiating the study. It is acceptable to budget for reconnaissance studies that exceed \$100,000. The Justification sheet should state the date of CECW-P or RIT approval if it shows a cost above \$100K or a schedule beyond 12 months.

Cite study authority. (In the event that sufficient study authority is not available to accomplish study purpose it should be so noted and a request for appropriate authority must be in progress.)

EC 11-2-199  
31 Mar 10

ILLUSTRATION A-2-2  
Cost-shared Feasibility Study

APPROPRIATION TITLE: Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-3) \$	Allocation FY (PY-3) \$	Tentative Allocation FY (PY-2) \$	Allocation FY (PY-1) \$	Allocation (PY) \$	Additional to Complete After FY (PY) \$
ABCD River & Tributaries, Nothing Wash EFG District	1,200,000	170,000	150,000	200,000	130,000	200,000	350,000

Furnish a brief description of the study area, water resource development problems, and principle purposes of the study. For example, for flood risk management studies any information available on recent flood history (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. For ecosystem restoration studies address the approximate area to be restored to the extent this is known. For all purposes, address the performance criteria for the purpose as described in Appendices I-VIII. For ecosystem restoration studies do not enter the performance component scores, instead provide data reflecting the basis for the scores. Do not include irrelevant data such as "mild summers or harsh winters"; do include all the data that would tell why this study should be selected out of the many recommended. Also cite any matters known to be of concern to the Congress. Describe briefly the general scope and key areas of concern that were or are being addressed in the reconnaissance study, probable solutions, and the work to be performed in the Program year. This paragraph should present specific arguments and evidence that it is important to fund the study in the Program year and similar evidence that makes it clear that the study and its anticipated outputs are in accord with Administration policy. Provide best available sponsor information. (Name of potential or actual sponsor, dates of verbal or written commitments, scheduled or actual FCSA signing.)

Fiscal Year (PY-1) funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year (PY) will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$2,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,400,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,100,000
Feasibility Phase (Non-Federal)	1,100,000

The reconnaissance phase is scheduled for completion in September (Month and Year) (Date of signing of FCSA). The feasibility study is scheduled for completion in September (Month and Year) (Date of Division Engineer's Transmittal Letter).

ILLUSTRATION A-2-3  
Full Federal Expense Feasibility Study

APPROPRIATION TITLE: Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-3) \$	Allocation FY (PY-3) \$	Tentative Allocation FY (PY-2) \$	Allocation FY (PY-1) \$	Allocation (PY) \$	Additional to Complete After FY (PY) \$
XYX River Basin EFG District	750,000	100,000	100,000	200,000	100,000	200,000	50,000

This paragraph should describe the study area, the navigation problems and potential solutions. Results of the study to date should be covered as well as information that conveys to the reviewer (Corps, Army, OMB, or Congress) that the study and its anticipated outputs are in accord with Administration priorities.

This paragraph is to be used to describe the activities to be undertaken during the PY-1. The activities pertaining to each interim are to be clearly described.

This third paragraph is to be used to describe the activities to be undertaken in the PY.

This final paragraph will set forth the schedule for the study including completion dates (month and year) (date of Division Engineer's Transmittal Letter for each interim and the overall study).

EC 11-2-199  
31 Mar 10

ILLUSTRATION A-2-4  
Preconstruction Engineering and Design

APPROPRIATION TITLE: Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cos \$	Allocation Prior to FY (PY-3) \$	Allocation FY (PY-3) \$	Tentative Allocation FY (PY-2) \$	Allocation FY (PY-1) \$	Allocation (PY) \$	Additional to Complete After FY (PY) \$
PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (Type)							
XYX River Basin	1,100,000	300,000	150,000	200,000	150,000	300,000	0
EFG District							

This is an example of the type of project description data to provide. For an ecosystem restoration project include area to be restored in acres, types of habitat, expected outputs and the data supporting the scores assigned for the performance components. Do not include the scores.

XWV River drains an area of about 2,114 square miles in southwest State and empties into Something Harbor. The XYZ flood plain encompasses about 1,560 acres of mostly urban development on the left bank of the XWV River. The maximum flood of record, that of December 1933, would have caused an estimated \$13.4 million damages to XYZ River under October (PY-1) prices and conditions of development. A feasibility report was completed in FY96. The recommended project, estimated to cost \$xx.x million with an estimated Federal cost of \$xx.xx million and an estimated non-Federal cost of \$xx.xx million, includes construction of a levee system to provide flood protection to 1,318 acres in XYZ. Pumping stations and gravity outlets with tide gates would be included to accommodate interior drainage. The average annual benefits amount to \$2.7 million, all for flood control. The benefit-cost ratio is 1.2 to 1 based upon the latest economic analysis dated (Month Year). Identify project sponsor and set forth latest evidence of support. (Sponsor's must assure that they understand and are ready to sign a design agreement and have funds available to finance the PED portion of the design of a project.) PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$1,333,000	Total Estimated Preconstruction Engineering and Design Costs	\$1,333,000
Initial Federal Share	1,000,000	Ultimate Federal Share	xxx,000
Initial Non-Federal Share	333,000	Ultimate Non-Federal Share	xxx,000

The project is authorized for construction by (Cite the construction authorization and cost sharing requirements). Fiscal Year (PY-1) funds are being utilized to continue work on the Feature Design Memorandum, including economic studies. Fiscal Year (PY) funds will be used for completion of PED in (Month and Year).

## SUB-ANNEX A-3

### Investigations CECW Programmed Items

#### A-3-1. **Program Procedure.**

a. The activities covered by this sub-annex are programmed by CECW. You should assume your allowances will remain at or about the same level as PY-2 through PY+9 in preparing programming documents for the fifteen activities requiring Division response.

b. If a division is experiencing conditions that would materially affect its requirements for the activities covered, the Division Commander should submit a brief letter to HQUSACE, CECW-I outlining the changed conditions.

c. Note that there are three accounts that are similar, in that they provide the ability to respond to other entities without being either agency or project/study specific, but that serve different functions. They are Special Investigations, Interagency Water Resources Development, and Coordination with Other Water Resources Agencies. Special Investigations is for limited scope investigations, not for coordination. Interagency Water Resources Development is for coordination with others on problems that may lead to specific studies such as cost sharing or applicability of Corps programs to water resources problems. The Coordination with Other Water Resources Agencies account is for coordination with Planning Commissions, other Federal Water Resources Agencies or other entities which serve that function, on regional problems of a general nature not related to a programmed study or specific potential study. Some requests for assistance will not fit clearly into one of these three accounts, but you should be sure that, to the extent possible, such activities are programmed in the appropriate account and that activities in the three accounts are not duplicative.

A-3-2. **Submission Requirements.** Provide a breakdown by District for each activity listed in paragraph A-3.1, for PY-1 and PY in the format of Illustration A-3.1. The information should provide a base to develop allowances for varying program levels.

#### A-3-3. **Special Investigations.**

a. **Program Objective.** This category is for investigations of limited scope, in replying to requests from sources outside the Corps of Engineers, for information relating to unauthorized projects and other activities which have no funds, and which are not accomplished with a view toward determining whether a project can be developed. Also included is work specifically authorized by the Chief of Engineers; the review of reports and Environmental Impact Statements requested by other agencies, unless otherwise provided for; and attendance at meetings of local interests and other agencies during the preliminary stages of project investigations.

(1) The program objective specifically includes The Gulf of Mexico Program, which is an interagency effort for resolving complex environmental problems associated with man's use of the Gulf of Mexico. This program is limited to divisions and subordinate districts bordering on the Gulf of Mexico.

(2) The program objective specifically includes the Pacific Northwest Forest Case Study, which is an interagency program initiated by the White House's Council on Environmental Quality for ecosystem management of the public lands within the range of the Northern Spotted Owl.

EC 11-2-199  
31 Mar 10

(3) The program objective specifically includes the Chesapeake Bay program, which is an interagency program initiated by the U.S. Environmental Protection Agency, for the protection and restoration of the bay's natural resources. Work which requires Section 510 of the Water Resources Development Act of 1996 authorization is subject to the cost sharing of that authorization.

b. **Narrative Paragraph Submission.** A narrative paragraph should be submitted which describes specific investigations, studies, or tasks accomplished under this activity for the PY-3 and PY-2 to date in the format of Illustration A-3.2.

#### A-3-4. **FERC Licensing Activities.**

a. **Program Objective.** The objective of the Federal Energy Regulatory Commission licensing activities is to provide timely review of FERC license and permit applications consistent with regional and national priorities. Review is accomplished on a first come-first served basis.

b. **Eligibility.** License or permit applications are eligible for consideration if they are for new or existing non-Corps operated facilities. Review of license and permit applications which could have an effect on ongoing projects under construction or being operated by the Corps should be accomplished with available project funds.

A-3-5. **Interagency Water Resources Development.** The interagency water resources development program is for Corps of Engineers districts activities, not otherwise funded, that require coordination effort with non-Federal interests. These activities include such things as meeting with City, County and state officials to help them solve water resources problems when they have sought advice or to determine whether or not Corps programs are available and should be used to address the problems. The funds would also be used to cover costs of meeting with potential study sponsors prior to programming for study to insure they fully understand study cost sharing and to obtain an indication of their interest in participating in a future study. Funding for American Heritage River Navigators is included in this category and requirements for this effort should be separately noted and justified.

A-3-6. **National Estuary Program (NEP).** The NEP is an interagency planning program to develop management plans for nationally significant estuaries designated by EPA. To date, the following 28 estuaries have been designated under the program: Columbia River, WA & OR; Mobile Bay, AL; Morro Bay, CA; Charlotte Harbor, FL; Maryland Coastal Bays, MD; New Hampshire Estuaries, NH; Barnegat Bay, NJ; Puget Sound, WA; Delaware Bay, DE; Delaware Inland Bays, DE; New York/New Jersey Harbor, NY-NJ; Sarasota Bay, FL; Santa Monica Bay, CA; San Francisco Bay, CA; Galveston Bay, TX; Albemarle/Pamlico Sound, NC; Buzzards Bay, MA; Narragansett Bay, RI; Long Island Sound, CT-NY; Peconic Bay, NY; Massachusetts Bay, MA; Barataria/Terrebonne Bay, LA; and Indian River Lagoon, FL. Because of extensive Corps involvement with Federal water resources projects in the nation's estuaries and other responsibilities in waters of the U.S., the Corps has been asked to participate on the management and technical advisory committees of those NEP estuaries being studied. The requested funds will be used to cover costs of Corps field office meeting attendance, field reconnaissance, and data transfer.

A-3-7. **North American Waterfowl Management Program (NAWMP).** The NAWMP is an international program designed to reverse downward trends in North America's waterfowl populations by protecting and improving waterfowl habitats nationwide, particularly in 34 areas

within the United States identified as being critical to meeting NAWMP goals and objectives. Department of the Army support to the NAWMP is set forth in an agreement signed with the Department of the Interior on January 23, 1989. The Corps of Engineers has broad water resources development responsibilities and authorities, and has stewardship responsibilities for over seven million acres of water and land. Many Corps of Engineers projects contribute directly or indirectly to the habitat base for the nation's waterfowl and other wetland species. The requested funds will be used to cover costs of Corps of Engineers field office participation in field trips, interagency coordination meetings, and information transfer in response to conditions set forth in the agreement between the Department of the Interior and the Department of the Army.

**A-3-8. Interagency and International Support.**

a. **Program Objective.** Authorized by Section 234 of the Water Resources Development Act of 1996, this program is for activities in support of other Federal agencies or international organizations to address problems of national significance to the United States.

b. **Submission Requirements.** An illustration A-3.6 titled Interagency and International Support is required. Illustration A-3.6 is an information display with supporting narrative in the format of Illustration A-3.4. The narrative should identify the work that would be pursued with the requested fund.

**A-3-9. Coordination with Other Water Resources Agencies** (including Department of Agriculture, Natural Resources Conservation Service; Department of Interior, Bureau of Reclamation; and Regional Planning Commissions and Committees Programs).

a. **Program Objective.** The objective of this program is to provide coordination with these agencies on water resources issues and problem areas of mutual concern that are general in nature and not part of a programmed project or study.

b. **CalFed.** The program objective specifically includes the CALFED Bay-Delta Program solution process for the development of a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system.

c. **Lake Tahoe Federal Interagency Partnership.** The program objective includes Corps participation in the partnership with other Federal Agencies, in accordance with Executive Order 13057 "Federal Actions in the Lake Tahoe Region", to insure cooperation, support and synergy.

**A-3-10. Planning Assistance to States.**

a. **Program Objective.** The Planning Assistance to States program is carried out in accordance with the provisions of Sec. 22, PL 93-251. This public law authorizes the Chief of Engineers to cooperate with States (Commonwealths, Territories, etc.) and Indian tribes in the preparation of plans for the development, utilization, and conservation of water and related land resources of drainage basins located within the boundaries of the state. Assistance is provided on the basis of State or tribe requests. When a state or tribe is served by more than one division, the Lead Division assigned in Table 2-5, ER 1105-2-100, has the responsibility for providing data on work requested by that state or tribe. The Lead Division may further delegate that responsibility to a Coordinating District, but that Coordinating District is responsible for coordinating not only with the State or tribe, but also with the other Districts doing work for that State or tribe.

EC 11-2-199  
31 Mar 10

b. **Submission Requirements.** Planning assistance is coordinated and scheduled to ensure the continuation and completion of ongoing work and the timely initiation of new work requested by the States and tribes. Lead Division offices should provide a prioritized listing of all work for states and tribes under their responsibility in the format of Illustration A-3.3. In addition, a listing of studies that could be completed in the PY is also required. (There may be some duplication of the studies in the listings)

#### A-3-11. **International Waters Studies.**

a. **Program Objective.** This program contributes to better control, utilization, and orderly development of jointly - controlled water resources along the U.S. - Canadian boundary. It encompasses four boards and one committee established by the International Joint Commission (IJC) and in response to other U.S./Canadian cooperative efforts. IJC boards fall into two broad categories: boards of control, which are essentially permanent; and engineering or advisory boards, which are usually dissolved after completing their investigation.

b. **Eligibility.** Activities within the scope of authority of an appropriate Board or committee are eligible for funding.

c. **Submission Requirements.** An information display and supporting narrative as shown in Illustration A-3.4 is required.

#### A-3-12. **Flood Plain Management Services (FPMS).**

a. **Program Objective.** The Corps is authorized by Section 206 of the 1960 Flood Control Act, as amended, to provide information, technical assistance, and guidance, in identifying the magnitude of the flood hazard and for planning wise use of the flood plain. Direct response and assistance are provided through the FPMS program to states, Indian tribes and local governments without charge and to Federal agencies and private persons on a cost reimbursable basis.

b. **Submission Requirements.** An information table as shown in Illustration A-3.5 is required. FPMS funding requirements are to be shown for (1) District FPMS Units, (2) Quick Responses taking 10 minutes or less and provided without charge, (3) Technical Services, and (4) Special studies to include HES studies. In addition to the comprehensive Special Study numbers, a list of Special Studies that could be completed in the PY is required. An estimated cumulative number of responses to requests will be shown for Quick Responses and Technical Services. Submit two versions of Illustration A-3.5; one for the PY-2 amount and another based on capability to meet demand from state, tribal and local governments. The funding requirements for Quick Responses should not exceed two percent of the PY-2 work allowance amount. Hurricane Evacuation Study (HES) funding will be allotted in the same manner as other MSC study allotments for this program. Full reimbursement should be required for assistance to Federal agencies and private persons. Information provided for Illustration A-3.5 should not exclude requirements for HES studies but exclude all requirements for assistance to Federal agencies and private persons.

#### A-3-13. **Hydrologic Studies.**

a. **Program Objectives.** To collect and analyze basic data on hydrologic, climatologic, and river morphology for general use in connection with the Corps planning design, construction, and operation of water resource projects.

b. **Submission Requirements.** Provide a breakdown by District in the format of illustration A-3.1. Note that all activities in this class (260) should be defined and reported as follows:

(1) **261, Storm Studies.** Includes Part I and II storm studies accomplished in coordination with National Weather Service.

(2) **262, General Hydrologic Studies.** Includes generalized hydrologic analyses of rainfall - runoff relationship, flood frequency, snowmelt studies, hydrograph development and routing at selected watersheds, model calibrations in urban areas, and analyses of past floods and other studies of hydrologic nature.

(3) **263, Sedimentation Studies.** Includes all non-project sedimentation investigation activities at the Waterways Experiment Station.

(4) **264, Streamflow and Rainfall Data Collection.** This continuing program provides for installation and operation of streamflow and rainfall gages for general studies. It also provides for flood investigation activities such as investigation of hurricane surges; high water mark setting, measurement, and recordings; and rainfall bucket surveys.

A-3-14. **National & International Water Resources Coordination.** The national and international water resources coordination program is for Corps of Engineers activities, not otherwise funded, that require coordination effort with other agencies and governments. These activities include such things as meeting with officials to develop collaborative exchanges in complementary areas such as navigation, flood protection, coastal development, dredging and river basin management. The funds would be used to cover costs of meetings and to conduct workshops on water resource trends and decision points between the Corps and other organizations or governments. The Corps of Engineers signed a Memorandum of Agreement with the Dutch Rijkswaterstaat in May 2004 and this program would fund costs associated with sharing experiences between the two nations.

EC 11-2-199  
31 Mar 10

ILLUSTRATION A-3-1

District Breakdown  
(Code 901-171,172,173,175,176,177,178,181,186,240,250,260)  
(\$K)

Division: \_\_\_\_\_

Tentative Allowance

Total  
DIST.-A  
DIST.-B  
DIST.-C etc.

PY-1  
PY

SPECIAL INVESTIGATIONS  
(AND)  
GULF OF MEXICO PROGRAM  
(AND)  
PACIFIC NORTHWEST FOREST CASE STUDY  
(AND)  
CHESAPEAKE BAY PROGRAM  
(AND)  
FERC LICENSING  
(AND)  
INTERAGENCY WATER RESOURCES DEVELOPMENT  
(AND)  
AMERICAN HERITAGE RIVER NAVIGATORS  
(AND)  
NATIONAL ESTUARY  
(AND)  
NORTH AMERICAN WATERFOWL MANAGEMENT

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)

ILLUSTRATION A-3-1 (Continued)

District Breakdown  
(Code 901-171,172,173,175,176,177,181,186,240,250,260)  
(\$K)

Division: \_\_\_\_\_

Tentative Allowance

Total  
DIST.-A  
DIST.-B  
DIST.-C etc.

PY-1  
PY

(AND)  
INTERAGENCY AND INTERNATIONAL SUPPORT  
(AND)  
COORDINATION WITH OTHER WATER RESOURCES AGENCIES  
(AND)  
CALFED  
(AND)  
LAKE TAHOE FEDERAL INTERAGENCY PARTNERSHIP  
(AND)  
PLANNING ASSISTANCE TO STATES  
(AND)  
INTERNATIONAL WATER STUDIES  
(AND)  
FLOOD PLAIN MANAGEMENT SERVICES  
(AND)  
HYDROLOGIC STUDIES  
SUBCLASS  
PY-1  
PY

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(To be typed as necessary)

EC 11-2-199  
31 Mar 10

ILLUSTRATION A-3-2

Special Investigations Work Accomplished  
(Code 901-171)

Division: \_\_\_\_\_

**SPECIAL INVESTIGATIONS**

<b>DISTRICT</b>	<b>NARRATIVE DESCRIPTION</b>
-----------------	------------------------------

A	PY-3:
A	PY-2:

B	PY-3:
B	PY-2:

etc.

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(To be typed as necessary)

ILLUSTRATION A-3-3

Planning Assistance to States  
(Code 901-186)  
Priority Listing  
Fiscal Year \_\_\_\_\_

Lead Division: \_\_\_\_\_

Work Item Name	State	State Priority	Performing Office	Amount (\$000)
<u>1/</u>			<u>2/</u>	

Studies that could complete in the PY	Amount (\$000)
1.	
2.	
3.	

---

1/ List work items in order of decreasing priority as established by the Lead Division.  
2/ Priority as indicated by the State.

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(To be typed as necessary)

EC 11-2-199  
31 Mar 10

ILLUSTRATION A-3-4

International Waters Studies  
(Code 901-240)

Division: \_\_\_\_\_

**Justification:** Furnish a brief description of the Division/Districts activities and potential accomplishments relating to the functions of each board or committee. Include the associated program request for each board.

FOR ILLUSTRATION PURPOSE ONLY  
(To be typed as necessary)

ILLUSTRATION A-3-5

Flood Plain Management Services  
(Code 901-250)

Division: \_\_\_\_\_

Work Item	Amount (\$000)	Total # Responses/Studies
District FPMS Units	N/A	
Quick Responses	(5% Max.)	(# of responses)
Technical Services		(# of responses)
Special Studies		(# of studies)
Studies that could complete in the PY	Amount (\$000)	
1.		
2.		
3.		

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(To be typed as necessary)

EC 11-2-199  
31 Mar 10

ANNEX B

Construction and Flood Control, Mississippi River and Tributaries

TABLE OF CONTENTS

Subject	Paragraph	Page
Sub-Annex B-1, General		
Applicability.....	B-1-1.....	B-1-1
Objective .....	B-1-2.....	B-1-1
Projects Previously Funded as Construction.....	B-1-3.....	B-1-1
Sub-Annex B-2, Construction (Except for Dam Safety Assurance, Seepage Control, and Static Instability Correction Projects)		
Applicability.....	B-2-1.....	B-2-1
Specifically Authorized Projects and Programs.....	B-2-2.....	B-2-1
Other Projects .....	B-2-3.....	B-2-2
Budgeting for New Construction.....	B-2-4.....	B-2-3
Sub-Annex B-3, Dam Safety Assurance, Seepage Control, and Static Instability Correction Projects		
Applicability.....	B-3-1.....	B-3-1
Definitions.....	B-3-2.....	B-3-1
Project Development.....	B-3-3.....	B-3-1
Eligibility Criteria .....	B-3-4.....	B-3-1
Cost Sharing.....	B-3-5.....	B-3-1
Sub-Annex B-4, Supporting Documentation and Submission Requirements		
Schedules and Capabilities .....	B-4-1.....	B-4-1
Cost Estimates, Contingencies, and Inflation.....	B-4-2.....	B-4-2
Alternate Funding Levels for the PY.....	B-4-3.....	B-4-3
Benefit-Cost Ratio (BCR) and Remaining Benefit-Remaining Cost Ratio (RBRCR) .....	B-4-4.....	B-4-3
Submission Requirements .....	B-4-5.....	B-4-5
Adjustments to PY-1 and PY Programs .....	B-4-6.....	B-4-7
TABLES/FILES		
	Table	Page
New Construction: Basic Eligibility Criteria.....	B-2-1.....	B-2-6
Dam Safety Action Classification (DSAC).....	B-3-1.....	B-3-2
Remaining Benefit / Remaining Cost Ratio (RBRCR) .....	B-4-1.....	B-4-5
Sample Non-Beach RBRCR no IDC Spreadsheet with Instructions.....	B-4-2.....	B-4-5
Sample Beaches RBRCR no IDC Spreadsheet with Instructions.....	B-4-3.....	B-4-5
Final Division Summary RBRCR List.....	B-4-4.....	B-4-5
New Construction: Applicable Discount Rates in Effect When Initial Construction Funds Were Appropriated .....	B-4-5.....	B-4-8

TABLE OF CONTENTS (continued)

ILLUSTRATIONS

	Illustration	Page
Project Data Summary .....	B-4-1.....	B-4-10
PY Justification Sheet .....	B-4-2.....	B-4-11
PY Proposed New Replacement and Other New Work Summary .....	B-4-3.....	B-4-39
PY Proposed New Construction Checklist .....	B-4-4.....	B-4-40

## SUB-ANNEX B-1

### General

**B-1-1. Applicability.** This annex provides guidance for preparation of the ten year request (PY through PY+9) for all new and continuing projects and programs funded by line item under the Construction (C) appropriation, including the Inland Waterways Trust Fund (IWTF) and Harbor Maintenance Trust Fund (HMTF), as applicable, and the Construction portion of the Mississippi River and Tributaries appropriation. Unless stated otherwise, any reference to the C (or I) appropriation applies to IWTF, HMTF and MR&T as well as C (or I). This annex does not address the Continuing Authorities Program, which is addressed in Annex G, or other CECW-developed Remaining Items.

**B-1-2. Objective.** The overall goal is to develop a 10 year construction program (PY through PY+9) consisting of projects that are cost effective, performance based (using the performance measures located in Appendices I-VIII) and complete as quickly as practicable within program constraints and consistent with current national priorities. We will adhere to Army policy and the guidance provided in the main part of the EC.

**B-1-3. Projects Previously Budgeted as Operations and Maintenance.** The PY Civil Works budget will continue to fund four types of activities in the Construction account that previously have been budgeted in the Operations and Maintenance account. These activities are appropriately funded in the Construction account, where they have been traditionally funded in earlier years.

a. **Biological Opinions.** Activities necessary to comply with Biological Opinions, pursuant to the Endangered Species Act, to avoid jeopardizing listed species at existing projects.

b. **Rehabilitations.:** Work to restore or ensure continuation of project functions or outputs,. Section 205 of WRDA 92 defines "rehabilitation," with respect to inland waterway projects, as economically justified, structural work for restoration of major project features that extends the project life significantly (typically 20 to 25 years) and will take at least 2 years to complete, or structural modifications that enhance operational efficiency, and that exceed certain cost thresholds. This definition has been applied to all business programs. Fifty percent of the costs of rehabilitations for inland waterway projects will be programmed from the Inland Waterways Trust Fund.

c. **Beneficial use of dredged material from maintenance dredging:** Construction of facilities, projects or features that use maintenance dredging material. These include beneficial uses of dredged material for island and marsh creation, shore protection, and other environmental purposes pursuant to the Section 204 Continuing Authority Program and specific authorizations. These also include dredged material disposal facilities for material from maintenance dredging. Funding for the dredged material disposal facilities will be derived from the Harbor Maintenance Trust Fund.

d. **Renourishment to restore sand lost to shorelines from Federal navigation operation and maintenance (navigation mitigation):** This activity would be carried out pursuant to specific authorizations for shore protection projects that involve navigation mitigation, and pursuant to the Section 111 Continuing Authority Program. Funding for navigation mitigation will be derived from the Harbor Maintenance Trust Fund.



## SUB-ANNEX B-2

### Construction (Except for Dam Safety Assurance, Seepage Control, and Static Instability Correction Projects)

**B-2-1. Applicability.** This sub-annex applies to projects and programs funded by line item for construction, other than Dam Safety Assurance, Seepage Control, and Static Instability Correction projects described in sub-annex B-3. These include projects and programs specifically authorized for construction, certain modifications to existing projects, rehabilitation projects, design and construction deficiency correction projects, and the projects described in paragraph B-1-3.

#### **B-2-2. Specifically Authorized Projects and Programs.**

a. **Standard Project Development.** Each specifically authorized project is developed through the normal budget development process, including reconnaissance, feasibility, and preconstruction engineering and design (PED) funded in the Investigations account or the Investigations portion of the MR&T account, followed by funding in the Construction account or the Construction portion of the MR&T account.

b. **Reconstruction Projects.** Reconstruction projects will be treated as new, specifically authorized projects.

c. **Beneficial Use of Dredged Material.** A beneficial use project may be implemented under the Continuing Authorities Program (section 204, as amended) if the project is of small scale. See Annex G. A large scale project must be specifically authorized, either separately or as part of the navigation project.

d. **Navigation Mitigation.** A navigation mitigation project may be implemented under the Continuing Authorities Program (section 111, as amended) if the Federal cost for the project is within the authorized cost limit of \$5 million. See Annex G. Otherwise, the project must be specifically authorized, either separately or as part of the navigation project.

e. **Environmental Modifications.** Environmental modifications to a project may be implemented under the Continuing Authorities Program (section 1135, as amended) if the Federal cost for the project is within the authorized cost limit of \$5 million. See Annex G. Otherwise, the modifications must be specifically authorized as an amendment to the project authorization.

#### **f. Post-Feasibility Modifications.**

(1) Once the feasibility report has been completed for a project, additional engineering and design, economic and environmental analyses, and evaluations during PED or construction often result in the identification of potential project modifications. Each potential modification that is identified (whether during PED or construction) should be subjected to a reconnaissance-level examination to determine whether the modification so changes or would change project scope or functions, beyond the scope and functions described in the completed feasibility report, that it required or would require additional authorization or constitutes a material change.

(2) Examination and documentation of design changes that would not require additional authorization may be undertaken as part of PED or construction. However, if such design changes are material changes to the basic project features or output levels and the original project already is covered by a PCA/PPA, design of the material changes should be undertaken under a design agreement, and construction of the material changes should not be commenced until the material changes have been documented and approved in accordance with EC 1165-2-205, Delegation of Review and Approval Authority for Post-Authorization Decision Documents, and the PCA/PPA has been amended to reference an approved decision document that incorporates the material changes.

(3) Certain project modifications within per-project limits may be implemented through the Continuing Authorities Program (see Annex G).

(4) Examination and documentation of a simple cost increase without a change in scope or functions may be undertaken as part of PED or construction. If additional authorization is required as a consequence of the simple cost increase, a Post-Authorization Change Report should be prepared. ER 1105-2-100, Appendix P, governs execution of the PPA and award of contracts while authorization of the cost increase is pending.

(5) A modification that would require, or that did require, additional authorization, and that extends, expands, or adds functions to the original project described in the completed feasibility report, is beyond the scope of the original project and should be treated as a substitute plan, new project, or new separable element. Development of the substitute plan, new project, or separable element after the reconnaissance-level examination should follow the standard project development process, beginning with a feasibility study, even in circumstances where it becomes authorized in the meantime without benefit of the feasibility study being completed. The feasibility study may not be undertaken as a "reevaluation" of the original project, and will not be funded as part of PED or construction of the original project. Even if the feasibility study is undertaken with construction funding, it should be cost shared 50/50.

(a) If such an extension, expansion, or added function is physically integral to the original project, the modification will be treated as a substitute plan and work on the original project will be suspended, then concluded in an orderly manner so that work on the substitute plan can be pursued.

(b) If such an extension, expansion, or added function is physically separable from the original project, it will be treated as a new project or separable element. In the case of a new separable element, once the feasibility report has been completed, PED may be integrated with PED for the original project, and once the separable element is authorized and PED for the element is under way or completed, the element may be programmed for construction in conjunction with the original project, in accordance with the guidance below.

**B-2-3. Other Projects.** The following types of projects do not require specific authorization, as they may be carried out under the authority of existing, authorized projects. However, for purposes of budget development, they are treated as separate projects. For these projects, the project development process differs from that of new, specifically authorized projects.

**a. Definitions.**

(1) **Rehabilitations:** Work to restore or ensure continuation of project functions or outputs. Rehabilitation of existing projects will compete for funding on a level playing field with other construction projects. Fifty percent of the costs of rehabilitations for inland waterway projects will be derived from the Inland Waterways Trust Fund. Section 205 of WRDA 92 defines "rehabilitation," with respect to inland waterway projects, as economically justified, structural work for restoration of major project features that extends the project life significantly (typically 20m to 25 years), and will take at least 2 years, to complete, or structural modifications that enhance operational efficiency, and that exceed certain cost thresholds. This definition has been applied to all business programs. See ER 1165-2-119.

(a) The Rehabilitation program consists of work included in only one of two mutually exclusive categories: reliability improvements. The Reliability category encompasses major project feature restoration consisting of structural work on a Corps operated and maintained facility such as a lock, dam, etc., intended to improve the reliability of an existing structure, the result of which will be the deferral of capital expenditures to replace the structure. Rehabilitation will be considered when it can significantly extend the physical life of the feature and can be economically justified by benefit-cost ration analysis. The work will extend over at least two full construction seasons and will require at least \$6.6 million in outlays. For inland waterways projects, the reliability threshold will be \$14 million.

(b) Rehabilitation projects are authorized under the original project authorities. A project that requires specific authorization should be treated as a new project pursuant to paragraph B-2.3.a.

(c) Projects that involve the principal facility components that enable production of project outputs, e.g. replacement of turbines and generators at hydropower plants, replacement of failing locks, or recapitalizing or upgrading facilities are considered rehabilitation projects in the PY.

(2) Design and construction deficiency projects remedy design and construction deficiencies under the following two circumstances: 1) at a non-Federally operated project constructed with Civil Works funds; and 2) at a Federally-operated project, where the cost of the remedy is \$5 million or more. Less costly remedies at Federally-operated projects are funded as part of project O&M. Deficiency correction projects are authorized under the original project authorities. Deficiency correction projects are to remedy structural or performance deficiencies, not conditions caused by deferred non-Federal OMRR&R or changed hydrologic and hydraulic conditions. See ER 1165-2-119 - Water Resources Policies and Authorities - Modifications to Completed Projects.

(3) Biological Opinion projects. These are efforts to avoid jeopardy of listed species at existing projects or systems. Currently there are two Biological Opinion projects budgeted: Columbia River and Missouri River.

b. **Project Development.** Evaluation reports for rehabilitation, deficiency correction, or biological opinion projects will be funded from O&M or MR&T M funds (project operation and maintenance funds, or Inspection of Completed Works funds in the case of a non-Federally operated and maintained project). Once the evaluation report has been approved by HQUSACE or MSC (under delegated authority), planning, engineering, and design will be funded from O&M or MR&T M funds as well, until C or MR&T C funds are provided.

#### B-2-4. **Budgeting for New Construction.**

a. **Definitions.** New construction includes the following:

(1) New starts. These are specifically authorized projects and programs, reconstruction projects, specifically authorized beneficial use, navigation mitigation, environmental modification projects, specifically authorized replacement projects, design and construction deficiency correction projects, and biological opinion projects that have not been funded previously for construction.

(2) Previously unfunded separable elements of ongoing projects. A separable element is a portion of a project which is physically separable from other portions of the project, and which achieves hydrologic effects or produces physical or economic benefits which are separately identifiable from those produced by other portions of the project. If an investment increment is part of an authorized project, but is physically separable from other features of the authorized project and is not covered under the already-executed PPA or PPAs for the other features, that increment will be treated as a separable element. Investment increments that are not authorized are not separable elements of an authorized project and should be pursued as unauthorized projects in the Investigations appropriation account.

(a) Reimbursable work that is beyond the scope of the work covered under the existing reimbursement PPA will be treated as a new separable element.

(b) If the project already has a cost sharing agreement, recreation facilities requiring a new cost sharing agreement will be treated as a new separable element.

(3) Resumptions of physical construction. A project is a resumption when: 1) the project was first funded for construction in PY-3 or before; and 2) the project has not been under physical construction since before PY-3; and 3) the resumption of physical construction was not included in the President's budget for PY-1; and 4) the suspension of construction was not due to a natural pause such as for a levee lift or monitoring stage. Continuing planning, engineering, and design of a resumption may be

programmed as continuing work in the PY, but resumption of physical construction requires a new budget decision as new construction.

**b. Eligibility Criteria.**

(1) General. Potential new construction candidates should meet the eligibility criteria shown in Table B-2.1. Candidates ranking high using the performance measures shown in Appendices I-VIII may be recommended.

