Draft Interagency Agreement on FERC-USACE Concurrent and Coordinated Processes

Overview

The Department of Energy (DOE) estimates that there is a potential for 12 gigawatts of new hydropower in the U.S. by adding power at non-powered dams[1] Assessments from DOE and the United States Army Corps of Engineers (USACE) agree that at least 6 gigawatts of that potential exists at USACE facilities.[2]

Adding power at USACE non-powered dams involves completing three regulatory processes: the Federal Energy Regulatory Commission (FERC) licensing process; the USACE 408 process (a technical review of hydropower development proposals and granting permission to modify a dam) and the USACE Regulatory 404 process (impacts to waters of the U.S. pursuant to Section 404 of the Clean Water Act). All three of these processes require project proposal identification, information gathering, and environmental and engineering analyses to support a licensing, permitting, or regulatory decision.

In 2011, FERC and USACE revised an Interagency MOU that describes the agencies' intent to coordinate their regulatory responsibilities for authorizing hydropower generation at non-powered USACE dams. The MOU identifies that "the signatory agencies will develop more specific guidance to ensure that the Corps' review is undertaken concurrently with the Commission's licensing and NEPA processes to the maximum extent practicable."

Based on the MOU, and experience with developers sharing concern over the redundancy of the licensing and permitting processes, DOE and Oak Ridge National Laboratories (ORNL) facilitated a dialog to engage FERC hydro licensing and dam safety staff and USACE 408 and USACE Regulatory 404 staff to find ways to undertake FERC's and USACE's permitting[3] reviews in a more coordinated manner. This effort has involved a series of interviews with FERC, USACE, and developers with case experience, followed by joint workshops and webinars with FERC, USACE, DOE, and a facilitation team of ORNL staff supported by Kearns & West. This document is the result of this effort and outlines how better coordination between the FERC and USACE permitting efforts can increase efficiency and decrease process time.

[1] National Hydropower Asset Assessment Program, Non-Powered Dam Resource Assessment can be found here.
[2] Hydropower Resource Assessment at Non-Powered USACE Sites can be found here.
[3] The term "permit" or "permitting" is used throughout the document to describe the three concurrent processes recognizing that the FERC process results in a license, the USACE 408 process results in an approval letter to modify the dam and the USACE Regulatory process results in a permit.

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Concurrent and Coordinated Processes Overview

Below are two flow charts showing how the concurrent and coordinated processes can be conducted, should the developer choose to do so. It should be noted that none of these potential improvements would require a rulemaking or legislative action. Option A achieves concurrent timing for issuance of the FERC license, the 408 decision and the 404 permit as close together as possible. To achieve this requires the developer to provide detailed design and engineering information (100% of project design addressing dam safety, life safety, environment and operations information for USACE 408) and a USACE Regulatory 404 permit application, at the same time as the FERC license application is filed. Option B is coordinated with shared information and advancement of all three processes, but license issuance is achieved first followed by USACE 408 and USACE Regulatory 404 decisions at a reasonable time thereafter. These options are further described throughout this document.

This document reflects a commitment by both FERC and USACE to coordinate information and regulatory needs for each of the three processes, to work with the developer, relevant agencies and others to achieve an efficient, concurrent or coordinated set of processes. It entails increased coordination throughout each of the steps in the process by both FERC and USACE and better aligning the USACE 408 and USACE Regulatory 404 processes, which have their own timeframes, with the timeframes in the FERC licensing process. . This alignment can only occur if the developer provides more detailed information earlier in the process than typically occurs now.

