

ER 1165-2-217

**CIVIL WORKS REVIEW POLICY
DISTRICT QUALITY CONTROL
REVIEW PLAN TEMPLATES**

Presenters:

Karen Miller – LRD RIT Senior Planner

Monique Savage – PCoP

Emily Calla – Levee Safety Center

Date: 06 APR 2023



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of Engineers®**

ER 1165-2-217	Review Plans	DQC	RMO	Potpourri
<p>100 Civil Works Review Policy</p> <hr/> <p>What is...ER 1165-2-217?</p>	<p>100 PMP</p> <hr/> <p>What is...houses the RP?</p>	<p>100 Foundation of the USACE quality process</p> <hr/> <p>What is...DQC?</p>	<p>100 Assign ATR Team</p> <hr/> <p>What is...the RMO?</p>	<p>100 Type of Review for Checking Computations</p> <hr/> <p>What is...Red Dot?</p>
<p>200 4-Part Comment Structure</p> <hr/> <p>What is...1) Problem 2) Basis 3) Significance 4) Resolution?</p>	<p>200 30</p> <hr/> <p>What is...the number of days for initial RP development?</p>	<p>200 Not a substitute for DQC</p> <hr/> <p>What is...ATR and/or higher levels of review?</p>	<p>200 MSC unless delegated to District</p> <hr/> <p>What is...RMO for CAP studies?</p>	<p>200 Standard Naming Convention</p> <hr/> <p>What is...best management practice for version control?</p>
<p>300 3-Part Response</p> <hr/> <p>What is...1) Concur/NonConcur 2) Proposed Resolution or Why NonConcur 3) Location of changes made?</p>	<p>300 Policy & Legal Compliance Review Team Identification</p> <hr/> <p>What is...included at the draft stage of the RP?</p>	<p>300 Happens prior to DQC</p> <hr/> <p>What is...PDT review?</p>	<p>300 RMC</p> <hr/> <p>What is...RMO for projects with Safety Assurance review?</p>	<p>300 Review Plan Re-Approval</p> <hr/> <p>What is...3 years or for significant scope changes?</p>
<p>400 Sec 2034 of WRDA 2007</p> <hr/> <p>What is...the statute that required IEPR?</p>	<p>400 PDT</p> <hr/> <p>What is...responsible for developing the RP?</p>	<p>400 Draft and Final Reports</p> <hr/> <p>What is...needs a DQC Certification to begin ATR?</p>	<p>400 INDC</p> <hr/> <p>What is...RMO for Inland Nav MRERs?</p>	<p>400 Requires a Risk Assessment</p> <hr/> <p>What is...feasibility studies involving life safety?</p>



REVIEW PLAN



REVIEW PLANS – ER 1165-2-217



- Updated Review Plan (RP) Template & Checklist on Toolbox
 - PCX may have additional mission specific requirements
 - DQC guide and checklist
- Know your Review Management Organization (RMO) – RMO endorses the RP / MSC approves the RP
- RP timeline - Initial RP should be drafted in first 30 days as part of Project Management Plan (PMP) development
 - Draft to be updated / endorsed by the RMO before the Alternatives Milestone Meeting (AMM)
 - Submitted to MSC for approval within 2 weeks after the AMM
- New ** Re-approval of updated RPs required after 3 years **
- Approved RP must be posted to district website
- Provide the approved RP to your HQ Regional Integration Team (RIT) Planner



RISK MANAGEMENT CENTER

When is the RMC the RMO?

- Decision Documents
 - **Modification of a dam or levee that does not require specific project authorization.**
 - Continuing Authorities Program (CAP) expected to require a Safety Assurance Review (SAR) during the implementation phase.
- Implementation Documents
 - Flood Risk Management (FRM) or coastal storm risk management (CSR) requiring a SAR.
 - CAP requiring a SAR.