(2) Decision Document. Each recommended new construction candidate requires submission of a decision document to serve as the basis for selection and (with the exception of inland waterway construction or rehabilitation projects, and certain other projects) for a PPA. The requirement for a decision document can be satisfied by one of the following: 1) an approved feasibility report with engineering annex; 2) an approved General Reevaluation Report (GRR); 3) in some cases, an approved Post-Authorization Change Report (PAC); or 4) for certain rehabilitation or design or construction deficiency correction projects, an approved evaluation report. An Engineering Documentation Report (EDR) or Limited Reevaluation Report (LRR) is for updating and documenting changes to the project within the scope of a decision document and is not itself a decision document.

(3) Economic Analysis. A current economic analysis for each new construction candidate must be approved not earlier than 3 fiscal years prior to the fiscal year of the submission of the program request to HQUSACE CECW-I. For example, a FY12 (PY) initial new construction program request made in June 2010 (PY-2) must have an economic analysis contained in an official report approved not earlier than 1 October 2006 (PY-6). This analysis will be included in an approved decision document or in a supplemental report such as an EDR, LRR, PAC, or other special study report which must be approved at the appropriate level. A Design Documentation Report (DDR) is a technical document approved by a District and should not include information such as formulation of alternatives or economic analyses. After construction funds have been appropriated for such work, no further update of the economic analysis will be required during the approval process for the non-Federal sponsor's financing plan and execution of the PPA provided the PPA is approved in the PY and no significant changes which may affect economic justification have been made from the latest approved document. The same current economic analysis requirements for PPA projects apply to non-PPA projects.

**c. Cost Sharing.**

(1) New Channels and Harbor Projects. Cost sharing and financing provisions are in Section 101 of WRDA 1986, as amended. These provisions apply to a project, or separable element thereof, on which a contract for physical construction had not been awarded before 17 November 1986. Cost sharing for dredged material disposal facilities was modified by section 201 of the Water Resources Development of 1996 and applies to those facilities for which a contract for construction had not been awarded on or before 12 October 1996.

(2) New Projects for Flood Control or Other Specified Purposes. Cost sharing and financing provisions are set out in section 103 of WRDA 1986, as amended. Except for certain named projects specifically exempted by law, these provisions apply to a project, or a separable element, thereof, on which physical construction is initiated after 30 April 1986. Section 202(a) of the WRDA 1996 amends Section 103 of WRDA 86 and increases non-Federal cost sharing for costs assigned to flood control to a minimum of 35 percent and applies to projects authorized after 12 October 1996.

(3) New reconstruction projects are cost shared in accordance with the project purpose(s) under WRDA 86, as amended.

(4) New Inland Waterways Projects: The Water Resources Development Act of 1986 authorizes 50 percent of the costs of new construction projects to be funded from the Inland Waterways Trust Fund, subject to appropriations. In addition, new projects authorized since 1986 have been specifically

authorized to be funded 50 percent from the Trust Fund. Accordingly, specifically authorized inland waterway projects will be programmed for 50 percent cost sharing from the Trust Fund.

(5) For beneficial use projects, the cost share is 65% Federal and 35% non-Federal of the incremental cost above the least cost method of dredged material disposal consistent with engineering and environmental criteria.

(6) For navigation mitigation projects, the costs of mitigation are shared in the same proportion as the cost sharing provisions applicable to the project causing the shore damage. If the project provides storm damage reduction benefits over and above mitigation of damages from the navigation project, costs allocable to storm damage reduction are cost shared 65% Federal and 35% non-Federal.

(7) For environmental modifications, the cost share is 65% Federal and 35% non-Federal.

(8) Rehabilitation Projects. Rehabilitation projects will be cost shared in the same proportions as O&M costs. The exception is rehabilitations at inland waterway projects, which are authorized by WRDA 86 to be cost shared 50 percent from the Inland Waterways Trust Fund, subject to appropriations, and will be programmed as 50/50 on a cumulative basis.

(9) Deficiency Correction Projects.

(a) At non-Federally operated and maintained projects, cost sharing and financing will be the same as for new projects, unless an exception has been granted by ASA(CW) during the evaluation report review and approval process.

(b) At Corps of Engineers operated and maintained projects, no cost sharing is required unless a non-Federal sponsor has contributed toward the initial construction of the project. Payment may be required of public entities which have signed agreements with the Government, e.g. for water supply storage.

(10) Cost shares for biological opinion projects are determined on a case-specific basis.

(11) Resumptions.

(a) Projects initiated under post-WRDA 86 cost sharing will be cost shared and financed in accordance with WRDA 1986, as amended.

(b) Cost sharing for projects initiated under pre-WRDA 1986 cost sharing will depend on the circumstances under which construction on the project was stopped. Generally, if it was at the request of, or due to action by local interests, cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended will apply. However, if the project was stopped by other parties, such as in the case of a court injunction, then the originally authorized cost sharing and financing requirements will be applicable.

TABLE B-2-1

New Construction  
(including new separable elements and resumptions)

Basic Eligibility Criteria

1. The project or separable element is authorized for construction. No planning, engineering, design, or construction of unauthorized functions or features is proposed for construction funding.
2. The Executive Branch has developed a favorable position on construction of the project or separable element, as authorized. If a project modification, cost increase, or cost sharing change was enacted after the favorable position was developed, a favorable position also has been developed on the enacted change.
3. PED is fully funded by the end of the PY-1 and the PPA is on schedule to be executed and the Financing Plan approved no later than the end of the PY.
4. The Project Manager has confirmed the sponsor's understanding of its contractual and financial commitments and its willingness and ability to meet the funding requirements of the construction schedule, including its proportional cash share of sunk and current costs.
5. The project is in compliance with the applicable environmental statutes, appropriate to the current stage of implementation. An Environmental Assessment has been completed and Finding of No Significant Impact signed, or final EIS has been filed with EPA, or final EIS supplement has been filed with EPA, or the applicable action will have been completed by 1 August of the PY-2.
6. An M-CACES Baseline cost estimate has been prepared, in accordance with ER 5-1-11, with approval at the appropriate level as the basis for the subsequent work and financial flow.
7. A project management plan (PMP) has been prepared and approved.
8. No known or reasonably anticipated conditions or unresolved issues exist which might prevent either: (a) award of the first significant construction contract by the end of the PY; or (b) the start of real estate acquisition for the first significant construction contract so that the scheduled construction contract can be awarded no later than the end of the following fiscal year (PY+1) in the absence of the sponsor possessing title to the required lands and easements. Planning, engineering and design work should be far enough along in the PY so that the orderly and continuous progression of construction is assured with the scheduled award of the first construction contract.
9. An appropriate decision document is scheduled to be completed by 30 June of the PY-2, to be approved by 31 August of the PY-2, and to receive final Executive Branch action or concurrence by 31 December of the PY-1. For a new construction project or a separable element with no previous, applicable Executive Branch position, OMB provides the necessary position. For certain rehabilitation projects or design or deficiency correction projects, ASA(CW) provides the necessary concurrence.
10. Programmed recreation facilities either are minimum facilities needed for health and safety as defined in ER 1165-2-400, or have a non-Federal Partner that has agreed to provide 50 percent cost sharing and financing for its share of recreation costs and to bear 100 percent of the recreation operation and maintenance costs in accordance with the cost sharing and financing concepts in the Water Resources Development Act of 1986, as amended.
11. The economic analysis is current.

## SUB-ANNEX B-3

### Dam Safety Assurance, Seepage Control, and Static Instability Correction Projects

**B-3-1. Applicability.** This program involves three types of projects: Dam Safety Assurance projects; Seepage Control projects; and Static Instability Correction projects.

**B-3-2. Definitions.**

a. In accordance with section 1203 of the Water Resources Development Act of 1986, a Dam Safety Assurance project is a “modification....the cause of which results from new hydrologic or seismic data or changes in state-of-the-art design or construction criteria deemed necessary for safety purposes.”

b. Seepage Control and Static Instability Correction projects are not types of Dam Safety Assurance projects. Rather, they are types of rehabilitation projects, and do not qualify as Dam Safety Assurance under the current Executive Branch interpretation of section 1203.

**B-3-3. Project Development.**

a. The National Dam Safety Program is a line item in the O&M account that funds, among other things, assessments of the dams in the Civil Works inventory. Each dam is classified using the Dam Safety Action Classifications (see table B-3.1).

b. For those dams that meet DSAC threshold criteria, project-specific studies of the safety of the dams are funded from the Dam Safety Assurance, Seepage Control, and Static Instability Correction Program line item (the “wedge”) in the C account. Dams in all business programs are included. Upon completion of each study, the evaluation report is submitted to the Dam Safety Officer for approval. Upon report approval, the report is submitted to the ASA(CW) for concurrence in construction, and planning, engineering and design are undertaken using funds from the wedge, if the project continues to meet the DSAC threshold criteria.

c. If the ASA(CW) concurs in construction, the project is line-item budgeted at the next opportunity. The project is budgeted as continuing construction.

d. If the ASA(CW) has concurred in construction and the project is ready to initiate physical construction, the project may initiate physical construction using line-item funds, or using wedge funds until line-item funds become available.

**B-3-4. Eligibility Criteria.**

a. For FY12, only DSAC Class I and II projects are eligible for funding in the wedge or as line items.

b. Interim Risk Reduction Measures (IRRM) and IRRM Plans will be funded from the Operation and Maintenance account.

**B-3-5. Cost Sharing.**

a. In accordance with section 1203, 15 percent of Dam Safety Assurance project costs are assigned to project purposes in accordance with the cost allocation in effect for the project at the time the work is initiated, and non-Federal interests share the costs of each purpose in accordance with the cost sharing in effect at the time of initial project construction. Eighty-five percent of costs are borne entirely by the Federal Government.

b. Under current policy, Seepage Control and Static Instability Correction projects are types of rehabilitation projects. Consequently, section 1203 cost sharing does not apply to them. Seepage Control and Static Instability Correction projects will be cost shared the same as other rehabilitation projects, namely, in the same proportions as O&M costs. The exception is Seepage Control or Static Instability Correction at inland waterway projects, which are authorized by WRDA 86 to be cost shared 50 percent from the Inland Waterways Trust Fund, subject to appropriations, and will be programmed as 50/50 on a cumulative basis.

TABLE B-3-1

Dam Safety Action Classification (DSAC)

DSAC Class Code	Definition of Classification
1	Dams considered being critically near failure and for which urgent actions are needed to avoid catastrophe in the near-term.
2	Dams not critically near failure, but for which progressive failure could be initiated, or for which failure could occur, given the occurrence of a reasonably foreseeable triggering event that has a moderate chance of occurrence prior to remediation
3	Dams that have not been tested by design loads, have suspected deficiencies for which failure could occur under rare loading conditions.
4	Dams that are not declared safe because they don't meet current guidelines, but which are not considered unsafe enough to warrant heightened attention and for which remediation is considered to be quite low priority, although investigations to confirm their DSAC classification should be given normal priority.
5	Dams that are determined to be safe.

## SUB-ANNEX B-4

### Supporting Documentation and Submission Requirements

#### B-4-1. Schedules and Capabilities.

a. Capability-level funding is equal to the amount that can be obligated on a project with no funding constraints, minus unobligated carry-in for the PY. For continuing contracts, the amount that can be obligated should be limited to the amount of unconstrained contractor earnings on the contract for the PY and should not include out-year earnings. Unobligated carry-out should not be programmed and is not included in Capability.

b. Prepare a detailed project schedule using P2 Primavera Project Manager, reflecting an unconstrained (Capability) level of funding in the PY and out-years, for each new and continuing construction project, separable element, or line-item funded Safety of Dams project eligible for construction funding in the PY. The PM data must reflect the funding decisions enacted by Congress for PY-2, and a realistic expectation of PY-1 funding. All active uncompleted separable elements must be displayed separately. The PM data will be queried as needed to produce extracts and reports.

c. A completion date for each new or continuing construction project, separable element, or line-item funded Safety of Dams project will be developed for the Capability Level. Use the completion date for currently programmed work if the completion date for the entire project is indefinite. Use "indefinite" if planning, engineering and design is the only programmed activity and all construction work is unprogrammed. Show separate completion dates for initial construction and periodic renourishment dates for beach nourishment projects.

d. **Proportional Cash Financing.** Project schedules should assume Federal and Non-Federal funding is in balance (in terms of the respective percent shares of cash contributed on a cumulative basis) throughout construction life unless otherwise approved as part of the PPA. The exception is in the first fiscal year of construction, when Federal and non-Federal contributions will be adjusted to bring the sponsor's total sunk and current contributions in line with its required cash percentage of cumulative obligations through that fiscal year (including PED obligations, which are included in total project costs). Credit for authorized and approved construction by the sponsor, if any, should be included in financial obligations for construction and applied toward the sponsor's required cash contribution (other than the 5 percent cash share required for structural flood control) in the year that the credit for the completed work is afforded. In all cases the schedule for obligating and expending non-Federal funds is independent of the schedule for the provision or crediting of LERRDs. Proportional cash financing also applies to inland waterway projects, where the share of cumulative obligations (including PED costs) borne by the Trust Fund should attain 50 percent as soon as possible and be maintained at 50 percent throughout construction.

e. **Contracts.** All new contracts \$20 million or less should be fully funded. However, the costs of contract management, E&D during construction, and real estate activities associated with those contracts should not be fully funded, and should be funded in the FY the funds are needed, unless the PY is the last year of contract funding. For new contracts more than \$20 million and with earnings spanning more than one fiscal year, an acquisition plan should be developed involving base bid plus option, continuing, or other type of contract. Continuing contracts should be programmed as "Special" continuing contracts. Continuing contracts using the "True" clause should not be programmed. "Incrementally funded" contracts should not be programmed; these contracts are for use only on certain unbudgeted work added by Congress.

f. **Capabilities .** PY thru PY+19 capabilities should be loaded into the OFA "PBS Multi Year Funding Stream" data entry form for each new and continuing construction project or line-item funded Safety of Dams project that could initiate or continue construction in the PY thru PY+4 period.

g. It is extremely important that schedules and capabilities be realistic and risk-based. Project capabilities are used in formulating the President's Budget and the Five-Year Development Plan, and overly optimistic schedules, or capabilities that ignore carry-in or fund out-year obligations, lead to a misallocation of funding.

**B-4-2. Cost Estimates, Contingencies, and Inflation.**

a. Cost estimates will be based on a 1 October PY-1 price level with an allowance for inflation through the construction period, assuming a Capability schedule and in accordance with the instructions in ER 11-2-240. Inflation factors are shown in Table 1. The inflation allowance for each project will be computed only once and will be used without recomputation for other funding levels.

(1) Develop a Capability Level schedule for each project at a 1 October PY-1 price level (Uninflated Project Cost Estimate).

(2) Do not further escalate contracts already awarded or to be awarded by 30 September PY-2.

(3) Escalate each contract to be awarded in the PY-1 and future years through its construction period in accordance with the guidance in paragraph 10 in the Main EC.

(4) Escalate land acquisition, in-house planning, engineering and design costs, in-house construction management costs, and Non-Federal costs through the construction period also in accordance with the guidance in paragraph 10 in the Main EC.

b. Design costs prior to receipt of C funds.

(1) Continuation of Planning and Engineering (CP&E): Effective 1 October 1985, funds obligated for CP&E are considered project costs and must be included in project cost estimates. CP&E costs obligated prior to 1 October 1985 remain excluded from project cost estimates.

(2) Advance Engineering and Design (AE&D) and Preconstruction Engineering and Design (PED): All AE&D and PED costs are considered project costs and must be included in project cost estimates.

c. Items which are indefinite or unprogrammed will be based on a 1 October PY-1 price levels without an allowance for inflation. Indefinite or unprogrammed items include parts of projects that will likely not be programmed due to lack of local support or other non-funding reasons, as well as all new construction candidates that are not included in the PY program. Many items in the unprogrammed balance to complete, although currently designated as active, may eventually be deauthorized or reclassified to the deferred or inactive categories

d. Contingencies: The methodologies in Primavera Project Manager (PM) (Base and Plug-In Methodologies in Project Architect) include separate activities on which to resource contingencies. They are:

WBS	Activity Code	Activity Description
30DS0-Construction Contract A	CON490	Budgeted Construction Contingency
30DS1-Construction Contract B	CON740	Budgeted Construction Contingency
30DV0-E&D During Construction	END6340	Budgeted E&D Contingency
31E00-S&A Prog & Proj Mgmt	SNA6640	Budgeted S&A Contingency

The contingency allowance should be varied according to the stage of planning and design. ER 1110-2-1302, annex D, shows reasonable percentage factors to be used for contingency allowances for construction and relocation features. For projects that are programmed to complete in the PY, the PY request may include an appropriate, reasonable amount for contingencies. The scheduled dates on the activities in Primavera Project Manager should be used to place the resourced amount for budgeted

contingency within the PY. For projects that are not programmed to complete in the PY, the project cost estimate may include appropriate contingency allowances, and such allowances must be distributed in the out-years in proportion to the work to which the contingencies apply; however, the PY request must not include an amount for contingencies. As a project nears completion, the contingency allowance must be reduced accordingly. In no case will contingencies for completed work be included. Claim settlements and deficiency judgments in the PY and out-years will be handled in accordance with normal reprogramming procedures. PY and out-year requests must not include amounts for anticipated claim settlements or anticipated deficiency judgments.

#### **B-4-3. Alternate Funding Levels for the PY.**

a. **Initial Funding Level.** The initial funding level for each continuing project, separable element, or line-item funded Safety of Dams project is limited to: 1) the amount needed for contractor earnings (no more, no less) in PY for continuing contracts funded in the PY-1 President's Budget and with performance continuing into the PY; plus 2) the costs of contract management, E&D during construction, and real estate activities associated with all contract work funded in the PY-1 President's Budget and with performance continuing into the PY; minus 3) anticipated unobligated carry-in to PY.

b. **Increments within Capability Level.** Appendices I through VIII provide guidance on assigning costs to and documenting logical funding increments above Initial and within the Capability level.

#### **B-4-4. Benefit-Cost Ratio (BCR) and Remaining Benefit-Remaining Cost Ratio (RBRCR).**

a. **BCR.** Data on benefit-cost ratios (BCRs) should be provided in accordance with the instructions in the BCR Worksheet, below, for projects and separable elements other than design or construction deficiency correction projects, Safety of Dams projects, and aquatic ecosystem restoration projects.

b. **RBRCR.** Use the following guidelines and the RBRCR worksheets and instructions, below, to compute the RBRCR at the applicable interest rate, the current interest rate, and the OMB prescribed 7% interest rate for projects and separable elements other than design or construction deficiency correction projects, Safety of Dams projects, and aquatic ecosystem restoration projects.

(1) **Remaining Costs.** Consider anticipated Federal and non-Federal allocations and other non-Federal costs through the PY-1 as sunk, and exclude them from the RBRCR computation. The Remaining Costs shall be the Federal and non-Federal allocations as of the end of PY-1 (30 September 2011) based on the current project cost estimate and allocations from prior years and on the Presidents Budget for PY-2 in October 2010 dollars. Where the project includes completed separable elements, independent units and/or useful increments, OMRR&R costs for completed units/increments shall also be considered sunk, and only OMRR&R for remaining units/increments shall be considered in remaining project costs. The remaining costs should include any reimbursements to be paid for work already completed.

(2) **Remaining Benefits.** Where the project includes completed separable elements, independent units and/or useful increments, the amount of annual benefits that would be expected to accrue over the period of analysis for completed or functioning components of the total project shall be considered sunk and excluded from the RBRCR computation. Sunk benefits for projects that have reimbursable features should be estimated based on the reimbursable costs expended and an estimate on the amount of sunk benefits that would be associated with that level of expenditure. Remaining benefits are those that will be attainable in the PY or thereafter only if project features not completed with allocations through PY-1 are completed and operated and maintained.

(3) The RBRCR supporting PY funding requests for new construction candidates must be based on current approved evaluations of benefits and costs contained in an official report approved in or later

than PY-5 and computationally follow one of the methods outlined in paragraph B-3.4.c. In no case should the benefits be price indexed except for specific benefit categories such as roads, bridges and rail line damages provided these benefits do not constitute a major portion of overall benefits.

(4) For projects that were authorized without a formal benefit-cost analysis because monetary benefits have not been quantified, indicate the RBRCR is not applicable and the reasons why.

(5) For PY, the RBRCR's will be computed using both the applicable rates from Table B-4.4 and a standard discount rate of 7 percent.

c. **Alternative Methods for RBRCR.** Use one of the following methods for determining RBRCR as appropriate for the conditions and situations associated with each project. It is expected that the most commonly used method will be the Deflation of Costs method outlined below. In any case, cost savings from implementation of the project or separable element will be treated as benefits, not as offsets against implementation costs.

(1) **Deflation of Cost Method.** The Deflation of Cost method will generally be used for projects where the last approved economic analysis remains generally current with existing and anticipated future conditions. In this method, remaining costs are to be deflated to the date of price level basis of the last approved economic benefits analysis using the composite CWCCIS. Interest during construction will be computed for the remaining period of construction at the various interest rates and based on the anticipated remaining construction allocations. The total project cost will be annualized at the various interest rates over the appropriate period of analysis (usually 50-years). Remaining OMR&R will also be deflated to the price level of the last approved benefit analysis and added to the annualized capital costs to determine total remaining annual costs. The total remaining annual benefits will be determined on the same price levels of the last approved economic analysis, and at the various interest rates. Then RBRCRs for the various interest rates will be computed.

(2) **Economic Update Method.** The Economic Update Method will consist of the district preparing an economic update of total and remaining project benefits on current price levels in accordance with an approved Economic Update Plan. The price level prevailing during PY-2 (FY09 for the FY11 budget) will be used to update the benefits. Remaining cost will be calculated using the steps outlined in paragraph 1 above. RBRCRs calculations using this method will then be adjusted by the deflation method outlined above. The Economic Update Method should be used for projects wherein the last approved economic analysis is old and/or otherwise no longer reflective of current and anticipated future conditions. This would be especially useful for projects that have prolonged and periodic construction activities such as levee lifts (ie. MR&T) and additions to training river control works over extended periods of time. In performing economic updates current and future development, traffic levels, fleet characteristics, residual risks, operating practices, and other relevant factors should be factored in to the analysis as appropriate to derive a reasonably accurate estimate of project benefits.

(3) **Beach Re-nourishment Projects.** For beach re-nourishment projects, the general assumption and calculations in the original (and last approved) economic analysis is one of needing to continue to periodic re-nourish the beach to maintain the design profile. Otherwise the estimated benefits would not be realized. Therefore, for beach re-nourishment activities, the RBRCR shall be computed in the following manner for the various project interest rates. Either the Deflation of Project Costs or the Economic Update Method outlined above may be used. However, the period of analysis for comparison of remaining costs and remaining benefits will be the remaining period of authorized Federal participation in the period re-nourishment of the project and/or applicable separable element. Remaining benefits will be considered the total annual benefits of the project after accounting for any historic and future growth in development used in the last approved economic analysis. For example, if there are 25 years remaining in authorized Federal participation in re-nourishment, the remaining construction and OMR&R costs will be amortized over that period at the various interest rates, and compared to the annual benefits also computed at the same interest rate.

d. RBRCR instructions and spreadsheets are attached below:

TABLE B-4-1  
RBRCR Summary Sheet



Table B-4-1 FINAL  
RBRCR Summary She

TALBE B-4-2

Sample Non-Beach RBRCR no IDC Spreadsheet with Instructions



Table B-4-2 FINAL    Table B-4-2 FINAL  
Instructions RBRCR NHughes Non-Beach R

TABLE B-4-3

Sample Beaches RBRCR no IDC Spreadsheet with Instructions



Table B-4-3 FINAL    Table B-4-3 FINAL  
Instructions RBRCR BHughes Beaches RBR

TABLE B-4-4

Final Division Summary RBRCR List



Table B-4-4 FINAL  
Hughes Final Division

**B-4-5. Submission Requirements.**

**a. New and Continuing Construction and Line-Item Funded Safety of Dams Projects.**

(1) Project schedule and resource requirements updated in P2 Primavera Project Manager reflecting capability funding level for PY and out-years, 25 June, automated information system input, no hardcopy submission required.

(2) P2 OFA "PBS Performance Measure DEF", 25 June, automated information system input, no hard copy submission required. Use the Performance Measure data entry forms provided by the OFA PBS module. There is a separate data entry form for each business line. The data requirements for each business line are detailed in the business line appendices.

(3) P2 OFA "PBS Multi Year Funding Stream DEF", 25 June, automated information system input, no hard copy submission required.

(a) Illustration B-4-1, Project Data Summary Table, is an OFA report which will be prepared using the OFA "PBS Multi Year Funding Stream DEF" data entry form. Individual Illustrations B-4.1 prepared for separable elements will be rolled up into their parent projects by use of the P2 Program Code. The PY Federal and IWTF budget amounts can not be entered directly on this data entry form, but will be auto-populated from the PBS performance measure data entry forms. OFA analysis cubes can be used to provide summaries of Federal (Corps) and, Inland Waterways Trust Fund requirements from data entered into the "PBS Multi Year Funding Stream DEF" form.

(b) Illustration B-4-1, Project Data Summary Table, should be developed for all continuing, policy-consistent projects and separable elements, all new construction planned for initiation in the PY thru PY+9 period, and all eligible Safety of Dams projects planned for migration from the Safety of Dams "wedge" in the PY thru PY+9 period (see Sub-Annex B-3). The objective is to display an orderly flow of high performing, urgently needed and locally supported projects and separable elements that are in accord with current policies and priorities. Initiation of new construction should be scheduled no sooner than the fiscal year following completion of PED.

(4) Illustration B-4-2, PY Justification Sheet, 12 August for continuing construction and 16 July for new construction, by email as a Word document. The Justification Sheets should be based on Capability-level funding, but should provide sufficient detail on the proposed use of PY funds that the Initial Level and logical funding increments can be discerned. These continuing and new justification sheets are used by decisionmakers as additional information to determine the highest priority projects to budget. Although funds for separable elements of ongoing construction projects are not programmed on an individual basis and are included as part of the program requests for their parent projects, Illustration B-4-2, PY Justification Sheet, will be prepared for each separable element that is recommended as new construction in the PY. The appropriation title and project classification must be typed as the first line in the body and the Division, District, and project name must be typed in the 1 inch bottom margin. Do not underline any headings. See paragraph 14.d of the main section of the EC for specific instructions on conversion of your justification sheets to an Adobe Acrobat 7.0 file for transmission of the Congressional submission to HQ.

(5) BCR and RBRCR analyses in accordance with paragraph B-4-4 for projects and separable elements other than design or construction deficiency correction projects, Safety of Dams projects, and aquatic ecosystem restoration projects, 16 July.

(6) Reproducible map for Congressional submission. See paragraph 14.d of the main section of this EC concerning conversion of maps to an Adobe Acrobe file and format in accordance with ER-11-2-240.

**b. New Construction Only.**

(1) Illustration B-4.3, PY Proposed New Replacement and Other New Work Summary, 16 July, will be prepared to identify each new replacement project, new deficiency correction project, resumption, and new separable element of an ongoing project (including new recreation facilities and new reimbursable work) recommended for construction funding in the PY.

(2) Illustration B-4.4, New Construction Checklist, 16 July, will be prepared to identify PY new construction projects that are recommended in accordance with the criteria listed in Table B-2.1.

(3) Three copies of the approved decision document, 12 March. If approval is pending, note scheduled date in Illustration B-4.3 and notify HQ. If copies of required reports have been sent for previous program submissions, RIT will verify the availability of these reports before requesting additional copies.

(4) Evidence of Executive Branch support, including, where applicable, written concurrence by the ASA(CW) in construction of the project, or a written statement of Executive Branch position by OMB, 16 July. If final Executive Branch action has not been taken, note scheduled date in Illustration B-4.3 and notify HQ.

(5) Approved M-CACES Baseline cost estimate (summary sheets to the sub-feature element level for each feature and the appropriate narrative), 25 June, 1 copy.

(6) A reproducible map, 8 1/2 inch by 11 inch, 16 July, 10 copies.

**B-4-6. Adjustments to PY-1 and PY Programs.** When Congress takes action on the PY-1 appropriations bill, appropriate revisions to Division submissions will be requested.

TABLE B-4-5

Applicable Discount Rates in Effect  
When Initial Construction Funds Were Appropriated

Fiscal Year	Discount Rate 1/ Show on Justification Sheet	Show on Illustration B-2.1
1958	2 1/2	2.500
1959	2 1/2	2.500
1960	2 1/2	2.500
1961	2 5/8	2.625
1962	2 5/8	2.625
1963	2 7/8	2.875
1964	3	3.000
1965	3 1/8	3.125
1966	3 1/8	3.125
1967	3 1/8	3.125
1968	3 1/4	3.250
1969	3 1/4	3.250
1970	4 7/8	4.875
1971	5 1/8	5.125
1972	5 3/8	5.375
1973	5 1/2	5.500
1974	5 5/8	5.625
1975	5 7/8	5.875
1976	6 1/8	6.125
1977	6 3/8	6.375
1978	6 5/8	6.625
1979	6 7/8	6.875
1980	7 1/8	7.125
1981	7 3/8	7.375
1982	7 5/8	7.625
1983	7 7/8	7.875
1984	8 1/8	8.125
1985	8 3/8	8.375
1986	8 5/8	8.625
1987	8 7/8	8.875
1988	8 5/8	8.625
1989	8 7/8	8.875

1/ Unless the project qualifies for the 3 1/4 percent rate under the "grandfather" clause in Section 80 of the 1974 Water Resources Development Act.

TABLE B-4-5 (Continued)  
Applicable Discount Rates in Effect  
When Initial Construction Funds Were Appropriated

Fiscal Year	Discount Rate 1/ Show on Justification Sheet	Show on Illustration B-2.1
1990	8 7/8	8.875
1991	8 3/4	8.750
1992	8 1/2	8.500
1993	8 1/4	8.250
1994	8	8.000
1995	7 3/4	7.750
1996	7 5/8	7.625
1997	7 3/8	7.375
1998	7 1/8	7.125
1999	6 7/8	6.875
2000	6 5/8	6.625
2001	6 3/8	6.375
2002	6 1/8	6.125
2003	5 7/8	5.875
2004	5 5/8	5.625
2005	5 3/8	5.375
2006	5 5/8	5.675
2007	5 3/8	5.375
2008	5 1/8	5.125
2009	4 7/8	4.875
2010	4 7/8	4.875
2011	4 5/8	4.625
2012	4 3/8	4.125

1/ Unless the project qualifies for the 3 1/4 percent rate under the "grandfather" clause in Section 80 of the 1974 Water Resources Development Act.

ILLUSTRATION B-4-1  
Project Data Summary  
\$000

Oracle Financial Analyzer: logged in as u4ievf9 - Microsoft Internet Explorer

**PBS Project Data Summary Report**

Civil Works Project      PBS Funding Level/Increment      Program Year  
 113000 - K6-C6 BRUNSWICK HARBOR, GA      CURRENT      PY2008

**PBS Project Data Summary Report**  
(Dollars in Thousands)

	Project Data Summary Table						
	GLOBAL DATA	ALLOC THRU PY-3	ALLOC FOR PY-2	ALLOC THRU PY-2	PY-1	PY	PY+1
<b>INFORMATION SECTION:</b>							
P2 PROJECT NAME	113000 - K6-C6 BRUNSWICK ...						
EROC NAME	K6 - SAVANNAH DISTRICT						
PROGRAM CODE	N/A						
LEGACY PROJECT NUMBER	050730						
PRIMARY CONGRESSIONAL DISTRICT	GA01 - GEORGIA DISTRICT 1						
STATUS	APPROVED						
CEFMS PROJECT WORK ITEM	71D94J						
CURRENT P2 ALLOCATION/BUDGET			29,131	29,131	61,706	11,534	1
CURRENT P2 ALLOCATION/BUDGET (INFLATION ADJUSTED)			29,131	29,131	62,535	11,668	1
<b>FUNDING SECTION:</b>							
FEDERAL (CORPS)					19,877	10,270	0
NON-FED CASH CONTRIBUTIONS					42,658	1,397	0
TOTAL					62,535	11,668	1
<b>SCHEDULE/MILESTONE SECTION:</b>							

start    M...    I...    3 I...    O...    W...    P...    Express and OFA    MS Office    Utilities    USACE Apps    1:47 PM

ILLUSTRATION B-4-2

PY Justification Sheet

(NOTE: DO NOT TYPE ILLUSTRATION HEADING ON JUSTIFICATION SHEET)

APPROPRIATION TITLE: Construction - Enter the project classification and type.

PROJECT: Enter the project name, state and whether it is new or continuing.

LOCATION: Enter a brief description of the project location, clearly identifying major landmarks, counties, and municipalities in the project vicinity.

DESCRIPTION: Enter a brief description of the plan of improvement clearly identifying major project features and differentiating between programmed and unprogrammed work. Indicate if project is part of a system. For reservoir projects, include breakdown of storage by function. Differentiate between programmed and unprogrammed work. For ecosystem restoration projects include area in acres to be restored and types of habitat. If operation and maintenance is required to maintain describe briefly what and how often – For example to keep and area as a wetland dredging will be required every 5 years. If monitoring/adaptive management is authorized or recommended in the approved report – briefly describe what is approved and the period of time involved. Note the recommended/authorized cost of these items.

AUTHORIZATION: Enter the act authorizing the project, such as: Water Resources Development Act of xxxx.

REMAINING BENEFIT-REMAINING COST RATIO: Enter the RBRCR for the project at a 7 percent discount rate (as calculated from Section B.2-11 of the Annex). If the project is substantially complete and the RBRCR is no longer meaningful, enter: Not applicable because project construction is substantially complete.

TOTAL BENEFIT-COST RATIO: Enter the benefit-cost ratio for the project at a 7 percent discount rate. For Ecosystem restoration projects briefly summarize the results of the Cost Effectiveness/Incremental Cost Analysis. If the NER plan was not authorized note this.

INITIAL BENEFIT-COST RATIO: Enter the benefit-cost ratio at the applicable discount rate and the fiscal year for which Congress appropriated initial construction funds such as: 1.11 to 1 at 5 1/8 percent (FY xxxx). Omit this item for PY new construction. Use the applicable discount rate from Table B-2.2

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

BASIS OF BENEFIT-COST RATIO: Indicate the basis of the benefit-cost ratios, such as: Benefits are from the latest available evaluation approved in (month) xxxx at xxxx price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan xxxx)	PCTCOMPLETION CMPL	PHYSICAL SCHEDULE
(For projects with an unprogrammed balance to complete, but no future non-Federal reimbursement.)			Element A	xx	May xxxx
			Element B	0	Indefinite
			(For shore protection projects)		
			Initial Construction	xx	Sep xxxx
			Periodic Nourishment	xx	Jun xxxx
Estimated Federal Cost		xx,xxx,xxx			
Programmed Construction	xx,xxx,xxx				
Unprogrammed Construction	xx,xxx,xxx		Entire Project	xx	Jun <u>xxxx</u>
Estimated Non-Federal Cost	xx,xxx,xxx	PHYSICAL DATA			
Programmed Construction	xx,xxx,xxx				
Cash Contributions	xx,xxx,xxx	Under appropriate subheadings, enter the significant physical data on the major project			
Other Costs	xx,xxx,xxx				
Estimated Non-Federal Cost		facilities indicating mitigation, indicating the project scope.			
Unprogrammed Construction	xx,xxx,xxx				
Cash Contributions	xx,xxx,xxx				
Other Costs	xx,xxx,xxx				
Total Estimated Programmed Construction Cost		xx,xxx,xxx			
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx			
Total Estimated Project Cost	xx,xxx,xxx				

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF EST FED COST	STATUS (1 Jan <u>xxxx</u> )	PHYSICAL PCTCOMPLETION CMPL SCHEDULE
Allocations to 30 September PY-4	xx,xxx,xxx			
Allocation for PY-3		xx,xxx,xxx		
Allocation for PY-2		xx,xxx,xxx		
Conference Allowance for PY-1		xx,xxx,xxx		
Allocation for PY-1		xx,xxx,xxx	1/	
Allocations through PY-1	xx,xxx,xxx	xx		
Budget for PY	xx,xxx,xxx	xx		
Programmed Balance to Complete after PY	xx,xxx,xxx			
Unprogrammed Balance to Complete after PY		xx,xxx,xxx		

1/ Reflects \$xxx reprogrammed to (from) the project. (Use example as applicable).