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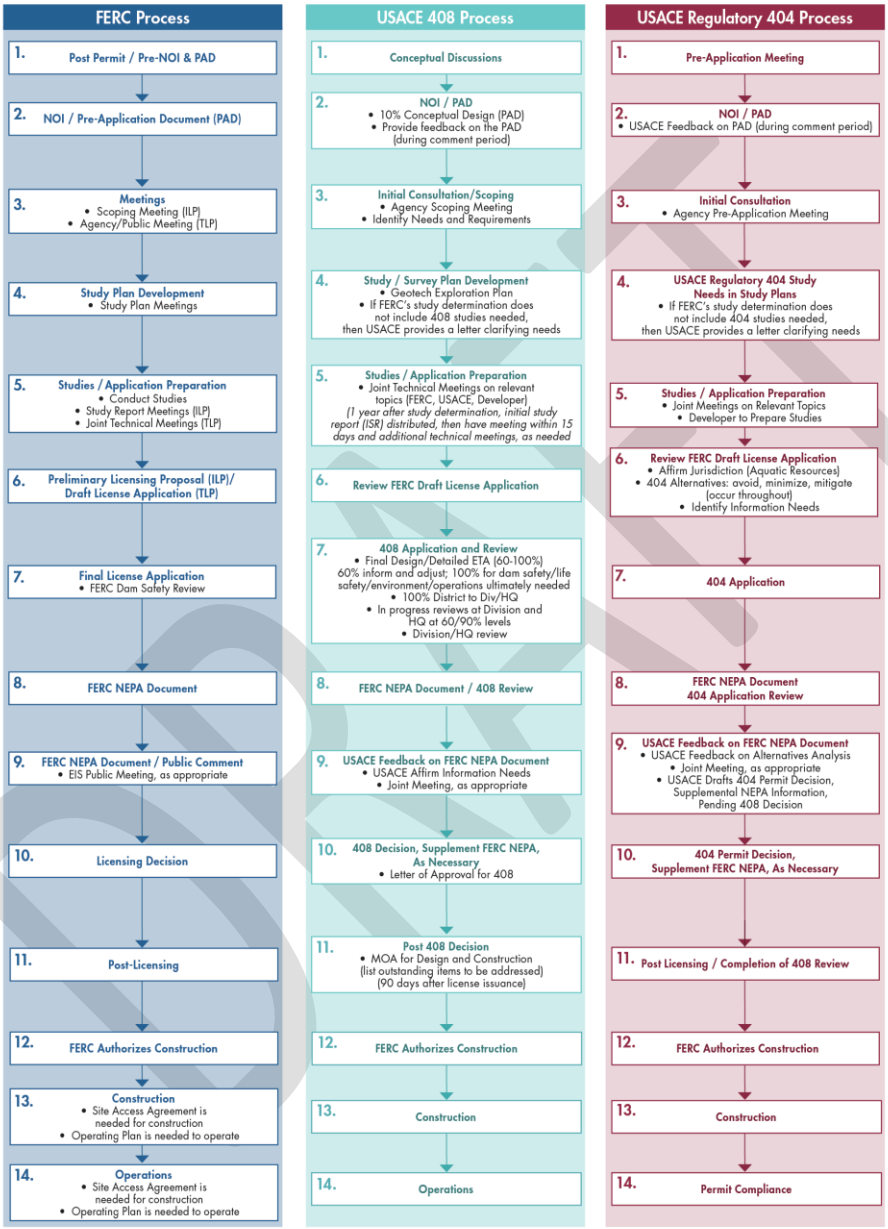
OPTION A: DRAFT INTER-AGENCY AGREEMENT ON FERC–USACE COORDINATED PROCESSES



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OPTION B: DRAFT INTER-AGENCY AGREEMENT ON FERC–USACE COORDINATED PROCESSES

FERC Process

1. Post Permit / Pre-NOI & PAD
2. NOI / Pre-Application Document (PAD)
3. Meetings
   - Scoping Meeting (ILP)
   - Agency/Public Meeting (TLP)
4. Study Plan Development
   - Study Plan Meetings
5. Studies / Application Preparation
   - Conduct Studies
   - Study Report Meetings (ILP)
   - Joint Technical Meetings (TLP)
6. Preliminary Licensing Proposal (ILP)/ Draft License Application (TLP)
7. Final License Application
8. FERC NEPA Document
9. FERC NEPA Document / Public Comment
   - EIS Public Meeting, as appropriate
10. Licensing Decision
11. Post-Licensing / Dam Safety
    - FERC Dam Safety Review
12. FERC Authorizes Construction
13. Construction
    - Site Access Agreement is needed for construction
    - Operating Plan is needed to operate
14. Operations
    - Site Access Agreement is needed for construction
    - Operating Plan is needed to operate

