

Review of Civil Works Projects

Planning SMART Guide

USACE

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1. BACKGROUND

The Secretary of the Army and/or the Chief of Engineers has authority to investigate water resources problems and opportunities and make recommendations through the Administration to the Congress regarding solutions that are in the public interest. Authority is provided through study resolutions passed by the Senate Committee on Environment and Public Works and the House Committee on Transportation and Infrastructure, or through specific provisions in Water Resources Development Acts (WRDA) and other Acts submitted by the Congress and enacted by the President. Investigations are initiated upon appropriation of funds through Energy and Water Development Appropriations Acts, or other appropriations Act, that are based on a budget from the President, modified as desired by the Congress, and enacted by the President. Rather than conducting these investigations from a central location such as Corps of Engineers Headquarters (HQUSACE), the Chief of Engineers allocates funding through the Commander of a regional Major Subordinate Command (MSC) to a Commander of a local Corps of Engineers (USACE) District. Using the allocated funds, and any required non-Federal funding and resources, the local USACE District conducts an investigation that will ultimately inform the recommendation of the Chief of Engineers. The findings of the USACE District are reported by the District Commander and, if concurred with, endorsed by the MSC Commander to the Chief of Engineers. In making a recommendation to Congress, the Chief of Engineers has the prerogative to concur entirely with the reporting officers (the District and MSC Commanders), concur principally with the reporting officers but with modification of the recommendations, or to disagree with the recommendations of the reporting officers and recommend a completely different solution. The goal of the variety of reviews conducted throughout the development of the reporting officers' report is for the reporting officers to present the Chief of Engineers with legally and policy compliant recommendations for technically correct solutions that can be endorsed without modification to the Administration and the Congress.

2. TYPES OF REVIEW

There are generally three major types of reviews that will occur during the development of the reporting officer's report, referred to as a decision document. They are technical review, legal review, and policy review. Within these broad review categories, there may be sub-categories of reviews. Some are a matter of good business practice and some are statutorily required. Reviews have many overarching purposes with the primary goal being the preparation of a decision document that accurately reflects the views of USACE, the Army, and the President. Reviews determine the appropriateness of the problems and opportunities addressed, the plans considered, and the solution recommended. Analyses and recommendations must be in

accordance with policy, laws, and statutes; result in a recommended solution that warrants USACE participation; and be supported by a non-Federal sponsor(s) that is willing and able to fulfill the non-Federal responsibilities of project implementation. Reviews are conducted within USACE at the local, regional, and national level and by experts outside of USACE. The success of the review process is often judged by how well these reviews complement each other and how efficiently these reviews can be completed.

a. Technical Review

Technical reviews are the most extensive and diverse of the three major types of reviews. They are a means of checks and balances that include peer reviews and public reviews, reviews conducted internal to USACE, and reviews conducted by external experts. Technical review focuses on the methodology and analysis of results specific to particular professional areas of expertise. Internal to USACE, these reviews consist of District Quality Control and Agency Technical Review. External to USACE, these reviews include three statutorily directed reviews: Independent External Peer Review as required by Sections 2034 and 2035 of WRDA 2007 (Public Law (P.L.) 110-114); public reviews required by the National Environmental Policy Act of 1969 (NEPA) (P.L. 91-190); and State and Agency Review required by the 1944 Flood Control Act (P.L. 78-534).

i. Internal Corps Reviews

(1) District Quality Control (DQC)

DQC is the most direct of the technical reviews. DQC is an internal district review process of basic science and engineering work products focused on fulfilling the project quality requirements. It is a robust series of measures taken by USACE District leadership to ensure the quality of technical decisions made throughout project development. It starts with the identification of a capable project delivery team (PDT), includes training and mentoring of the members of the PDT, coaching of the PDT throughout project development, review of PDT products by senior leaders, and after action reviews. Senior district leaders overseeing planning, engineering, real estate, and project management (and other disciplines as necessary) are responsible for and expected to be directly involved in DQC. Quality checks and reviews occur during the development process and are carried out as a routine management practice. All civil works planning, engineering, and Operation & Maintenance (O&M) products undergo DQC.