For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

JUSTIFICATION: Enter an explicit and factually objective presentation of the merits of the project, i. e., an answer to the question: "Why now?" In narrative form, present your best case. The following information, when related to recent events or the current state of the economy, is more convincing than a simple recitation of facts.)

For flood projects, state the present value and type of property subject to flood damage; the average annual damages, with and without the project; the flood frequency against which protection is to be provided; the maximum flood of record; the damage sustained at that time and what it would be now; the frequency and duration of flooding; recent flood experience; and any other data

## ILLUSTRATION B-4-2 (Continued)

### PY Justification Sheet

which indicate the magnitude and severity of the flood problem and the need for protection. Include information on risk to life such as velocity and depth of flooding and amount of warning time and egress conditions. If more than 20 percent of urban flood damage prevention benefits are future benefits, explain the basis for such future benefits. In particular, estimated benefits for prevention of damages to household contents must be in accordance with the most recent CECW-P guidance. Describe the residual risk in terms of damages, population at risk, and the type of risk (rapid flooding from levee overtopping, etc). Does project directly or indirectly support future flood plain development in areas other than those near already urbanized areas or where flood plain values have been largely lost? Does it avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands and/or other environmental attributes?

For commercial navigation projects, discuss major commodities imported and exported; average commerce tonnage over the most recent 10-year period; savings per ton for selected commodities; availability of dredged material disposal sites; and size of ships expected to call at the port in the future.

For Ecosystem restoration discuss significance, as described in Appendix II, Table II-2-3 **paragraphs 51-63**, of the resources being restored, expected benefits and time frame for the realization of these benefits (eg – mature oak forest full benefits 10-20 yrs out), incidental benefits, and significant factors affecting the cost – such as urban. See Appendix II for other items that you may want to cover in the justification.

For water supply or hydroelectric power generation projects, specify the storage provided, and the potential sponsor(s) who has agreed to fully finance the applicable costs.

Similar specific data should be provided for other types of projects and purposes.

Identify those counties, districts, Indian reservations, or other areas which qualify as areas of "substantial and persistent" unemployment using the procedures in the Principles and Guidelines. The construction activities must be physically located in such areas in order for the benefits from employment of previously unemployed labor resources to be included in the project's justification.

Discuss the extent to which project beneficiaries have made investments other than the required items of local cooperation whose return is contingent upon completion of the Federal project.

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

Include a tabular listing of annual benefits as the final item of the justification paragraph if there is more than one applicable benefit category, such as: Average annual benefits are as follows:

Annual Benefits	Amount
Benefit 1	x,xxx,xxx
Benefit 2	x,xxx,xxx
Benefit 3	x,xxx,xxx
 Total	 xx,xxx,xxx

FISCAL YEAR PY-1: Enter a paragraph describing how PY-1 funds are being used. The current amount is being applied as follows:

FISCAL YEAR PY: Enter a tabular explanation of how the PY funds will be used, such as: The budget amount will be applied as follows:

Initiate .....	\$x,xxx,xxx	
Initiate and complete .....	x,xxx,xxx	
Continue .....		x,xxx,xxx
Complete .....		x,xxx,xxx
Planning, Engineering, and Design for parent project	x,xxx,xxx	
Planning, Engineering, and Design for Element A		x,xxx,xxx
Planning, Engineering, and Design for Element B		x,xxx,xxx
Construction Management		x,xxx,xxx
Total		\$xx,xxx,xxx

NON-FEDERAL COST: Enter a separate tabular explanation of the requirements of local cooperation included in each project cooperation agreement applicable to the project together with the associated payments during construction, reimbursements, and annual operation, maintenance, repair, rehabilitation, and replacement costs, such as: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Separable Element A (Repeat as applicable for each separable element).		
Provide lands, easements, (and) rights of way, (add for all but navigation projects) and dredged or excavated material disposal areas, (add if appropriate) which may be reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968) after reductions for such credit have been made in the required cash payments.	x,xxx,xxx	
(Add if covered under post-1994 PCA) Participate in Project Coordination Team, conduct audits of non-Federal costs, and perform investigations of hazardous substances	x,xxx,xxx	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	x,xxx,xxx	
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities.	x,xxx,xxx	x,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, repair, rehabilitation and replacement of municipal and industrial water supply facilities.	x,xxx,xxx	x,xxx
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	x,xxx,xxx	x,xxx
Pay one-half of the separable and joint costs allocated to recreational navigation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreational navigation facilities.	x,xxx,xxx	x,xxx
Pay xx percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to (include one of the following) 25 percent, 35 percent, or xx percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the	x,xxx,xxx	x,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
non-Federal sponsor's ability to pay, (add if appropriate) as reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968), but no less than 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.		
Pay xx percent of the costs allocated to fish and wildlife enhancement, and pay xx percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	x,xxx,xxx	x,xxx
Pay 35 percent of the ecosystem restoration costs and bear all costs of operation, maintenance, repair, rehabilitation and replacement of ecosystem restoration facilities.		
Pay 35 percent of the costs allocated to hurricane and storm damage reduction, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities.	x,xxx,xxx	x,xxx
	x,xxx,xxx	x,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay (include one of the following) 35 percent or xx percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, of the costs allocated to agricultural water supply, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of agricultural water supply facilities.	x,xxx,xxx	x,xxx
Pay xx percent of the costs allocated to general navigation facilities during construction and (add if appropriate) pay 50 percent of the costs of incremental maintenance below 45 feet below mean low water.	x,xxx,xxx	x,xxx
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation.	x,xxx,xxx	
Total Non-Federal Costs	x,xxx,xxx	x,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction when is this applicable? It would be good to specify.(Use example as applicable).

Note: After approval by the ASA(CW), local credit based on ability to pay (Section 103 (m) of the Water Resources Development Act Of 1986, as amended,) or general credit for prior work (Section 104 of the Water Resources Development Act Of 1986, as amended, or Section 215 of the Flood Control Act of 1968) must be reflected in the requirements of local cooperation as an offset to required cash contributions or, if necessary, LERRD contributions. However, any credit provided under Section 104 of the Water Resources Development Act Of 1986, as amended, or Section 215 of the Flood Control Act of 1968 may not be used to offset the required 5 percent cash contribution.

STATUS OF LOCAL COOPERATION: Identify the non-Federal sponsor, the current status of assurances, the current status of the PPA, actions being taken by the non-Federal sponsor toward compliance with the requirements of local cooperation, contributions made, bond issues passed, or other specific items. If known, state the method by which the non-Federal sponsor intends to provide its share of the project first costs (cash and other items of local cooperation) and annual O&M costs. List all potential sources of funds (together with dollar amounts, if known) to meet local cooperation requirements, including any anticipated Federal funds for which the Federal granting agency has indicated in writing that the use of such funds for items of local cooperation is authorized. List and describe any local work or investments that have already been made or are underway which would serve to fulfill all or part of the local cooperation requirements (including work accomplished pursuant to Section 215 of the 1968 Flood Control Act or creditable under Section 104 of the 1986 Water Resources Development Act.)

In the event a PPA has not been executed by the ASA(CW), provide the scheduled month and year when the PPA is scheduled to be executed.

For projects with future non-Federal reimbursement, indicate the specific conditions which govern the initiation of non-Federal reimbursement payments and the scheduled date such reimbursement payments are scheduled to begin.

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For each project with an executed PPA, compare the approved non-Federal cost estimate in the PPA with the current non-Federal cost estimate and provide an assessment of the non-Federal sponsor's financial capability to contribute toward any increased costs and an indication of the sponsor's willingness to share in any increased costs, such as: The current non-Federal cost estimate of \$8,000,000, which includes a cash contribution of \$3,000,000, is an increase of \$1,000,000 from the non-Federal cost estimate of \$7,000,000 noted in the Project Partnership Agreement, which included a cash contribution of \$2,500,000. In a letter dated 3 March xxxx, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: Enter a tabular explanation of the changes in the Federal (Corps) cost estimate from the last estimate presented to Congress to the current estimate, such as: The current Federal cost estimate of \$xxx,xxx,xxx is an increase (decrease) of \$xx,xxx,xxx from the latest estimate (\$xxx,xxx,xxx) presented to Congress (FY xxxx). This change includes the following items.

Item	Amount
Price Escalation or De-escalation on Construction Features	\$x,xxx,xxx
Design Changes	x,xxx,xxx
Additional Functions Added under General Authority	x,xxx,xxx
Authorized Modifications	x,xxx,xxx
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	x,xxx,xxx
Schedule Changes	x,xxx,xxx
Price Escalation or De-Escalation on Real Estate	x,xxx,xxx
 Total	 \$x,xxx,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

**STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE:** Indicate the status of the environmental impact statement, such as: The final EIS was filed with EPA on 28 September xxxx. List other significant items such as Clean Water Act, Coastal Zone Management Act, cultural resources and Endangered Species Act compliance status if not completed at the time the EIS was filed.

**OTHER INFORMATION:** Indicate when funds were appropriated to initiate preconstruction engineering and design and construction, respectively, such as: Funds to initiate preconstruction engineering and design were appropriated in FY xxxx and funds to initiate construction were appropriated in FY xxxx. If the scheduled completion date for programmed work has changed from the date last presented to Congress, explain the changes, such as: The scheduled completion date of June xxxx for programmed work is a (slippage or acceleration) from the latest completion date of March xxxx presented to Congress. This change is due to ..... Also, note any problems that should be considered by the Committees which might affect the progress schedule shown in your program request, as well as your expectations for and timing of a resolution of the problems. Fish and Wildlife Mitigation costs should also be separately identified and reflected in this paragraph.

Separable Element A (Repeat as necessary for each programmed separable element.)

**SUMMARIZED FINANCIAL DATA:** For ongoing projects with programmed separable elements, provide a breakdown of the summarized financial data for each programmed separable element in the same format as displayed for the parent project, except that the allocations and conference allowance information is not required.

**REMAINING BENEFIT-REMAINING COST RATIO:** Enter the RBRCR for each programmed separable element at a 7 percent discount rate. If the element is substantially complete and the RBRCR is no longer meaningful, enter: Not applicable because construction is substantially complete. N/A for Ecosystem restoration.

**TOTAL BENEFIT-COST RATIO:** Enter the total benefit-cost ratio for each programmed separable element at a 7 percent discount rate. For Ecosystem Restoration projects briefly summarize the results of the Cost Effectiveness/Incremental Cost Analysis. If the NER plan is not being implemented note this and explain briefly.

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

Note: The justification sheets must be typed on standard size paper, 8 1/2 inches by 11 inches, as left justified Word document at 6 lines per inch (.167 inch line height) using a landscape 11 point font (12 characters per inch); Use Arial font. The typed material must be confined to 6 1/2 inches vertically and 10 inches horizontally, leaving 1/2 inch margins on the left and right sides, and 1 inch margins on the top and bottom. The appropriation title and project classification must be typed as the first line in the body and the Division, District, and project name must be typed in the 1 inch bottom margin. Do not underline any headings. The July submission must be submitted by email as a Word document. See paragraph 13.d.(1).(g). of the main EC for specific instructions concerning conversion of your justification sheets to an Adobe Acrobat file for transmission of the Congressional submission to HQ.

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

Additional Examples of Summarized Financial Data

For projects with no unprogrammed balance to complete, and no future non-Federal reimbursement.

Estimated Federal Cost		xx,xxx,xxx
Estimated Non-Federal Cost	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	

Total Estimated Project Cost xx,xxx,xxx

For projects with both an unprogrammed balance to complete and future non-Federal reimbursement.

Estimated Total Appropriation Requirement	xx,xxx,xxx	
Programmed Construction		xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx	

Future Non-Federal Reimbursement		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	

Estimated Federal Cost (Ultimate)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)  
PY Justification Sheet

For projects with both an unprogrammed balance to complete and future non-Federal reimbursement (continued).

Estimated Non-Federal Cost		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Cash Contributions	xxx,xxx	
Other Costs	xxx,xxx	
Reimbursements	xxx,xxx	
Purpose 1	xxx,xxx	
Purpose 2	xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Cash Contributions	xxx,xxx	
Other Costs	xxx,xxx	
Reimbursements	xxx,xxx	
Purpose 1	xxx,xxx	
Purpose 2	xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Total Estimated Project Cost	xx,xxx,xxx	

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement.

Estimated Total Appropriation Requirement	xx,xxx,xxx
Future Non-Federal Reimbursement	xx,xxx,xxx
Estimated Federal Cost (Ultimate)	xx,xxx,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement (continued).

Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs		xx,xxx,xxx
Reimbursements		xx,xxx,xxx
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Project Cost	xx,xxx,xxx	

For projects with an unprogrammed balance to complete, future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Appropriation Requirement (CoE)	xx,xxx,xxx
Programmed Construction	xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx

Estimated Appropriation Requirement (OFA)	xx,xxx,xxx
Programmed Construction	xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx

Estimated Total Appropriation Requirement	xx,xxx,xxx
Programmed Construction	xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects with an unprogrammed balance to complete, future non-Federal reimbursement, and where an additional Federal agency is involved (continued).

Future Non-Federal Reimbursement		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Federal Cost (Ultimate) (CoE)	xx,xxx,xxx	
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Non-Federal Cost		xx,xxx,xxx
Programmed Constructions	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Total Estimated Project Cost	xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement and where an additional Federal agency is involved.

Estimated Appropriation Requirement (CoE)	xx,xxx,xxx	
Estimated Appropriation Requirement (OFA)	xx,xxx,xxx	
Estimated Total Appropriation Requirement	xx,xxx,xxx	
Future Non-Federal Reimbursement		xx,xxx,xxx
Estimated Federal Cost (Ultimate)		xx,xxx,xxx
Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs		xx,xxx,xxx
Reimbursements		xx,xxx,xxx
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Project Cost	xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

The funding status for projects authorized to use funds appropriated from the Inland Waterways Trust Fund will be displayed as shown below.

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September PY-2	xx,xxx,xxx	xx,xxx,xxx	
Conference Allowance for PY-1	xx,xxx,xxx	xx,xxx,xxx	
Allocation for PY-1	xx,xxx,xxx 1/	xx,xxx,xxx 1/	
Allocations through PY-1	xx,xxx,xxx	xx,xxx,xxx	xx
Budget for PY	xx,xxx,xxx	xx,xxx,xxx	xx
Programmed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	
Unprogrammed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	

1/ Reflects \$xxx reduction assigned as savings and slippage, and \$xxx reprogrammed to (from) the project. (Use example as applicable).

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

The funding status for projects authorized to use funds appropriated from the Harbor Services Fund will be displayed as shown below.

	GENERAL APPNS.	HARBOR MAINTENANCE TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September PY-2	xx,xxx,xxx	xx,xxx,xxx	
Conference Allowance for PY-1	xx,xxx,xxx	xx,xxx,xxx	
Allocation for PY-1	xx,xxx,xxx 1/	xx,xxx,xxx 1/	
Allocations through PY-1	xx,xxx,xxx	xx,xxx,xxx	xx
Budget for PY	xx,xxx,xxx	xx,xxx,xxx	xx
Programmed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	
Unprogrammed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	

1/ Reflects \$xxx reduction assigned as savings and slippage, and \$xxx reprogrammed to (from) the project. (Use example as applicable).

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For deficiency correction projects and modifications to existing projects with no unprogrammed balance to complete and no future non-Federal reimbursement.

Original Project

Actual Federal Cost		xx,xxx,xxx
Actual Non-Federal Cost	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Original Project Cost	xx,xxx,xxx	

Remedial Work or Project Modification

Estimated Federal Cost	xx,xxx,xxx	
Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Estimated Remedial or Modification Cost		xx,xxx,xxx
Total Estimated Project Cost	xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For deficiency correction projects and modifications to existing projects with no unprogrammed balance to complete but with future non-Federal reimbursement.

Original Project

Actual Federal Cost		xx,xxx,xxx
Actual Non-Federal Cost	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Original Project Cost	xx,xxx,xxx	

Remedial Work or Project Modification

Estimated Total Appropriation Requirement	xx,xxx,xxx	
Future Non-Federal Reimbursement		xx,xxx,xxx
Estimated Federal Cost (Ultimate)		xx,xxx,xxx
Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Project Cost	xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects with an unprogrammed balance to complete, no future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Federal Cost (CoE)		xx,xxx,xxx	
Programmed Construction		xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx		
Estimated Federal Cost (OFA)		xx,xxx,xxx	
Programmed Construction		xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx		
Estimated Non-Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Unprogrammed Construction	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Total Estimated Programmed Construction Cost			xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost			xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects which include beach nourishment with no unprogrammed balance to complete, no future non-Federal reimbursement, and where no additional Federal agency is not involved.

Estimated Federal Cost		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Non-Federal Cost			xx,xxx,xxx
Initial Construction	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Total Estimated Project Cost		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where no additional Federal agency is involved.

Estimated Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Non-Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where no additional Federal agency is involved (continued).

Estimated Non-Federal Cost			
Unprogrammed Construction			xx,xxx,xxx
Initial Construction		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Total Estimated Programmed Construction Cost			xx,xxx,xxx
Initial Construction			xx,xxx,xxx
Periodic Nourishment			xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost			xx,xxx,xxx
Initial Construction			xx,xxx,xxx
Periodic Nourishment			xx,xxx,xxx
Total Estimated Project Cost			xx,xxx,xxx
Initial Construction			xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx	

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Federal Cost (CoE)			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Federal Cost (OFA)			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Non-Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		

ILLUSTRATION B-4-2 (Continued)

PY Justification Sheet

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where an additional Federal agency is involved. (continued)

Estimated Non-Federal Cost			
Unprogrammed Construction			xx,xxx,xxx
Initial Construction		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Total Estimated Programmed Construction Cost			xx,xxx,xxx
Initial Construction			xx,xxx,xxx
Periodic Nourishment			xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost			xx,xxx,xxx
Initial Construction			xx,xxx,xxx
Periodic Nourishment			xx,xxx,xxx
Total Estimated Project Cost			xx,xxx,xxx
Initial Construction			xx,xxx,xxx
Periodic Nourishment			xx,xxx,xxx

ILLUSTRATION B-4-3

PY Proposed New Replacement and Other New Work Summary

Division:

Type 1/ and Proj or Elem Names	Total Proj Elem Cost \$000	Total Fed Appn Rqmt \$000	Total IWTF Appn Rqmt \$000	Total Non-Fed Cost \$000	Table B-2.1 Criteria Met? Y/N	BCR at Appl Rate 2/	RBRCR at Appl Rate 2/	Type of Decision Document	Act/Sched Date of Dec Doc Approval Mo/Yr	Act/Sched Date of Exec Br Support Mo/Yr	Sched PPA Exec Date Mo/Yr	First Const Ct Awd Date Mo/Yr
---	--	---------------------------------------	--	-----------------------------------	--	------------------------------	--------------------------------	---------------------------------	--	---	---------------------------------------	---

1/ New Replacement Projects

New Deficiency Correction Projects

New Separable Elements of Ongoing Projects, including Additional Recreation Facilities Requiring an Agreement and New Increments at Reimbursable Projects Resumptions

2/ Not applicable to deficiency correction projects.

FOR ILLUSTRATION PURPOSES ONLY

(To be typed as necessary)

ILLUSTRATION B-4-4

PY Proposed New Construction Checklist

Project Name	Authorization Status 1/	PED Status 2/	Criteria Met (Yes/No) 3/	Sched PCA/PPA Exec Date Mo/Yr 4/	BCR @ 7% 5/	Date of OMB Approval Letter 6/	Last Year Appropriate d	Any Physical Work Performed Under a Construction Contract During the Past 3 Consecutive Fiscal Years?  Yes/NO 7/
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(List all new construction projects which are recommended for construction in the PY.)

- 1/ Cite Authorizing Act, date of resolution for Section 201, or completion date of the Chief of Engineers report or approved EDR, LRR or GRR as appropriate.
- 2/ The project should not be recommended if PED will not be sufficiently complete to allow award of the first construction contract during the fourth quarter of the PY, or by the end of the PY+1 if the sponsor must acquire needed real estate, or if the M-CACES Baseline cost estimate or the PMP has not been approved. Planning, engineering and design should be far enough along in the PY so that the orderly and continuous progression of construction is assured with the programmed award of the first construction contract.
- 3/ Projects having an unapproved Reevaluation Report involving a significant change in project scope or cost or for addition of fish and wildlife mitigation measures will not meet the basic criteria unless the required change(s) recommended in the Reevaluation Report are scheduled for approval by ASA(CW) by 1 August of the PY-2.
- 4/ Show the scheduled month and year for PCA/PPA execution, e.g. Apr XX.
- 5/ Based on discount rate of 7% (cite approval date of last approved economic analysis in parentheses after BCR). Footnote projects where authorization is not based on formal benefit/cost evaluation.
- 6/ Include the date of the OMB letter that indicates OMB has completed their review of the report to determine if the project is eligible for budgetary consideration in the President's budget and that it is consistent with policies and programs of the President.
- 7/ Physical work under a construction contract does not include activities related to project planning, engineering and design, relocation, or the acquisition of lands, easements, or rights-of-way.

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)

ANNEX C

Operation and Maintenance

TABLE OF CONTENTS

Subject	Paragraph	. Page
SUB-ANNEX C-1, Operation and Maintenance		
Appropriation Title .....	C-1-1	. C-1-1
SUB-ANNEX C-2, Project Operation and Maintenance		
Purpose and Scope.....	C-2-1	. C-2-1
Program Development Principles .....	C-2-2	. C-2-1
Program Development and Review Process .....	C-2-3	. C-2-8
Funding Considerations .....	C-2-4	C-2-11
Special Interest Items.....	C-2-5	C-2-12
Operation and Maintenance Unfunded Reporting Requirements.....	C-2-6	C-2-12
Cost Estimates .....	C-2-7	C-2-12
Rank Assignments .....	C-2-8	C-2-13
Navigation Projects .....	C-2-9	C-2-13
Bridge Performance .....	C-2-10	C-2-13
Marginal Projects .....	C-2-11	C-2-13
Evaluation Reports.....	C-2-12	C-2-14
Cultural Resources.....	C-2-13	C-2-14
Special Recreation Use Fees (SRUF) .....	C-2-14	C-2-14
Program Development .....	C-2-15	C-2-14
Business Line Increments Limits .....	C-2-16	C-2-14
Recreation Budget Evaluation System (Rec-Best).....	C-2-17	C-2-15
Environment-Stewardship Budget Evaluation System (E-S BEST).....	C-2-18	C-2-15
Projects Previously Funded in Construction .....	C-2-19	C-2-16
Deficiency Corrections .....	C-2-20	C-2-16
Additional Information .....	C-2-21	C-2-16
Submission Requirements .....	C-2-22	C-2.18
SUB-ANNEX C-3, National Emergency Preparedness Program (NEPP)		
General.....	C-3-1	. C-3-1
General Program.....	C-3-2	. C-3-1
Cost Estimates .....	C-3-3	. C-3-2
Recommended Funding Level .....	C-3-4	. C-3-2
Submission Requirements .....	C-3-5	. C-3-2
SUB-ANNEX C-4, Work Category Codes		
O&M Work Category Codes - Numerically Ordered .....	C-4-1	. C-4-1
O&M Work Category Codes - Alphabetically Ordered.....	C-4-2	C-4-10
O&M Work Category Codes - Matrixes and Definitions.....	C-4-3	C-4-19
Operation Work Category Code Matrix (by Business Line).....	C-4-3a	C-4-19
Maintenance Work Category Codes Matrix (by Business Line) .....	C-4-3b	C-4-19
Work Category Codes and Definitions - O&M Operations Account.....	C-4-4c	C-4-19
Work Category Codes and Definitions - O&M Maintenance Accounts.....	C-4-5d	C-4-50

TABLE OF CONTENTS (continued)

Subject	Paragraph	Page
SUB-ANNEX C-5, Systems and Justification of Estimates		
Operation and Maintenance Systems and Regions .....	C-5-1 .....	C-5-1
Narrative and Supporting Data .....	C-5-2 .....	C-5-1
Justification sheets for O&M Congressional Submission .....	C-5-2a .....	C-5-1
State Designation for Inspection of Completed Works (ICW) .....	C-5-2b .....	C-5-1
Definitions.....	C-5-3 .....	C-5-1

TABLES

.....	Table .....	Page
Inspection Intervals & Budget Criteria.....	C-2-1 .....	C-2-7
Special Interest Items.....	C-2-2 .....	C-2-12
Total for Increments by MSC (Initial Increments).....	C-2-3 .....	C-2-15
Contacts for General/Miscellaneous Items .....	C-2-4 .....	C-2-16
Contacts for Performance Measures for O&M Program Submittal.....	C-2-5 .....	C-2-17
Work Plan Spreadsheet- NEPP .....	C-3-1 .....	C-3-3
Work Category Codes - Numerically Ordered .....	C-4-1 .....	C-4-1
Work Category Codes - Alphabetically Ordered .....	C-4-2 .....	C-4-10
Maintenance Work Category Matrix.....	C-4-3a&b ...	C-4-19
Work Category Codes and Definitions, Operations Accounts by Business Program.....	C-4-4 .....	C-4-19
Work Category Codes and Definitions, Maintenance Accounts by Business Program..	C-4-5 .....	C-4-50
Systems .....	C-5-1 .....	C-5-2

ILLUSTRATIONS

	Illustration	Page
Information Management Plan (Format Template).....	C-2-1 .....	C-2-4
Water Resource Systems .....	C-5-1 .....	C-5-3
Major Subordinate Command (MSC) Supplemental Justification Sheet		
Major Maintenance.....	C-5-2 .....	C-5-5
MSC O&M Justification Sheet Template.....	C-5-3 .....	C-5-6

SUB-ANNEX C-1

Operation and Maintenance

**C-1-1. Appropriation Title.**

a. This annex provides guidance for preparation of the program request for all Operation and Maintenance activities under the appropriation titles: Operation and Maintenance (O&M) and Flood Control, Mississippi River and Tributaries, Maintenance (MR&T) for the Program Fiscal Year.

b. This appropriation funds operation, maintenance, and related activities at the water resources projects that the Corps operates and maintains. Work to be accomplished consists of dredging, maintenance, repair, and operation of structures and other facilities, as authorized in the various River and Harbor, Flood Control, and Water Resources Development Acts.



## SUB-ANNEX C-2

### Project Operation and Maintenance

**C-2-1. Purpose and Scope.** This sub-annex provides policy and general procedural guidance for developing programs for the Project Operation and Maintenance (O&M), and National Emergency Preparedness programs. To provide a general framework and uniform approach for program development and justification, five funding increments have been identified. The various work items have been grouped by Work Category Code (WCC) for purposes of defining the appropriate funding increment. Guidance concerning automated data requirements for submittal of program recommendations is contained in paragraph 14 of the main body of the EC.

### C-2-2. Program Development Principles.

a. **General Philosophy.** The Operation and Maintenance program path forward incorporates approaches to better reflect the performance outputs of the projects and a management philosophy that looks at the inter-relationships of the projects across business lines, within systems and for a long-term horizon. The key components of this new approach include:

- Systems approach, the linking of projects by Systems
- Mission performance
- Risk and Reliability, condition and consequences
- Five Year Development Plan
- Five Year Infrastructure Management Plans

(1) These areas of interest have been addressed in prior budget ECs but more and better use of such tools is needed to realize efficiencies of employing these management tools in our budgeting and program execution. Our program plans must be able to be rolled up and examined holistically from a system and/or regional perspective to ensure consistent reliability, goals, mission execution, lowest sustainable investment levels and acceptable or shared risk levels are considered. The goal is to place all the projects on the same basis for the establishment of priorities based on benefits and risks.

(2) The O&M program should be developed from an asset management perspective which incorporates an emphasis on long range planning and return of value to the nation through the 10 year funding stream and Five Year Infrastructure Management Plans. The 10 year funding stream represents a comprehensive assessment of total investment requirements from all appropriation account (Investigations, Construction and Operation and Maintenance) while the Infrastructure Management Plans are currently focused on O&M program requirements. It is in the national interest for the Corps of Engineers to ensure reliable mission achievement at our operating projects in order to return value back to the nation. The projects were built to meet a national need through prioritized investment of Federal funds. In recognition of this, the Corps of Engineers maximizes the value returned to the nation by ensuring reliable performance, and maximum sustainable operating life at the lowest sustainable level of investment.

(3) The 10 year funding stream and Five Year Infrastructure Management Plans represent the collective technical judgment of the Operation and Maintenance Community of Practice, Business Line Managers, and the Engineering & Construction Community of Practice with regard to optimal asset replacement cycles, and best operation and maintenance practice. Investment requirements are

informed by asset condition assessments and failure risk assessments which affect estimates of remaining equipment life, future maintenance and repair requirements and re-capitalization plans. Equipment condition, failure risk and replacement cycles affect the O&M requirements and should be accounted for within Five Year Infrastructure Management Plans. Asset life extension through prudent O&M practice can provide return to the nation beyond the originally expected life of the project and serves the public interest. In addition, ensuring that our stewardship of these assets is accomplished at the lowest sustainable investment level maximizes the net value returned from our missions.

(a) Established Criteria is defined as the standard with specific guidelines which are formulated by the Administration which clarify and describe "justified levels of service."

(b) Justified Level of Service is defined as the delivery of a supportable and defensible amount or degree of project benefits consistent with authorization, use, and administration policies.

(c) Lowest Sustainable Investment is defined as the lowest investment level that a prudent manager would select, balancing between short and long term economics and considering overall availability of resources. Sustainability is key in that we still ensure the project meets or exceeds project life expectations and meets or exceeds changing environmental requirements for compliant operation.

b. **Budgeting by Systems.** The program is to be formulated based on performance goals and objectives and risk-based indicies (details can be found in the business line Appendices). The O&M plan in the past grouped individual projects by "basin codes" for geographically defining projects into regions. The Systems data will still be used to further refine the collection into systems that are functionally based. The hierarchy of order are the Systems with the Hydrological Unit Code (HUC) sub-regions assigned to the Systems. The initial set of Systems has been developed to consider the multiple purpose aspects of the O&M program. The 21 USGS Regions presented in FY07-08 are too broad for this purpose. **See Table C-5.1** for the O&M Systems that will be used in the PY. We will continue to assign projects to a HUC Sub-Region using the 4-digit code although the budget is presented project by project.

(1) The Systems have been developed using a standard, rational, logical approach, considering all business purposes.

(2) Each System has the HUC sub-regions assigned. Some HUC sub-regions are included in more than one System. All projects in a HUC sub-region do not have to be assigned to one System, but should be assigned to the System that it belongs.

(3) The end result is a set of Systems for O&M, with the HUC sub-regions and Corps of Engineers O&M projects assigned.

(4) "Regions" have also been associated with the Systems to allow greater aggregation. These regions generally match the RBCs.

c. **Out-Year Plans.** Basic design criteria for water resources improvements generally include estimates of repair and replacement frequency and effective project life. Major costs such as spillway gate replacements, navigation lock gate replacements, hydroelectric power generator rewinding and turbine replacement certainly need to be anticipated. Construction completion schedules for additional projects coming on line also need to be incorporated within O&M budgets (in some cases re-capitalization replaces equipment with better technology that requires lower O&M needs, but may not be as robust and therefore shortens re-capitalization cycles). However many projects in the Corps inventory are long past their design life. A strategy to formulate long range maintenance funding plans must take into account

unforeseen risk from fluctuations in weather conditions such as hurricanes and other major storms which often impose sudden, unanticipated requirements for maintenance and service restoration. Prediction of operational requirements requires consideration of equipment condition assessments, shifting public needs or areas of emphasis, geographic shifts driven by regional trends in commercial activity and other economic factors. And, finally, national priorities for federal investments are subject to frequent and radical fluctuations. Accordingly, the 10 year funding stream and Five Year Infrastructure Management Plans must not only be developed as a project-specific long-range plan, but also be based on sub-plans recommended by business lines. In addition, these project plans must be rolled up and examined holistically from a regional and/or system perspective to ensure consistent reliability goals, mission execution, lowest sustainable investment levels and acceptable or shared risk levels are taken into consideration.

**d. Mission and Systems Performance.** Our budget and system performance plans must account for performance output dependencies. For example, closure of one lock in a system would affect other lock passages or reservoir operations on one project could affect other downstream reservoirs. Consideration of systems in the operation and functioning of our projects will achieve better service to the public.

**e. Risk and Reliability.** Relative Risk Matrix (RRM). Project performance is not a consistent assured output. Project conditions have inherent risk and reliability that affect the performance outputs. Our budget packages require an assignment of a risk evaluation. The risk and consequence evaluation methodology are described in the business line appendixes and should be based, similar to that done for Dam Safety analyses, in the evaluation of facility conditions (risk) against the consequence of failure (consequence or performance). A Relative Risk Matrix would allow a consistent approach to risk/consequence. Work packages to preclude failure of high consequences would be readily apparent. This matrix would assist in the prioritization of work/budgeting. The analysis is to propose common, risk-based economic and life safety metrics for projects that protect life and property. These should be consistent with the construction program's dam safety assurance projects, dam and levee seepage control projects, static instability correction projects, and deficiency correction, reconstruction, and new construction projects for flood and coastal storm damage reduction efforts. The goal is to place all the projects on the same basis for the establishment of priorities based on benefits and risk.

**f. Infrastructure Management Plan.** The Infrastructure Management Plan (IMP) brings the management tools above together in laying out prioritized risk and performance based work over a short and long term to achieve desired end-state performance metrics. The synergy of system development could require budgeting certain tasks in the same timeframe. For instance dredging contracts for projects A and B could be advertised together if conducive to a joint solicitation to obtain better bids or electrical panels in two nearby reservoirs could be more optimally scheduled. The management plans should also lay out periodic dredging requirements that can be projected for out-year budgets to assure annual system outputs and stakeholder buy-ins (recognizing budgetary rules and inability to commit to future budgets). This could identify a higher budgetary priority and more system outputs for lower use projects that require infrequent investments. For example, a project with 400,000 tons moved annually but dredged every five years could be a better investment than a project with higher annual tons but dredged each year. For example, for Navigation the plans would include all harbor maintenance work that is justified by the resulting commercial transportation savings or by benefits to subsistence use, public safety, or public transportation as described in the Navigation appendix. The IMP is to cover the period PY through PY+4 (FY12-16) and be modified annually for subsequent budget submittals. The Infrastructure Management Plan will be consistent with the five year funding stream including the PY Budget Request. The Infrastructure Management Plan will be based on sub-plans developed by Business Line Managers for six primary missions (Flood & Storm Damage Reduction, Navigation,

Environmental Stewardship, Water Supply, Hydropower, and Recreation). The Infrastructure Management Plan should be jointly developed and improved within the Operations Community of Practice. The Infrastructure Management Plan must reflect sound engineering, construction, operation and maintenance state of practice (reliability centered maintenance, condition assessments, equipment mortality studies, predictive maintenance, etc.) and continually honed to achieve the lowest sustainable O&M investment level. Accelerated replacement cycles within the five year funding stream may affect O&M needs within the Infrastructure Management Plan (i.e. replacement versus continuing high outage and repairs on failing equipment). The O&M budget submission should be consistent with the 10 year funding stream and the five year Infrastructure Management Plan. The ten year funding stream and five year Infrastructure Management Plan both reflect planned investments for one range periods.