*Other products as requested (Validation Reports when SAR expected during implementation)





RMC TEMPLATES

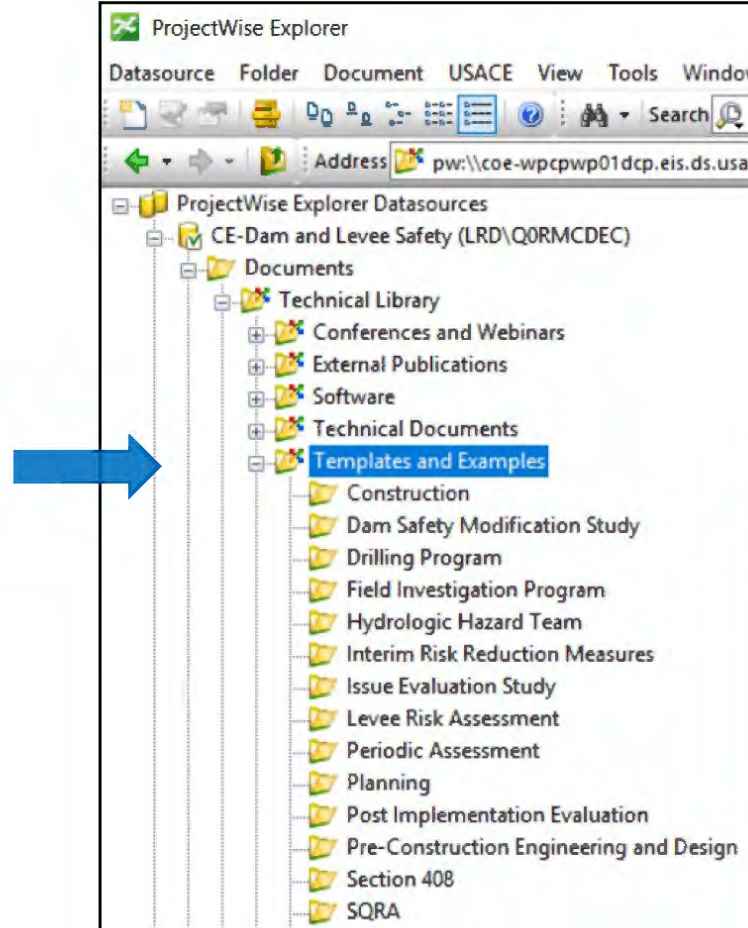
- Located on ProjectWise:

CEDALS/DOCS/TECH LIBRARY/TEMPLATES

pw:\\coe-wpcwp01dcp.eis.ds.usace.army.mil:RMC01\Documents\Technical Library\Templates and Examples\

RMC has templates for:

- PED Implementation
- Issue Evaluation Study (IES)/ Semi-Quantitative Risk Assessment (SQRA)
- Dam Safety Modification Study
- ATR Certification
- 408 Review Plan
- SAR IGE & SAR SOP
- SAR Completion




US Army Corps of Engineers

Prepared by:
South Atlantic Division
Jacksonville District

Rio de la Plata Flood Control Project, Puerto Rico Validation Report Review Plan

PREPARED BY: GARCIA-BELTRAN LYAN.I.118241
2534
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Date: 2022.10.18 13:45:14 -04'00'

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Date: 2022.10.24 09:06:15 -04'00'

APPROVED BY: 
Digitally signed by HILBNER DANIEL HARRY.106307
Date: 2022.11.02 13:30:53 -04'00'