(2) Agency Technical Review (ATR)

ATR is an independent USACE-internal review which verifies the DQC. As EC 1165-2-209 requires that ATR not be a replacement for DQC, ATR will always follow DQC. ATR is consistent with the Office of Management and Budget (OMB) peer review requirements under the Information Quality Act (Section 515 of the Treasury and General Government Appropriations Act of 2001, P.L. 106-554) and OMB's "Final Information Quality Bulletin for Peer Review" (referred to as the "OMB Peer Review Bulletin"). ATR assesses whether the



analyses presented are technically correct and comply with published USACE guidance, and whether the document explains the analyses and results in a reasonably clear manner for the public and decision makers. The ATR team validates the quality and credibility of the government's scientific information, including that resulting from in-kind services provided by non-Federal sponsors.

ii. External Reviews

(1) NEPA Review

A NEPA document, whether separate from the decision document or integrated within it, is circulated to agencies, organizations and members of the public known to have an interest in the study. Draft and final environmental assessments (EA) and draft and final Environmental Impact Statements (EIS) and supplements are made available to the public as provided in 40 Code of Federal Regulations (CFR) 1502.19 and 1506.6. The final report, final EA or final EIS (FEIS), and the proposed Report of the Chief of Engineers is circulated to interested parties for public review and filed with the Environmental Protection Agency (EPA) pursuant to regulations of the President's Council on Environmental Quality (CEQ) for implementing NEPA and 40 CFR Parts 1500-1508. NEPA documents are prepared concurrently with and utilize data from analyses required by other environmental laws and executive orders. Reviews and consultation requirements, analyses, and status of coordination associated with applicable laws, executive orders and memoranda are summarized in the draft document.

(2) Independent External Peer Review (IEPR)

IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. IEPR is provided for in Sections 2034 and 2035 of WRDA 2007. Sections 2034 and 2035, besides having different foci, also differ significantly in legislative language. This necessitates some variation in the scope and procedures for IEPR, depending on the phase and purposes of the project under review. For clarity, IEPR is divided into two types: Type I is generally for decision documents and Type II (Safety Assurance Review (SAR)) is generally for implementation documents. The differing criteria for conducting the two types of IEPR can result in work products being required to have Type I IEPR only, Type II IEPR only, both Type I and Type II IEPR, or no IEPR. Any work product, report, evaluation, or assessment that undergoes DQC and ATR also may be required to undergo IEPR under certain circumstances. A deliberate, risk-informed recommendation whether to undertake IEPR will be made and documented by the PDT. The District Chief of Engineering, as the Engineer-In-Responsible-Charge, will determine whether a Type II review is required. For Type I IEPR, the PDT's recommendation will be submitted by the District Commander to the MSC. The MSC Commander has approval authority to undertake Type I IEPR. However, if the MSC concurs with a recommendation to exclude the project from Type I IEPR, the MSC will forward the recommendation with its endorsement to the HQUSACE Regional Integration Team (RIT)

for coordination in HQUSACE and a determination by the Director of Civil Works (DCW) or the Chief of Engineers, depending on the factors.

(3) State and Agency (S&A) Review.

The S&A Review by pertinent agencies is required by Executive Order 12372, the 1944 Flood Control Act (P.L. 78-534), and the Fish and Wildlife Coordination Act (P.L. 85-624).

HQUSACE administers the S&A Review with the assistance of the PDT.

b. Legal Review

Legal review begins early in the study process so that issues are identified and addressed promptly, with elevation to higher authority as appropriate. These reviews ensure compliance of the investigations, reports, and recommendations with laws that govern the development of water resources solutions, including environmental laws such as NEPA; project specific and general provisions from WRDAs, River and Harbor Acts, and/or Flood Control Acts; and adherence to study resolutions, among others. PDT's are encouraged to seek legal counsel during project development. Legal certification by District Counsel is required prior to release of the draft decision document for public review, and legal review must continue as the final report is developed, with specific focus on changes in the decision document. All final decision documents must be legally certified and final legal compliance reviews are performed by HQUSACE unless this responsibility has been delegated. Guidance for legal compliance reviews is addressed in Appendix H, ER 1105-2-100.