USACE 408 Process

1. Conceptual Discussions
2. NOI / PAD
   - 10% Conceptual Design (PAD)
   - Provide feedback on the PAD (during comment period)
3. Initial Consultation/Scoping
   - Agency Scoping Meeting
   - Identify Needs and Requirements
4. Study / Survey Plan Development
   - Geotech Exploration Plan
   - If FERC's study determination does not include 408 studies needed, then USACE provides a letter clarifying needs
5. Studies / Application Preparation
   - Joint Technical Meetings on relevant topics (FERC, USACE, Developer)
   - *(1 year after study determination, initial study report (ISR) distributed, then have meeting within 15 days and additional technical meetings, as needed*
6. Review FERC Draft License Application
7. FERC License Application
   - 30% Project Design Drawings
   - Preliminary Engineering Technical Analysis (ETA)
     - Operation Impacts
     - Mission Impacts
   - Initial Division (Div) / Headquarters (HQ) Briefing
8. FERC NEPA Document
9. USACE Feedback on FERC NEPA Document
   - USACE Affirm Information Needs
   - Joint Meeting, as appropriate
10. USACE Reviews FERC License
11. Post Licensing / Dam Safety 408 Application and Review
    - MOA for Design and Construction (list outstanding items to be addressed (90 days after license issuance)
    - Final Design/Detailed ETA (60-100%) 60% inform and adjust; 100% for dam safety/life safety/ environment/operations ultimately needed
      - 100% District to Div/HQ
    - In progress reviews at Division and HQ at 60/90% levels
      - Division/HQ review
12. 408 Decision, Supplement FERC NEPA, As Necessary
    - Letter of Approval for 408
13. Construction
14. Operations

USACE Regulatory 404 Process

1. Pre-Application Meeting
2. NOI / PAD
   - USACE Feedback on PAD (during comment period)
3. Initial Consultation
   - Agency Pre-Application Meeting
4. USACE Regulatory 404 Study Needs in Study Plans
   - If FERC's study determination does not include 404 studies needed, then USACE provides a letter clarifying needs
5. Studies / Application Preparation
   - Joint Meetings on Relevant Topics
   - Developer to Prepare Studies
6. Review FERC Draft License Application
   - Affirm Jurisdiction (Aquatic Resources)
   - 404 Alternatives: avoid, minimize, mitigate (occur throughout)
   - Identify Information Needs
7. Ongoing Coordination between FERC, USACE and Developer
8. 404 Application
   - FERC NEPA Document Review
9. USACE Feedback on FERC NEPA Document
   - USACE Feedback on Alternatives Analysis
     - Joint Meeting, as appropriate
   - USACE Begins Drafting 404 Permit Decision, Supplemental NEPA Information, Pending 408 Decision
10. 404 Permit Decision, Supplement FERC NEPA, As Necessary
11. Post Licensing / Completion of 408 Review
12. 404 Permit Decision, Supplemental NEPA, As Necessary
13. Construction
14. Permit Compliance

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Potential Tradeoffs of Conducting the Coordinated Processes

While each agency's respective processes remain unchanged, it should be noted that tradeoffs may need to be made in order to better coordinate the permitting efforts and reduce timeframes. An example of this is how agencies and prospective developers are encouraged to interact and provide information earlier and more often at certain points in the regulatory processes. This can represent an earlier commitment of effort and resources, with a greater investment in project planning and design at an earlier stage, especially with regard to the hydraulic impacts, geotechnical design, construction means and methods, and future operations. However, such investment can be advantageous in allowing for early identification of design conflicts, improved communication among and with review agencies, and more comprehensive review and comment relative to each permit process. It may also facilitate the agencies having the necessary information to render a permit decision sooner

Benefits of Conducting Coordinated Processes

Conducting FERC and USACE review processes in a coordinated manner should:

- **Reduce the Overall License/Permit Application Review Time.** While each process has unique circumstances, conducting processes in a coordinated manner can potentially reduce the combined licensing/permitting review time relative to the status quo.
- **Increase Efficiencies.** The FERC and USACE processes have often occurred in sequence: first the FERC licensing process is completed, and then the USACE 408 and Regulatory 404 processes are completed. At times, conducting these processes sequentially has resulted in multiple iterations of the project proposal and associated engineering design, and duplicative information gathering and environmental analyses. Developer engagement and improved coordination with both agencies up front and throughout could reduce these inefficiencies by helping to better define the project and associated impacts, including refining the engineering design and other important attributes early, and determining and conducting a single set of studies acceptable to both agencies.
- **Result in a Single NEPA Environmental Document, Supplemented, as needed.** The proposed approach for coordinated processes includes FERC conducting its NEPA environmental review in cooperation with USACE in those cases where FERC and the USACE have signed a Letter of Understanding (LOU) to establish USACE's status as a NEPA cooperating agency for the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Even in cases where there is no LOU, FERC and USACE can follow the proposed approach for coordinated processes and USACE can prepare supplemental information to the FERC NEPA document to support the USACE 408 and Regulatory 404 review processes, if needed.