(1) For PY, each MSC will develop IMPs for their Systems. **The Template for O&M IMP and the IMP MSC Three-Year Submission Schedule are enclosed.**

(2) IMPs will be developed for the O&M Systems included in this EC. Each IMP will identify the current performance level or target and the five year end-state performance target. Ultimately, the overall end-state performance could be beyond the five-year planning horizon. For example, it may take more than five years to reach the target of reducing unscheduled closures at a navigation lock. The IMP should consider the various business activities performed within the System. Each Business Line will have a section to itself, and the IMP will have a summary section addressing comprehensive O&M activities. The relationships of the different business lines to each other should be addressed. For example, the dam at a project not only serves to create a navigation pool, but it is also used for municipal water supply and for water-based recreational opportunities. The IMP will include the major assets or features of the System and the relationship of the assets to the business lines. It will include the performance metrics and targets for the different business lines. The IMP will identify the risk and reliability factors for the major assets based on the different business lines condition assessments, with the condition and consequences addressed. The IMP will address different funding scenarios, such as a likely level to maintain the current condition, an optimal level to begin addressing the most critical items to begin increasing performance, and a "recommended" or elevated level to address critical condition needs, to buy down risk at a faster rate. The funding will be tied to achieving the targeted end-state for performance for the five years. The IMP will include stakeholder coordination and expectations. The MSCs will coordinate with other MSCs if required. For example, the IMP for the Mississippi River should address the relationship and impacts of the Missouri River as it is a provider of water flow to that waterway.

(3) MSCs will present to HQUSACE and ASA(CW) their individual IMPs.

#### ILLISTRATION C-2-1

##### Information Management Plan (Format Template)



Ill C-2-1 FINAL IMP  
Template-MSC 3Yr Sc

g. **Dam Safety.** Most dam safety related work items are below. Site specific conditions must be considered when determining costs for each project, following collaboration between the District Dam Safety and Operations experts. The table is a guide to cover many recurring dam safety program

activities. However, it is not a comprehensive list and additional dam safety work items may be programmed.

(1) O&M funded dam safety actions shall be prioritized based on risk. Budgeted dam safety items consider the performance history, potential failure modes, and severity of adverse consequences associated with each operating project.

(2) Routine dam safety monitoring, inspections, instrumentation data collection, instrumentation maintenance, surveys, training, Emergency Action Plan Updates, spillway and outlet works gate lubrication and testing, and dam safety exercises shall be budgeted to ensure safe operations. A higher standard of care is warranted for projects that have known dam safety deficiencies, or because of their inherent characteristics (reservoir size, construction methods, geographic setting, etc.) pose unacceptable life safety risks to the public. Implementation shall be reported to HQ quarterly via the Dam Safety Program Management Tools. Care must be taken to properly budget using existing Work Category Codes (WCCs) to allow accurate tracking of routine dam safety budgeting and expenditures, severable from the overall project operating costs.

(3) Dam Safety Interim Risk Reduction Measures (IRRM) Plans and Approved Interim Risk Reduction Measures. Effective 31 May 2007 USACE issued new guidance to develop IRRM Plans for Dam Safety Action Classification (DSAC) 1, 2, and 3 projects, and implement actions to reduce the probability and consequences of catastrophic failure to the maximum extent that is reasonably practicable while long term remedial measures are pursued. Funding for IRRM Plan preparation and implementation will be from the O&M account for the project. Critical Dam Safety Interim Risk Reduction Measures, including updating Emergency Action Plans and Conducting Emergency Exercises will be included and prioritized based on the DSAC classifications and program implementation guidance. The IRRM work will be recorded in the proper Operation WCCs or Maintenance WCCs, depending on the nature of the activity.

(4) Periodic Assessments, which expand the scope of our currently scheduled Periodic Inspections, were initiated in FY10. Approximately one half of the Periodic Inspections (PIs) scheduled for FY12 will be expanded with new requirements to add Potential Failure Mode Analysis and Risk Assessment in the PY. For initial PAs, Districts must distinguish the projects selected for PIs in their remarks, and budget for additional data collection and technical and administrative support as part of the PI costs

(5) Operating projects which have been evaluated under the Screening for Portfolio Risk Assessment (SPRA) process shall identify the Dam Safety Action Classification assigned by HQUSACE. See Annex B, Construction and Flood Control, Mississippi river and Tributaries, Sub-Annex B-3, Safety of Dams Projects ,paragraph B-3.3, Table B-3-1 for *DSAC* definitions.

List of Dam Safety Work Items/Activities:

- Minimum Instrumentation Data Collection & Evaluation
- Supplemental Instrumentation Data Collection & Evaluation
- Emergency Action Plan Notification List Updates
- Emergency Action Plan Revisions
- Dam Safety Emergency Exercises
- Interim Remedial Measures Planning (e.g. Coordination for Operating Restrictions)
- Inundation Map Updates
- Seismic safety Re-evaluations
- Hydrologic Reevaluations

EC 11-2-199  
31 Mar 10

Hydraulic Steel Structure Inspection & Testing  
Periodic Inspections (PI)  
Physical Surveys in Support of PIs  
Stilling Basin Inspections in support of PIs  
Sedimentation Studies  
Tainter Gate Testing  
Dam Safety Training  
Water Control Management Studies  
O&M Manual & As Build Drawing Updates  
Project Security Plans  
Instrumentation Repairs & Replacement  
Foundation Drain Cleaning  
Critical Relief Well Maintenance  
Other Relief Well Maintenance  
Dam Safety Program Tool data Updates  
Screening for Portfolio Risk Assessment

**h. Levee Safety Program and Inspection of Completed Works (ICW).** This section provides guidance to develop the PY budget for Levee Safety Program implementation and management activities, including inspections of levee systems. Guidance contained in the EC will be used in conjunction with Levee Safety Program implementation guidance when preparing budget submissions for PY for the following levee systems and associated program accounts:

- Federally authorized, locally maintained systems under the Inspection of Completed Works (ICW), Operation and Maintenance, General (O&M), appropriation category.

- Federally authorized, federally maintained systems under the Mississippi River & Tributaries (MRT) or other project specific appropriation category.

- Non-federal systems under the Rehabilitation and Inspection Program (RIP), Flood Control and Coastal Emergencies (FCCE) appropriation category.

(1) Budgeted levee safety activities should be prioritized based on the performance history, potential failure modes, and severity of adverse consequences associated with each system. Inspections of levee systems will be performed in accordance to current policies and direction as established by

HQUSACE. Existing site conditions must be considered when determining costs for each system, following collaboration between the District Levee Safety Program Managers and Operations experts.

(2) During the PY the type of inspections conducted and the inspection intervals for all flood damage reduction systems in the ICW, O&M, and RIP inspection programs will be in accordance with the inspection intervals shown in Table C -1. For the PY budget submission districts should assume Phase I & II I-wall analyses requirements will have been completed; that system risk assessments and national levee database GIS data collection activities will be centrally funded by HQUSACE; and that Levee certifications for NFIP purposes will not be budgeted (except for those systems which are federally maintained). The PY budget submissions by districts should include requirements to support the Levee Safety Program management requirements at the district level. Reference Appendix III-5, Budget Increments, for Levee Safety Program activities.

TABLE C-2-1			
Inspection Intervals & Budget Criteria For Flood Risk Management Systems			
Current Land Use in the Protected Area*	Project Design Event	Interval of Inspection**	Type of Inspection <sup>4</sup>
Urban/Rural/ Agricultural <sup>1</sup>	100 year event or greater	Annual	Routine
		5 yr	Periodic Inspection <sup>2</sup>
		TBD <sup>3</sup>	Risk Assessment <sup>3</sup>
Urban/Rural	50 to 99 year event	Annual	Routine
		5 yr	Periodic Inspection <sup>2</sup>
		TBD <sup>3</sup>	Risk Assessment <sup>3</sup>
Urban/Rural	10 to 49 year event	2 year	Routine
Agricultural	5 to 99 year event	2 year (rating dependent)	Routine
<p>* For combined urban, rural, and agricultural levee systems the higher standard governs.  ** Consider more frequent interval for levee with water on it all of the time.  1. This applies to high economic consequence agricultural regions.  2. Federal Projects/Systems only.  3. Risk assessments will be centrally funded by HQ.  4. For increment funding levels see Appendix III, "Flood and Coastal Storm Damage Reduction Business Line"</p>			

i. **Relationship to Program Execution.** Good program execution is an essential ingredient in securing the resources needed to ensure a viable O&M program and thereby continue to provide the Nation with the benefits for which water resources projects were constructed. Performance of the program is assessed through the Office of Management and Budget's ExpectMore.gov process. Together with OMB, the performance of the program will be assessed and accountability for improvement managed to assure the program is working well for the American people. The Program Assessment Rating Tool, or PART, for short, was a questionnaire designed to help assess the management and performance of programs. It is used to evaluate a program's purpose, design, planning, management, results, and accountability to determine its overall effectiveness. Therefore, development of the program was directly related to program execution. It is imperative to develop a sound and realistic program that can be executed as scheduled in accordance with commitments to customers. While PART is no longer used a new tool is under development to continue this connection. The programming process described in this annex has been designed to facilitate both program development as well as execution. If the procedures outlined in this annex are implemented in a consistent manner throughout the Corps, the result should be: (1) a credible program that can be defended within the Administration and Congress, (2) a sufficient allowance of O&M funds and (3) a high degree of fiscal performance.

j. **Operations (Work Category Codes 601XX-608XX).** All operations features should be closely examined to minimize the required investment levels in order to reduce costs wherever possible. While there may be some cost fluctuation in investment needs among individual projects, the goal is to reduce, or at least constrain, the aggregate total growth of operations costs in the MSC to no more than inflation. Efficiency improvements should be employed to reduce operations costs, where possible.

k. **Maintenance (Work Category Codes 611XX-618XX).** Prudent stewardship of available resources is essential to preserve the existing infrastructure. The growing and aging inventory of projects with a resources constrained environment necessarily dictates that resources be concentrated on the most prudent and necessary maintenance features of the program to the maximum extent possible. Just as with operations, the maintenance features should be reviewed and efficiency measures employed to reduce investment needs to the lowest sustainable level.

l. **Priorities.** The MSC and district commanders must ensure that the program request provides balanced and equitable treatment to all Business Lines (Navigation, Flood Risk Management, Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply) from a regional, system and watershed perspective.

### C-2-3. Program Development and Review Process.

a. **Work Category Codes (WCCs).** The Civil Works O&M program development process reflects the Corps compliance with the requirements of the Government Performance and Results Act of 1993 (GPRA). Therefore, the program will be submitted in a form that reflects the primary business processes/functions established for the O&M mission. These Business Lines are Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply. In addition, each budget activity will be tied to a business performance measure and goal for the program year. The Work Category Codes (WCCs) are aligned by the operation and maintenance areas and by the primary Business Lines within the operations or maintenance areas. The tables are provided in Sub-Annex C-4 to aid in developing budget activities aligned with appropriate Business Lines, WCCs and sub-WCCs.

(1) Table C-4-1 lists WCCs and sub-WCCs in numerical order.

(2) Table C-4-2 lists WCCs and sub-WCCs in alphabetical order.

(3) Table C-4-3a is a matrix that displays the operations Work Category Code structure by each Business Line (see embedded Excel file, paragraph C-4-3).

(4) Table C-4-3b is a matrix that displays the maintenance Work Category Code structure by each Business Line.

(5) Section C-4-3c describes and defines each WCC for operations activities (see page C-4-19).

(6) Table C-4-3d describes and defines each WCC for maintenance activities (see page C-4-50).

#### b. Joint Activities – Joint Costs.

(1) Joint Activities are activities that cannot be assigned to one specific Business Line at O&M multipurpose projects with power (Cat/Class 300). Joint Costs are the costs assigned to Joint Activities. At non-Cat/Class 300 (non-power) projects, activities will be included in the project's predominant business line.

(2) The districts will use P2-Primavera Project Manager to assign the appropriate Work Category Codes to request funds for joint operations activities and for joint maintenance activities at Cat/Class 300 multipurpose with Hydropower projects ONLY. Districts must ensure that joint activities are only assigned to the Hydropower Business Line in P2. The districts must also ensure joint activities are assigned the

appropriate phase code (OJ or MJ) in P2 and are placed in the appropriate increment. Joint activities designated as operations and maintenance at multipurpose Cat/Class 300 projects should use Work Category Codes of 606XX for operations and 616XX for maintenance.

(3) The Hydropower business line will contain two funding levels for O&M activities: hydropower specific activities and all business lines joint activities for Cat/Class 300 projects. The Hydropower Business Line Managers at each level will manage all Cat/Class 300 joint activity budget items to ensure accountability of joint activities across business lines. A joint cost funding level will be established by HQUSACE business line managers that represents the program's sum total of the O&M joint activities across all business lines. Each MSC is responsible for ensuring that the most critical O&M joint activities are included in the Initial Increment at Cat/Class 300 projects. These joint activities will be ranked separately by the Hydropower Business Line Manager with input from other Business Line Managers as appropriate. Before submittal of the O&M budget to OMB, joint costs will be distributed to individual business lines based on the current statutory cost allocation table to enable HQ Business Line Managers to finalize individual business line PY budgets.

**c. Performance-Based Programming.** Performance measures are described in the Appendices for the Business Lines. Performance data according to these measures will be entered in OFA for each budget item for which funds are requested as explained in paragraph 14 of the main body of this EC. In addition, in accordance with paragraph C-2.16, each budget item will be assigned to a Business Line increment. The districts may cite different performance levels in the funding arguments for different budget activities. For example, funding of the highest priority budget item in the Business Line initial increment may be required to attain 80 percent availability; funding of the next highest priority budget item in a subsequent Business Line increment may enable the project to attain 95 percent availability

**d. Risk-Based Condition Assessments.** Risk-based and reliability condition assessments are described in the Business Line appendixes.

**e. Use of Work Category Codes to Program for Business Lines.** The Work Category Codes are listed as follows:

601XX Operation for Navigation Function  
602XX Operation for Flood Risk Management Function  
603XX Operation for Hydropower Function  
604XX Operation for Environmental Stewardship Function  
605XX Operation for Recreation Function  
606XX Joint Activities for Operations (Cat/Class 300 projects only)  
607XX National Emergency Preparedness Program Function  
608XX Operation for Water Supply Function  
611XX Maintenance for Navigation Function  
612XX Maintenance for Flood Risk Management Function  
613XX Maintenance for Hydropower Function  
614XX Maintenance for Environmental Stewardship Function  
615XX Maintenance for Recreation Function  
616XX Joint Activities for Maintenance (Cat/Class 300 projects only)  
617XX Reserved  
618XX Maintenance for Water Supply Function

EC 11-2-199  
31 Mar 10

The programming process will allow the estimated costs for a Business Line to be identified. For example:

(1) A Cat/Class 100 Navigation project would have all of its primary purpose budget activities programmed under the 601XX and 611XX WCCs. These WCCs will identify the total navigation costs for the Navigation Business Line at this project. Separable costs specific to the Recreation and Environmental Stewardship Business Lines would be charged to the WCCs for those business lines.

(2) A Cat/Class 200 Flood Risk Management project with Recreation and Water Supply as authorized project purposes would have all its primary purpose budget activities programmed under the 602XX and 612XX WCCs. All Recreation-specific budget activities would be shown in 605XX and 615XX WCCs for Recreation, as appropriate. All Water Supply-specific budget activities would be shown in 608XX and 618XX WCCs for Water Supply, as appropriate. Work Category Codes 60210 and 60221 will no longer be used for Water Supply activities.

(3) A Cat/Class 300 Multiple Purpose Project with Power will have its specific Hydropower budget activities shown under the 603XX and 613XX WCCs. Budget activities representing specific activities for Navigation, Flood Risk Management, Recreation, Environmental Stewardship, or Water Supply will be budgeted under the WCCs for those specific business lines. The budget for Joint Activities (work which cannot be assigned to a single business line) will be shown under the 606XX and 616XX WCCs and will be coded as an "OJ" or "MJ" phase code. This allows Joint Activities at a project to be entered and managed as a single budget activity. The total budgeted amount for Joint Activities can later be "displayed" across specific Business Lines in accordance with the statutory O&M joint cost allocation formula. This "display" of joint costs will not result in a single budget activity being split into multiple activities across multiple business lines. However, this "display" of programmed costs allows the Corps to identify the specific costs for Hydropower O&M, plus that portion of the costs for Joint Activities allocated to Hydropower. This is important because the Federal Power Marketing Administration generally reimburses the Treasury for the power costs incurred by the Corps, which includes the portion of Joint Activities that can be allocated to Hydropower. Following is an example of a joint budget activity at a Cat/Class 300 project: During the programming process, a roof repair budget activity for an administration building at a multipurpose project would have the entire programmed cost entered under a single budget activity under WCC 61610. (Note: Power cost repayment accounting is a separate activity and should not be confused with the programming and execution WCC procedures.)

**f. O&M Power Costs in the Pacific Northwest.** Pursuant to the 5 December 1997 Memorandum of Agreement between the Department of Energy, acting by and through the Bonneville Power Administration (BPA), and the Department of the Army, entitled "Direct Funding of Power Operations and Maintenance Costs at Corps Projects", BPA will direct fund O&M Power Costs for Corps projects with hydroelectric power generation facilities for which BPA is the designated Federal power marketing agency. O&M Power Costs include hydropower-specific O&M costs, the power portion of joint O&M activities, and power capital items. The Northwestern Division will prepare an Annual Power Budget in conjunction with the Bonneville Power Administration that specifies O&M Power Costs for each applicable project. A five year Power Budget which includes annual power budgets for five consecutive fiscal years will be developed in conjunction with the Bonneville Power Administration by the Northwestern Division for purposes of inclusion in the BPA rate base and to fund the Corps O&M power costs. O&M Power Costs in the Pacific Northwest will be entered into P2-Primavera Project Manager under a separate type of funds classification (Bonneville Power Appropriation), and submitted concurrently with the O&M program submittal to HQUSACE, in the appropriate funding increment. In addition, budget activities for joint activities will be split into two budget activities to reflect the appropriate

allocation of joint activity costs between the O&M and O&M Power Cost appropriations. Budget activities for the power portion of large capital joint activity costs require specific dispensation from ASA(CW) to be funded within the O&M appropriation.

**g. Budget Activities - Primary and Supporting Costs.** In developing a budget activity, all costs required to accomplish the work should be included. This includes the cost of the primary activity as well as all supporting activities that are required to accomplish the work. For example, a dredging budget activity should contain the cost of the actual dredging process plus the costs for before and after surveys, engineering and design, real estate requirements, contract supervision, water quality monitoring, etc. In this way, a complete and stand-alone decision package is developed, thereby avoiding situations where the primary work is funded without the necessary supporting activities, or vice versa. This process applies to all WCC-based budget activities.

**h. Operation and Maintenance Budget Activities.** A continuing effort is required to standardize designations of budget activities as either operation or maintenance-related. To provide uniform guidance for the appropriate placement of such budget activities within operation or maintenance Work Category Codes, detailed definitions of the operation and maintenance elements of each WCC are provided in **Table C-4-2**. In addition to these definitions, the following general principles should be applied. Operation budget activities may include maintenance that is of a recurring nature, and is integral to continued project operation. Examples include things such as custodial services, removing ice and snow, debris, trash, cleaning; relapsing lighting fixtures, routine testing of lubricating and hydraulic oils; replacing packing in valves and glands; replacing electrical brushes and touch-up painting, etc. This work is performed on an annual basis, typically by hired labor or small contract (service contract, purchase order, etc.). All other maintenance work, specifically, non-recurring and non-routine maintenance, should be placed under maintenance Work Category Codes. It is the nature of the work itself which dictates where it should be placed. That is, annual recurring costs for annual recurring work, such as custodial services, belongs under operations Work Category Codes, while annual recurring costs for non-recurring work items, (e.g., minor roof repairs one year, placing signs and markers, painting of guardrails, wall striping, repainting comfort stations, etc.), belong under maintenance Work Category Codes.

**i. Appropriate Levels of Budget Activity Justification.** In a performance-based program, every budget activity must relate to an improvement in performance or results, that is, in the outputs or outcomes created by the Business Line. These linkages and the necessity of the budget activity to performance goal attainment must be made clear to all levels of reviewers, both internal and external (e.g., OMB or Congress) to the Corps. The impacts of the budget activity on specific areas of customer service, project performance, infrastructure investment, personnel or public safety, the local community, statutory requirements, or other considerations should be included in the funding argument if not covered in the performance measures.

**j. Well-Written Descriptions and Funding Arguments.** Care should be taken to write all descriptions and funding arguments clearly and concisely so that the reader can understand and appreciate the work for which funds are being requested. Well-written justifications are essential to convince reviewers who are not familiar with the work to fund your needs.

**C-2-4. Funding Considerations.** Several adjustments are made to your program after it has been submitted to HQUSACE based on coordination with ASA(CW) and OMB staff. These adjustments depend upon what is included in your program. The MSC's should ensure that every legitimate O&M need is included and properly prioritized within each Business Line so that their final program is based on the complete needs of the MSC.

C-2-5. **Special Interest Items.** In order to highlight specific activities, special interest items are defined. In each Program Year. HQUSACE may add to or delete special interest items as needed in each Program Year. Special interest items are not additional funding levels and any given budget activity may fall into all, none, or any number of special interest item categories. Activity codes are added to P2-Primavera Project Manager for each special interest item required for the PY budget. No special interest items are identified for the PY.

TABLE C-2-2	
Special Interest Items	
	N/A
	N/A

C-2-6. **Operation and Maintenance Unfunded Reporting Requirements.** District and MSC offices are encouraged to develop complete operation and maintenance programs so that they might better anticipate future program management requirements. It is important that all justified requirements funded or unfunded, be identified, so that in the event that additional resources are made available for infrastructure preservation, appropriate funding prioritization decisions can be made about budget activities which may originally have appeared to be below the funding level. Identification of unfunded requirements is critical in order to understand and quantify the condition of the water resources infrastructure, and the quality of associated services. It is equally important that the identified unfunded requirements be a realistic assessment of requirements, and not a "wish list" of nice-to-have enhancements. All requirements within district capability should be included (i.e. they must be executable within the Program Year).

a. **Unfunded Requirements.** Unfunded Requirements are defined as those unfunded operation and maintenance work items which are required and should have been funded in the PY in order to provide reasonable assurance that project performance goals can continue to be met and that undue risk of failure is avoided. It may occur in any Business Line and is not limited to infrastructure-related budget activities. Deferred maintenance of a project feature or deferred update of a project exhibit for instance, may both be valid examples of unfunded requirements.

b. **High Priority Unfunded Requirements.** [[HOW ARE THESE IDENTIFIED]] High Priority Unfunded Requirements are a primary concern of respective congressional delegations. MSCs need to be prepared to provide a prioritized listing of unfunded requirements if additional resources were to be made available.

C-2-7. **Cost Estimates.**

a. **Projections.** Field offices will compute costs based on PY-1 cost projections. All cost estimates will be projected to levels based on inflation factors and assumptions provided in the main part of this EC.

b. **Rounding.** All cost estimates shall be rounded to the nearest one thousand dollars (\$1000). Because of serious complications in aggregating functional, regional and national summaries, it is imperative that everyone at all levels strictly adhere to this requirement without exception.

#### C-2-8. Rank Assignments.

a. **Work Groupings.** The smallest increment of work for O&M programming purposes is a work item or task. Examples of tasks are trash pickup at a recreation area, mowing a levee, or painting a lock gate. In P2 tasks at the same project and within the same Work Category Code may be grouped into budget activities if they are of comparable criticality or priority, for example, maintenance of 15 of 30 recreation sites during May through September or painting lock gates at locks 1-4.

b. **Rankings.** As described in paragraph C-2-16, budget activities in each Business Line will be assigned to a maximum of **five** Business Line increments. Ranking of individual budget activities will be assigned by the district and MSC across all Business Lines. For each project all Increment 1 budget activities will be ranked higher than the budget activities in the next-added Business Line increment. A budget activity in the next-added increment for a high value project/activity can be ranked higher than the initial increment budget activities at less valued projects/activities. To better ensure appropriate rank, each budget activity will contain a code indicating the Business Line increment where the budget activity belongs.

c. **Final Rankings.** Development of final rankings should be an iterative process that employs all the knowledge and support tools available to the decision maker. In developing the national program, HQUSACE will generally rely on the final rankings assigned by the MSC in OFA provided they meet the business line increment definitions and overall policy. It is therefore important that rank assignments be made in accordance with the relative importance of the work so as to ensure that the highest priority activities can be accomplished within available resource limits. Ranking of work items within the business line increments will follow the priorities for operation and maintenance work items. Each budget activity should be assigned to the appropriate Business Line increment based on consistent and objective application of the Business Line increment definitions and performance measures established for the applicable Business Line. See Business Line Appendices for guidance on ranking budget activities for each program.

C-2-9. **Navigation Projects.** Beginning in FY87, all shallow-draft harbors previously financed as a part of a through-waterway in the inland river systems were, and will continue to be, programmed as separate projects. These projects include all activities on each spur or side channel of the old project and exclude only those activities on the main through channel.

C-2-10. **Bridge Performance.** Bridges are vital to the nation's highway and transportation systems, especially high-level highway bridges over waterways and canals. Bridges are also mission critical for flood risk management projects as well as for public access in our recreation and environmental stewardship lands. The criteria used to prioritize the funding of maintenance of Corps-owned bridges include (1) Federal Highway Administration's (FHWA) Sufficiency Rating, (2) Mission Critical Bridge Structures, such as service bridges to dam control towers (3) Environmental Issues, such as lead based paint remediation, (4) Life and Public Safety Concerns and (5) General Bridge Condition Appraisals.

C-2-11. **Marginal Projects.** For projects, or segments of projects, that have marginal benefits, special care should be taken to ensure that all resource requests are economically justified. If sufficient study detail is not yet available to develop appropriate funding recommendations, program requests should be held to levels below historic amounts. Major repairs not essential to structural integrity in the PY should be postponed. Operation activities should be constrained to the lowest level possible.

EC 11-2-199  
31 Mar 10

**C-2-12. Evaluation Reports.** Dredged Material Management Plans (DMMP's) for dredged material disposal facilities at operating navigation projects will be funded in the O&M account. Evaluation Reports and/or assessments for deficiency correction, and Rehabilitations are funded in the O&M account.

**C-2-13. Cultural Resources.** (NAGPRA/Curation). Funding requirements for activities to ensure compliance with Section 5 – 7 of the Native American Graves Protection and Repatriation Act (NAGPRA) (PL 101-601) and with 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, will be budgeted as a Remaining Items activity by HQUSACE thus should not be included in the general MSC program submittal. Specific guidance on program year activities will be provided in annual guidance by the Mandatory Center of Expertise (MCX) on how and when to make requests for funding of activities to ensure compliance with Section 5 – 7 of NAGPRA and with CRF Part 79. All of the requirements will be aggregated by the MCX into the program as a separate line item. All annual maintenance curation costs and cultural resource management costs, other than NAGPRA, should be included in the appropriate Work Category Code, within project work packages.

**C-2-14. Special Recreation Use Fees (SRUF).** Funds generated from collecting recreation use fees are returned in O&M appropriations for operation, maintenance and improvement of recreation sites and facilities. The construction of new recreation facilities or renovation and/or improvement of existing facilities may be accomplished with these funds if the goal of providing quality public recreation experiences with the most cost efficient management of water resource development projects can be met. Overall budgetary limitations should be carefully considered in determining what activities will be financed with these funds. Routine operation and maintenance of existing sites and facilities should not be compromised to finance new construction or facility improvements. SRUF funded work previously programmed in WCC 60512 and 61512 should now be programmed in WCC 60511 and 61511.

**C-2-15. Program Development.** The Corps Civil Works program will be developed in increments by Business Line from a zero base. The proposed work included in each increment will be evaluated against the performance criteria specified for each Business Line. The initial increment should provide the greatest benefit for the investment consistent with performance measures. Each subsequent increment should be ordered by the performance benefits to be gained versus the cost of the work contained in the increment.

**C-2-16. Business Line Increments Limits.** For consistency in the formulation of the Civil Works budget across Business Lines, across appropriations and across Districts, guidelines on the development of work increments are presented in paragraph 8 of the main text, the Definition/Glossary section of the main text, and within the business line appendixes. Remember that increments can facilitate ranking, but they are not used to rank or prioritize activities. Performance metrics will be used to set funding priorities. An integrated O&M program will be developed by each MSC where Increments 1 and 2 are limited to 75% of the total average of the prior 5 years. This integrated program applies to all business lines and no business line is reserved an individual 75%. It will be the MSC's decision to allocate to business lines within the integrated 75% program limit. Table C-2-3 **displays 75% values of** the 5-year average of the O&M President's Budget amount by MSC. The philosophy is to use Increment 1 as the minimum level to account for critical routine activities (both operations and maintenance) and to use Increment 2 to account for critical non-routine activities on our high performing projects.

TABLE C-2-3

75 percent of prior five fiscal year average budgets for Increments 1 & 2 by MSC (Dollars in Thousands)	
MSC	Amounts
LRD	322,449
MVD	300,005
NAD	154,844
NWD	199,895
POD	18,762,
SAD	252,842
SPD	104,007
SWD	264,393
<b>TOTAL</b>	<b>1,617,196</b>

C-2-17. **Recreation Budget Evaluation System (Rec-BEST)**. This web-based tool has been developed for field use in calculating Recreation performance measure outputs for O&M activities. Rec-BEST must be used to support ranking PY Recreation O&M and MR&T budget packages. Using Rec-BEST, Recreation budget activities (as defined by Work Category Codes) may be combined to create budget packages. Recreation budget activities will be evaluated individually based upon their performance values. All the budget packages will be matched into the corresponding increments in P2 and separated by "Budget Item" (BEST\_ID) in P2 to assure the proper performance measures can be linked to each budget item in OFA. Please see Appendix VI, Recreation, for additional information about budget development for the Recreation Business Line.

C-2-18. **Environment-Stewardship Budget Evaluation System (E-S BEST)**. This web-based tool has been developed for field use in calculating Environment-Stewardship performance measure outputs for O&M activities. E-S BEST must be used to support ranking PY Environment-Stewardship O&M and MR&T budget packages. Using E-S BEST, Environment-Stewardship budget activities (as defined by Work Category Codes) may be combined to create budget packages. A budget package is to contain all the budget activities that are necessary to produce a specified and quantified performance output. Performance outputs values will be calculated for all budget packages created in E-S BEST, using information provided by the Operations Manager or appropriate project budget developer. E-S BEST will support the ranking of all the Environment-Stewardship budget packages at the District, MSC, and HQ levels. Environment-Stewardship budget packages will be grouped into increments in accord with the definitions provided in the main portion of the EC. All the budget packages will be matched into the corresponding increments in P2 and separated by "Budget Item" (BEST\_ID) in P2 to assure the proper performance measures can be linked to each budget item in OFA. See Sub-Appendix II-3, Environment-Stewardship for additional information about budget development for the Environment-Stewardship Business Line..

EC 11-2-199  
31 Mar 10

C-2-19. **Projects Previously Funded in Construction.** The PY-1 Civil Works budget included five types of previously funded Construction activities in the Operation and Maintenance account. These activities will again be budgeted in Construction for the PY, see the Construction Annex for treatment of these activities. The five activities are **Biological Opinions, Rehabilitations, Dredged Material Disposal Facilities (DMDFs), Beneficial Uses of Dredged Material, and Renourishment to Restore Sand Lost to Shorelines from Federal Navigation O&M.**

C-2-20. **Deficiency Corrections.** All deficiencies at Corps of Engineers operated and maintained projects will be corrected using O&M funds.

C-2-21. **Additional Information.**

a. **Database System.** P2 will be used to submit data for the O&M program. For guidance and instructions on use of P2 refer to paragraph 14 in the main EC, and the document named "CW Program Budget Submission (PBS) Training Workbook" which can be obtained from a link on the P2 OFA-CW opening screen.

b. **Correction of Program Submittals.** As in past years, districts and MSCs will be asked to make any necessary corrections through automated program systems after HQUSACE review. If a district or MSC is asked to make corrections, the database will be reopened to allow access for updating.

c. **Points of Contact.**

TABLE C-2-4		
Contacts for General/Miscellaneous Items		
Question(s) Referring To	Office	Telephone
Policies, procedures, or format of the Project O&M activity.	CECW-IP	202-761- 4103 fax 202-761-4370
Automated input for the same activity	CECW-IN	202-761 4215 fax 202-761- 5295
Programs Management staff coordination of Congressional submission of the O&M program.	CECW-IP	202-761- 4103 fax 202-761-4370 <b>(e-mail preferred)</b>
Curation\Native American Graves Protection Act (NAGPRA)	CECW-PC-NWD	202-761- 4618

TABLE C-2-5			
Contacts for Performance Measures for O&M Program Submittal			
ENTRY #	PROPONENT MANAGER	BUSINESS FUNCTION	PERFORMANCE MEASURE
1	CECW-CO 202-761-8648	Navigation	Percent Time Achieve Purpose – Coastal
2	CECW-CO 202-761-8648	Navigation	Percent Time Achieve Purpose – Inland
3	CECW-CP 202-761-4669	Flood Risk Management	Availability
4	CECW-CO 202-761-4889	Hydropower	Forced Outage
5	CECW-CO 202-761-4889	Hydropower	Peak Season Availability
6	CECW-CO 202-761-0036	Recreation	Recreation Unit Day Availability
7	CECW-CO 202-761-0036	Recreation	Facility Condition Index
8	CECW-CO 202-761-0036	Recreation	NED Benefit
9	CECW-CO 202-761-1228 202-761-4704	Environment – Stewardship	Percent of Minimum Level One Natural Resources Inventory Completed
10	CECW-CO 202-761-4704	Environment – Stewardship	Percent of Healthy and Sustainable Acres on Corps Property
11	CECW-CO 202-761-4704	Environment- Stewardship	Mitigation Land Meeting Requirements
12	CECW-CO 202-761-4704	Environment- Stewardship	Percent of Corps-Operated Projects with Master Plans in Compliance with ER 1130-2-550
13	CECW-CO 202-761-4722	Environmental – Compliance	a. Significant Findings Corrected b. Major Findings Corrected c. Assessments Scheduled and Completed

EC 11-2-199  
31 Mar 10

C-2-22. **Submission Requirements.** Submission time schedules for automated data and hard copies are listed in Table 2 of the main text.