c. Policy Review

HQUSACE is responsible for the policy review and approval of all decision documents requiring approval by the Chief of Engineers or the Assistant Secretary of the Army (Civil Works) (ASA(CW)), all decision documents recommending Congressional action, and documents intended to inform the Congress. Congressional action involves authorization or modification of projects, including increases in the authorized cost of projects. Documents intended to inform Congress include letter reports recommending no further USACE action. Per ER 1165-2-502, review and approval authority is delegated to the MSC for post-authorization decision documents that are in accordance with law and policy and do not meet the requirements for HQUSACE approval above, with the exception of dam safety reports. Policy reviews verify compliance of the investigations, reports, and recommendations with prevailing policies that were developed in response to laws, Executive Orders, and other directives governing the development of water resources solutions. Policy review involves the analysis of decision factors and assumptions used to determine the extent and nature of Federal interest, project cost sharing and cooperation requirements, and related issues. It ensures that established policy and procedures are applied uniformly nationwide and identifies policy issues that must be resolved in the absence of established criteria, guidance, regulations, laws, codes, principles and procedures or where judgment plays a substantial role in decision making. Policy compliance review also confirms that the proposed action is consistent with the overall goals and objectives of the Civil Works



Program. The policy review team is engaged throughout project development to identify potential policy conflicts, to address conflicts when they can be most efficiently and effectively addressed, and to ensure that the ultimate recommendations of the reporting officers are policy compliant so that they can be supported by the Chief of Engineers. Every draft and final report receives a policy review. Guidance for policy compliance reviews is addressed in Appendix H, ER 1105-2-100.

d. Quality Assurance (QA)

QA is the responsibility of the MSC. In contrast with DQC which is focused on process outputs, QA is focused on the process itself. The overall goal of the QA process is to ensure that quality requirements are fulfilled and that the PDT is able to plan, design, and deliver quality projects on schedule, within budget, and acceptable to the non-Federal sponsor and the Federal Government. It requires a systematic series of checks and balances for monitoring and evaluating the USACE District's QC processes, with feedback communicated at appropriate stages in project development to ensure that technical and policy errors are avoided or addressed. Since QA is a process review that is conducted throughout the study, QA can be concurrent with all product reviews. QA includes an audit of the qualifications of the PDT and the DQC team, in coordination with the appropriate Planning Center of Expertise (PCX), with actions as necessary to ensure a technically proficient PDT and capable DQC reviewers. QA also includes engagement with the PDT, District leadership, the ATR team, and the HQUSACE policy review team throughout project development, and the conduct of after action reviews. Senior MSC leaders overseeing planning, engineering, real estate, and project management (and other disciplines as necessary) are responsible for and expected to be directly involved in QA and to regularly interact with their counterparts in the USACE District. The MSC Commander is accountable for execution of QA.

e. Model Certification

The USACE Planning Models Improvement Program (PMIP) was established in 2003 to assess the state of USACE planning models and to make recommendations to assure that high quality methods and tools are available to enable informed decisions on investments in the Nation's water resources infrastructure and natural environment. The main objective of the PMIP is to carry out a process to review, improve and validate analytical tools and models for USACE Civil Works business programs. When planning activities require the use of models, the use of certified or approved models is mandatory. National certification and approval of planning models results in significant efficiencies in the conduct of planning studies and enhances the capability to produce high quality products. PCXs are responsible for the implementation of the certification and approval assessment processes provided for in EC 1105-2-412. Models are currently certified by the HQUSACE Chief, Planning and Policy Division or approved for use by the HQUSACE Deputy Chief, Planning and Policy Division following review and a recommendation by the PCX and consideration by a HQUSACE Model Certification Panel. This process will transition to one where models are certified by the HQUSACE Chief, Planning

and Policy Division or approved for use by the Director of the PCX. The HQUSACE Model Certification Panel will continue to consider requests for national certification from the PCX and will periodically audit the approval of models by the PCX Director. **Further guidance on this transition is forthcoming.**

f. Study Cost, Schedule, and Coordination Requirements (The 3x3x3 Rule)