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Option A: Description of the Steps in Conducting the Processes in a Concurrent Manner

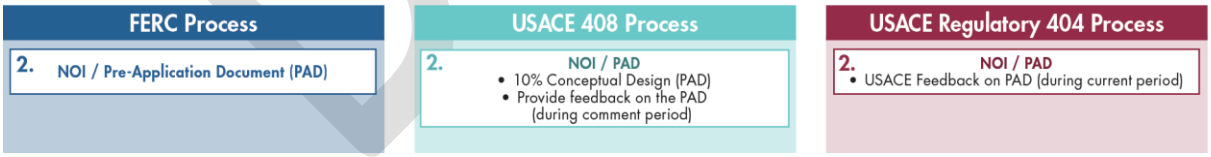
Below is a description of Option A: concurrent (i.e., at about the same time) license, 408, and 404 decisions.

The approach could be applied to FERC's Traditional or Integrated Licensing Processes (TLP or ILP). Under the Alternative Licensing Process (ALP), developers and stakeholders tailor the pre-filing consultation process to the circumstances of each case; therefore, this document does not directly address the ALP. However, the approach described here for the TLP and ILP could be applied to the ALP to accomplish the same goals; those using the ALP are encouraged to use these concepts as guidance.

<u>Step 1: Post-Permit/Pre-NOI and Preliminary Application Document (PAD)</u>

In Step 1, the developer engages both FERC and USACE 408 and USACE Regulatory 404 staff. FERC staff is available to clarify the FERC licensing requirements. USACE 408 and USACE Regulatory 404 staff can outline what information is required for each process to facilitate a coordinated FERC-USACE process. The developer should coordinate directly with USACE 408 staff to informally explore initial designs and obtain preliminary or conceptual feedback on how design options could impact existing congressionally authorized purposes and mission areas at the dam, including operations and maintenance. (It is important to note that USACE suggests an estimated 60 to 100% design for critical components that could impact USACE infrastructure or operations should be included in Step 7 below, the final FERC license application.) The developer should also work with USACE Regulatory 404 to the extent that impacts to waters of the U.S., as regulated under Section 404, are known or could potentially occur.

<u>Step 2: Notice of Intent (NOI)/PAD</u>



The applicant files a Notice of Intent (NOI) and Preliminary Application Document (PAD) with FERC, which includes a description of the proposed project, a compilation of existing information on potentially impacted resources, and a proposed list of studies to be conducted for the application. Under the proposed approach, in addition to what the FERC regulations require to be included in the NOI and PAD for the licensing process, the developer should include the information and proposed

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studies needed for USACE 408, such as a 10% engineering design, or as otherwise specified during Step 1 by USACE and USACE Regulatory 404 such as a delineation of waters of the U.S., including wetlands that would be potentially impacted by any aspect of construction (e.g., construction, staging, access roads, borrow pits, etc.).

For the licensing process, as required by the 18 C.F.R. § 5.6(d), the PAD must identify the preliminary issues and studies list for each resource area, and address the following:

- Issues pertaining to the identified resources;
- Potential studies and information gathering requirements;
- Relevant federal, state or tribal waterway plans;
- Relevant resource management plans.

Resource areas listed include:

- Existing environment and resource impacts (based on existing, relevant and reasonably available information);
- Geology, topography, and soils (descriptions and maps);
- Water resources (quality and quantity);
- Fish and aquatic resources (description and impacts);
- Wildlife and botanical resources including invasive species;
- Description of floodplains, wetlands, riparian and littoral habitat;
- Rare, threatened and endangered species;
- Recreation and land use;
- Aesthetic resources;
- Cultural resources;
- Tribal resources;
- Description of river basin and sub-basin information.

USACE 408 implementation guidance (Engineering Circular 1165-2-216) clarifies USACE 408 information needs and is attached as Appendix A, and may be periodically updated or superseded.

USACE 408 and USACE Regulatory 404 staff will review the PAD and provide comments on information and study needs, project design, and other aspects important for USACE 408 and USACE Regulatory 404 processes if such information has not previously been provided to the developer.