Daniel H. Hilbner, PMP
Brigadier General, U.S. Army
Commanding

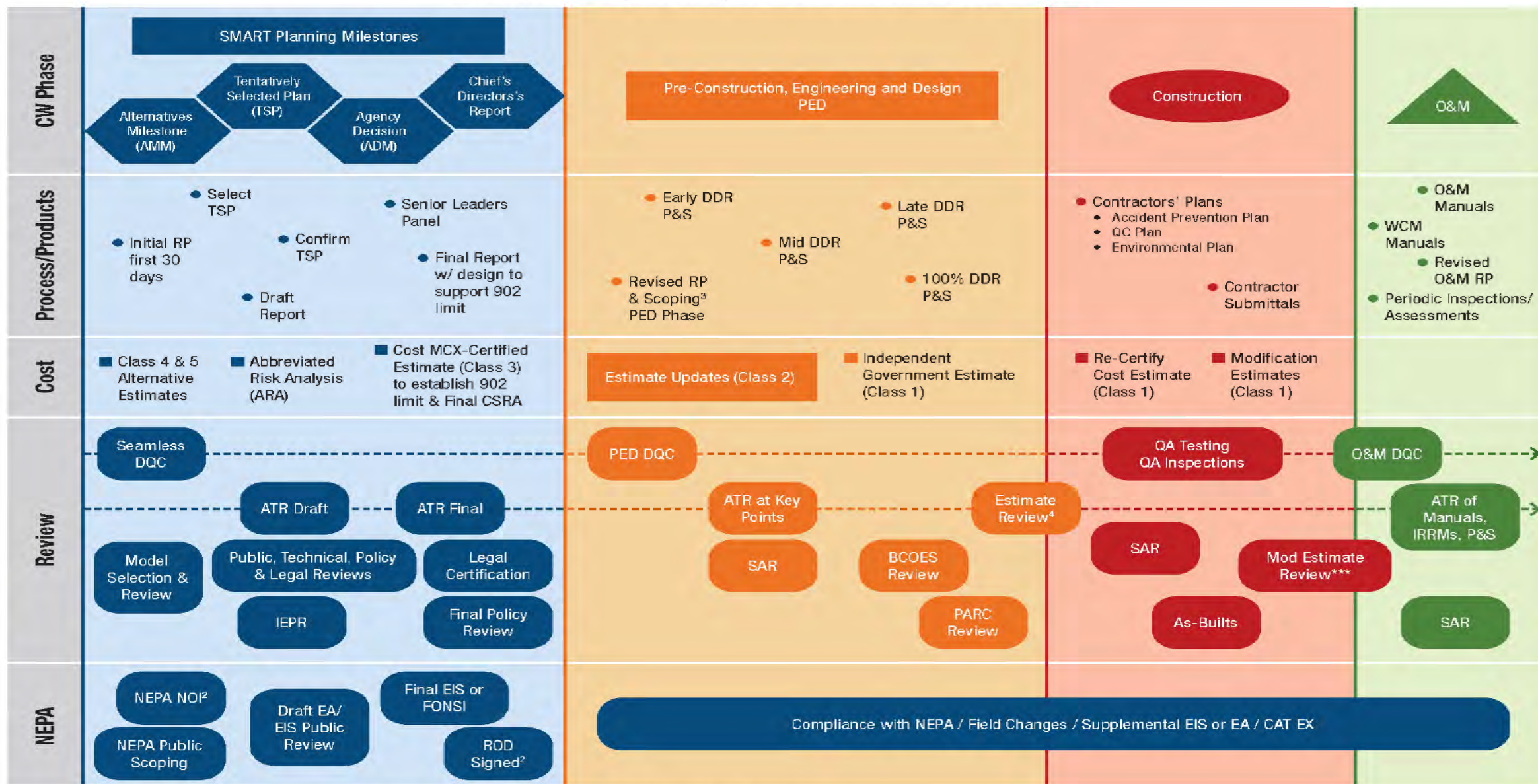
MSC Approval Date: October 2022
Last Revision Date: N/A

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DISTRICT QUALITY REVIEW

Civil Works Project Stages of Development and Review¹



¹ Graphic not to time scale and projects can begin in any of the stages
² If environmental impact statement is required

³ Includes review of feasibility level design & commitments
⁴ Per USACE Acquisition Instruction (UAI)