No feasibility cost sharing agreement (FCSA) will be executed for any study with an estimated total cost greater than \$3 million and/or a study length of more than 3 years, even if using a model FCSA, unless an exemption has been provided by the Deputy Commanding General for Civil and Emergency Operations (DCG-CEO). Any ongoing study with a Chief's Report scheduled for after December 2014 and a remaining cost to complete greater than \$3 million and/or a study length of more than 3 years cannot proceed unless an exemption has been provided by the DCG-CEO. Approval of requests for exemptions is expected to be rare and must undergo review by a HQUSACE Senior Leader Panel prior to consideration by the DCG-CEO. Such requests will only be made after a coordinated effort among the three levels of the vertical team has been made to scope the study utilizing rigorous management controls and the principles of risk-informed planning to support efficient completion of the study in 18 months to 3 years.

Exemptions will be requested in writing by the District Commander and endorsed to HQUSACE by the MSC Commander. The exemption package will be provided to the RIT and include:

- A brief Report Synopsis (less than 10 pages) that describes without project conditions; problems and opportunities; planning objectives and constraints; decision criteria for evaluation, comparison, and selection of alternatives; key uncertainties; planning measures already eliminated from consideration; and formulated plans that are under consideration;
- A Scoping Plan that describes the path to the completion of the study based on risk areas;
- A table that summarizes the original study budget (by work breakdown structure) and the current study budget, if different, as a result of any re-scoping;
- A table that displays the original study milestones and the current study milestones, if different, as a result of any re-scoping; and
- An electronic copy of the presentation that the District Commander will use to brief the Senior Leader Panel. The presentation is expected to be succinct, give a short background on the need for the study, the sponsor support, and the factors driving the request for relief: project type, size, cost, and/or complexity. It will include a description of the effort taken to reduce the scope and schedule, discuss the tasks that are the high risk schedule and budget drivers, and identify the involvement of the vertical team that participated.



Requests for exemptions will be logged with the Office of Water Project Review (OWPR) as a means of tracking exemption requests programmatically. The RIT Planner will be the review manager for the exemption request. After ensuring the completeness of the exemption request package, the RIT will schedule a meeting of the Senior Leader Panel at the earliest possible opportunity. The Senior Leader Panel will include the HQUSACE Chiefs of Engineering and Construction, Planning and Policy, Real Estate, and Civil Works Program Integration. The exemption request package will be circulated to the HQUSACE members of the vertical team that were involved in study scoping and provided concurrently to the Senior Leader Panel. The HQUSACE vertical team members will concur with the MSC endorsement or indicate additional measures that could be taken within acceptable risk to lower study costs and/or shorten the study schedule.

The Senior Leader Panel will be convened virtually. Expected participants include the District Commander, the project manager (PM), the District Chief of Planning, the MSC Director of Programs, the MSC Chief of Planning and Policy, and HQUSACE members of the vertical team. Following the District Commander's presentation, the Senior Leader Panel will ask questions of the District Commander and the vertical team as needed to ensure that the study is focused and scoped to the appropriate level of detail, utilizes rigorous management controls, and takes full advantage of existing and readily available information.

Based on the exemption package and the outcome of the Senior Leader Panel meeting, the Senior Leader Panel Members will concur with the MSC endorsement or indicate additional measures that could be taken within acceptable risk to lower study costs and/or shorten the study schedule. The Panel findings are not required to be unanimous and will be provided via the Staff Action Summary to the DCG-CEO for consideration. If the exemption is denied, a facilitated re-scoping of the study involving all three levels of the vertical team will be required. The RIT will develop a Memorandum from the DCG-CEO to the MSC Commander with actions as required.