## SUB-ANNEX C-3

### Operation and Maintenance National Emergency Preparedness Program (NEPP)

C-3-1. **General.** Through the use of the Evaluation and Corrective Action Program and other similar assessment tools, every effort should be made to ensure that your current state of organizational readiness is maintained in a manner which assures that your capability to support the nation in a national emergency is sustained. National Emergency Preparedness Program (NEPP) activities to be programmed are Local Preparedness (Continuity of Operations) 903-510, National Preparedness (primarily the development of Catastrophic Disaster Response Plans (CDRP)) 903-520, Facilities (903-530), the Emergency Water Program (903-540), Continuity of Government (903-550), and NEPP Training/Exercises (903-560). Overall program priorities are:

- Preparedness Plans and SOPs (including CDRP's, COOP, COG)
- Program Management
- Exercises and Training
- Emergency Facilities (EOC)

Field organizations should not anticipate any significant mid-year fiscal relief from HQUSACE (CECS-HS) for personnel or other program costs. MSC's should critically review subordinate district requirements to ensure consistency with overall priorities. If necessary, MSC's should propose reprogramming within the Division to accomplish highest priority efforts.

#### C-3-2. **General Program.**

a. **National Emergency Preparedness Program (Code 903-500).** This feature series includes those civil administrative, supervisory and procurement activities at each USACE activity that are concerned solely with developing and maintaining a high state of preparedness for national emergency operations of the Corps of Engineers Civil Works functions.

b. **Continuity of Operations (Code 903-510).** This feature series applies to USACE oriented Continuity of Operations (COOP) preparedness planning. Activities in this category include those associated with the identification of specific USACE reconstitution missions, the analysis of required resources, the establishment of organizational and operational procedures, the preparation and publication of contingency plans, and the participation in exercises related to USACE emergency relocation and reconstitution missions as a result of either a natural or manmade disaster. Planning items should include but are not limited to: command succession, identification of alternate relocation/alternate headquarters site(s) (NEPP does not support funding for the acquisition of space), development of appropriate crisis relocation team(s), identification and storage of duplicate emergency files, and other considerations necessary to ensure minimum downtime of the affected organization. This also includes, in conjunction with other appropriate offices, the development of a framework for the individual plans that address the continued operation of Corps civil works projects.

c. **National Preparedness Planning (Code 903-520).** This feature series consists of activities and services which provide the Corps with the capability to ensure that MSC's and districts can provide support for the nation during national emergency events other than reconstitution. Included are those activities associated with the identification of the USACE national emergency missions, the establishment of organizational and operational procedures, the preparation and publication of catastrophic disaster response plans. Also included is the necessary planning coordination with related Federal, state, and local entities. Efforts include, but are not limited to, the following:

EC 11-2-199  
31 Mar 10

- (1) Technological and other manmade disasters.
- (2) Anti and Counter Terrorism.
- (3) Military Support to Civil Authorities, including the development of catastrophic disaster response plans.
- (4) Command, Control, Communications and Computers (C4).
- (5) Individual Mobilization Augmentee (IMA) Program Management. IMA management associated solely with disaster response and the development and maintenance of disaster related TDAs.
- (6) Port Readiness. Activities associated with maintenance of navigable waterways.
- (7) Resource Management and Administration. Requirements associated with programming, personnel management, and reports.

d. **Emergency Operations Center Support (Code 903-530).** This feature consists of the exclusive use of space which supports Emergency Operations Centers (EOCs). Included are those activities associated with the operation and maintenance in support of the facilities (rent, supplies, equipment, etc.). This class does not include any labor charges. The EOC will be funded on a joint basis between NEPP and other readiness programs.

e. **Emergency Water Program (Code 903-540).** This applies to requirements of Executive Order (E.O.) 12656 (For Headquarters, U.S. Army Corps of Engineers (HQUSACE only).

f. **Continuity of Government (Code 903-550).** Defined as plans to support Federal Emergency Management Agency (FEMA) and other Federal, state and local agencies in their efforts to reestablish civil authority lost as a result of natural or manmade disaster or an attack on the United States (HQUSACE and only as directed).

g. **Catastrophic Disaster Training and Exercises (Code 903-560).** The development of and participation in catastrophic disaster exercises and training in the inter- and intra-agency arena. The development and participation in evaluation and corrective action programs related to catastrophic disasters will be funded under this class.

C-3-3. **Cost Estimates.** Estimates should include overhead costs for both PY-1, PY, and PY+n. PY-1 figures should reflect any recommended increases from the PY-1 program request.

C-3-4. **Recommended Funding Level.** PY-1 and PY funding levels for all series other than Code 903-520 are expected to be no higher than PY-2 levels, (Code 903-520 funding will be based upon specific scenario based CDRP assignments). MSC's will establish priorities for each major level of effort and identify those areas which cause recommended division/district programs to exceed funding levels defined. Requirements above PY-2 allocations should be specifically addressed. Salary costs for MSC Emergency Management Chiefs are to be funded under the Expenses appropriation, not Operation and Maintenance, or Flood Control and Coastal Emergencies appropriation accounts.

C-3-5. **Submission Requirements.** Districts will fill out the spreadsheet shown in Table C-3-1 below and provide to their MSC. MSC's will submit consolidated District lists and submit to HQUSACE, Office of

Homeland Security, CECW-HS, not later than 26 June 10. HQUSACE will consolidate MSC's submissions. Although detailed breakdowns of MSC and district programs for PY + n years are not required, districts will provide estimates to division headquarters to justify total programs for PY + n. Questions regarding NEPP program management submissions can be addressed to Germaine Hofbauer, telephone: (202) 761-4970.

TABLE C-3-1

Work Plan Spreadsheet – NEPP



Table C-3-1 FINAL  
Revised Work Plans N



SUB-ANNEX C-4

Work Category Codes

C-4-1. O&M Work Category Codes- Numerically Ordered.

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
601-- <sup>1/</sup>	Operation for Navigation Functions
60110 **	Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Navigation
60120 <sup>1/</sup>	Studies and Surveys for Navigation
60121*	Studies and Surveys
60122	Major Rehabilitation Evaluation Reports
60123	Environmental Studies and Monitoring for Dredging Purposes
60130 <sup>1/</sup>	Dam Safety for Navigation
60131**	Instrumentation, Data Collection and Analysis
60132*	Formal Periodic Inspections and Reports
60133	Dam Safety Assurance Studies
60140 <sup>1/</sup>	Water Management (Control and Quality) Activities for Navigation
60141	Water Management (Control and Quality) Activities - Analysis and Studies for Navigation
60142	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Navigation
60150*	Real Estate Management for Navigation
60160	Environmental Compliance Management for Navigation
60190 <sup>1/</sup>	Facility Security for Navigation
60191	Facility Security Assessments for Navigation
60192	Facility Security Guards, Monitoring Activities for Navigation
602-- <sup>1/</sup>	Operation for Flood Risk Management Functions
60210**	Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Flood Risk Management
60220 <sup>1/</sup>	Studies and Surveys for Flood Risk Management
60221	Studies and Surveys
60222	Major Rehabilitation Evaluation Reports
60223*	Inspections of Completed Works - Local Protection Projects
60230 <sup>1/</sup>	Dam Safety for Flood Risk Management
60231**	Instrumentation, Data Collection and Analysis

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60232*	Formal Periodic Inspections and Reports
60233	Dam Safety Assurance Studies
60240 <sup>1/</sup>	Water Management (Control and Quality) Activities for Flood Risk Management
60241	Water Management (Control and Quality) Activities - Analysis and Studies for Flood Risk Management
60242	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Flood Risk Management
60250*	Real Estate Management for Flood Risk Management
60260	Environmental Compliance Management for Flood Risk Management
60290 <sup>1/</sup>	Facility Security for Flood Risk Management
60291	Facility Security Assessments for Flood Risk Management
60292	Facility Security Guards, Monitoring Activities for Flood Risk Management
603-- <sup>1/</sup>	Operation for Hydropower Functions
60310 <sup>1/</sup>	Operation of Dams, Power Plants, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
60311**	Operations - Supervision and Engineering
60312**	Hydraulic Expenses
60313**	Electric Expenses
60314**	Miscellaneous Hydraulic Power Generation Expenses
60320 <sup>1/</sup>	Studies and Surveys for Hydropower
60321	Studies and Surveys - Supervision and Engineering
60322	Studies and Surveys - Hydraulic Expenses
60323	Studies and Surveys – Electric Expenses
60324	Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses
60325	Major Rehabilitation Evaluation Reports
60330 <sup>1/</sup>	Dam Safety for Hydropower
60331**	Instrumentation, Data Collection and Analysis
60332*	Formal Periodic Inspections and Reports
60333	Dam Safety Assurance Studies
60340 <sup>1/</sup>	Water Management (Control and Quality) Activities for Hydropower
60341	Water Management (Control and Quality) Activities - Analysis and Studies for Hydropower

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60342	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Hydropower
60350*	Real Estate Management for Hydropower
60360	Environmental Compliance Management for Hydropower
60390 <sup>1/</sup>	Facility Security for Hydropower
60391	Facility Security Assessments for Hydropower
60392	Facility Security Guards, Monitoring Activities for Hydropower
604-- <sup>1/</sup>	Operation for Environmental Stewardship Functions
60410 <sup>1/</sup>	Operation for Environmental Stewardship
60411	Management of Natural Resources for Environmental Stewardship
60412	Management and Curation of Archeological and Cultural Resources
60413	Management of Natural Resources Mitigation Features
60414	Fisheries Management - Operation of Fish Hatcheries
60415	Fisheries Management – Fish Hauling Activities and Fish Passage Structures
60416	Comprehensive Master Plans
60417	Shoreline Management
60418	Management of Special Status Species for Environmental Stewardship
60419	Pest Management for Environmental Stewardship
60420 <sup>1/</sup>	Studies, Surveys and Inventories for Environmental Stewardship
60421	Studies, Surveys and Inventories for Environmental Stewardship
60422	Inspection of Ecosystem Restoration Projects
60430	Reserved
60440 <sup>1/</sup>	Water Management (Control and Quality) Activities for Environmental Stewardship
60441	Water Management (Control and Quality) Activities - Analysis and Studies for Environmental Stewardship
60442	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Environmental Stewardship
60450*	Real Estate Management for Environmental Stewardship
60460	Environmental Compliance Management for Environmental Stewardship
60490 <sup>1/</sup>	Facility Security for Environmental Stewardship
60491	Facility Security Assessments for Environmental Stewardship

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60492	Facility Security Guards, Monitoring Activities for Environmental Stewardship
605-- <sup>1/</sup>	Operation for Recreation Functions
60510 <sup>1/</sup>	Operation for Recreation
60511**	Operation/management of Recreation Areas/facilities, Reservoirs, Service Facilities and Equipment, Etc. for Recreation
60513	Law Enforcement - Costs and Supervision of Law Enforcement Agreements
60514	Operation/management of Visitor Centers
60520	Studies and Surveys for Recreation
60530	Reserved
60540 <sup>1/</sup>	Water Management (Control and Quality) Activities for Recreation
60541	Water Management (Control and Quality) Activities - Analysis and Studies for Recreation
60542	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Recreation
60550*	Real Estate Management for Recreation
60560	Environmental Compliance Management for Recreation
60590 <sup>1/</sup>	Facility Security for Recreation
60591	Facility Security Assessments for Recreation
60592	Facility Security Guards, Monitoring for Recreation
606-- <sup>1/</sup>	Joint Activities for Operations (Cat/Class 300 Multipurpose Hydropower Projects ONLY)
60610**	Joint Costs for Operations Activities
60620 <sup>1/</sup>	Joint Costs for Studies and Surveys
60621*	Joint Costs for Studies and Surveys
60622	Joint Costs for Major Rehabilitation Evaluation Reports
60630 <sup>1/</sup>	Joint Costs for Dam Safety Activities
60631**	Joint Costs for Instrumentation, Data Collection and Analysis
60632*	Joint Costs for Formal Periodic Inspections and Reports
60633	Joint Costs for Dam Safety Assurance Studies
60640 <sup>1/</sup>	Joint Costs for Water Management (Control and Quality) Activities
60641	Joint Costs for Water Management (Control and Quality) Activities – Analysis and Studies
60642	Joint Costs for Water Management (Control and Quality) Activities –

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	Operation of Water Control Data Systems
60650*	Joint Costs for Real Estate Management Activities
60660	Joint Costs for Environmental Compliance Management Activities
60690 <sup>1/</sup>	Joint Costs for Facility Security Activities
60691	Joint Costs for Facility Security Assessments
60692	Joint Costs for Facility Security Guards, Monitoring Activities
60710 <sup>1/</sup>	National Emergency Preparedness Program (NEPP)
60711	NEPP Continuity of Operations
60712	NEPP National Preparedness Planning
60713	NEPP Support of Emergency Ops Ctrs
60714	NEPP Emergency Water Program
60715	NEPP Continuity of Government
60716	NEPP Training and Exercises
608-- <sup>1/</sup>	Operation for Water Supply Functions
60810 <sup>1/</sup>	Operation for Water Supply
60811	Operation of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply
60812	Water Supply Agreements
60820	Studies and Surveys for Water Supply
611— <sup>1/</sup>	Maintenance for Navigation Functions
61110	Maintenance of Locks, Dams, Reservoirs, Levees, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Navigation
61120 <sup>1/</sup>	Dredging for Navigation
61121	Dredging Activities for Navigation
61122	Construction and Maintenance of Dredged Material Disposal Facilities for Navigation
61130	Dam Safety Remediation of Deficiencies for Navigation
61140	Purchase/maintenance of Water Management (Control and Quality) Equipment for Navigation
61150 <sup>1/</sup>	Real Estate for Navigation
61151	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Navigation
61152	Resolution of Real Estate Encroachments for Navigation
61153	Boundary Monumentation and Rectification for Navigation

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
61160	Environmental Compliance (Remedial Actions) for Navigation
61170	Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Navigation
61190 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Navigation
61191	Facility Security Maintenance and Replacement for Navigation
61192	Facility Security Physical Improvements and Modifications for Navigation
612— <sup>1/</sup>	Maintenance for Flood Risk Management Functions
61210 <sup>1/</sup>	Maintenance for Flood Risk Management
61211	Maintenance of Dams, Reservoirs, Other Structures, Service Facilities, permanent Operating Equipment, Etc. for Flood Risk Management
61212	Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for the Mississippi River and Tributaries (MR&T)
61220 <sup>1/</sup>	Dredging for Flood Risk Management
61221	Dredging Activities for Flood Risk Management
61222	Construction and Maintenance of Dredged Material Disposal Facilities for Flood Risk Management
61230	Dam Safety Remediation of Deficiencies for Flood Risk Management
61240	Purchase/maintenance of Water Management (Control and Quality) Equipment for Flood Risk Management
61250 <sup>1/</sup>	Real Estate for Flood Risk Management
61251	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Flood Risk Management
61252	Resolution of Real Estate Encroachments for Flood Risk Management
61253	Boundary Monumentation and Rectification for Flood Risk Management
61260	Environmental Compliance (Remedial Actions) for Flood Risk Management
61290 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Flood Risk Management
61291	Facility Security Maintenance and Replacement for Flood Risk Management
61292	Facility Security Physical Improvements and Modifications for Flood

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	Risk Management
613— <sup>1/</sup>	Maintenance for Hydropower Functions
61310 <sup>1/</sup>	Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
61311	Maintenance Supervision for Hydropower
61312	Maintenance of Hydraulic Structures for Hydropower
61313	Maintenance of Electric Plant for Hydropower
61314	Maintenance of Miscellaneous Hydraulic Plant for Hydropower
61320	Dredging Activities for Hydropower
61330	Dam Safety Remediation of Deficiencies for Hydropower
61340	Purchase/maintenance of Water Management (Control and Quality) Equipment for Hydropower
61350 <sup>1/</sup>	Real Estate for Hydropower
61351	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Hydropower
61352	Resolution of Real Estate Encroachments for Hydropower
61353	Boundary Monumentation and Rectification for Hydropower
61360	Environmental Compliance (Remedial Actions) for Hydropower
61370 <sup>1/</sup>	Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Hydropower
61371	Comprehensive Replacement Supervision
61372	Comprehensive Replacement of Structures
61373	Comprehensive Replacement of Electric Plant
61374	Comprehensive Replacement of Miscellaneous Hydraulic Plant
61390 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Hydropower
61391	Facility Security Maintenance and Replacement for Hydropower
61392	Facility Security Physical Improvements and Modifications for Hydropower
614— <sup>1/</sup>	Maintenance for Environmental Stewardship Functions
61410 <sup>1/</sup>	Maintenance for Environmental Stewardship
61411	Maintenance of Natural Resources Facilities for Environmental Stewardship
61412	Mitigation of Archeological and Cultural Resources
61413	Maintenance of Natural Resources Mitigation Features for

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	Environmental Stewardship
61414	Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures
61418	Maintenance for Special Status Species for Environmental Stewardship
61420 <sup>1/</sup>	Dredging for Environmental Stewardship
61421	Dredging Activities for Environmental Stewardship
61422	Construction and Maintenance of Dredged Material Disposal Facilities for Environmental Stewardship
61430	Reserved
61440	Purchase/maintenance of Water Management Equipment (Control and Quality) for Environmental Stewardship
61450 <sup>1/</sup>	Real Estate for Environmental Stewardship
61451	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Environmental Stewardship
61452	Resolution of Real Estate Encroachments for Environmental Stewardship
61453	Boundary Monumentation and Rectification for Environmental Stewardship
61460	Environmental Compliance (Remedial Actions) for Environmental Stewardship Features
61490 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Environmental Stewardship
61491	Facility Security Maintenance and Replacement for Environmental Stewardship
61492	Facility Security Physical Improvements and Modifications for Environmental Stewardship
615— <sup>1/</sup>	Maintenance for Recreation Functions
61510 <sup>1/</sup>	Maintenance for Recreation
61511	Maintenance of Recreation Facilities, Other Operating Equipment, Etc.
61513	Cost Shared Recreation Developments
61514	Maintenance of Visitor Centers
61515	Modernization of Recreation Features
61520	Dredging Activities for Recreation
61530	Reserved
61540	Purchase/maintenance of Water Management Equipment (Control

TABLE C-4-1	
WORK CATEGORY CODES - NUMERICALLY ORDERED (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	and Quality) for Recreation
61550 <sup>1/</sup>	Real Estate for Recreation
61551	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Recreation
61552	Resolution of Real Estate Encroachments for Recreation
61553	Boundary Monumentation and Rectification for Recreation
61560	Environmental Compliance (Remedial Actions) for Recreation
61590 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Recreation
61591	Facility Security Maintenance and Replacement for Recreation
61592	Facility Security Physical Improvements and Modifications for Recreation
616— <sup>1/</sup>	Joint Activities for Maintenance (Cat/Class 300 Multipurpose Hydropower Projects ONLY)
61610	Joint Costs for Maintenance Activities Excluding Dredging
61620 <sup>1/</sup>	Joint Costs for Dredging
61621	Joint Costs for Dredging Activities
61622	Joint Costs for Construction and Maintenance of Dredged Material Disposal Facilities
61630	Joint Costs for Dam Safety Remediation of Deficiencies
61640	Joint Costs for Water Management Equipment Activities
61650 <sup>1/</sup>	Joint Costs for Real Estate Activities
61651	Joint Costs for Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits
61652	Joint Costs for Resolution of Real Estate Encroachments
61653	Joint Costs for Boundary Monumentation and Rectification
61660	Joint Costs for Environmental Compliance (Remedial Actions) Activities
61690 <sup>1/</sup>	Joint Costs for Facility Security Physical Improvements, Modifications, Maintenance and Replacement
61691	Joint Costs for Facility Security Maintenance and Replacement
61692	Joint Costs for Facility Security Physical Improvements and Modifications
618-- <sup>1/</sup>	Maintenance for Water Supply Functions
61810	Maintenance of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply

EC 11-2-199  
31 Mar 10

Footnotes:

1/ SUMMARY COST ACCOUNT/WORK CATEGORY CODE - Costs may not be charged directly to these accounts.

NOTE: PERIODIC INSPECTIONS AND REPORTS, AND INSTRUMENTATION, DATA COLLECTION AND ANALYSIS are to be included in the minimum program for the project to meet minimum legal responsibilities for operations and safety. This footnote applies to the work category codes 60131, 60132, 60231, 60232, and 60331, 60332, 60631 and 60632.

\*Work Category Codes marked with an asterisk require added data in project work description, justification statement, or output measures.

\*\*Although Work Category Codes marked with double asterisk require no description or funding argument, requested resources will be in consonance with the funding increment and prior year experience.

**C-4-2. O&M Work Category Codes- Alphabetically Ordered.**

TABLE C-4-2 WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Boundary Monumentation and Rectification for Environmental Stewardship	61453
Boundary Monumentation and Rectification for Flood Risk Management	61253
Boundary Monumentation and Rectification for Hydropower	61353
Boundary Monumentation and Rectification for Navigation	61153
Boundary Monumentation and Rectification for Recreation	61553
Comprehensive Master Plans	60416
Comprehensive Replacement of Electric Plant	61373
Comprehensive Replacement of Miscellaneous Hydraulic Plant	61374
Comprehensive Replacement of Structures	61372
Comprehensive Replacement Supervision	61371
Construction and Maintenance of Dredged Material Disposal Facilities for Flood Risk Management	61222
Construction and Maintenance of Dredged Material Disposal Facilities for Environmental Stewardship	61422
Construction and Maintenance of Dredged Material Disposal Facilities for Navigation	61122
Cost Shared Recreation Developments	61513
Dam Safety Assurance Studies	60333
Dam Safety Assurance Studies	60133
Dam Safety Assurance Studies	60233
Dam Safety for Flood Risk Management	60230 <sup>1/</sup>

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Dam Safety for Hydropower	60330 <sup>1/</sup>
Dam Safety for Navigation	60130 <sup>1/</sup>
Dam Safety Remediation of Deficiencies for Flood Risk Management	61230
Dam Safety Remediation of Deficiencies for Hydropower	61330
Dam Safety Remediation of Deficiencies for Navigation	61130
Dredging Activities for Environmental Stewardship	61421
Dredging Activities for Flood Risk Management	61221
Dredging Activities for Hydropower	61320
Dredging Activities for Navigation	61121
Dredging Activities for Recreation	61520
Dredging for Environmental Stewardship	61420 <sup>1/</sup>
Dredging for Flood Risk Management	61220 <sup>1/</sup>
Dredging for Navigation	61120 <sup>1/</sup>
Electric Expenses	60313**
Environmental Compliance (Remedial Actions) for Environmental Stewardship Features	61460
Environmental Compliance (Remedial Actions) for Flood Risk Management	61260
Environmental Compliance (Remedial Actions) for Hydropower	61360
Environmental Compliance (Remedial Actions) for Navigation	61160
Environmental Compliance (Remedial Actions) for Recreation	61560
Environmental Compliance Management for Environmental Stewardship	60460
Environmental Compliance Management for Flood Risk Management	60260
Environmental Compliance Management for Hydropower	60360
Environmental Compliance Management for Navigation	60160
Environmental Compliance Management for Recreation	60560
Environmental Studies and Monitoring for Dredging Purposes	60123
Facility Security Assessments for Environmental Stewardship	60491
Facility Security Assessments for Flood Risk Management	60291
Facility Security Assessments for Hydropower	60391
Facility Security Assessments for Navigation	60191
Facility Security Assessments for Recreation	60591
Facility Security for Environmental Stewardship	60490 <sup>1/</sup>
Facility Security for Flood Risk Management	60290 <sup>1/</sup>

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Facility Security for Hydropower	60390 <sup>1/</sup>
Facility Security for Navigation	60190 <sup>1/</sup>
Facility Security for Recreation	60590 <sup>1/</sup>
Facility Security Guards, Monitoring Activities for Environmental Stewardship	60492
Facility Security Guards, Monitoring Activities for Flood Risk Management	60292
Facility Security Guards, Monitoring Activities for Hydropower	60392
Facility Security Guards, Monitoring Activities for Navigation	60192
Facility Security Guards, Monitoring Activities for Recreation	60592
Facility Security Maintenance and Replacement for Navigation	61191
Facility Security Physical Improvements and Modifications for Navigation	61192
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Navigation	61190 <sup>1/</sup>
Facility Security Maintenance and Replacement for Flood Risk Management	61291
Facility Security Physical Improvements and Modifications for Flood Risk Management	61292
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Flood Risk Management	61290 <sup>1/</sup>
Facility Security Maintenance and Replacement for Hydropower	61391
Facility Security Physical Improvements and Modifications for Hydropower	61392
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Hydropower	61390 <sup>1/</sup>
Facility Security Maintenance and Replacement for Environmental Stewardship	61491
Facility Security Physical Improvements and Modifications for Environmental Stewardship	61492
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Environmental Stewardship	61490 <sup>1/</sup>
Facility Security Maintenance and Replacement for Recreation	61591
Facility Security Physical Improvements and Modifications for Recreation	61592
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Recreation	61590 <sup>1/</sup>
Fisheries Management – Fish Hauling Activities and Fish Passage Structures	60415
Fisheries Management - Operation of Fish Hatcheries	60414
Formal Periodic Inspections and Reports	60232*

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Formal Periodic Inspections and Reports	60332*
Formal Periodic Inspections and Reports	60132*
Hydraulic Expenses	60312**
Inspection of Ecosystem Restoration Projects	60422
Inspections of Completed Works - Local Protection Projects	60223*
Instrumentation, Data Collection and Analysis	60131**
Instrumentation, Data Collection and Analysis	60231**
Instrumentation, Data Collection and Analysis	60331**
Joint Activities for Maintenance	616— <sup>1/</sup>
Joint Activities for Operations (Cat/Class 300 Multipurpose Hydropower Projects ONLY)	606— <sup>1/</sup>
Joint Costs for Boundary Monumentation and Rectification	61653
Joint Costs for Construction and Maintenance of Dredged Material Disposal Facilities	61622
Joint Costs for Dam Safety Activities	60630 <sup>1/</sup>
Joint Costs for Dam Safety Assurance Studies	60633
Joint Costs for Dam Safety Remediation of Deficiencies	61630
Joint Costs for Dredging	61620 <sup>1/</sup>
Joint Costs for Dredging Activities	61621
Joint Costs for Environmental Compliance (Remedial Actions) Activities	61660
Joint Costs for Environmental Compliance Management Activities	60660
Joint Costs for Facility Security	60690 <sup>1/</sup>
Joint Costs for Facility Security Assessments	60691
Joint Costs for Facility Security Guards, Monitoring Activities	60692
Joint Costs for Facility Security Physical Improvements, Modifications, Maintenance and Replacement	61690 <sup>1/</sup>
Joint Costs for Facility Security Maintenance and Replacement	61691
Joint Costs for Facility Security Physical Improvements and Modifications	61692
Joint Costs for Formal Periodic Inspections and Reports	60632*
Joint Costs for Instrumentation, Data Collection and Analysis	60631**
Joint Costs for Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits	61651
Joint Costs for Maintenance Activities Excluding Dredging	61610
Joint Costs for Major Rehabilitation Evaluation Reports	60622

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Joint Costs for Operations Activities	60610**
Joint Costs for Real Estate Activities	61650 <sup>1/</sup>
Joint Costs for Real Estate Management Activities	60650*
Joint Costs for Resolution of Real Estate Encroachments	61652
Joint Costs for Studies and Surveys	60621*
Joint Costs for Studies and Surveys	60620 <sup>1/</sup>
Joint Costs for Water Management (Control and Quality) Activities - Operation of Water Control Data Systems	60642
Joint Costs for Water Management (Control and Quality) Activities - Analysis and Studies	60641
Joint Costs for Water Management (Control and Quality) Activities	60640 <sup>1/</sup>
Joint Costs for Water Management Equipment Activities	61640
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Flood Risk Management	61251
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Environmental Stewardship	61451
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Navigation	61151
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Recreation	61551
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Hydropower	61351
Law Enforcement – Costs and Supervision of Law Enforcement Agreements	60513
Maintenance for Environmental Stewardship	61410 <sup>1/</sup>
Maintenance for Environmental Stewardship Functions	614— <sup>1/</sup>
Maintenance for Flood Risk Management	61210 <sup>1/</sup>
Maintenance for Flood Risk Management Functions	612— <sup>1/</sup>
Maintenance for Hydropower Functions	613— <sup>1/</sup>
Maintenance for Navigation Functions	611— <sup>1/</sup>
Maintenance for Recreation	61510 <sup>1/</sup>
Maintenance for Recreation Functions	615— <sup>1/</sup>
Maintenance for Water Supply Functions	608— <sup>1/</sup>
Maintenance of Dams, Reservoirs, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Flood Risk Management	61211
Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for	61212

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
the Mississippi River and Tributaries (MR&T)	
Maintenance of Electric Plant for Hydropower	61313
Maintenance of Electric Plant for Hydropower	6131_
Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures	61414
Maintenance of Hydraulic Structures for Hydropower	61312
Maintenance of Locks, Dams, Reservoirs, Levees, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Navigation	61110
Maintenance of Miscellaneous Hydraulic Plant for Hydropower	61314
Maintenance of Miscellaneous Hydraulic Plant for Hydropower	61314
Maintenance of Natural Resources Facilities for Environmental Stewardship	61411
Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	61310 <sup>1/</sup>
Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	61310 <sup>1/</sup>
Maintenance of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply	61810
Maintenance of Recreation Facilities, Other Operating Equipment, Etc.	61511
Maintenance of Special Status Species for Environmental Stewardship	61418
Maintenance of Visitor Centers	61514
Maintenance of Natural Resources Mitigation Features for Environmental Stewardship	61413
Maintenance Supervision for Hydropower	61311
Major Rehabilitation Evaluation Reports	60122
Major Rehabilitation Evaluation Reports	60325
Major Rehabilitation Evaluation Reports	60222
Management and Curation of Archeological and Cultural Resources	60412
Management of Natural Resources for Environmental Stewardship	60411
Management of Special Status Species for Environmental Stewardship	60418
Management of Natural Resources Mitigation Features	60413
Miscellaneous Hydraulic Power Generation Expenses	60314**
Mitigation of Archeological and Cultural Resources	61412
Modernization of recreation Features	61515
National Emergency Preparedness Program (NEPP)	60710 <sup>1/</sup>
NEPP Management and Operations	60711

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
NEPP Requirements Analysis and Studies	60712
NEPP Support of Emergency Ops Ctr	60713
NEPP Training and Exercises	60716
Operation for Environmental Stewardship	60410 <sup>1/</sup>
Operation for Environmental Stewardship Functions	604— <sup>1/</sup>
Operation for Flood Risk Management Functions	602— <sup>1/</sup>
Operation for Hydropower Functions	603— <sup>1/</sup>
Operation for Navigation Functions	601— <sup>1/</sup>
Operation for Recreation	60510 <sup>1/</sup>
Operation for Recreation Functions	605— <sup>1/</sup>
Operation for Water Supply	60810 <sup>1/</sup>
Operation for Water Supply Functions	608— <sup>1/</sup>
Operation of Dams, Power Plants, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	60310 <sup>1/</sup>
Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Flood Risk Management	60210**
Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Navigation	60110 **
Operation of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply	60811
Operation/management of Recreation Areas/facilities, Reservoirs, Service Facilities and Equipment, Etc. for Recreation	60511**
Operation/management of Visitor Centers	60514
Operations - Supervision and Engineering	60311**
Pest Management for Environmental Stewardship	60419
Purchase/maintenance of Water Management (Control and Quality) Equipment for Navigation	61140
Purchase/maintenance of Water Management (Control and Quality) Equipment for Flood Risk Management	61240
Purchase/maintenance of Water Management (Control and Quality) Equipment for Hydropower	61340
Purchase/maintenance of Water Management Equipment (Control and Quality) for Environmental Stewardship	61440
Purchase/maintenance of Water Management Equipment (Control and Quality) for Recreation	61540
Real Estate for Environmental Stewardship	61450 <sup>1/</sup>

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Real Estate for Flood Risk Management	61250 <sup>1/</sup>
Real Estate for Hydropower	61350 <sup>1/</sup>
Real Estate for Navigation	61150 <sup>1/</sup>
Real Estate for Recreation	61550 <sup>1/</sup>
Real Estate Management for Environmental Stewardship	60450*
Real Estate Management for Flood Risk Management	60250*
Real Estate Management for Hydropower	60350*
Real Estate Management for Navigation	60150*
Real Estate Management for Recreation	60550*
Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Hydropower	61370 <sup>1/</sup>
Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Navigation	61170
Reserved	60530
Reserved	61530
Reserved	60430
Reserved	61430
Resolution of Real Estate Encroachments for Environmental Stewardship	61452
Resolution of Real Estate Encroachments for Flood Risk Management	61252
Resolution of Real Estate Encroachments for Hydropower	61352
Resolution of Real Estate Encroachments for Navigation	61152
Resolution of Real Estate Encroachments for Recreation	61552
Shoreline Management	60417
Studies and Surveys	60121*
Studies and Surveys	60221
Studies and Surveys - Electric Expenses	60323
Studies and Surveys - Hydraulic Expenses	60322
Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses	60324
Studies and Surveys - Supervision and Engineering	60321
Studies and Surveys for Flood Risk Management	60220 <sup>1/</sup>
Studies and Surveys for Hydropower	60320 <sup>1/</sup>
Studies and Surveys for Navigation	60120 <sup>1/</sup>
Studies and Surveys for Recreation	60520
Studies and Surveys for Water Supply	60820

TABLE C-4-2	
WORK CATEGORY CODES - ALPHABETICALLY ORDERED	
DESCRIPTION	WORK CATEGORY CODE
Studies, Surveys and Inventories for Environmental Stewardship	60421
Studies, Surveys and Inventories for Environmental Stewardship	60420 <sup>1/</sup>
Water Management (Control and Quality) Activities - Analysis and Studies for Flood Risk Management	60241
Water Management (Control and Quality) Activities - Analysis and Studies for Environmental Stewardship	60441
Water Management (Control and Quality) Activities - Analysis and Studies for Recreation	60541
Water Management (Control and Quality) Activities - Analysis and Studies for Navigation	60141
Water Management (Control and Quality) Activities - Analysis and Studies for Hydropower	60341
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Environmental Stewardship	60442
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Flood Risk Management	60242
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Recreation	60542
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Navigation	60142
Water Management (Control and Quality) Activities – Operation of Water Control Data Systems for Hydropower	60342
Water Management (Control and Quality) Activities for Environmental Stewardship	60440 <sup>1/</sup>
Water Management (Control and Quality) Activities for Flood Risk Management	60240 <sup>1/</sup>
Water Management (Control and Quality) Activities for Hydropower	60340 <sup>1/</sup>
Water Management (Control and Quality) Activities for Navigation	60140 <sup>1/</sup>
Water Management (Control and Quality) Activities for Recreation	60540 <sup>1/</sup>
Water Supply Agreements	60812

Footnotes:

1/ SUMMARY COST ACCOUNT/WORK CATEGORY CODE - Costs may not be charged directly to these accounts.

2/ PERIODIC INSPECTIONS AND REPORTS, AND INSTRUMENTATION, DATA COLLECTION, AND ANALYSIS are to be included in the minimum program for the project to meet minimum legal responsibilities for operations and safety. this footnote applies to the work category codes 60131, 60132, 60231, 60232, and 60331, 60332, 60631 and 60632.