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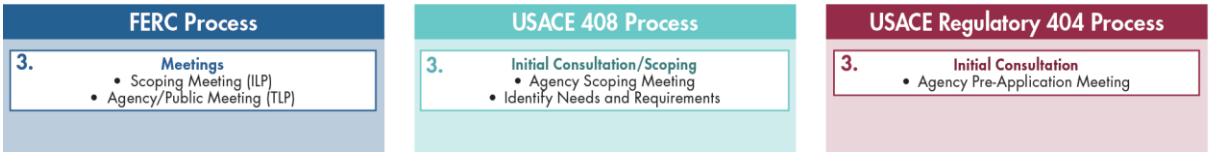
Step 3: Initial Consultation or Scoping Meeting



Under the TLP, the developer schedules and conducts a joint agency/public meeting (joint meeting) inviting all pertinent agencies, including USACE 408 and USACE Regulatory 404 staff, Indian tribes, and members of the public to explain the developer's proposal and its potential environmental impact, review the PAD, and discuss the data to be obtained and studies to be conducted. The developer can also request a pre-application meeting with FERC, USACE 408 and USACE Regulatory 404 staff.

Under the ILP, FERC schedules and conducts a public scoping meeting. FERC staff will contact USACE 408 and Regulatory 404 staff to coordinate scheduling the agency scoping meeting. These meetings will include a discussion of the studies that need to be conducted to inform the draft and final license application and will be publicly noticed for the specific project.

The first scoping meeting must be held within 30 days after the issuance of a notice commencing the ILP and in the case of a TLP, the first joint meeting must be held no earlier than 30 days from, and no later than 60 days after, the Commission's approval of a request to use the TLP. USACE 408 and USACE Regulatory 404 staff will participate in the joint or public scoping meeting, as applicable.

For both the TLP and ILP, in response to FERC's notice soliciting cooperating agencies,[4] USACE 408 and USACE Regulatory 404 staff will coordinate to determine if USACE should be a cooperating agency during the development of the appropriate environmental review document in accordance with NEPA unless USACE determines they cannot as outlined in 40 CFR 1501.6(c) or if they disagree with any FERC-imposed communication requirements that may conflict with USACE processes and interactions with the developer. If it is determined that USACE should be a cooperating agency, USACE 408 and Regulatory 404 staff will identify the scope of their involvement. USACE Regulatory 404 participation should be scaled to reflect the type of Regulatory permit likely required. For instance, if the activity that is subject to Section 404 jurisdiction qualifies for a general permit, NEPA has already been completed for the authorization of that activity and USACE Regulatory will be substantially less involved in the development of the environmental document than if the project requires an individual permit.

[4] Under the ILP, the solicitation for cooperating agencies is usually made in the notice commencing the ILP. For the TLP, the solicitation is usually made in the notice of license application tendered for filing with the Commission, which is typically issued within 14 days of the filing of a license application.

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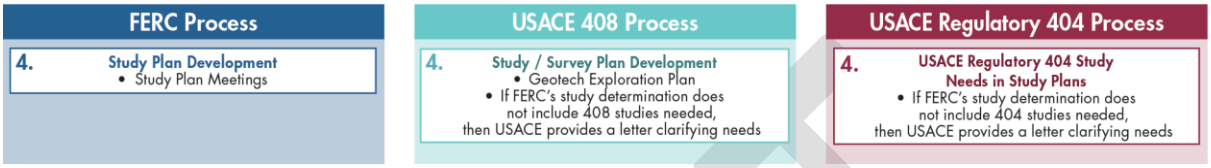
USACE 408 staff will work with the developer on necessary instruments to enable site access, affirm boundary requirements for the project and provide right of entry to the project for further information gathering and design purposes.

Step 4: Study Plan Development



For TLP's, the FERC TLP process on determining studies is followed (See 18 C.F.R. 4.38(b)(5) and (6) and 4.38(c), including:

- the filing of study requests by licensing participants, including the USACE; and
- the referral of any unresolved disputes over the studies among the agencies including the USACE, tribes, and applicant with the Commission for resolution.

For ILP's, the FERC ILP process on study plan development is followed (See 18 C.F.R. §§ 5.9 and 5.11-5.13), including:

- the filing of study requests by licensing participants, including the USACE;
- the filing of a proposed study plan by the developer;
- holding a meeting by the developer to clarify the proposed study plan and attempt to resolve any outstanding issues with respect to the proposed study plan;
- filing comments on the proposed study plan by participants;
- filing revised study plan by the developer based on the participant comments; and
- rendering FERC staff's study plan determination. In the FERC letter issued on its study plan determination, it will note that the determination is not intended, in any way, to limit the USACE's and other agency's proper exercise of its independent statutory authorities to require additional studies.