3. Resourcing the USACE Reviews

a. DQC

DQC may be performed by staff responsible for the work, such as supervisors, work leaders, team leaders, designated individuals from the senior staff, or other qualified personnel. The District Chief of Planning is personally responsible for the adequacy of pre- and post-authorization decision documents. The District Commander is accountable for execution of DQC and responsible for assuring that decision documents comply with all applicable statutory and policy requirements and have been read for consistency prior to forwarding to higher authority. In its QA function, the MSC is responsible for assessing the technical proficiency of the PDT and the capability of DQC reviewers. If the MSC determines that some or all of the DQC team do not have the experience or capability to adequately execute the DQC function, it will work with the District and the PCX to identify other resources to replace or supplement the DQC team. The MSC can replace DQC team members with staff from a USACE District within

the MSC or another USACE District. Supplemental DCQ team members could come from a USACE District within the MSC, another USACE District, the ATR team, USACE laboratories, etc. These additional resources, whether replacing or supplementing DQC team members will be mutually selected by the MSC and the appropriate PCX and will be project funded.

b. ATR

ATR teams are comprised of senior USACE personnel that are recognized subject matter experts with the appropriate technical expertise, such as regional technical specialists who are a cadre of experts in a Corps civil works discipline and/or mission area recognized for outstanding work and leadership. ATR teams may be supplemented by outside experts as appropriate. The USACE organization managing a particular review effort is designated the Review Management Organization (RMO) for that effort. For ATR on decision documents, the RMO generally will be the appropriate PCX, e.g. for flood risk management (FRM) decision documents, the FRM PCX would manage the effort. For dam or levee safety modification studies, the USACE Risk Management Center (RMC) will be the RMO, in close coordination with the FRM PCX or the Coastal Storm Damage Reduction PCX, as appropriate. The RMO selects the ATR lead for the study from a list of qualified regional technical specialists and experienced ATR leads. Selection of ATR leads that are not regional technical specialists or who have had no previous experience as an ATR lead will be by exception. The ATR will be managed by an office outside the home MSC. The development of the Review Plan is generally the responsibility of the PDT in concert with the RMO. The ATR lead will be included as a representative of the RMO. ATR is conducted by a qualified team from outside of the home district that is not involved in the day-to-day production of a project/product. The ATR leader, with assistance from the RMO, identifies and secures the services of the ATR team. Priority for ATR assignments will be given to regional technical specialists. The name and organizational affiliation of the ATR lead and ATR team and a short paragraph on their credentials and relevant experience will be included in the Review Plan.

c. Legal Review

Legal reviews are conducted by counsel representing the district, MSC, and/or HQUSACE and are coordinated throughout the respective local, regional, and national offices.

d. Policy Review

OWPR assigns a review manager and assembles the policy review team. OWPR may assign the review manager role to an MSC when appropriate, but would retain responsibility for issuing review documents. The team may include subject matter experts from a USACE District (usually outside the home district), MSC, or PCX, subject to need and availability. This coordinated use of team members external to HQUSACE is provided for in Appendix H of ER 1105-2-100. In some instances, this coordinated review could serve both policy review and MSC QA purposes. Dramatically shortening the development of pre-authorization planning studies requires a higher level of involvement from the vertical team. It is essential that



HQUSACE and the Office of the ASA(CW) (OASA(CW)) be engaged in the clarification of policy (particularly regarding the appropriate level of analytical detail) and the identification and resolution of policy issues throughout the study. Accomplishing the requisite level of vertical team integration requires that HQUSACE and OASA(CW) policy reviews be responsive, require minimum advanced documentation, and focus on early issue resolution. Leveraging vertical team resources is critical to achieving this level of involvement. The inclusion of MSC, and potentially USACE District resources, will require coordination with and the consent of MSC leaders. OWPR will identify and maintain a roster of the dedicated policy review team that is assigned to the portfolio of active studies.

4. Review Documentation

a. Review Plan

All projects or activities will be covered by a Review Plan. The Review Plan is the basis for addressing the Information Quality Act requirement to ensure and maximize the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency. The Review Plan is the primary opportunity to scale reviews appropriate to the size and level of complexity of a project throughout its life cycle. The Review Plan will be prepared by the PDT within the USACE District or other USACE office responsible for the project, in coordination with the appropriate RMO, and approved by the MSC Commander. DQC and ATR team members will be identified by name and organizational affiliation with a short paragraph on both the credentials and relevant experiences of each reviewer. An initial Review Plan will be developed prior to executing an FCSA, modified as necessary throughout project development, and revised prior to the completion of the feasibility phase to detail the reviews in the Pre-construction Engineering and Design (PED) phase. The expected content of Review Plans is prescribed in EC 1165-2-209 (Civil Works Review Policy). **A Review Plan template is under development and will be included in Appendix A.**