SEAMLESS DQC – ER 1165-2-217

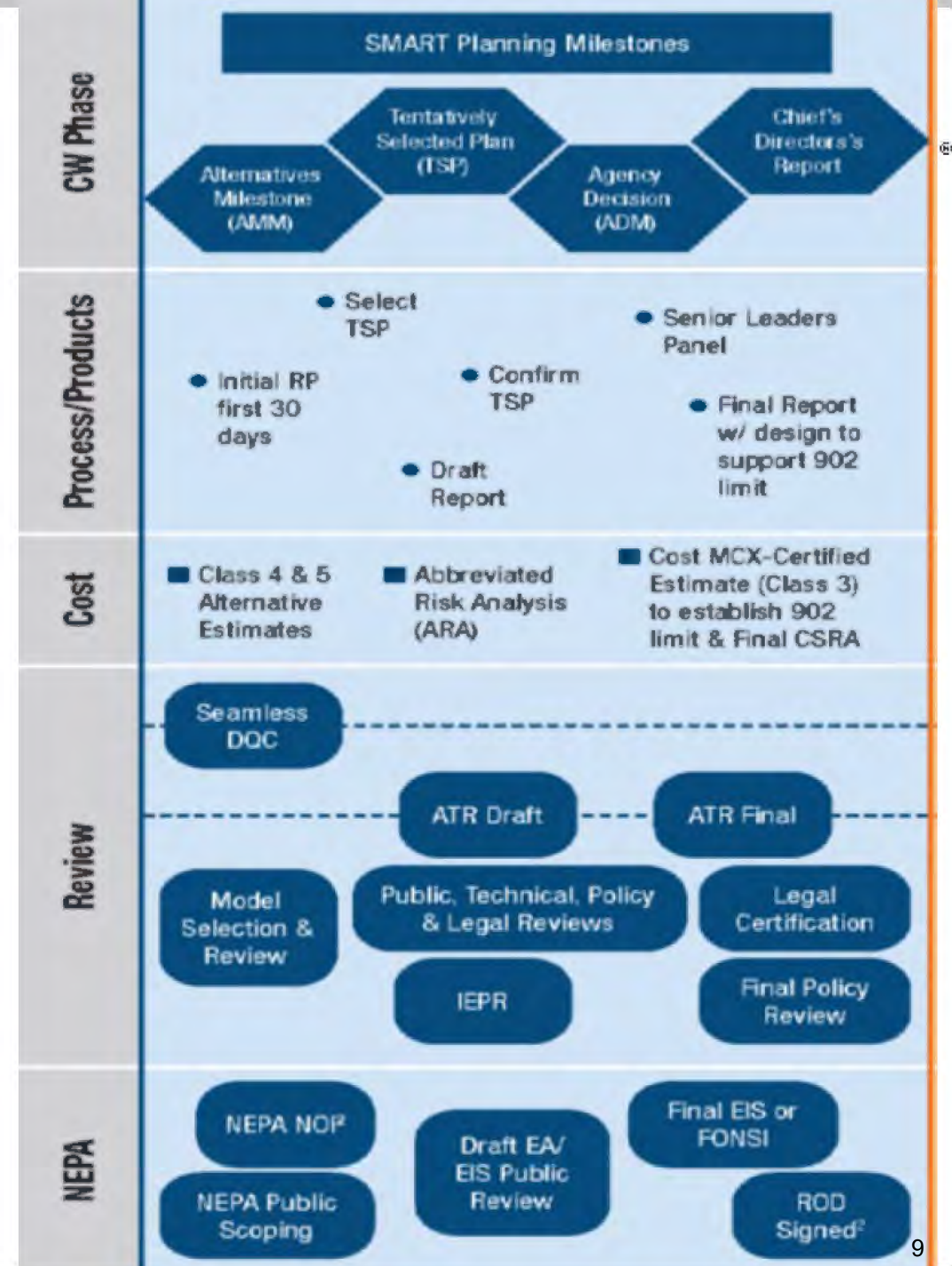


- DQC applies to all Civil Works products including decision documents (draft and final), implementation, NEPA, and other work products
- The District Quality Management System study processes will follow their MSC Quality Management Plan and include the following key processes: selecting the DQC Review Team, conducting DQC, certifying DQC, and documenting DQC, including comments and responses.
- Minimum DQC questions in RP template are from ER 1165-2-217