\*Work Category Codes marked with an asterisk require added data in project work description, justification statement, or output measures.

\*\*Although Work Category Codes marked with double asterisk require no description or funding argument, requested resources will be in consonance with the funding increment and prior year experience.

### C-4-3. O&M Work Category Codes - Matrixes and Definitions.

a. **Operation Work Category Code Matrix by Business Line.** See Table 4-3.a.

b. **Maintenance Work Category Code Matrix by Business Line.** See Table 4-3.b.

**Note:** Table 4-3a and Table 4-3.b. Maintenance Work Category Code Matrix (by Business Line). See embedded excel file below.

TABLES C-4-3a and C-4-3b

Maintenance Work Category Matrix



Table C-4-3a-3b  
FINAL.xls

c. **Work Category Codes and Definitions – O&M Operations Account.** The Operation functions are broken down into Work Category Codes, together with a description of work to be performed. See Table C-4-4 below.

TABLE C-4-4

Work Category Codes and Definitions  
Operations Accounts By Business Program:

Navigation (601--)  
Flood Risk Management (602--)  
Hydropower (603--)  
Environmental Stewardship (604--)  
Recreation (605--)  
Joint Activities (606--)  
NEPP (607--)  
Water Supply (608--)

A Breakdown of Work Category Codes (WCCs) and descriptions under these functions is on the following pages:

EC 11-2-199  
31 Mar 10

WORK CATEGORY CODE: **60110** – Operations for Navigation

WORK CATEGORY DESCRIPTION: Operations of Locks, Dams, Reservoirs, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for navigation features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of lock gates and/or associated equipment; maintaining lock records; removing debris, ice and snow, cleanup of lock facilities; routine adjusting of meters, relays, instruments, radios and regular equipment; lubrication of equipment;

of dam structures and appurtenant equipment such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes all costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to perform reservoir inspections and patrols, removal and control of trash and debris (major periodic or one-time removal of growth and debris from the reservoir should be recorded in Work Category Code 61110); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities; insect control and elimination of health and safety hazards; of project-owned permanent facilities such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery are charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories. This activity includes costs of buildings, grounds and utilities related to the operation of the Los Angeles-Long Beach and San Francisco Bay hydraulic models located in South Pacific Division and it does not include costs associated with recreation facilities and areas which will be included in Work Category Code 60511; of all tools and equipment, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project-owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles; for prevention of obstructive and injurious deposits at NAD projects as authorized by the Act approved 29 June 1888, as amended, including all costs for surveillance at harbors, channels, waterfront construction

sites, and at overboard ocean dumping sites, costs to administer outstanding enforcement actions on prior noted violations of Federal statutes, and any costs required for ground or aerial surveillance.

WORK CATEGORY CODE: **60121** – Studies and Surveys for the Navigation Function

WORK CATEGORY DESCRIPTION: Studies and Surveys including project condition surveys, dredging studies, etc. for navigation features.

Includes all costs to perform surveys for the purpose of determining elevation, grade and sedimentation conditions in navigation projects, investigation of sunken vessels, and to prepare dredging studies. For program management purposes, all projects with funding requirements (dredging or otherwise) under the Non-deferrable levels should have any needed surveys programmed under the project name. All other surveys should be programmed in aggregation under PWID 14600: Project Condition Surveys. Funding for PWID 14600: Project Condition Surveys, will be adjusted after overall dredging program levels are determined.

WORK CATEGORY CODE: **60122** - Studies and Surveys for Navigation - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for navigation features.

Includes all costs to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60123** - Studies and Surveys for Navigation - Environmental Studies and Monitoring for Dredging Purposes

WORK CATEGORY DESCRIPTION: Environmental Studies and Monitoring for Dredging Purposes.

Includes all costs for environmental studies and monitoring for dredging purposes including all costs of study and analysis activities associated with long range environmental activities related to waterways. These activities are needed to ensure that appropriate information and requirements are fulfilled so that E&D for dredging can be completed on a timely basis. Dredged Material Management Plans (DMMPs) are included in this Work Category. Environmental requirements to perform maintenance dredging of Federal channels (e.g. water quality certification, bio-assays, water quality testing, Environmental Impact Statements, and environmental assessments) should also be included in this Work Category.

WORK CATEGORY CODE: **60131** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Navigation Function

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to navigation features.

Includes all costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60132** - Formal Periodic Inspections and Reports for Dam Safety related to the Navigation Function

EC 11-2-199  
31 Mar 10

**WORK CATEGORY DESCRIPTION:** Formal Periodic Inspections and Reports for Dam Safety related to navigation features.

Includes all costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

- (a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.
- (b) Public Bridges.
- (c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.
- (d) Other projects where known conditions warrant inspections at a frequency more often than normal including revetments, dikes, groins, breakwaters, jetties, seawalls, piers and other similar structures provided in seas, lakes, rivers, canals, exposed tidal waters and harbors.

**WORK CATEGORY CODE:** **60133** - Dam Safety Assurance Studies related to the Navigation Function

**WORK CATEGORY DESCRIPTION:** Dam Safety Assurance Studies for Dam Safety related to navigation features.

Includes all costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

**WORK CATEGORY CODE:** **60141** - Water Management (Control and Quality) Activities for Navigation - Analysis and Studies

**WORK CATEGORY DESCRIPTION:** Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for navigation features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60142.

**WORK CATEGORY CODE:** **60142** - Water Management (Control and Quality) Activities for Navigation - Operation of Water Control Data Systems

**WORK CATEGORY DESCRIPTION:** Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for navigation features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies, and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61140.

**WORK CATEGORY CODE:** **60150** - Real Estate Management for the Navigation Function

**WORK CATEGORY DESCRIPTION:** Real Estate Management including Compliance, and Utilization Inspections for navigation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

**WORK CATEGORY CODE:** **60160** - Environmental Compliance Management for the Navigation Function

**WORK CATEGORY DESCRIPTION:** Environmental Compliance Management for navigation features.

Includes all Navigation operational costs to comply with applicable Federal environmental laws and regulations, including the National Environmental Policy Act (NEPA), Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment (external or internal). Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance operational activities related to the Navigation function. Includes costs associated with the following activities environmental compliance activities for maintenance shops supporting Navigation; environmental baseline inspection of outgrants and right-of-ways on lands allocated for operations; required personnel environmental training; development and update of required environmental plans for spill prevention, hazard communication, pollution prevention, hazardous material management; storage and handling of petroleum-oil & lubricants and preparation of pesticide reports and corresponding documentation. Includes costs associated with implementation and maintaining an Environmental Management System (EMS) which may be cost shared with other

EC 11-2-199  
31 Mar 10

functions. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60170**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60180**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60191** – Facility Security Assessments for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for navigation features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for navigation features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60192, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61190.

WORK CATEGORY CODE: **60192** – Facility Security Guards, Monitoring Activities for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for navigation features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60191, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61190.

WORK CATEGORY CODE: **60210** - Operations for Flood Risk Management

WORK CATEGORY DESCRIPTION: Operations of Dams, Reservoirs, Levees, Hurricane Barrier Gates, and Other Flood Risk Management Non-Dam Structures, Pumping Plants, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for flood risk management features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of dam structures and appurtenant equipment such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes all costs for dam safety/failure training of project personnel,

preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to perform reservoir inspections and patrols, removal and control of trash and debris (major periodic or one-time removal of growth and debris from the reservoir should be recorded under Work Category Code 61210); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities, insect control and elimination of health and safety hazards; of levees, hurricane barrier gates, and other gated non-dam flood risk management structures; vegetation control on flood risk management structures; removal of snow and ice from structures;

of pumping plants, pumps and associated equipment; collecting and maintaining operational records; routine replacement, purification and testing of insulating, lubricating and hydraulic oils; lubricants and lubricating equipment; minor maintenance of electrical equipment, cleaning, testing, and adjustment of motor starters, relays, meters, and similar equipment; minor maintenance and repair of pumps, motors, engines, trash raking equipment, gate hoists, gates, fire fighting, and other equipment required for operation; minor maintenance of buildings, roads, and grounds; removal of debris, ice, and snow;

of project-owned permanent facilities such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery are charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories. This activity does not include costs associated with recreation facilities and areas which will be included in Work Category Code 60511;

of all tools and equipment, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project-owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles.

Does not include specific Water Supply activities as in the past. Water Supply activities including that required by water supply contracts, collections including delinquencies and the renegotiation of existing water supply contracts are now included in WCCs 60811 and 60812.

WORK CATEGORY CODE: **60221** - Studies and Surveys for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Non-Navigation Project Condition Studies, including Dredging

EC 11-2-199  
31 Mar 10

Studies, for flood risk management features.

Includes all costs to prepare reconnaissance reports or studies related to the maintenance and rehabilitation of Civil Works projects such as foundation reports, embankment criteria, O&M manuals, sediment surveys at flood risk management projects, surveillance of northern boundary waters, and hydraulic model analyses prior to the engineering and design phase. Does not include Water Supply reallocation study costs as in the past. Water Supply reallocation study costs are now included in WCC 60820.

WORK CATEGORY CODE: **60222** - Studies and Surveys for Flood Risk Management - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for flood risk management features.

Includes all costs to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60223** – Studies, Surveys and Inspections of Completed Works - Local Protection Projects

WORK CATEGORY DESCRIPTION: Studies, Surveys and Inspections of Local Protection Projects for flood risk management features.

Includes all costs related to the inspection of Federally constructed, locally operated and maintained projects to ensure compliance with local cooperative agreements. This Work Category does not include costs for projects covered by PL 84-99. Includes all costs for technical review and approval of sponsor-proposed alterations, improvements, excavation or construction within the limits of the project right-of-way; advice given to sponsors related to the effects of such activities on the function/operation of the project and information on acceptable construction methods; all costs to update O&M Manuals; initial funding of reconnaissance or evaluation reports; and PED for major rehabilitation, dam safety assurance, deficiency correction and reconstruction as applicable until Construction (C) funds are allocated.

WORK CATEGORY CODE: **60231** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to flood risk management features.

Includes all costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60232** - Formal Periodic Inspections and Reports for Dam Safety related to the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to flood risk management features.

Includes all costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60233** - Dam Safety Assurance Studies related to the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety related to flood risk management features.

Includes all costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60241** - Water Management (Control and Quality) Activities for Flood Risk Management - Analysis and Studies

**60241** - Water Management (Control and Quality) Activities for Flood Risk Management - Analysis and Studies

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60242.

WORK CATEGORY CODE: **60242** - Water Management (Control and Quality) Activities for Flood Risk Management - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for flood risk management features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and

EC 11-2-199  
31 Mar 10

other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies, and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61240.

WORK CATEGORY CODE: **60250** - Real Estate Management for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for flood risk management features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of, and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government. Includes reconciliation of financial records with flood risk management land and mineral lease receipts, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60260** - Environmental Compliance Management for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for flood risk management features.

Includes all Flood Risk Management operational costs to comply with applicable Federal environmental laws and regulations, including the National Environmental Policy Act (NEPA), Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment, external and internal. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance operational activities related to the Flood Risk Management Function. Includes costs associated with the following activities environmental compliance activities for maintenance shops supporting Flood Risk Management; environmental baseline inspection of outgrants and right-of-ways on lands allocated for operations; required personnel environmental training; development and update of required environmental plans for spill prevention, hazard communication, pollution prevention, hazardous material management; underground storage tanks, storage and handling of pesticides and petroleum-oil & lubricants. Includes costs associated with implementation and maintaining an Environmental Management System (EMS) which may be cost shared with other business lines. Includes costs associated with implementation and maintaining an Environmental Management System (EMS) which may be cost shared with other functions. Costs include salaries, training, materials,

supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. This Work Category also includes all costs for the management and curation of Orphan Collections and archeological materials collected from early local protection projects and subsequently turned over to local sponsors for operation and maintenance. All other costs for management and curation of archeological resources are included in Work Category Code 60412.

WORK CATEGORY CODE: **60270**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60280**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60291** – Facility Security Assessments for Flood Risk Management

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for flood risk management features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for flood risk management features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60292, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61290.

WORK CATEGORY CODE: **60292** – Facility Security Guards, Monitoring Activities for Flood Risk Management

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for flood risk management features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60291, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61290.

WORK CATEGORY CODE: **60310 (60311-60314)** - Hydropower Operations. Costs for this function will be sub-divided as follows:

**60311** - Hydropower Operations - Supervision and Engineering, FERC #535. Costs for labor, materials and other expenses incurred in the general supervision of the operation of hydraulic generating stations. Direct supervision of specific activities will be charged to the appropriate accounts;

**60312** - Hydropower Operations - Hydraulic Expenses, FERC #537. Costs for labor, materials and other expenses incurred in operating power intake works whether or not the powerhouse is an integral part of the intake dam;

EC 11-2-199  
31 Mar 10

**60313** - Hydropower Operations - Electric Expenses, FERC #538. Costs for labor, materials and other expenses incurred in operating turbines, generators, auxiliary apparatus, switchgear and other electric equipment to the point where electricity leaves for transmission by the marketing agency or other project. Keeping plant logs and records, and preparing reports of operation are included herein;

**60314** - Hydropower Operations - Miscellaneous Hydraulic Power Generation Expenses, FERC #539. Costs for labor, materials and other expenses not specifically provided for in other power plant operation accounts. Includes costs for custodial and other administrative services.

WORK CATEGORY DESCRIPTION: Operations of Power Plants.

Includes specific costs for the general supervision and engineering associated with the operation; routine materials, supplies, equipment and transportation costs; associated hired labor and contract support; and other costs: :

of power plants including hydraulic generating stations, and their associated power intake structures, turbines, generators, auxiliary apparatus, switchgear, and other electrical or electronic equipment to the point where electricity leaves for transmission by the marketing agency or project. Includes miscellaneous costs such as custodial, administrative services and training power plant trainees including labor. Costs not specific to hydropower will be included in Work Category Code 60610.

WORK CATEGORY CODE: **60320 (60321-60324)** - Studies and Surveys for the Hydropower Function Costs for this function will be sub-divided as follows:

**60321** - Studies and Surveys - Supervision and Engineering, FERC #535. Costs for labor, materials and other expenses incurred in the general supervision of the operation of hydraulic generating stations. Direct supervision of specific activities will be charged to the appropriate accounts;

**60322** - Studies and Surveys - Hydraulic Expenses, FERC #537. Costs for labor, materials and other expenses incurred in operating power intake works whether or not the powerhouse is an integral part of the intake dam;

**60323** - Studies and Surveys - Electric Expenses, FERC #538. Costs for labor, materials and other expenses incurred in operating turbines, generators, auxiliary apparatus, switchgear and other electric equipment to the point where electricity leaves for transmission by the marketing agency or other project;

**60324** - Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses, FERC #539. Costs for labor, materials and other expenses not specifically provided for in other power plant operation accounts.

WORK CATEGORY DESCRIPTION: Studies and Surveys for hydropower features.

Includes all costs to prepare reconnaissance reports or studies related to the maintenance and rehabilitation of hydropower projects such as foundation reports, embankment criteria, O&M manuals, sediment surveys and hydraulic model analyses prior to the engineering and design phase.

WORK CATEGORY CODE: **60325** - Studies and Surveys for Hydropower - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for hydropower features.

Includes all costs for specific hydropower purposes to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60331** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to hydropower features.

Includes all specific costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60332** - Formal Periodic Inspections and Reports for Dam Safety related to Hydropower Activities, FERC #537

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to hydropower features.

Includes all specific costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60333** - Dam Safety Assurance Studies related to the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety activities related to hydropower features.

Includes all specific costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60341** - Water Management (Control and Quality) Activities for Hydropower - Analysis and Studies, FERC #537

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for hydropower features.

EC 11-2-199  
31 Mar 10

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60342.

WORK CATEGORY CODE: **60342** - Water Management (Control and Quality) Activities for Hydropower - Operation of Water Control Data Systems, FERC #537

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for hydropower features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61340.

WORK CATEGORY CODE: **60350** - Real Estate Management for the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for hydropower features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60360** - Environmental Compliance Management for the Hydropower Function, FERC #539

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for hydropower features.

Includes all Hydropower operational costs to comply with applicable Federal environmental laws and regulations, including the National Environmental Policy Act (NEPA) Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment, external and internal. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance operational activities. related to the Hydropower function. Includes costs associated with implementation and maintaining and Environmental Management System (EMS). Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60370**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60380**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60391** – Facility Security Assessments for Hydropower

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for hydropower features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for hydropower features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60392, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61390.

WORK CATEGORY CODE: **60392** – Facility Security Guards, Monitoring Activities for Hydropower

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for hydropower features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work

Category Code 60391, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61390.

EC 11-2-199  
31 Mar 10

WORK CATEGORY CODE: **60411** - Management of Natural Resources for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Management of Natural Resources and Operational Management Plans.

Includes all costs for the management and operations; of natural resources to foster healthy and sustainable lands and waters, including the conservation and protection of soil, water, wetland, forest, vegetation, waterfowl, fish and wildlife, grasslands and range, and other resources essential to the total management of specific projects; salaries, equipment, supplies; managing areas under license or outlease, spawning beds, fish shelters, fish and waterfowl impoundments; forest/woodland management activities, timber salvage (NOTE: Do not include commodity (e.g. timber, crops, sand) sales cost or other natural resources management activity costs that are expected to be funded by the proceeds from the sale of project commodities), timber trespass surveillance, timber cruising, stand improvement, development and maintenance of fire lines, forest fire suppression, prescribed burning and haul road maintenance; conducting vegetation plantings, fertilization, maintain riparian vegetation, establishing wildlife food plots, manipulating vegetation; conducting wildlife habitat preservation management or improvement activities; range management; erosion control; conducting citation authority programs outside developed recreation areas that involve the protection of natural resources; conducting interpretive programs for the stewardship of natural resources; and boundary surveillance and routine, recurring maintenance of boundary monumentation required for protection of managed stewardship lands or environmentally sensitive areas. This Work Category excludes costs associated with fish hatcheries and fish passage. Natural resources activities conducted for the enhancement of recreation areas, e.g. management or control of nuisance wildlife including geese, nutria, woodchucks, and swallows in recreation areas, will be charged to Work Category Code 60511; of Operational Management Plans, including all costs for salaries, supplies and materials, and equipment related to the preparation and updating of Operational Management Plans and supplements. Charges may include field units that perform data collection and analysis.

WORK CATEGORY CODE: **60412** - Management and Curation of Archeological and Cultural Resources

WORK CATEGORY DESCRIPTION: Management and Curation of Archeological and Cultural Resources.

Includes all costs for the management of, and annual maintenance curation costs for, archeological and cultural resources including identification, surveillance, studies, literature searches, reconnaissance surveys, inventory, subsurface testing, development and update of management plans and agreements for historical, archaeological and cultural resources, archeological and cultural resources outreach and educational programs, coordination with Tribal interests, operations activities associated with identified historical, archaeological and cultural resources, and enforcement of Title 36 Code of Federal Regulations, the National Historic Preservation Act of 1966, the Archeological Resources Protection Act of 1979 and other applicable laws and regulations. (Do not include funding requirements for activities to ensure compliance with Section 5-7 of the Native American Graves Protection and Repatriation Act (NAGPRA). These costs will be budgeted as a Remaining Items Activity. See para. C-2.13 of this Annex.). Costs for Orphan Collections are included in Work Category Code 60260.

WORK CATEGORY CODE: **60413** - Management of Natural Resources Mitigation Features

WORK CATEGORY DESCRIPTION: Management of Natural Resources Mitigation Features.

Includes all costs for the management and operations of authorized mitigation activities including costs to comply with mitigation requirements specified in Federal law, Congressional legislation, or in HQ

approved project authorization decision document, to offset unavoidable natural resources and ecological losses caused by the construction of the project or by project operation activities. This Work Category does not include acquisition costs.

WORK CATEGORY CODE: **60414** - Fisheries Management - Operation of Fish Hatcheries

WORK CATEGORY DESCRIPTION: Fisheries Management – Operation of Fish Hatcheries.

Includes all costs for salaries, equipment, supplies and all costs associated with the operation, of fish hatcheries, egg collecting stations and related facilities for provision of fish propagation. It excludes fisheries development activities included in Work Category Code 60411.

WORK CATEGORY CODE: **60415** - Fisheries Management - Fish Hauling Activities and Fish Passage Structures

WORK CATEGORY DESCRIPTION: Fisheries Management - Fish Hauling Activities and Fish Passage Structures.

Includes all costs associated with operation of facilities and equipment for collecting, trapping, transportation and passage of fish at dams and navigation facilities. Facilities include ladders, nets, elevators and locks. It excludes fisheries development activities included in Work Category Code 60411.

WORK CATEGORY CODE: **60416** - Comprehensive Master Plans

WORK CATEGORY DESCRIPTION: Preparation and Updating of Comprehensive Master Plans and Master Plan Supplementals.

Includes all costs to initiate new, or continue ongoing, comprehensive Master Plans, including all costs for salaries, supplies and materials, and equipment related to the preparation and updating of Master Plans and Master Plan Supplements. Charges may include field units that perform data collection and analysis.

WORK CATEGORY CODE: **60417** – Shoreline Management

WORK CATEGORY DESCRIPTION: Shoreline Management

Includes all costs associated with managing permits issued under authority of Title 36 CFR, the Shoreline management Program. Includes costs for salaries, contracts, supplies, materials and equipment.

WORK CATEGORY CODE: **60418** – Management of Special Status Species for Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Management of Special Status Species for Environmental Stewardship

Includes all environmental stewardship program function costs for management and operations to support special status species. Includes costs for salaries, contracts, supplies, materials, and equipment to manage the conservation and recovery of special status species such as Federally or state listed endangered, threatened, rare or sensitive species, including activities in areas under license, lease or outgrant. Includes activities to determine and document the state or condition of a resource or population (e.g. surveys, inventories); activities to increase understanding and appreciation of special status species such as interpretive programs, signs, surveillance activities, GPS/GIS mapping, marking populations boundaries and exclusion zones. Also includes costs to prepare or update Management Plans for Special Status Species, such as data collection and analysis, plan development, review and coordination.

EC 11-2-199  
31 Mar 10

WORK CATEGORY CODE: **60419** – Pest Management for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Pest Management

Includes all costs for management and operations to support integrated pest management activities for the health and sustainability of natural resources. Includes costs of salaries, contracts, supplies, materials, and equipment to control pests, control invasive exotic species, control noxious weeds and animals. Includes activities undertaken to determine the state or condition of a resource, or to determine population densities to assess the likelihood of resources damage by pests, and activities to increase understanding and appreciation of pest management activities.

WORK CATEGORY CODE: **60421** – Studies, Surveys and Inventories for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Natural Resources Studies, Surveys and Inventories for environmental stewardship features, including Fisheries and Wildlife Development Activities.

Includes all costs of fish and wildlife studies, including fish hauling and passage analyses to support long-range development and modification of existing structures, applicable to a specific project and pro rata share of basin-wide fish and wildlife studies; inventorying the natural resources base through Level One and Level Two Natural Resources Inventories; includes all costs to conduct surveys of fish and wildlife; and all costs to perform population dynamics and other studies.

WORK CATEGORY CODE: **60422** – Studies, Surveys and Inspections of Completed Works – Ecosystem Restoration

WORK CATEGORY DESCRIPTION: Studies, Surveys and Inspections of Ecosystem Restoration Features at Completed Projects Operated by Others.

Includes all costs related to the inspection of Federally constructed, locally operated and maintained projects to ensure compliance with Project Cooperative Agreements. Includes inspection of ecosystem restoration features, observations regarding compliance with any access or easement restrictions, and minimal documentation of the condition of the ecosystem. Includes all costs for technical review and approval of sponsor-proposed alterations, improvements, excavation or construction within the project boundaries; advice given to sponsors related to the effects of such activities on the function/operation of the project and information on acceptable construction methods; all costs to update O&M Manuals; initial funding of reconnaissance or evaluation reports; PED for deficiency correction and reconstruction as applicable until Construction (C) funds are allocated.

WORK CATEGORY CODE: **60430**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60441** - Water Management (Control and Quality) Activities for Environmental Stewardship - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for environmental stewardship features.

Includes all water management activity costs related to the conservation, protection, or enhancement of environmental stewardship features, e.g. natural aquatic communities, wetlands, including associated costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for

water control and quality activities in accordance with the current water control/quality plan. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60442.

WORK CATEGORY CODE: **60442** - Water Management (Control and Quality) Activities for Environmental Stewardship - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for environmental stewardship features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61440.

WORK CATEGORY CODE: **60450** - Real Estate Management for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for environmental stewardship features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for environmental stewardship program purposes such as fish and wildlife habitat management, disposal of timber (NOTE: Do not include commodity (e.g. timber, crops, sand) sales costs that are expected to be funded by the proceeds from the sale of project commodities) and selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, as they relate to natural resources utilization or lands managed for natural resources. The general granting of land use to others and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits not supporting the environmental stewardship mission shall, in most instances, be charged to the grantee as administrative costs, including NEPA documentation costs. In cases where it is in the public interest for the Corps to absorb the costs, those costs should be charged to the primary mission of the project such as flood risk management or navigation. Also includes the preparation of Report of Availability (ROAs); Environmental Baseline Surveys (EBSs); Finding of Suitability to Lease (FOSLs) or Finding of Suitability to Transfer (FOSTs) for real estate transactions when such action primarily concerns the stewardship of natural resources and fish and wildlife activities.

WORK CATEGORY CODE: **60460** - Environmental Compliance Management for the Environmental Stewardship Function

EC 11-2-199  
31 Mar 10

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for environmental stewardship features.

Includes all Environment Stewardship operational costs to comply with applicable Federal laws and regulations as they relate to the management of natural resources, including the National Environmental Policy Act (NEPA) Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. [Environment Stewardship program costs to comply with requirements of the Endangered Species Act (ESA) should be charged to WCC 60418.] Includes cost to complete portions of annual external or internal environmental compliance assessment that are related to natural features or lands managed for fish and wildlife in accordance with Federal, DOD and Corps of Engineers requirements as described in the ERGO/TEAM environmental assessment manuals. Environmental compliance and inspections associated with Recreation such as concession inspections, visitor center inspections, maintenance shops that service recreation areas, marina inspections shall be charged to 60560. Cost associated with compliance and inspections for facilities associated with dam operations, levee works, pump station or maintenance areas that serve these functions shall be charged to 60560. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60470**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60480**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60491** – Facility Security Assessments for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for environmental stewardship features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for environmental stewardship features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60492, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61490.

WORK CATEGORY CODE: **60492** – Facility Security Guards, Monitoring Activities for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for environmental stewardship features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60491, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61490.

WORK CATEGORY CODE: **60511** - Operations for the Recreation Function

**WORK CATEGORY DESCRIPTION:** Operations and Management of Recreation Areas and Facilities, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for recreation features.

Includes all costs for the management and operation; necessary materials, supplies, equipment, transportation and rental costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of recreation areas and facilities including all costs for salaries, per diem, travel, signs collecting and administering user fees, brochures, maps, participation in public and special events and exhibitions, costs of trash removal, cleanup, mowing, and gate or park attendants. Also includes operations costs for buildings, grounds, landscaping, removal of hazardous trees, control of vegetation, roads, bridges, parking areas, grills, tables, trails, playgrounds and permanent operating equipment utilized for recreation purposes;

to perform reservoir inspections and patrols for recreation purposes;

of project-owned permanent facilities for recreation purposes;

of all tools and permanent operating equipment including direct costs of automotive and other equipment assigned to the recreation function. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles.

Costs previously included in 60512, Operations and Management for the Recreation Function using Special Recreation Users Fee (SRUF) Funds, should be included here.

Costs previously included here for Visitor Centers operations and management should now be included in Work Category Code 60514.

**WORK CATEGORY CODE:**

60513 - Operations for the Recreation Function - Law Enforcement Agreements

**WORK CATEGORY DESCRIPTION:** Operations for recreation features - Costs and Supervision of Law Enforcement Agreements.

Includes all costs for cooperative agreements for law enforcement with states and their political subdivisions under PL 94-587, and all costs for technical and administrative charges, including project and district costs for administration of law enforcement agreements and activities.

**WORK CATEGORY CODE:** **60514** – Operation/management of Visitor Centers

**WORK CATEGORY DESCRIPTION:** Operations and Management of Visitors Centers.

Includes all costs for the management and operation; necessary materials, supplies, equipment, transportation and rental costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs of visitor centers. Includes all costs associated with visitor center operations, such as all personnel costs, custodial duties, supporting costs of cooperating associations, snow, ice and debris removal, lawn and shrubbery maintenance, landscaping, utilities, exhibits, grounds, heating and cooling systems, audio visual programs, building material, and equipment costs. These costs were formerly included in WCC 60511

**WORK CATEGORY CODE:** **60520** - Studies and Surveys for the Recreation Function

**WORK CATEGORY DESCRIPTION:** Studies and Surveys for recreation features.

EC 11-2-199  
31 Mar 10

Includes all costs to prepare visitor surveys, reports or studies related to the operation, maintenance and rehabilitation of recreation facilities.

WORK CATEGORY CODE: **60530**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60541** - Water Management (Control and Quality) Activities for Recreation - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for recreation features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60542.

WORK CATEGORY CODE: **60542** - Water Management (Control and Quality) Activities for Recreation - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for recreation features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61540.

WORK CATEGORY CODE: **60550** - Real Estate Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for recreation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property used for recreational purposes such as commercial concessions, public park and

recreation, quasi-public and group camps. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, power line, and communication rights-of-way and other uses covered by easement, licenses, and permits that impact the recreational features of a project. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrant's, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states) on lands that support the recreational features of a project. Includes costs of utilization inspections of real property used for recreation under the control of or subject to a service agreement with the Corps of the Government and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166) for lands that support the recreation program of a project.

WORK CATEGORY CODE: **60550** - Real Estate Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for recreation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60560** - Environmental Compliance Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for recreation features.

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for Recreation features. Includes all Recreational operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for recreation facilities and visitor centers. Includes cost to complete annual environmental compliance assessment, external and internal as inspections and findings related to recreational activities and in accordance with Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for recreation operations activities such as maintenance shops that support recreation, inspection of outgrants and concessions such as marinas, personnel training and management plans in spill prevention, hazard communication, pollution prevention, hazardous material,

EC 11-2-199  
31 Mar 10

water resources, storage and handling of oil and pesticide management that support recreational activities. Includes costs associated with implementing and maintaining an Environmental Management System (EMS) for the recreational activities and support facilities (may be cost shared with other functions). Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60570**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60580**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60591** – Facility Security Assessments for Recreation

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for recreation features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for recreation features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60592, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61590.

WORK CATEGORY CODE: **60592** – Facility Security Guards, Monitoring Activities for Recreation

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for recreation features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60591, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61590.

WORK CATEGORY CODE: **60610** - Joint Activities for Operations, FERC #535, #537, #538 and #539

WORK CATEGORY DESCRIPTION: Joint costs for Operations activities NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities may include the operation of Dams, Reservoirs, Levees, Other Non-Dam Multi-purpose Structures, Pumping Plants, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), gates, conduits, Permanent Operating Equipment, etc.

Includes all joint costs for the operation routine materials, supplies, equipment and transportation costs; hired labor and contract support associated with operations; and other costs:

of dam structures and appurtenant equipment such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to perform reservoir inspections and patrols, removal and control of trash and debris (excluding major periodic or one-time removal of growth and debris from the reservoir which should be included in maintenance accounts); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities, insect control and elimination of health and safety hazards;

of levees and other non-dam multi-purpose structures; vegetation control, removal of snow and ice from multi-purpose structures;

of pumping plants, pumps and associated equipment; collecting and maintaining operational records; routine replacement, purification and testing of insulating, lubricating and hydraulic oils; lubricants and lubricating equipment; minor maintenance of electrical equipment, cleaning, testing, and adjustment of motor starters, relays, meters, and similar equipment; minor maintenance of pumps, motors, engines, trash raking equipment, gate hoists, gates, fire fighting, and other equipment required for operation; minor maintenance of buildings, roads, and grounds; removal of debris, ice, and snow;

of project-owned permanent facilities such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Where space in other basic structures, such as a dam or powerhouse, is used in lieu of any above mentioned facilities, such allocated space is not separated from the basic structure. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery is charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories of all tools and equipment, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment not assigned to specific features. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles. Operating costs of permanent equipment assigned to specific functions will be charged to those functions.

EC 11-2-199  
31 Mar 10

WORK CATEGORY CODE: **60621** - Joint Activities for Studies and Surveys, FERC #535, #537, #538 and #539

WORK CATEGORY DESCRIPTION: Joint costs for Studies and Surveys including project condition surveys, dredging studies, etc. NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to perform studies or surveys for multi-purpose projects including sedimentation conditions and dredging studies.

WORK CATEGORY CODE: **60622** - Joint Activities for Studies and Surveys - Major Rehabilitation Evaluation Reports, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Studies and Surveys - Major Rehabilitation Evaluation Reports NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60631** - Joint Activities for Instrumentation, Data Collection and Analysis for Dam Safety, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs of Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60632** - Joint Activities for Formal Periodic Inspections and Reports for Dam Safety, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Formal Periodic Inspections and Reports for Dam Safety NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60633** - Joint Activities for Dam Safety Assurance Studies, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Dam Safety Assurance Studies NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60641** - Joint Activities for Water Management (Control and Quality) - Analysis and Studies, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Joint costs for data collection are included in Work Category Code 60642.

WORK CATEGORY CODE: **60642** - Joint Activities for Water Management (Control and Quality) - Operation of Water Control Data Systems, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Water Management (Control and Quality) Activities - Operation of Water Control Data Systems NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61640.

WORK CATEGORY CODE: **60650** - Joint Activities for Real Estate Management, FERC #539

EC 11-2-199  
31 Mar 10

**WORK CATEGORY DESCRIPTION:** Joint costs for Real Estate Management including Compliance, and Utilization Inspections NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government. Includes reconciliation of financial records with flood risk management land and mineral lease receipts, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

**WORK CATEGORY CODE:** **60660** - Joint Activities for Environmental Compliance Management, FERC #539

**WORK CATEGORY DESCRIPTION:** Joint costs for Environmental Compliance Management activities NOT specific to Navigation, Flood risk management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment, external or internal. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Includes costs associated with implementing and maintaining an Environmental Management System (EMS). Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included.

**WORK CATEGORY CODE:** **60670**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE:** **60680**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE:** **60691** – Joint Activities for Facility Security Assessments

**WORK CATEGORY DESCRIPTION:** Joint Costs for Facility Security – Assessments, reviews, studies

and analyses NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Joint costs for guards and surveillance activities are included in Work Category Code 60692, and joint costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61690.

WORK CATEGORY CODE: **60692** – Joint Activities for Facility Security Guards, Monitoring Activities

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Guards and Monitoring Activities NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Joint costs for assessments are included in Work Category Code 60691, and joint costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61690.

WORK CATEGORY CODE: **60711** - National Emergency Preparedness Program (NEPP) - Continuity of Operations

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Continuity of Operations activities.

Includes all costs required to develop, maintain and exercise Continuity of Operations Plans (COOP). Includes personnel and contracting costs for development of plans and Standard Operating Procedures (SOPs), training, participation in exercises and program management associated with USACE relocation and reconstitution missions as a result of either a natural or manmade (caused) disaster or emergency.