b. Compilation and Interpretation of Existing Guidance

All planning studies begin with identification and compilation of applicable laws, regulations, and guidance. These efforts will be as comprehensive as possible and will be shared with the entire vertical team and the ATR team. The Planning, Engineering and Construction, and Real Estate Communities of Practice (CoP) will assist this effort by jointly developing and making available a list of laws, regulations, and guidance that are universally applicable regardless of mission area, such as ER 1105-2-100 (Planning Guidance Notebook), ER 1110-2-1150 (Engineering and Design for Civil Works Projects), ER 200-2-2 (Procedures for Implementing NEPA), and ER 405-1-12 (Real Estate Handbook). PCXs will assist this effort by developing a list of laws, regulations, and guidance that are generally applicable to their specific mission area, such as ER 1110-2-1404 (Hydraulic Design of Deep-Draft Navigation Projects) or ER 1165-2-122 (Studies of Harbor or Inland Harbor Projects by Non-Federal Interests). HQUSACE RITs will provide the project specific guidance resulting from Congressional legislation or from in-

progress reviews. The PM will compile and distribute the applicable guidance at a study kick-off meeting. Questions regarding the interpretation of guidance will be raised within the vertical team and documented in the Decision Log, if appropriate. Interpretation questions that cannot be addressed by the policy review team members will be elevated to HQUSACE for policy clarification by the Chief, OWPR, and if needed, the HQUSACE Chief of Planning and Policy.

c. The Project Study Issue Checklist

The Project Study Issue Checklist in Exhibit H-2 of ER 1105-2-100 **is being updated and will be provided in Appendix B**. It includes many of the more frequent and sensitive policy areas encountered in studies. The checklist was created to emphasize the USACE District's responsibility for achieving policy compliance and to facilitate the early identification and resolution of technical, policy and legal issues via the vertical team. The checklist will be prepared as part of the Review Plan, regularly updated, discussed at in-progress reviews (IPRs) with the vertical team, and provided as read ahead material for milestone meetings. The questions in the Project Study Issue checklist should be included in the Risk Register; any policy risks will be included in the Risk Registry summary provided at each milestone. When the PDT identifies an issue as sensitive, it will immediately engage the vertical team to resolve the concern. If an issue cannot be resolved by simple coordination, the resolution effort will be supported with an issue paper in accordance with paragraph H-2f of ER 1105-2-100.

d. The Report Synopsis

The report synopsis begins with the compilation of basic information about the study and evolves into the decision document. It captures a chronological decision thread with each iteration of the six step planning process. The report synopsis originates as one page of current information for each of the following:

- Problems and opportunities statement;
- Planning objectives and constraints statement;
- List of decision criteria for evaluation, comparison, and selection;
- List of key uncertainties;
- Without condition narrative;
- List of planning measures already eliminated from consideration; and
- Names of formulated plans that are under consideration

Ultimately, the final decision document will be limited to 100 pages or less. Databases and technical analyses may be summarized in the decision document, but will be retained at the District or online. Per ER 200-2-2, an environmental assessment prepared in combination with a USACE report or as a separate document is not to exceed pages. Per 40 CFR §1502.7, the text of final environmental impact statements shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages. PDTs are expected to comply with all of the above page limit restrictions.



e. The Risk Register

The Risk Register is a dynamic (usually qualitative) tool for managing study and project risk associated with a project throughout its life cycle. It documents the study and project risks, risk management options, and the risk control strategy. Typically in the form of a spread sheet, the Risk Register includes the task or decision that is to be managed; the risk and its cause; the consequence of the risk on the study schedule and project outcomes; ratings and their basis for consequence, likelihood, risk (consequence + likelihood) and uncertainty; decision criteria that could be affected; options available for mitigating unacceptable risks; recommended risk management response; identification of other study tasks affected by the outcome of the risk; and the effect of course of action.