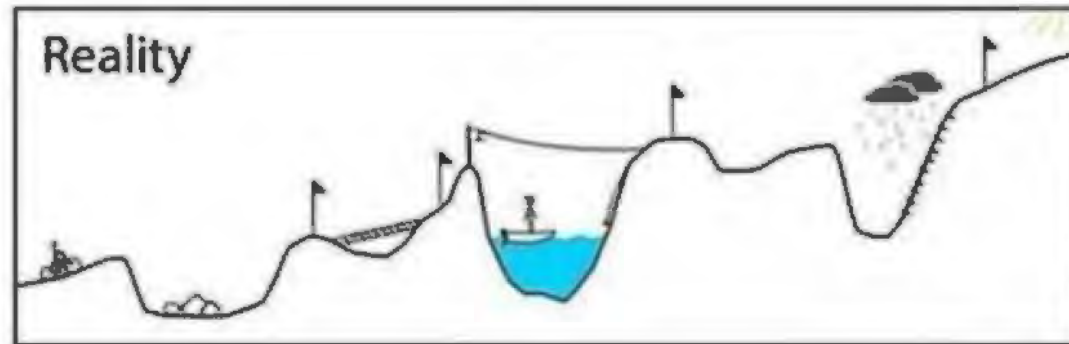
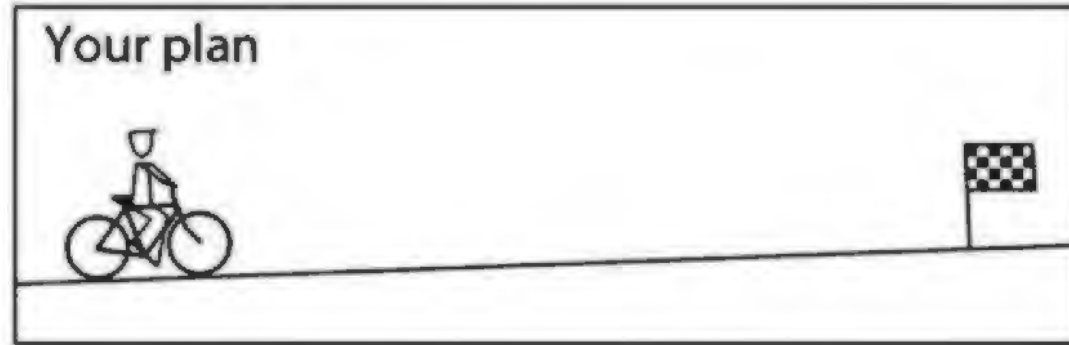


SEAMLESS DQC

- Project Delivery Team (PDT) Review
- “Red Dot” Review
 - Computations
 - Graphics
 - Annotations
- DQC lead and team independent from the PDT
- DQC Certification - only be provided for completed components. Draft documents for concurrent review in a planning study are considered a final work product and must have DQC certifications.



DQC BEST MANAGEMENT PRACTICES





READ THE ENGINEER REGULATIONS



Annotation Exercise – Add ERs that planners use the most

1105-2-100

ER 1105-2-100

-58

ER 200-2-2

ER 5-1-11

ER 1165-2-119 (mods)

1165-2-502

1105-2-100

ER 110-2-240

1165-2-217

ER 1110-2-1156



FILE MANAGEMENT



- Focused team discussion on file management and version control
- Lock other versions (ATR or DQC)
- Discuss with DQC and ATR lead how to receive editorial comments
- Send links to appropriate versions

Other File Management BMPs (annotate or chat)

Always add Day Month Year to the file name of the last master version saved.
Big issue just calling it V1 V2 ...