WORK CATEGORY CODE: **60712** - National Emergency Preparedness Program (NEPP) - National Preparedness Planning

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - National Preparedness Planning activities.

Includes all costs associated with, or in support of, deliberate planning for assigned catastrophic disaster response plans which ensure that Corps MSCs and districts can support the Nation during national emergency events. Includes personnel and contracting costs for deliberate planning, development of Standard Operating Procedures (SOPs), training, exercises, program management and coordination with related Federal, State, and local entities. Also includes costs associated with preparedness planning for Port Readiness and Military Assistance to Civil Disturbances.

WORK CATEGORY CODE: **60713** - National Emergency Preparedness Program (NEPP) - Support of Emergency Operations Centers (EOCs)

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Support of Emergency Operations Centers (EOCs)

EC 11-2-199  
31 Mar 10

WORK CATEGORY CODE: **60714** - National Emergency Preparedness Program (NEPP) -  
Emergency Water Program

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Emergency  
Water Program.

Includes all personnel and contracting costs for those activities required to execute E.O. 12656 related to  
the Emergency Water Program. (For HQUSACE use only.)

WORK CATEGORY CODE: **60715** - National Emergency Preparedness Program (NEPP) - Continuity  
of Government

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Continuity of  
Government.

Includes all personnel and contracting costs for those activities associated with Continuity of Government,  
including plans to support the Federal Emergency Management Agency (FEMA) and other Federal, State  
and local agencies in their efforts to reestablish civil authority lost as a result of natural or manmade  
(caused) disaster or an attack on the United States. (For HQUSACE use only as directed.)

WORK CATEGORY CODE: **60716** - National Emergency Preparedness Program (NEPP) - Training  
and Exercises

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Training and  
Exercises.

Includes all costs for the development of and the participation in catastrophic disaster training and  
exercises in the inter- and intra-agency arena.

WORK CATEGORY CODE: **60811** - Operations for Water Supply

WORK CATEGORY DESCRIPTION: Operations of Project Gates, Specific Water Supply Conduits,  
Permanent Operating Equipment, etc. for water supply features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs  
associated with operations; associated hired labor and contract support; routine materials and supplies;  
and other costs: of project gates, specific water supply conduits and permanent operating equipment  
specifically for water supply. Prior to FY07, these costs have been included in WCC 60210.

WORK CATEGORY CODE: **60812** - Water Supply Agreements

WORK CATEGORY DESCRIPTION: Development and Renegotiation of Water Supply Agreements.

Includes all labor and associated costs involved in the development of new water supply agreements and  
for costs required for existing water supply agreements such as billings and collections including  
delinquencies, lawsuits and modifications and renegotiations of such agreements. Prior to FY07, these  
costs have been included in WCC 60210.

WORK CATEGORY CODE: **60820** - Studies and Surveys for the Water Supply Function

WORK CATEGORY DESCRIPTION: Studies and Surveys for water supply features.

Includes all costs to prepare new or continuing reports associated with the reallocation of an existing project purpose to water supply. Prior to FY07, these costs have been included in WCC 60221.

EC 11-2-199  
31 Mar 10

d. **Work Category Codes and Definitions – O&M Maintenance Accounts.** The Maintenance functions are broken down into Work Category Codes, together with a description of work to be performed. See Table C-4-5 below

TABLE C-4-5

Work Category Codes and Definitions  
Maintenance Accounts By Business Line:

Navigation (611--)  
Flood Risk Management (612--)  
Hydropower (613--)  
Environmental Stewardship (614--)  
Recreation (615--)  
Joint Activities (616--)  
Reserved (617--)  
Water Supply (618--)

A Breakdown of Work Category Codes (WCCs) and descriptions under these functions is on the following pages:

WORK CATEGORY CODE:

61110 - Maintenance for the Navigation Function

WORK CATEGORY DESCRIPTION: Maintenance of Locks, Dams, Reservoirs, Dikes, Revetments, Breakwaters, Jetties, Seawalls, Piers, Levees and Similar Structures, Service Facilities, Permanent Operating Equipment, etc. excluding dredging activities for navigation features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities:

of lock and salt water control structures and facilities for passage of waterborne traffic, including gates, valve operating machinery, lock walls, and guide and guard-walls including dolphins within the lock approaches for tie up, guard, or guide purposes;

of facilities and equipment for dams, spillways, outlet works and auxiliary dams;

of reservoirs and facilities including floating trash booms, trash racks, erosion control, drainage, major periodic or one time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60110); rim grouting or mine sealing, etc., to prevent leakage;

of revetments, dikes, groins, breakwaters, jetties, seawalls, piers, levees and similar structures provided in seas, lakes, rivers, canals, exposed tidal waters, and harbors;

of non-dredging navigation channel maintenance including snagging, clearing, aquatic plant removal, removal of sunken vessels, drift removal, rock and other debris removal;

of buildings, grounds, utilities, and roads, railroads and bridges, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes direct costs for project utilities including electrical, gas, water, and sewer systems;

of permanent operating equipment;

of buildings, grounds and utilities that are part of the hydraulic models in South Pacific Division;

and for instrumentation on lock facilities and dam structures including all costs for the installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **61121** - Dredging Activities for the Navigation Function

WORK CATEGORY DESCRIPTION: Dredging of Channels and Canals for navigation activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for maintenance dredging and disposal activities of navigation channels and canals, except project condition sediment survey costs which are included in Work Category Code 60121. Includes costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. Costs for long-range environmental requirements are included in Work Category Code 60123. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

NOTE: Line item submissions for Corps-owned hopper dredges should be separate from line item submissions for any other dredges.

WORK CATEGORY CODE: **61122** - Dredging - Construction and Maintenance of Dredged Material Disposal Facilities for the Navigation Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for navigation features.

Includes all costs for the construction and the maintenance of dredged material disposal facilities including confined disposal facilities, and costs for required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation, and equipment usage. **This does not include cost to prepare Dredge Material Management Plans (DMMP). DMMP costs should be allocated to WCC 60123**

WORK CATEGORY CODE: **61130** – Dam Safety Remediation of Deficiencies for the Navigation Function

EC 11-2-199  
31 Mar 10

**WORK CATEGORY DESCRIPTION:** Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate for navigation features.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. In previous years these costs were included in WCC 61110. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

**WORK CATEGORY CODE:** **61140** - Water Management (Control and Quality) Equipment for the Navigation Function

**WORK CATEGORY DESCRIPTION:** Purchase and Maintenance of Water Management (Control and Quality) Equipment for navigation features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

**WORK CATEGORY CODE:** **61151** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Navigation Function

**WORK CATEGORY DESCRIPTIONS:** Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for navigation features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61152** - Real Estate - Resolution of Real Estate Encroachments for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for navigation features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. The costs for boundary line surveys and remarking are included in Work Category Code 61153.

WORK CATEGORY CODE: **61153** - Real Estate - Boundary Monumentation and Rectification for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for navigation features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61160** - Environmental Compliance (Remedial Actions) for the Navigation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Locks, Dams, Reservoirs, Breakwaters, Jetties, Seawalls, Piers, Levees, Other Control Structures, Pumping Plants, Other Facilities, Channels and Canals for navigation features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for locks, dams, reservoirs, breakwaters, jetties, seawalls, piers, levees, other control structures, pumping plants, other facilities, channels and canals. Includes cost for corrective actions related to environmental compliance assessment findings related to the Navigation function. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61170** - O&M Major Rehabilitation Projects for the Navigation Function

WORK CATEGORY DESCRIPTION: Remaining O&M Funded Major Rehabilitation projects for navigation features.

Includes all major rehabilitation costs such as repair, replacement, additions and efficiency improvements to lock structures and facilities for passage of waterborne traffic, and all costs for facilities and equipment for dams, spillways, outlet works and auxiliary dams including gates, valve operating machinery, lock walls, and guide and guard-walls including dolphins within the lock approaches for tie up, guard, or guide purposes.

EC 11-2-199  
31 Mar 10

NOTE: Major rehabilitation, deficiency correction, and reconstruction projects are programmed for initial Construction (C) appropriation and Inland Waterways Trust Fund moneys, as appropriate, only after applicable reconnaissance and/or evaluation reports have been approved. Work items for Major

Rehabilitation Evaluation Reports are included in Work Category Code 60122. This Work Category will be used only until O&M funded Major Rehabilitation projects are completed.

WORK CATEGORY CODE: **61180**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61191** – Facility Security Maintenance and Replacement for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for navigation features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60191, and costs for guards and surveillance activities are included in WCC 60192. Costs for improvements and modifications are included in WCC 61192. Includes some costs formerly included in WCC 61190.

WORK CATEGORY CODE: **61192** – Facility Security Physical Improvements and Modifications for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for navigation features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61190.

WORK CATEGORY CODE: **61211** - Maintenance for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Maintenance of Dams, Reservoirs, Levees, Floodwalls, Hurricane Barriers, and Other Flood Risk Management Structures; Snagging, Clearing, Aquatic Plant Removal, Rock and Other Debris Removal, and Other Non-Dredging Flood Risk Management Channel Maintenance; Pumping Plants, Other Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Maintenance and Purchase of Permanent Operating Equipment for Non-Water Control Management Activities; etc. excluding dredging for flood risk management features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities:

of facilities and equipment for dams, spillways, outlet works and auxiliary dams;

of reservoirs and facilities including floating trash booms, trash racks, erosion control, drainage, major periodic or one-time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60210); and rim grouting or mine sealing, etc., to prevent leakage;

of levees, floodwalls, hurricane barriers, embankments, walls, in-channel structures, and other flood risk management structures to protect areas from inundation; and snagging, clearing, debris removal, and non-dredging flood risk management channel maintenance. This includes direct costs for removal of trees, brush, accumulated snags, drifts, and debris from canals and waterways for flood risk management and major drainage purposes; and channel improvement structures and revetments, linings, dikes, jetties, bulkheads, and buildings (when provided for flood risk management);

of pumping plants including such items as buildings, pumps, and prime movers including power supplies, controls, piping, and all other associated facilities;

of buildings, grounds, utilities, and roads, railroads and bridges, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes direct costs for project utilities including electrical, gas, water, and sewer systems; of permanent operating equipment;

and for instrumentation on dam structures and levees, floodwalls, hurricane barriers, and other flood risk management structures including all costs for the installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

Costs for Water Supply activities formerly charged to this Work Category Code should now be charged to Work Category Code 61810.

**WORK CATEGORY CODE:**     **61212** - Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for Mississippi River and Tributaries (MR&T) Flood Risk Management

**WORK CATEGORY DESCRIPTION:** Maintenance of Dikes, Revetments, Groins, Breakwaters, Jetties, Seawalls and Similar Structures for MR&T flood risk management purposes.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of revetments, dikes, groins, breakwaters, seawalls, piers, linings, training dikes, bulkheads and similar structures. Also includes related costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs, equipment usage, associated government plant and hired labor for project maintenance, contract support, and other costs.

**WORK CATEGORY CODE:**     **61221** - Dredging Activities for the Flood Risk Management Function

**WORK CATEGORY DESCRIPTION:** Dredging of Channels and Canals for flood risk management activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for dredging, excavation and disposal activities for the maintenance and efficiency

EC 11-2-199  
31 Mar 10

improvements of channels and canals for flood risk management purposes, except project condition sediment survey costs which are included in Work Category Code 60221. Includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; and creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61222** - Dredging - Construction and Maintenance of Disposal Facilities for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for flood risk management features.

Includes all costs for the construction and the maintenance of dredged material disposal facilities including confined disposal facilities, and required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61230** - Dam Safety Remediation of Deficiencies for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate for navigation features.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. In previous years these costs were included in WCC 61110. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

WORK CATEGORY CODE: **61240** - Water Management (Control and Quality) Equipment for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for flood risk management features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61251** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Flood Risk Management Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for flood risk management features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61252** - Real Estate - Resolution of Real Estate Encroachments for the Flood Risk Management Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for flood risk management features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61253.

WORK CATEGORY CODE: **61253** - Real Estate - Boundary Monumentation and Rectification for the Flood Risk Management Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for flood risk management features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61260** - Environmental Compliance (Remedial Actions) for the Flood Risk Management Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Dams, Breakwaters, Jetties, Seawalls, Levees, Floodwalls, Hurricane Barriers, Other Flood Risk Management

EC 11-2-199  
31 Mar 10

Structures, Pumping Plants, Other Facilities, Channels and Canals for flood risk management features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for dams, breakwaters, jetties, seawalls, levees, floodwalls, hurricane barriers, other flood risk management structures, pumping plants, other facilities, channels and canals. Includes cost for corrective actions related to environmental compliance assessment findings related to flood risk management activities. Costs include salaries of environmental compliance coordinators and administration, contaminant detection, waste analysis, site investigations, site remediation of recent and past releases or contamination resulting from Flood Risk Management activities; treatment system installation, repair or renovation, erosion protection of structures or pool, responding to spills from FDR facilities, disposal of unclaimed barrels or containers, and responding or clean-up of pesticide or chemical releases that flood risk management activities on Corps or outgranted lands. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61270**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61280**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61291** – Facility Security Maintenance and Replacement for Flood Risk Management

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for flood risk management features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60291, and costs for guards and surveillance activities are included in WCC 60292. Costs for improvements and modifications are included in WCC 61292. Includes some costs formerly included in WCC 61290.

WORK CATEGORY CODE: **61292** – Facility Security Physical Improvements and Modifications for Flood Risk Management

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for flood risk management features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61290.

WORK CATEGORY CODE: **61310 (61311-61314)** Maintenance for the Hydropower Function Costs for this function will be sub-divided as follows:

**61311** Maintenance Supervision, FERC #541. Costs for labor, materials and expenses incurred in the general supervision of maintenance of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**61312** Maintenance of Hydraulic Structures, FERC #542. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the powerhouse, and power intake works whether or not the powerhouse is an integral part of the intake dam;

**61313** Maintenance of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant generating and accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

**61314** - Maintenance of Miscellaneous Hydraulic Plant, FERC #545. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant and switchyard hydraulic plant.

WORK CATEGORY DESCRIPTION: Maintenance of Power Plants, excluding dredging for hydropower features.

Includes all costs for power plant maintenance and repair, replacements, additions and efficiency improvements to, and retirement of all power plant structures; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; and of lighting and interior power distribution systems, cable tunnels and conduit runs; and installation of instrumentation. Includes spare parts, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. Includes labor and materials, and incidental expenses incurred to maintain maintenance records; expenses incurred by the power plant management and support staff in the general supervision of the maintenance of the hydraulic generating station; and transportation and per diem costs required to perform power plant maintenance functions. Dredging is included in Work Category Code 61320.

WORK CATEGORY CODE: **61320** - Dredging Activities for the Hydropower Function, FERC #543

WORK CATEGORY DESCRIPTION: Dredging for hydropower activities including all disposal activities.

Includes all costs for maintenance dredging and disposal activities, except project condition sediment survey costs which are included in Work Category Code 60321. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61330** – Dam Safety Remediation of Deficiencies for the Hydropower Function

EC 11-2-199  
31 Mar 10

**WORK CATEGORY DESCRIPTION:** Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate for hydropower features.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. In previous years these costs were included in WCCs 61311-61314. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

**WORK CATEGORY CODE:** **61340** - Water Management (Control and Quality) Equipment for the Hydropower Function, FERC #542

**WORK CATEGORY DESCRIPTION:** Purchase and Maintenance of Water Management (Control and Quality) Equipment for hydropower features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

**WORK CATEGORY CODE:** **61351** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Hydropower Function, FERC #545

**WORK CATEGORY DESCRIPTION:** Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for hydropower features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61352** - Real Estate - Resolution of Real Estate Encroachments for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Real Estate - Resolution of Real Estate Encroachments for hydropower features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. The costs for boundary line surveys and remarking are not included in this Work Category.

WORK CATEGORY CODE: **61353** - Real Estate - Boundary Monumentation and Rectification for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Real Estate - Boundary Monumentation and Rectification for hydropower features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61360** - Environmental Compliance (Remedial Actions) for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Dams, Levees, Other Control Structures, Power Plants, Pumping Plants, and Other Facilities for hydropower features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for dams, levees, other control structures, power plants, pumping plants, and other facilities. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Includes cost for corrective actions related to environmental compliance assessment findings related to the Hydropower function

WORK CATEGORY CODE: **61370 (61371-61374)** - O&M Major Rehabilitation Projects for the Hydropower Function Costs for this function will be further subdivided as follows:

**61371** - Comprehensive Replacement Supervision, FERC #541. Costs for labor, materials and expenses incurred in the supervision of the comprehensive replacement of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**61372** - Comprehensive Replacement of Structures, FERC #542. Costs for labor, materials and expenses incurred in the comprehensive replacement of the powerhouse, switchyard, and power intake works whether or not the powerhouse is an integral part of the intake dam;

EC 11-2-199  
31 Mar 10

**61373** - Comprehensive Replacement of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the comprehensive replacement of the power plant generating and

accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

**61374** - Comprehensive Replacement of Miscellaneous Hydraulic Plant, FERC # 545. Costs for labor, materials and expenses incurred in the comprehensive replacement of the power plant and switchyard hydraulic plant.

**WORK CATEGORY DESCRIPTION:** Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) projects for hydropower features.

Includes all costs for comprehensive major rehabilitation, replacement, repair, additions and efficiency improvements, including supervision, of all power plant structures, electric plant, miscellaneous hydraulic plant, power plant intake works; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; and of lighting and interior power distribution systems, cable tunnels and conduit runs. Includes labor and materials, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. See Work Category Codes 61310 (61311-61314) and 613N0 (613N1-613N4).

**NOTE:** Major Rehabilitation work is now funded under the Construction (C) appropriation. Work items for Major Rehabilitation Evaluation Reports are included in Work Category Code 60325. This Work Category will be used only until current O&M funded Major Rehabilitation projects are completed.

**WORK CATEGORY CODE:** **61380**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE:** **61391** – Facility Security Maintenance and Replacement for Hydropower

**WORK CATEGORY DESCRIPTION:** Facility Security – Maintenance and Replacement for hydropower features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60391, and costs for guards and surveillance activities are included in WCC 60392. Costs for improvements and modifications are included in WCC 61392. Includes some costs formerly included in WCC 61390.

**WORK CATEGORY CODE:** **61392** – Facility Security Physical Improvements and Modifications for Hydropower

**WORK CATEGORY DESCRIPTION:** Facility Security – Physical Improvements and Modifications for hydropower features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and

terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61390.

WORK CATEGORY CODE: **61411** - Maintenance of Natural Resource Facilities for Environmental Stewardship function

WORK CATEGORY DESCRIPTION: Maintenance of Natural Resource Facilities.

Includes all costs to perform maintenance needed to foster healthy and sustainable lands and waters, and to conserve and protect natural resources and associated facilities located on project lands. This Work Category only includes costs during the conservation or protection effort.

WORK CATEGORY CODE: **61412** - Mitigation of Archeological and Cultural Resources

WORK CATEGORY DESCRIPTION: Mitigation of Archeological and Cultural Resources such as Sites, Structures, and Objects.

Includes all costs to manage, curate, maintain and rehabilitate identified archeological collections and associated documentation and long term collections management. Also includes cultural resources mitigation costs to protect, recover, preserve or otherwise mitigate significant archaeological, historical, and cultural buildings, sites, structures or objects. This Work Category only includes costs during the recovery, preservation, or mitigation effort.

WORK CATEGORY CODE: **61413** - Maintenance of Natural Resources Mitigation Features for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Maintenance of Natural Resources Mitigation Features for Environmental Stewardship.

Includes all costs for the maintenance and repair of natural resources mitigation features to comply with mitigation requirements specified in Federal law, Congressional legislation, or in HQ approved project authorization decision document, to offset unavoidable natural resources and ecological losses caused by the construction of a project or by project operation activities. This Work Category only includes costs during the mitigation effort.

WORK CATEGORY CODE: **61414** - Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures

WORK CATEGORY DESCRIPTION: Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures for environmental stewardship features.

Includes all costs for maintenance and repair of fish hatcheries, egg collection stations, transportation equipment, and fish passage facilities.

WORK CATEGORY CODE: **61418** – Maintenance of Special Status Species for Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Maintenance of Special Status Species for environmental stewardship features.

Includes all costs for maintenance of resources and features supporting special status species. Includes costs of salaries, contracts, equipment, supplies and materials to protect and maintain species of special

EC 11-2-199  
31 Mar 10

concern such as Federal or state listed endangered, threatened, rare or sensitive species, including activities in areas under license, lease, or outgrant. Includes activities undertaken to maintain a resource, population, habitat or management feature, such as vegetation manipulation, timber management, prescribed burning, and activities to protect populations and individual specimens (e.g. citation authority program, surveillance activities, identifying and monitoring exclusion zones). The cost of special status species maintenance that is a function of activities of another business line, e.g. navigation, shall be funded by that business line as a cost of doing business, using work category codes associated with the appropriate business line.

WORK CATEGORY CODE: **61421** - Dredging Activities for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Dredging of Channels and Canals for environmental stewardship activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for maintenance dredging of project channels and canals, and disposal activities, except project condition sediment survey costs which are included in Work Category Code 60420. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; and creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61422** - Dredging - Construction and Maintenance of Disposal Facilities for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for environmental stewardship features.

Includes all costs for the construction and the maintenance of disposal facilities including confined disposal facilities, and required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61430**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61440** - Water Management (Control and Quality) Equipment for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for environmental stewardship features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the

new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61451** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for environmental stewardship features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. (NOTE: Includes administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection. However, do not include those commodity (e.g. timber, crops, sand) sales costs that are expected to be funded by the proceeds from the sale of project commodities. Staff supervision of timber management should be included in Work Category Code 60411).

WORK CATEGORY CODE: **61452** - Real Estate - Resolution of Real Estate Encroachments for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate - Resolution of Real Estate Encroachments for environmental stewardship features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61453.

WORK CATEGORY CODE: **61453** - Real Estate - Boundary Monumentation and Rectification for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate - Boundary Monumentation and Rectification for environmental stewardship features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61460** - Environmental Compliance (Remedial Actions) for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) of Natural Resources including Other Service Facilities for environmental stewardship features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for

EC 11-2-199  
31 Mar 10

natural resources and other environmental stewardship features. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61470**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61480**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61491** – Facility Security Maintenance and Replacement for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for environmental stewardship features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60491, and costs for guards and surveillance activities are included in WCC 60492. Costs for improvements and modifications are included in WCC 61492. Includes some costs formerly included in WCC 61490.

WORK CATEGORY CODE: **61492** – Facility Security Physical Improvements and Modifications for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for environmental stewardship features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61490.

WORK CATEGORY CODE: **61511** - Maintenance of Recreation Features

WORK CATEGORY DESCRIPTION: Maintenance of Recreation areas and Facilities, Service Facilities – (Buildings, Grounds, Utilities, Roads and Bridges), Erosion Control in Recreation Areas, and Maintenance and Purchase of Permanent Operating Equipment for recreation features.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of, recreation facilities and structures such as grills, tables, playgrounds, trails, campgrounds, picnic areas, restrooms, showers, boat ramps, parking areas, roads, grounds, utilities associated with recreation use, buildings used for recreation purposes or the collection of fees and other structures used to support the recreation function. Also included are the costs for realignment, overlay, grading, and widening, of roads, parking areas, bridges and walkways associated with recreational development, and all costs for control of erosion endangering recreational areas or facilities, including seeding, sodding, riprap, gabions, vegetation, retaining walls and other measures. Also includes the costs for permanent operating equipment such as backhoe, trencher, bucket truck, tractor loader,

vehicles, communications equipment, and computers used to support the recreation function of the project. This Work Category also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage, and costs to bring facilities up to modern design standards and to provide accessibility for persons with disabilities as required. Includes costs for new recreation facilities, if the goal of providing quality public recreation experiences with the most cost efficient management of water resources development projects can be met.

This Work Category Code includes costs previously included in Work Category Code 61512, Maintenance of Recreation Facilities using SRUF funds (see paragraph C-2.15 SRUF).

SRUF costs previously included under Work Category Code 61512 should now be included under Work Category Code 61511.

**WORK CATEGORY CODE: 61513 - Maintenance of Recreation Features - Cost Shared Recreation Developments**

**WORK CATEGORY DESCRIPTION: Cost Shared Recreation Developments - Contracts and Negotiations.**

Includes all recreation cost share agreements and contract costs; costs to reimburse local sponsors; and costs for monitoring and negotiating agreements related to cost sharing.

**WORK CATEGORY CODE: 61514 – Maintenance of Visitor Centers**

**WORK CATEGORY DESCRIPTION: Maintenance of Visitor Centers for recreation features.**

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of, visitor center buildings, displays, audiovisual systems, heating and cooling systems, landscaping, grounds, exhibits and utilities. Also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage. These costs were formerly included in WCC 61511.

**WORK CATEGORY CODE: 61515 – Modernization of Recreation Features**

**WORK CATEGORY DESCRIPTION: Modernization of recreation features.**

Includes all costs for the modernization, replacement or additions for modernization to recreation facilities and structures such as trails, campgrounds, picnic areas, restrooms, showers, boat ramps, parking areas, roads, grounds, utilities associated with recreation use, buildings used for recreation purposes or the collection of fees and other structures used to support the recreation function. Also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage, and costs to bring facilities up to modern design standards and to provide accessibility for persons with disabilities as required. Also, includes costs for E&D and P&S for the Recreation Modernization Program. Work should be included in this Work Category Code (WCC) rather than WCC 61511 if the primary reason for the work is to update existing facilities to meet current guidelines and user needs, as well as modifying facilities and services to improve efficiency and effectiveness. If the primary reason to do work is non-operational maintenance, it should be included in WCC 61511, even if some modernization will be accomplished in conjunction with the work. These costs were formerly included in WCC 61511.

**WORK CATEGORY CODE: 61520 - Dredging Activities for the Recreation Function**

EC 11-2-199  
31 Mar 10

WORK CATEGORY DESCRIPTION: Dredging for recreation activities including all disposal activities.

Includes all costs for maintenance dredging and disposal activities for the recreation function, except project condition sediment survey costs which are included in Work Category Code 60520. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. Also includes all costs associated with the disposal of dredged materials as sand on beaches, and related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61530**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61540** - Water Management (Control and Quality) Equipment for the Recreation Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for recreation features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality) for the recreation function. This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the Corps new Water Management System (SWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61551** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for recreation features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping surveying, title evidence, inspection, closing, audits and temporary permits necessary to acquire or dispose of lands and interests that support the recreational features of a project.

WORK CATEGORY CODE: **61552** - Real Estate - Resolution of Real Estate Encroachments for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate - Resolution of Real Estate Encroachments for recreation features.

Includes all costs for the resolution of all encroachments on projects lands classified for recreational use and degradation of public lands and encroachments adversely affecting the recreational use of the project; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking should be included in Work Category Code 61553.

WORK CATEGORY CODE: **61553** - Real Estate - Boundary Monumentation and Rectification for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate - Boundary Monumentation and Rectification for recreation features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed on lands classified for recreational use at a project.

WORK CATEGORY CODE: **61560** - Environmental Compliance (Remedial Actions) for the Recreation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for recreation features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for recreation facilities and visitor centers. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, and modification. Other costs associated with complacence include activities such as responding to marinas spills, updating hazard communication, disposal of unclaimed barrels or containers, and responding or clean-up of pesticide or chemical releases that support recreational activities on Corps owned land. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61570**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61580**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61591** – Facility Security Maintenance and Replacement for Recreation

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for recreation features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60591, and costs for guards and surveillance activities are included in WCC 60592. Costs for improvements and modifications are included in WCC 61592. Includes some costs formerly included in WCC 61590.

WORK CATEGORY CODE: **61592** – Facility Security Physical Improvements and Modifications for Recreation

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for recreation features.

EC 11-2-199  
31 Mar 10

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61590.

WORK CATEGORY CODE: **61610** - Joint Activities for Maintenance excluding Dredging, FERC #541, #542, #543, #544 and #545

WORK CATEGORY DESCRIPTION: Joint costs for Maintenance activities NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities include maintenance of Dams, Reservoirs, Levees, Floodwalls, Hurricane Barriers, and Other Control Structures; Snagging, Clearing, Aquatic Plant Removal, Rock and Other Debris Removal, and Other Non-Dredging Channel Maintenance; Pumping Plants, Other Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Gates, Conduits, Maintenance and Purchase of Permanent Operating Equipment, etc. excluding dredging.

Includes all joint costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related joint costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment:

of joint use facilities and equipment for dams, spillways, outlet works and auxiliary dams;

of reservoirs and facilities including floating trash booms, trash racks, erosion control, drainage, major periodic or one time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60610); and rim grouting or mine sealing, etc., to prevent leakage;

of levees, floodwalls, hurricane barriers, embankments, walls, in-channel structures, and other control structures to protect areas from inundation; snagging, clearing, debris removal; and non-dredging channel maintenance. This includes costs for removal of trees, brush, accumulated snags, drifts, and debris from canals and waterways; and channel improvement structures, revetments, linings, dikes, jetties, bulkheads, and buildings;

of pumping plants including such items as buildings, pumps, and prime movers including power supplies, controls, piping, and all other associated facilities;

of non-dredging channel maintenance including snagging, clearing, aquatic plant removal, removal of sunken vessels, drift removal, rock and other debris removal;

of buildings, grounds, utilities, and roads, railroads and bridges, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes costs for project utilities including electrical, gas, water, and sewer systems;

of permanent operating equipment;

and for instrumentation on dam structures, levees, floodwalls, hurricane barriers, and other control structures including costs related to installation and maintenance of instruments in existing

structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **61621** - Joint Activities for Dredging, FERC #543

WORK CATEGORY DESCRIPTION: Joint costs for Dredging of Channels and Canals NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities include all disposal activities such as confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all joint costs for maintenance dredging of project channels and canals, and disposal activities, except for project condition sediment survey costs which are included in Work Category Code 60621. Also included are joint costs to obtain environmental clearances to perform the associated dredging. Long-range environmental requirements and costs for initial project condition surveys are included in related operations accounts. Also includes joint costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; the creation or restoration of wetlands or other aquatic habitat using dredged material; and the creation of land using dredged material. Also includes related joint costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61622** - Joint Activities for Dredging - Construction and Maintenance of Dredged Material Disposal Facilities, FERC #543

WORK CATEGORY DESCRIPTION: Joint costs for the Construction and Maintenance of Disposal Facilities for Dredged Materials NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the construction and the maintenance of disposal facilities, including confined disposal facilities, for dredged materials. Also includes related joint costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61630** - Joint Activities for Dam Safety Remediation of Deficiencies

WORK CATEGORY DESCRIPTION: Joint costs for Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter

EC 11-2-199  
31 Mar 10

dam safety related work, the costs should be included in the primary business program for that project. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

WORK CATEGORY CODE: **61640** - Joint Activities for Water Management Equipment, FERC #542

WORK CATEGORY DESCRIPTION: Joint costs for the Purchase and Maintenance of Water Management (Control and Quality) Equipment NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the Corps new Water Management System (SWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61651** - Joint Activities for Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests, real estate payments for acquisition of real property and interests therein, and costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired.

WORK CATEGORY CODE: **61652** - Joint Activities for Real Estate - Resolution of Real Estate Encroachments, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Resolution of Real Estate Encroachments NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting.

WORK CATEGORY CODE: **61653** - Joint Activities for Real Estate - Boundary Monumentation and Rectification, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Boundary Monumentation and Rectification NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions; and costs to survey and mark boundary lines where not previously completed.

WORK CATEGORY CODE: **61660** - Joint Activities for Environmental Compliance (Remedial Actions), FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Environmental Compliance (remedial actions) NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities include actions for Dams, Levees, Other Control Structures, Pumping Plants and Other Project Facilities.

Includes all joint costs maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for dams, reservoirs, levees, other control structures, pumping plants and other joint use project facilities. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61670**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61680**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61691** – Joint Activities for Facility Security Maintenance and Replacement

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Maintenance and Replacement NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes joint costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Joint costs for assessments are included in Work Category Code 60691, and costs for guards and surveillance activities are included in Work Category Code 60692.

WORK CATEGORY CODE: **61692** – Joint Activities for Facility Security Physical Improvements and Modifications

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Physical Improvements and Modifications NOT specific to Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and

EC 11-2-199  
31 Mar 10

terrorist activities. Includes joint costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Joint costs for assessments are included in Work Category Code 60691, and costs for guards and surveillance activities are included in Work Category Code 60692.

WORK CATEGORY CODE: **61810** - Maintenance for the Water Supply Function

WORK CATEGORY DESCRIPTION: Maintenance of Project Gates, Water Supply Conduits, Permanent Operating Equipment, etc. excluding dredging activities for water supply features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities: of project gates and specific water supply conduits; and permanent operating equipment. Prior to FY07, these costs were included in WCC 61211.

SUB-ANNEX C-5

Systems and Justification of Estimates

**C-5-1. Operations and Maintenance Systems and Regions.** The PY O&M budget will be formulated based on performance goals and objectives and risk-based indices (details can be found in the business line Appendices). Also basin codes will continue to be attached to projects on a system basis although the budget will be presented on a project by project basis. The systems were developed, using HUC sub-regions as established by the US Geological Survey.

**C-5-2. Narrative and Supporting Data.**

a. **Justification Sheets for O&M for Congressional Submission.** Each MSC shall prepare and submit Justification sheets for each O&M project, using the format and template provided. The tone of statements must reflect a full support of the President's Program request with no hints that amounts may not be adequate. Justification sheets must be submitted as Microsoft Word documents over the Corps Outlook Electronic Mail. ASCII format is not acceptable because it deletes control codes for formatting. To avoid allocation problems associated with roll-ups, projects spanning more than one district should be entered separately with titles showing the district name, for example:

OHIO RIVER LOCKS AND DAMS, PA (Pittsburgh Dist.)  
OHIO RIVER LOCKS AND DAMS, WV (Huntington Dist.)  
OHIO RIVER LOCKS AND DAMS, KY, IL, IN, OH, & WV (Louisville Dist.)

(Other projects include Ohio River Open Channel Work, McClellan-Kerr, Missouri River and the Upper Mississippi River.)

Justification sheets for National programs or, activities such as Inspection of Completed Works, Scheduling Reservoir Activities, and Project Condition Surveys will be prepared by HQUSACE.

b. **State Designation for Inspection of Completed Works (ICW),** Project Condition Surveys (PCS), Scheduling Reservoir Operations (SRO), Surveillance of Northern Boundary Waters (SNBW) and Inspection of Ecosystem Restoration Projects.

Each of these programs will have a budget activity per state per funding increment. In those cases where these programs are performed in more than one state, the district will have a budget activity for each state. The budget activities do not necessarily have to be in the same funding increment. For example, Little Rock District (SWL) has projects in Missouri and Arkansas therefore SWL should have at least two IWC budget activities, one for Missouri and one for Arkansas. Some SWL projects cross state lines such as Table Rock Lake. All the ICW for this project should be included for its primary state, which is Missouri. The justification/Remarks will indicate how many surveys, inspections, actions, etc. of that districts total will be performed for the respective Business Program funding increment. For example the Business Line initial increment ICW budget activity for SWL for Missouri would state five critical inspections would be conducted out of a total of 10 in the PY. Additional ICW budget activity(s) would be included in next-added Business Line increments as justified by increased performance or benefits.