f. The Decision Log

There are many times over the course of a study that the vertical team will need to make project decisions. Often these decisions can change the course of the project. The Decision Log is a way for the PDT to document the decisions made and to reduce the study schedule and cost risk arising from undocumented decisions. The Decision Log is a chronological documentation of all policy issues and their resolution. It is created at the beginning of the study with the preparation of the Project Study Issue Checklist, which is an attachment to the Decision Log. Generally, policy issues will be raised and addressed as part of IPR meetings of the vertical team. All changes to the Decision Log are coordinated with the vertical team and a copy of the Decision Log is provided in advance of all milestone meetings. During the final report review and approval process, OWPR will compile the Decision Log and the final report policy compliance assessment results into the Documentation of Review Findings that will be forwarded to ASA(CW) with the final report. The Documentation of Review Findings will demonstrate that the decision document has received policy and legal compliance review and that the document complies with all legal and policy requirements. **A Decision Log template is under development and will be included in Appendix C.**

g. The Scoping Plan

After the development of the initial scope of work for the study, every subsequent suite of actions taken by the PDT will include doing the work required to make the next decision and scoping the work required to make the decision after the next decision. The Scoping Plan is a brief document that is the roadmap for the next steps in the planning process. It is developed based on the Report Synopsis and the Risk Register and documents risk areas and study methodology for updating the project management plan (PMP). **A Scoping Plan template is under development and will be included in Appendix D.**

5. Review Process

Decision-making is focused early in the study process, using a progressive and iterative planning process to address key areas of uncertainty. Incremental decision making is conducted in a

progressive 6-step planning process. This process identifies the next decision to be made and manages uncertainty in making it. It incorporates quality engineering, economics, real estate and environmental analysis. Review efforts manage and balance an appropriate level of detail and acknowledge uncertainty. Vertical integration through IPRs and engagement of decision makers through milestone meetings take place early and throughout the planning process.

a. Identification of the Review Team.

The DQC, policy review, and legal review team members and the ATR lead will be identified and/or confirmed at study initiation. District functional office chiefs (Planning, Engineering, Real Estate, etc) will identify the members of the DQC team. As part of the QA process, the MSC will make adjustments to the DQC team as necessary. Prior to the preparation of the project's Review Plan and prior to the execution of the FCSEA, the RMO selects the ATR lead for the study. The ATR leader, with assistance from the RMO, identifies and secures the services of the ATR team. The DQC and ATR team members will be identified by name and organizational affiliation with a short paragraph on both the credentials and relevant experiences of each reviewer. OWPR assigns a review lead and assembles the policy review team.

b. IPRs

Early interaction of the vertical team will be conducted through a series of IPRs that lead up to milestone meetings. The objective of the IPRs is to ensure orderly progress of the study and preparation of the decision document. This is accomplished by identifying, discussing and resolving technical and policy questions before they unduly affect the progress of the study. The District and MSC, the ATR lead, and HQUSACE will participate in all IPRs. HQUSACE may invite OASA(CW). The PDT will strongly encourage the non-Federal sponsor, resource agencies, and major stakeholders to participate in all IPRs. The ATR will include members of the ATR team as necessary. Within one week of an IPR, the PDT will distribute a copy of its briefing materials, which will include background and facts appropriate to the purpose and scope of the IPR, identify and document issues that need to be resolved, and present the PDT's analysis of options considered and its recommended solution. The forum of the IPR may be a telephone conference, videoconference, webinar, or a face-to-face meeting as appropriate. The forum selection should consider the need for a project site visit. If a site visit would be useful but is not practical, photos and/or a video of the site should be presented. The end-product of all IPRs is an updated Decision Log that documents issue resolution.

c. Issue Resolution

Under development.

d. Milestones

Milestones are triggered by the need to confirm a decision, not the accomplishment of a series of tasks. Five milestones are established for planning studies to confirm decisions regarding the study scope, the tentatively selected plan, the agency endorsed plan, the final decision document,



and the Chief's Report. Senior leader and decision maker involvement at milestone meetings increases as the study progresses.

6. FEASIBILITY STUDY PHASES

Under Development

APPENDIX A: REVIEW PLAN TEMPLATE

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