COMPUTATIONS



- Create a spreadsheet to capture computations that are referenced frequently (and change repeatedly) for a central location for PDT members to reference – costs, benefits, Benefit Cost Ratio (BCR), acres, habitat units, etc.
- Round to an appropriate level of accuracy – we typically do not have accuracy to the tenths or sometimes even the hundreds so our numbers should reflect that.
- Make sure that computations are checked (red dot review) before using them
- Potential for a targeted ATR on computations used for alternative selection
- If chief's report crosses over into the next FY make sure you update costs - check with VT on how to capture those changes
- Use the right costs – economic cost (alternatives portion of report), project first cost (exec. summary and recommended plan), and total project cost (Project Partnership Agreement (PPA)).
- Use the correct fiscal year when documenting costs

Other Computation BMPs (chat)



INTERIM DQC



- Interim DQC on the first few chapters of the report – authority, purpose, problem, opportunity, objectives, constraints, existing and Future With Out Project (FWOP) conditions.
 - Reduces writing procrastination
 - Planning foundation reviewed
 - Breaks up the DQC review time

Other interim DQC BMPs (annotate or chat)



REVIEWS – PDT, SPONSOR, AGENCY, LEGAL



PDT/Sponsor review - Have team members and sponsor read the report and comment. Designate one person to review and highlight the comments that bear team discussion. Follow up comment meeting - Recommend minimum of 6 weeks

Other Federal/State Cooperating and Participating Agencies review – Send draft report to agencies at same time as PDT review to give them additional time for comment/response

District Legal Review – Talk to your legal team about review times and overlap with DQC to facilitate success - Recommend minimum of 4 weeks

Other Review BMPs (annotate or chat)



FORMAL DQC



- DQC is required for both the draft and final report
- Your Division's and District's quality management processes should be on Qualtrax (<https://qualtrax.usace.army.mil/>)
- Have a DQC kickoff meeting with PDT/DQC team highlighting areas of concern (charge to reviewers)
- Organize DQC with your lead – send your review plan, set up labor codes, set up Dr. Checks, communicate where editorial comments go, talk about resolution process, etc.
- Allow 8 weeks in your schedule for DQC
- Ensure DQC reviewers are experienced, or are being mentored by experienced staff members

Other Formal DQC BMPs (chat)



ADVICE FROM FOLKS IN THE FIELD



PLAN FORMULATION



- HQUSACE, MSCs, and the PCXs are concerned about the **quality** of the planning basics.
 - Problems are not being adequately defined and may affect inclusion of certain communities in alternative plans.
 - We plan to meet the study objectives; they must be used to evaluate and compare the alternatives.
 - Differing levels of understanding of the P&G Criteria.
- **PLANNING IS RAPIDLY EVOLVING:**
 - ASA(CW) will soon publish the Agency Specific Procedures to implement the PR&G.
 - Comprehensive Benefits represent a fundamental change in planning direction.
 - FRM/CSRM undergoing massive shift towards nonstructural recommendations.
- The quality of the plan formulation reflects upon district planning leadership, not just the planning lead. Planning leadership should not wait until DQC to ensure quality work is being done.
- Use your PCXs – they usually know the answer or can help you find the answer.
- **Vertical Team coordination is key;** do not wait until a milestone to float concerns by MSC and HQUSACE reviewers.
- Senior planners, indicated in the box to the right, want to help teams - use them.

<u>PLAN FORM SUBCOP</u>	
<u>LEAD</u>	
Ray Wimbrough	
<u>OWPR Planners</u>	
<u>MSC Senior Formulators</u>	
POD	Russell Iwamura
NWD	Charlie Hanneken
SPD	Sara Schultz
SWD	Saji Varghese
MVD	Matt Mallard
LRD	Ronny Sadri
NAD	Hank Gruber
SAD	Samantha Borer
<u>RIT Planners</u>	