**C-5-3. Definitions.** R=Reconnaissance; F=Feasibility; P=PED; C=Construction; CR=Replacement; O=Operations; M=Maintenance (regular, not major or rehab); MM=Major Maintenance; MR=Rehabilitation; OJ=Operation Joint Activities; MJ=Maintenance Joint Activities;

EC 11-2-199  
31 Mar 10

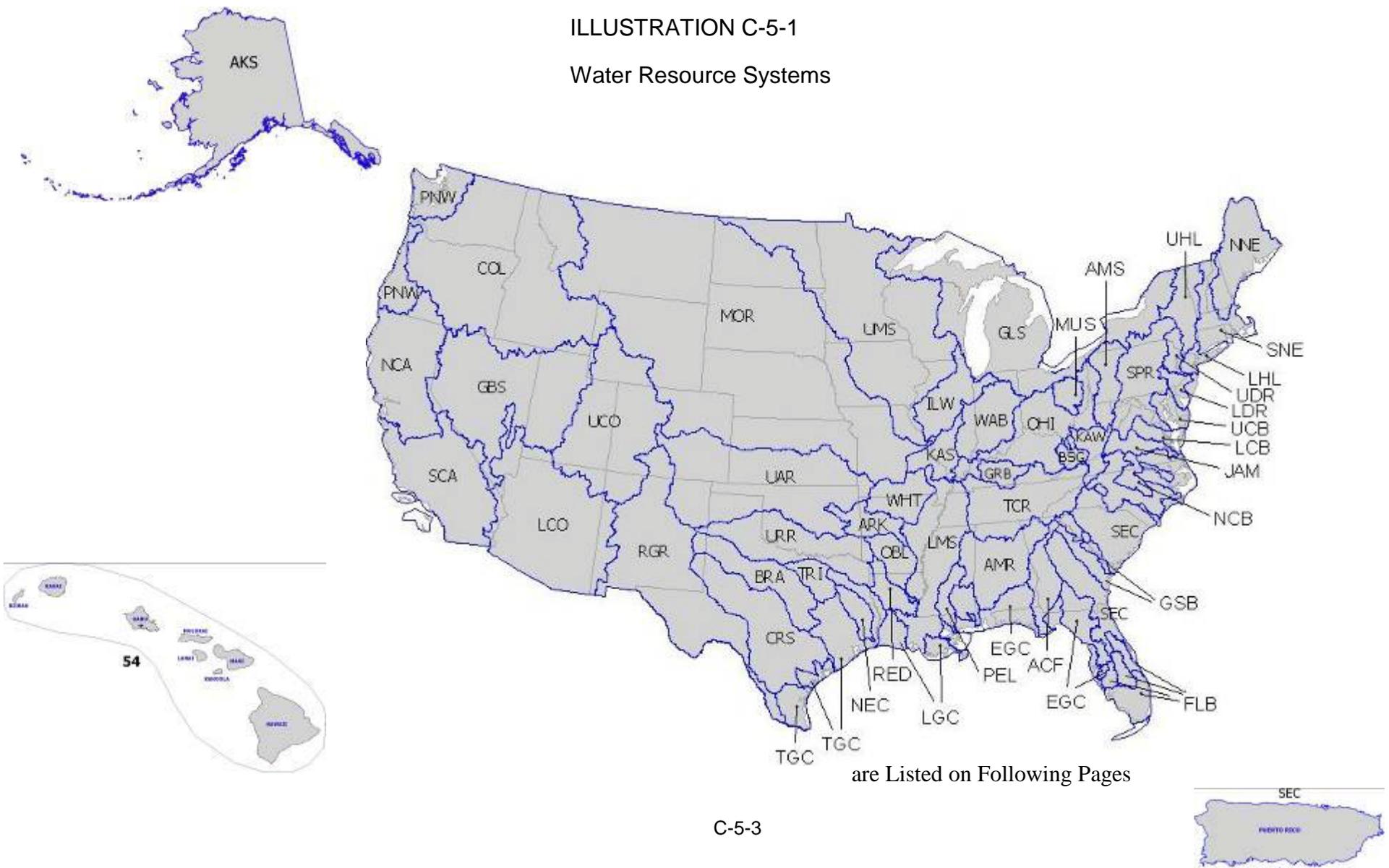
TABLE C-5-1

Systems

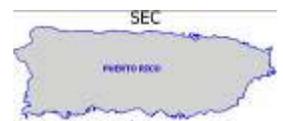


Table C-5-1 FINAL  
Bub O&M Systems for

ILLUSTRATION C-5-1  
Water Resource Systems



are Listed on Following Pages



EC 11-2-199  
31 Mar 10

The work is accomplished in the following water resource System as delineated by water boundaries (HUC sub regions):

#### GLOSSARY OF DISTRICT ACRONYMS

LRB	Buffalo District	NAD	North Atlantic Division	SAJ	Jacksonville District
LRC	Chicago District	NAE	New England District	SAM	Mobile District
LRD	Great Lakes & Ohio River Division	NAN	New York District	SAS	Savannah District
LRE	Detroit District	NAO	Norfolk District	SAW	Wilmington District
LRH	Huntington District	NAP	Philadelphia District	SPA	Albuquerque District
LRL	Louisville District	NWD	Northwestern Division	SPD	South Pacific Division
LRN	Nashville District	NWK	Kansas City District	SPL	Los Angeles District
LRP	Pittsburgh District	NWO	Omaha District	SPK	Sacramento District
MVD	Mississippi Valley Division	NWP	Portland District	SPN	San Francisco District
MVK	Vicksburg District	NWS	Seattle District	SWD	Southwestern Division
MVM	Memphis District	NWW	Walla Walla District	SWF	Fort Worth District
MVN	New Orleans District	POA	Alaska District	SWG	Galveston District
MVP	St. Paul District	POD	Pacific Ocean Division	SWL	Little Rock District
MVR	Rock Island District	POH	Honolulu District	SWT	Tulsa District
MVS	St. Louis District	SAC	Charleston District		
NAB	Baltimore District	SAD	South Atlantic Division		

ILLUSTRATION C-5-2

Major Subordinate Command (MSC)  
Supplemental Justification Sheet  
Major Maintenance

1. **DESCRIPTION OF WORK:** (Describe specific items of work to be included in the overall package.)
2. **JUSTIFICATION:** (Provide justification for the total work to be accomplished, including economic evaluation. Quantify benefits when possible. In last paragraph of justification, provide arguments on why the work should be started in the program year, either design or construction; and the impact of not starting the work in the program year. For ongoing work, include the impacts of not continuing the work in the program year. These paragraphs must be in sufficient detail to permit a decision to be made on the investment.)
3. **ESTIMATED COST AND SCHEDULE:** (Provide the basis of the estimated cost, i.e., based on cost of XYZ PROJECT IN FY90 indexed to current price levels, reconnaissance level estimate, e.g. *Design Memorandum D-28 approved 22 January 1993, etc*; and include the amount of contingencies included in the estimate. The cost estimate should be broken down to reflect individual DDRs, procurements, contracts, installations, etc. Schedule dates should be shown only to the month and year, e.g., 11/01, and all dollar amounts in even thousands, i.e., \$10,000 to be shown as 10. The estimate and schedule should include required fund requirements for engineering and design during construction and other related costs for completion of a total package. If contributed funds are required for Corps construction activities, include in cost estimate and add a line to the schedule with minus entries; so that the total line will reflect Total Federal fund requirements by year.)

NOTE: This illustration is included to show the additional information required for major maintenance activities. This information will be provided in the format shown in the expanded funding argument field.

EC 11-2-199  
31 Mar 10

### ILLUSTRATION C-5-3

Major Subordinate Command  
O&M Justification Sheet Template



III C-5-3 FINAL O&M  
J-SHEET.TEMPLATE.c

ANNEX D

Expenses

TABLE OF CONTENTS

Subject	Paragraph	Page
SUB-ANNEX D-1. APPLICABILITY		
Appropriation Title .....	D-1-1.....	D-1-1
Purpose .....	D-1-2.....	D-1-1
Activities Included .....	D-1-3.....	D-1-1
SUB-ANNEX D-2. PROGRAM GUIDANCE		
Program Objective .....	D-2-1.....	D-2-1
Supporting Data .....	D-2-2.....	D-2-2
Submission Requirements .....	D-2-3.....	D-2-2
Prior Years Funds .....	D-2-4.....	D-2-2
ILLUSTRATIONS		
	Illustration	Page
Requirements Summary .....	D-2-1.....	D-2-3
Contract/Other Support .....	D-2-2.....	D-2-4

SUB-ANNEX D-1

Expenses  
Applicability

D-1-1. **Appropriation Title.** Expenses 96X3124

D-1-2. **Purpose.** This annex provides guidance for development of the Expenses (E) Program for Headquarters, U. S. Army Corps of Engineers (HQUSACE), Major Subordinate Commands (MSCs), and other command and control support activities.

D-1-3. **Activities Included.** The CCS codes for use with this program submission are in Table 3 of the main part of the EC.



SUB-ANNEX D-2

Expenses  
Program Guidance

D-2-1. **Program Objective.** The objective of the Expenses (E) Program is to resource the Civil Works Executive Direction and Management (ED&M) activities of the US Army Corps of Engineers (USACE).

a. ED&M is comprised of five functions:

(1) Command and Control – Exercise of command and control of USACE Civil Works Program operations;

(2) Policy and Guidance – Development, coordination and issuance of policy and guidance that will guide headquarters, regional, and field operations;

(3) Program Management – Development, defense and execution of the Civil Works Programs;

(4) National Level Coordination – Coordination with the Administration, federal and state agencies, national stakeholders, and other interest groups to facilitate development of program policy and guidance and efficient execution of the Civil Works Program; and

(5) Quality Assurance – Assurance that the Civil Works Program is being executed in accordance with law, policy and guidance.

b. Support activities outside of the headquarters are accomplished by:

(1) The eight (8) Major Subordinates Commands

(2) Institute of Water Resources (IWR) - providing forward-looking analysis and research in development of planning methodologies for the Civil Works Program.

(3) Humphreys Engineer Center Support Activity (HECSA) – providing administrative and operational support to HQUSACE for the Civil Works Program.

(4) Engineering Research and Development Center (ERDC) - conducting research and development as support of the Civil Works Program.

(5) USACE Finance Center - providing finance & accounting support for the Civil Works Program.

(6) Army Corps of Engineers – Information Technology (ACE-IT) – providing corporate information management support to HQUSACE for the Civil Works program; and

(7) USACE Logistics Activity (ULA) – provides logistics support to HQUSACE for the Civil Works program.

c. Program and Financing. The Expenses Program will be developed for the accomplishment of the program objective by HQUSACE, Major Subordinate Commands (MSCs), and other USACE command and control support activities. The Expenses Program will reflect any carry-over from prior fiscal years and the USACE Consolidated Command Guidance (CCG), last updated on 10 Oct 08, the Command Priorities and Budget Guidance Memo, as well as any new initiatives approved by the Chief of Engineers' and/or directed by Assistant Secretary of Army (ASA) for Civil Works (CW)/Office of Management and Budget (OMB)/Congress. Further program formulation for FY11/12/13 will be developed based on guidance issued by HQ Resource Management. Requirements will be submitted in

the CEEMIS Budget Module with supporting data as reflected on the spreadsheet in Illustration D-2.1. Further details in support of the budget submission will be reflected in the spreadsheet at Illustration D-2-2.

d. Audit costs formally budgeted through the Expense Account will be funded through the Revolving Fund Account.

e. Labor Requirements and Funding.

(1) Labor Requirements. Estimates of labor requirements for Program Year (PY) (2011) will reflect the most efficient utilization of personnel necessary to achieve the program objective. Staffing will be at the 2012 Future Force authorized level published in the CCG. Labor estimates for PY (2012) and PY+2 (2013) will be at the required (full staffing) level of 917 FTEs

(2) Labor Funding. Funding requests for PY will include base labor cost as of 1 Oct, PY-1 (2010), plus projected inflation rates which will be provided. The rates will reflect the national and locality pay raises, plus agency contributions for employee benefits. In preparing estimates for overtime, analyze the use of overtime to ensure it is prudent and efficient; explore all reasonable alternatives to overtime, such as flexible scheduling; and assure that adequate approval, monitoring, and audit procedures are in place to avoid abuses. Total labor funding requirements includes locality, cost of living increase (COLA), overtime, awards and estimated pay raise.. Costs for Expenses-funded military/uniformed-officers will be included in estimating total labor/personnel-compensation costs. Total labor funding will be fenced and provided for the authorized FTE. Funds remaining due to hire lag can be used to support details and developmental assignments due to unfilled vacancies, PCS and costs for the Student Educational Employment Program.

(3) Non-labor Requirements and Funding. Non-labor requirements will be submitted as reflected in Illustration D-2.1. Non-labor requirements are separated into Mandatory and Discretionary. Specific guidance on how to budget for non-labor requirements, such as travel, training, AIS costs, will be outlined in the budget data call memorandum.

D-2-2. **Supporting Data.** The PY Expenses Program budget submission will be comprised of requirement build, specific FTE by name and salary, and details on contractual support to include justification by object class as reflected in Illustration D-2-3. The Expenses program manager will develop multiple program options based upon OMB and ASA(CW) guidance and field data listed above. These will include a 'ceiling' program which will be submitted to reflect no more than the amount needed to maintain "current services" compared to the FY10 budget. A second 'Recommended' program will be developed to accomplish performance targets over five years.

D-2-3. **Submission Requirements.** Supporting data, described above, will be submitted by electronic mail to CERM-BI (Attention: Gloria Bell) 05 Arp 10. If there are any problems complying with these submission requirements, contact Mrs. Bell at 202-761-1822, or Karen Watkins at 202-761-0406.

D-2-4. **Prior Years Funds.** Even though these are no year funds, all decommitted/deobligated prior year Expense Program funds should be returned to HQ as soon as they are identified. These funds will be reprogrammed and distributed based on priority of need.

ILLUSTRATION D-2.1

FY Executive Direction & Management (ED&M) RQMTS Summary (\$000) DETAIL INFO				
O/C	TITLE	MSC		
		GE	OMA	TOT ED&M
11.1	Personnel Comp Full-time Permanent (FTP)	0	0	0
11.3	Personnel Comp Other Than FTP	0	0	0
11.5	Other Personnel Compensation - Overtime	0	0	0
11.5	Other Personnel Compensation - Awards	0	0	0
11.5	Other Personnel Compensation - SES Awards	0	0	0
12.1	Civilian Personnel Benefits	0	0	0
13.0	Benefits for Former Personnel	0	0	0
	<b>Total Civilian Compensation</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>FTE Authorized Allocation</b>	<b>60</b>	<b>12</b>	<b>72</b>
	<b>Other FTE Authorization</b>			
25.0	Military Officer's Pay (Incl BAS/BAQ)	0	0	0
25.0	Military Personnel Benefits	0	0	0
	<b>Total Military Compensation</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total Military Personnel Support</b>			
23.1	SLUC	0	0	0
23.2	Rental Payments to Others (NAD & POD only)	0	0	0
23.3	CEEIS	0	0	0
25.3	UFC Support	0	0	0
25.3	DFAS Payroll Support	0	0	0
25.3	AIS, CEALS	0	0	0
25.3	CFO Audit	0	0	0
25.3	PRIP Payback	0	0	0
25.3	CGO/ACE-IM/IT	0	0	0
25.3	LOG HPO/ULA Support	0	0	0
25.3	CPOC/CPAC Support	0	0	0
25.3	Workman's Compensation	0	0	0
25.3	Health/EAP/AED	0	0	0
25.3	ASBCA	0	0	0
25.3	Seat Management Nationalized	0	0	0
25.3	Command Directed Initiatives	0	0	0
	<b>TOTAL MUST FUNDS</b>	<b>0</b>	<b>0</b>	<b>0</b>
12.1	Civilian Personnel Benefits (PCSPERBNFT)	0	0	0
21.0	PCS Transportation of Personnel (PCSTRANPER)	0	0	0
22.0	PCS Transportation of Things (PCSTRANTHG)	0	0	0
25.7	PCS Other Contractual Scs (PCSOTHSVCS)	0	0	0
21.0	Travel/Transportation of Persons (Civilian)	0	0	0
21.0	Travel/Transportation of Persons (Military & SES)	0	0	0
21.0	Motor Vehicles (COMVEH, CORP, GSAVEH)	0	0	0
23.2	Rental Payments to Others	0	0	0
23.3	Communications, Utilities & Misc Charges	0	0	0
23.3	Mailroom Contract Costs (OTHCONSVCS)	0	0	0
23.3	CASU Mailroom, Metering & Postage Costs	0	0	0
23.3	Copier Leases (OTHRENTAL)	0	0	0
24.0	Printing And Reproduction	0	0	0
25.1	Organizational IT Requirements	0	0	0
25.2	Other Services	0	0	0
25.2	Command Directed Initiatives	0	0	0
25.2	Strategic Initiatives	0	0	0
25.2	HQ Other Unique Missions	0	0	0
25.2	Training	0	0	0
25.3	Library Subscriptions & Services (Publications)	0	0	0
25.3	Graphics & Photographic Support (VISUALINFO)	0	0	0
25.3	Operating Support purchased from Districts	0	0	0
25.3	Support Agreements with other Agencies - ISSAs	0	0	0
25.3	Union Activity, Local Agreements	0	0	0
25.3	Division Airplane	0	0	0
25.3	Other Purchase of goods & services from Gov't accts	0	0	0
25.4	Operation & Maintenance of Facilities	0	0	0
25.7	PC, Equipment & Software Maintenance	0	0	0
26.0	Supplies and Materials	0	0	0
31.0	Equipment, IT Equipment, Software (COOP & Conf RM)	0	0	0
32.0	Land and Structures	0	0	0
	<b>Total Controllable Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

ILLUSTRATION D-2.2

MSC:

Contract/Other Support

Object Class	Description	Amount			Comment/Justification
		GE	OMA	TOTAL	
	<b>RENT</b>				
23.1	a. GSA				
23.2	b. Private				
	c. Other (specify)				
	Sub-Total	\$0	\$0	\$0	
25.3	<b>Corps-to-Corps</b>				
	Sub-total	\$0	\$0	\$0	
25.3	<b>Government-to-Government</b>				
	Sub-Total	\$0	\$0	\$0	
25.3	<b>Government-to-Non-Government</b>				
	Sub-total	0	0	0	
	<b>PCS</b>				
21					
22					
25.7					
21					
22					
25.7					
21					
22					
25.7					
	Sub-Total	0	0	0	
	<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	

NOTE: Add lines as required

ANNEX E

Revolving Fund  
Plant Replacement and Improvement Program (PRIP)

TABLE OF CONTENTS

Subject	Paragraph	Page
Purpose and Scope.....	E-1 .....	E-1
Program Development Concepts .....	E-1 .....	E-1
Program and Budget Guidance.....	E-1 .....	E-1
Submission Requirements and Dates.....	E-1 .....	E-2



## ANNEX E

### Plant, Revolving Fund Plant Replacement and Improvement Program (PRIP)

**E-1. Purpose and Scope.** This annex provides policy and general procedural guidance for Plant Replacement and Improvement Program (PRIP) development. To provide a uniform approach for program development and justification, the various plant items have been grouped into categories. Guidance for the electronic transmission of automated data for submittal of limited program recommendations is contained in the 1130 series of Engineer Regulations (ERs). Procedures for preparing input, for generating these reports, and for updating data are also included in the ER 1130 series. From time to time, additional detailed guidance will be provided by CERM-B in supplemental memoranda.

#### **E-2. Program Development Concepts.**

a. **Categories.** All plant items should be identified by category. Detailed definitions for the categories and subcategories can be found in Annex G, ER 37-1-29, Financial Administration, Financial Management of Capital Investments. The categories and subcategories authorized for use with this program submission are in Table 3 of the main part of the EC.

b. **Major and Minor Items.** For programming purposes all items of plant will be classified as either major or minor items. Major Items will be further classified as either new or continuing items.

(1) **Major Items.** New Major Items consist of those items which exceed HQUSACE authority and which require submittal through the Assistant Secretary of the Army (CW) to the Office of Management and Budget (OMB) and the Congressional Committees on Appropriations for concurrence. The limit of Chief of Engineers authority is \$700,000. Continuing Major Items consist of those acquisitions costing more than \$700,000, which were previously submitted to and concurred in by OMB; and authorized by the Congressional committees. An update shall be submitted on all continuing major items with scheduled obligations in FY11. Continuing Major Items with cost increases of 10% or more require re-authorization. Documentation to support the increase will be submitted along with an updated Economic Analysis. In the absence of Congressional action on the current year PRIP budget request, the President's current year program will be used for planning purposes with the assumption that the program request for continuing items and new starts will be enacted by 1 October of the current year. In the case that appropriations are not made by the Congress, but that a continuing resolution is instituted, major item new start projects will not be executed until full year appropriations are enacted.

(2) **Minor Items.** For FY12 minor items are those items which exceed the capitalization threshold of \$250,000 but which do not exceed the Chief of Engineers authority level.

**E-3. Program and Budget Guidance.** Major Subordinate Command (MSC) Commanders will develop and submit a total PRIP for their command to include district requirements. Tabulation of program requirements will reflect the total MSC program and will show both MSC and district priorities for each item of plant. Each item of plant (major and minor) shall be submitted with full justification. This justification shall be submitted on ENG Form 4613-R for major items and ENG Form 4943-R for minor items via email. In addition, major item new starts proposed for FY12 shall be submitted in accordance with

EC 11-2-199\*  
31 Mar 10

ER 37-1-29 and are to be accompanied by economic and affordability analyses. Cost estimates and obligation plans for continuing projects and projects that are on hold awaiting Congressional authorization should be reviewed and updated annually. A mid-year review will be held per CERM-B guidance for unfinanced requirements and new major projects that are of an emergency nature or have extraordinary circumstances. Mid-year submissions that are a result of poor planning or failure to update during the regular yearly budget submission will not be approved for funding until the next yearly budget cycle. Out-of-cycle requests and notifications for project increases of greater than 10% that require Congressional notification and approval must be kept to a minimum. A five year PRIP plan will be submitted annually, showing the current year, the program year, and the follow- on three out-years using ENG Form 1978-R or an approved electronic Format. The-PRIP plan shall be updated only after the mid-year review at the end of the second fiscal quarter or whenever significant changes occur. A copy of the semiannual update and changes shall be forwarded to CERM-B in accordance with the HQ mid-year review calendar published each fiscal year by CERM-B.

E-4. **Submission Requirements and Dates.** See Table 2 of the main part of this EC.

ANNEX F

Automation Program

TABLE OF CONTENTS

Subject	Paragraph	Page
Background .....	F-1 .....	F-1
Program Development Concepts .....	F-2 .....	F-1
Program and Budget Guidance .....	F-3 .....	F-1
Submission Dates and Requirements .....	F-4 .....	F-2



## ANNEX F

### Automation Program

F-1. **Background.** House Report 103-135, June 17, 1993, accompanying the Energy and Water Development Appropriations Bill, 1994, directs the Corps to "provide separate and distinct data for automation costs" in future program requests. The basis for this request is the Committee's belief that "the cost attributable to the development and implementation of automated programs of the Corps of Engineers is entirely unreasonable." In accordance with this direction, the Civil Works Directorate provides Congress with a display of estimated automation costs with its annual program submissions.

F-2. **Program Development Concepts.** For PY (FY12), the Corps will provide a display similar to that of PY-1, organizing CW automation costs according to the Programs for major investments.

a. The Programmatic management of major IT investment enables the Corps to achieve greater efficiencies within these investments. The programs are:

- (1) Financial Management Services Program
- (2) Asset Management Services Program
- (3) Emergency Preparedness and Response Program
- (4) Business Management Tools Program
- (5) Acquisition Services Program
- (6) Science and Engineering Technology Program
- (7) Real Estate Management Program
- (8) IT Infrastructure and Office Automation Program

b. Additionally, we will distinguish between items proposed for PRIP acquisition (i. e., items supporting more than one project or program and costing more than \$250,000), also displayed under the Revolving Fund section of the program; and items costing less than \$250,000, and expensed, or acquired using specific study, project or program funds.

F-3. **Program and Budget Guidance.** Information Technology Investment Portfolio System (ITIPS) must be maintained up-to-date and reflect your best estimate of what actual requirements will be since it is the data source for the estimate of our automation costs being reported to Congress. The PRIP Five-Year Plan remains primarily a planning tool, but since the data in it is used to prepare our automation costs estimate it is important that it too reflect your best estimate of what actual requirements will be. Justifications to support PY PRIP requirements in plan are to be submitted with the PRIP budget submittal per separate guidance provided by CERM-B. Refer to ER 37-1-29 for instructions for preparing, justifying and submitting PRIP budget requirements.

**SPECIAL NOTE FOR AUTOMATED ENGINEERING TOOLS** (ITIPS classification). The Automated Engineering Tools (AET) classification represents an aggregation of field-level initiatives of individual offices throughout USACE for procurement and support of AIS products in support of assigned technical

functions. Nearly three-quarters of this funding item is identified for Computer Aided Design (CAD) and Geographic Information System (GIS) tools. The remainder includes surveying, mapping, global positioning systems, data management, and remote lock and dam operating systems. AET represents the largest single cost item under the Science and Engineering Technology Program, approximately \$40M USACE-wide in PY. Please pay particular attention to the accuracy of this line item in the update of your ITIPS record. We will be utilizing these numbers to better define the magnitude of our Science and Engineering (S&E) tools investments, as part of the ongoing USACE efforts to improve the support of S&E.

**F-4. Submission Dates and Requirements.**

**a. Information Technology Investment Portfolio System (ITIPS).** In the case of the ITIPS, which is updated annually as part of the Corps' Capital Planning and Investment Management Process (CPIM), the most important data elements for the Civil Works automation budget are contained in the PY Requirements Tabs (Direct, Site, and PRIP) for development, modernization, operations and support. Although ITIPS is continually available for updating, the Requirements Tabs (for financial data input) are only open during the 1<sup>st</sup> quarter of the FY to coincide with the start of the CPIM process. Please ensure that the ITIPS is kept up to date and all cost data are entered during the aforementioned update period. (In accordance with ER 25-1-2, the functional proponent has Life Cycle Management of Information Systems (LCMIS) responsibility for any Automated Information System AIS. Although this party may not be responsible for entering data into the ITIPS, it is responsible for the accuracy of the data.). More information about the CPIM process is available in ER 25-1-106.

**b. PRIP Five-Year Plan.** A new PRIP Five-Year Plan must be submitted annually per separate guidance provided by CERM-B. Please ensure that your annual PRIP Five-Year Plan contains accurate FY12 estimates for Categories 80 (Software) and 90 (Hardware). Refer to ER 37-1-29 for instructions for preparing the PRIP Five-Year Plan and update submission requirements.

ANNEX-G

Construction  
Continuing Authorities Programs

TABLE OF CONTENTS

Subject	Paragraph	Page
General.....	G-1 .....	G-1
CAP Budget Restrictions.....	G-2 .....	G-1
Coordination Account.....	G-3 .....	G-2
Appropriation Account.....	G-4 .....	G-2
Increments Criteria.....	G-5 .....	G-3
Program Ranking Criteria.....	G-6 .....	G-4
Data Elements and Ranking Method.....	G-7 .....	G-4
TABLES		
.....	Table .....	Page
CAP Data Elements .....	G-1 .....	G-4



ANNEX G

Continuing Authorities Program

**G-1. General.**

a. The CAP is a group of legislative authorities under which the Secretary of the Army, acting through the Chief of Engineers, is authorized to plan, design, and implement certain types of water resources projects without additional project specific congressional authorization. The purpose of the CAP is to plan and implement projects of limited size, cost, scope, and complexity. Although there is no specific minimum project size or cost, very small projects are not pursued under CAP as they should be implemented by other Federal or non-Federal entities, and large or complex problems are pursued under the specifically authorized programs. The table below lists the CAP authorities and their project purposes.

b. General Requirements. Projects recommended for implementation pursuant to CAP authorities must be justified, formulated, and implemented in accordance with the requirements discussed in ER 1105-2-100. There are two phases for CAP projects.

- (1) Feasibility Phase.
- (2) Design and Implementation Phase.

**CAP AUTHORITIES**

<b>AUTHORITY</b>	<b>PROJECT PURPOSE</b>
Section 14, Flood Control Act of 1946, as amended	Stream bank and shoreline erosion protection of public works and non-profit public services
Section 103, River and Harbor Act of 1962, as amended (amends Public Law 79-727)	Beach erosion and hurricane and storm damage reduction
Section 107, River and Harbor Act of 1960, as amended	Navigation improvements
Section 111, River and Harbor Act of 1968, as amended	Shore damage prevention or mitigation caused by Federal navigation projects
Section 204, Water Resources Development Act of 1992, as amended	Regional sediment management
Section 205, Flood Control Act of 1948, as amended	Flood control
Section 206, Water Resources Development Act of 1996, as amended	Aquatic ecosystem restoration
Section 208, Flood Control Act of 1954, as amended (amends Section 2, Flood Control Act of August 28, 1937)	Removal of obstructions, clearing channels for flood control
Section 1135, Water Resources Development Act of 1986, as amended	Project modifications for improvement of the environment

**G-2. CAP Budget Restrictions.**

a. Categorical Restrictions. In accordance with ER 1105-2-100, the following categories of work shall not be submitted for budgeting in CAP unless specific legislative direction is provided. If projects of these types are proposed for CAP budgeting, the legislative authority must be specified in the remarks data field.

- (1) Study only activities, excepting participation in Section 204 Regional RMS plans.
- (2) Projects to implement or replace any portion of a project specifically authorized by Congress.

(3) Projects that nullify or change an existing condition of non-Federal responsibility required for a project specifically authorized by Congress or implemented under a CAP authority.

(4) Adoption of a non-Federal project for future maintenance at Federal expense.

(5) Restoration of completed Corps projects to their authorized dimensions.

(6) Required non-Federal maintenance at a federally constructed project.

(7) Correction of design deficiencies on another CAP project or a specifically authorized project.

b. Funding Limits.

(1) The cumulative request in increments 1-8 for a project phase will not exceed the total PY obligation capability for that phase. Place any additional amounts in increment 9.

(2) Section 107 projects that do not have ASA Fact Sheet concurrence as required by ER 1105-1-100 will request not more than a cumulative of \$100,000 for Feasibility phase only in increments 1-8. No requests for D&I for such projects will be included in increments 1-8.

(3) All requests on Section 107 projects for which the ASA has given a non-concur decision shall be placed in increment 9.

c. Federal Participation Limits. CAP budget submissions shall comply with the following limits given in Table F-2 of ER 1105-2-100, as amended by WRDA 2007.

STATUTORY FEDERAL PARTICIPATION LIMITS

Authority	Per Project Limit (\$)	Annual Program Limit (\$)
Sec 14	1,500,000	15,000,000
Sec 103	3,000,000	30,000,000
Sec 107	7,000,000	35,000,000
Sec 111	5,000,000	Not Applicable
Sec 204	Not Applicable	15,000,000
Sec 205	7,000,000	55,000,000
Sec 206	5,000,000	50,000,000
Sec 208	500,000	7,500,000
Sec 1135	5,000,000	40,000,000

G-3. **Coordination Account.** Coordination account funds are not budgeted against specific projects. Coordination account funds will be prepared by HQ. Coordination activities related to on-going projects are funded in budget activities for that project's funding account.

G-4. **Appropriation Account.** All CAP projects (including sections 111 and 204) will be budgeted in the Construction account. Budget instructions are given in the Main EC and in Annex B, Construction and Flood Control, Mississippi River and Tributaries. CCS codes are the Main EC, Table 3.

G-5. **Increments Criteria.** CAP budget items shall be assigned to Increments and ranked using a performance based analysis of incremental benefits to be realized by incremental increases in overall program funding. Put unbudgetable items in increment 9. For each increment, if there are multiple

independent activities or contracts for a given project, then itemize requests for each separable activity or contract. Only items meeting the inclusion criteria may be included in a given increment. Continuing contracts will not be used for CAP. All CAP contracts are to be fully fund. Requests for projects that have previously been terminated or completed and fiscally closed out will be placed in increment 9.

a. **Increment 1** – Inclusion and exclusion criteria:

(1) Includes phases of work scheduled to be ongoing from PY-1 for projects listed in the PY-1 President's Budget.

(2) Includes work necessary to satisfy Legal Mandates.

(3) Excludes new phases and items requiring initiation of new phases.

(4) Excludes unbudgetable items, even if such items might otherwise qualify for this increment.

b. **Increment 2** – Inclusion and exclusion criteria:

(1) Includes ongoing Feasibility phase work for projects with FCSA's executed before July 1, PY-1.

(2) Includes ongoing D&I phase work (Sections 14, 103, 205, and 208) for projects with:

BCR>7, and

Project completion date in PY, and

Partner Agreement executed before PY-1.

(3) Includes ongoing D&I work phase NAV work (Sections 107, 111, and 204) for projects with:

BCR>7, and

Project completion date in PY, and

Partner Agreement executed before PY-1.

(4) Includes ongoing D&I phase ENR work (Sections 206 and 1135) for projects with:

Environmental score of Regionally Significant, and

Total Environmental Significant Socor >50, and

Project completion date in PY, and

Partner Agreement executed before PY-1.

(5) Includes work necessary to solve critical Life Safety Issues.

(6) Excludes new phases and items requiring initiation of new phases, excepting critical Life Safety.

(7) Excludes unbudgetable items, even if such items might otherwise qualify for this increment.

c. **Increment 3** – Inclusion and exclusion criteria:

(1) Includes new phases of work for projects listed in the PY-1 President's Budget.

(2) Includes items for phases scheduled to be ongoing from PY-1 that are necessary to sustain an efficient PMP project schedule.

(3) Excludes new phases for projects not listed in the PY-1 President's Budget.

(4) Excludes items which advance the efficient project schedule.

(5) Excludes unbudgetable items, even if such items might otherwise qualify for this increment.

d. **Increments 4-8** – Inclusion and exclusion criteria:

(1) Includes items for continuing or new phases to sustain the efficient PMP project schedule.

(2) Includes additional capability amounts for continuing or new phases to enhance or advance the PMP project schedule.

(3) Excludes unbudgetable items, even if such items might otherwise qualify for this increment.

e. **Increment 9** – Inclusion and exclusion criteria:

(1) Includes unbudgetable items. For example, Section 107 projects that have received non-concur decisions. Explain in remarks why the item is not budgetable.

(2) Excludes budgetable items.

G-6. **Program Ranking Criteria.** All CAP budget items shall be ranked using performance based analysis. District and MSC Rankings shall use consecutive integer numbers beginning with the number one. The entire CAP Program shall be ranked across all CAP Sections. Each item must have a unique ranking number.

G-7. **Data Elements and Ranking Method.**

a. **General.**

1) All dates are entered in calendar date form as YYYY-MM-DD.  
(<http://www.iso.org/iso/en/prods-services/popstds/datesandtime.html>)

(2) If data is not available or not applicable, then enter NA.

b. **Data definitions and ranking method are given in the attached Excel workbook.**

TABLE G-1

PY CAP Data Elements



Table G-1 FINAL.xls