ECOSYSTEM RESTORATION AND COMPLIANCE



- **Ecological Models:**
 - Coordinate with the ECO-PCX Model Review Manager early in the planning process to ensure:
 - ✓ Appropriateness of model
 - ✓ Model user understands how to use the model
 - ALL ecological models planned for use need to be listed in the Review Plan
 - Models need to be approved/certified prior to use (typically before the TSP)
- **ECO-PCX Account Managers:**
 - Assist teams with Review Plans and routing to ECO-PCX Operating Director for Review Plan endorsement
 - Can assist in ATR Lead and team member identification
 - Should be invited to project IPRs and milestone meetings
- Include Conceptual Ecological Model in the main report for all AER studies
- Strongly encourage use of alternative formulation strategies vs. using CE/ICA to combine measures
- Ensure monitoring and adaptive management plans are developed for each alternative in the final array, associated costs are included prior to running the CE/ICA, and MAM links to project objectives
- For all business lines, if mitigation is needed coordinate with the ECO-PCX since we have expertise in mitigation planning and can assist PDTs
- Use whole numbers for habitat units and AAHUs reporting ☺

Director
Dr. Kelly Keefe

OPERATING DIRECTOR
Dr. Kat McCain (Acting)

ACCOUNT MANAGERS

POD	Valerie Ringold
NWD	Brad Foster
SPD	Jesse Ray
SWD	Rachel Mesko
MVD	Kat McCain
LRD	Sierra Keenan
NAD	Chip Hall
SAD	Katie Opsahl

IEPR Manager
Andy MacInnes

Model Review Manager
Kip Runyon

Budget
Adrienne Stark



NAVIGATION



Review Related Actions/POCs:

- DDNPCX Review Management Organization POC: Kim Otto, DDNPCX Review Manager
- Contact DDNPCX Review Manager prior to drafting/updating RP for deep draft navigation studies.
- Review Manager will:
 - Assist PDT with development of RP (provide template, examples, etc.);
 - Provide DDNPCX review and endorsement of RP;
 - Identify ATR Team Lead and ATR team members;
 - Participate in IPRs and milestone meetings; and
 - Serve as IEPR Project Manager for deep draft navigation studies.
- DDNPCX Technical Director, Todd Nettles, will identify:
 - Economics PDT member;
 - Economics DQC team reviewer; and
 - Economics ATR team reviewers (for report and model(s)).

Reminders:

Review Plans

- Review and endorsement process takes several weeks
- Review will not start without cross charge labor code
- Be thorough – Factors Affecting the Scope and Level of Review & Decision on IEPR
- Obtain PDT input for risk factor assessment, review team expertise, and models used
- Don't underestimate review schedules and costs
- Use templates/checklists when available
- Coordinate w/ PCX early and often

Reviews:

- DQC is a great time to gain review experience but should be performed by someone who has performed the type of work being reviewed. A more senior person should mentor the person gaining review experience.
- DQC of draft and final reports is required. Draft report DQC occurs after TSP; final report DQC occurs after ADM.
- ATR will not start until DQC complete and certified.
- PCX can refuse to begin ATR if quality DQC not performed.
- Limited number of qualified, certified people to perform ATR...don't wait until last minute to schedule, be kind to reviewers, etc.



ENGINEERING



**US Army Corps
of Engineers**

ENGINEERING AND CONSTRUCTION BULLETIN

No. 2022-7 Issuing Office: CECW-EC Issued: 20 Oct 22 Expires: 20 Oct 24

SUBJECT: Interim Approach for Risk-Informed Designs for Dam and Levee Projects

CATEGORY: Guidance



PLANNING BULLETIN

**US Army Corps
of Engineers**

No. PB 2019-04 Issuing Office: CECW-P Issued: 20 June 2019

Subject: Incorporating Life Safety into Flood and Coastal Storm Risk Management Studies

Applicability: Guidance

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

ER 1105-2-101

CECW-CP
CECW-CE
Regulation
No. 1105-2-101

15 July 2019

Planning
RISK ASSESSMENT FOR FLOOD RISK MANAGEMENT STUDIES