In the TLP, if USACE determines in its review of a developer's study proposal that there is not adequate information gathering for USACE 408 or USACE Regulatory 404 purposes and there is a dispute between USACE and the developer on the need for the additional information, USACE may ask the Office of Energy Projects (OEP) Director to resolve the dispute pursuant to 18 C.F.R. § 4.38(b)(6.). USACE may also directly provide a letter to the developer and file with FERC what additional study information is needed for USACE 408 and USACE Regulatory 404 purposes.

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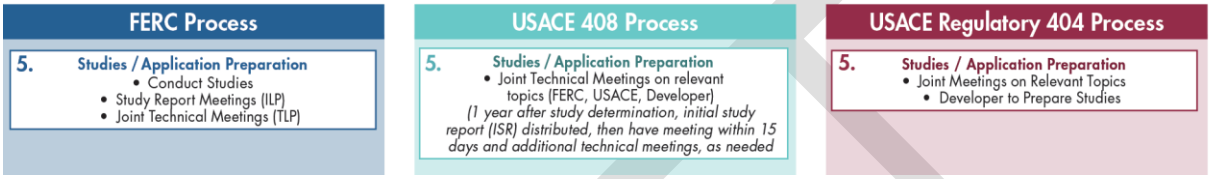
For the ILP, if USACE 408 and/or USACE Regulatory 404 staff determine in their reviews of the FERC study determination that the required studies do not adequately address USACE 408 or USACE Regulatory 404 information needs, then USACE may request that the dispute be referred to a panel pursuant to 18 C.F.R. § 5.14. USACE may also directly provide a letter to the developer and file with FERC what additional study information is needed for USACE 408 and USACE Regulatory 404 purposes.

Step 5: Studies/Application Preparation



In the case of a TLP, the developer conducts studies and then includes its findings in a draft license application. The developer must also include a response to any agency or Indian tribe request for studies in the draft license application. A resource agency or Indian tribe will have 90 days to provide written comments. If the written comments indicate a substantive disagreement with the conclusions of a project's anticipated resource impacts or with the proposed mitigation measures, the potential applicant must hold a joint meeting with the disagreeing entity and other agencies with similar interests and expertise to attempt to reach agreement. If USACE has made study requests the developer will also address these requests in the draft license application.

In the case of an ILP, the developer conducts studies required by the Study Plan Determination and, after one year, issues an Initial Study Report (ISR). Within 15 days of ISR filing, the developer holds a meeting with the licensing participants, including USACE, to discuss the ISR, review the study findings, and explore what modifications to the study plan are needed. (Note: Further information on the purpose of the ISR is available on FERC's website.)

Within 15 days of the ISR meeting, the developer files a meeting summary which describes modifications to ongoing studies or new studies. Once the meeting summary is filed, USACE 408 and USACE Regulatory 404 staff and stakeholders have 30 days to file a disagreement with the summary and suggest modifications to the ISR. If a disagreement is filed, the Office of Energy Projects (OEP) Director resolves it and amends the approved study plan, as appropriate. USACE, under its own authorities, may also directly notify the developer of studies/information the agency will need to conduct its review/analyses. No later than two years after FERC's approval of the study plan and schedule, the developer files an updated study report, which describes the developer's overall progress in implementing the study plan and schedule and the data collected. The report must also include any modifications to ongoing studies or new studies proposed by the developer.

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Step 6: FERC Draft License Application and USACE Review

Under the TLP, the developer prepares a draft license application and under the ILP, the developer prepares a Preliminary Licensing Proposal for review by the licensing participants. The draft license application and Preliminary Licensing Proposal must contain all information required in 18 CFR 4.38(c)(4) and 18 CFR § 5.18, respectively.

The USACE Regulatory Program does not have an official "draft permit application" submittal and review process, but the developer can and should discuss permit application considerations with the Regulatory 404 staff prior to submittal of an application if there are questions, especially as it pertains to avoiding, minimizing, and compensating for impacts to aquatic resources. During this time, if they have not already done so, the developer should consider delineating all aquatic resources proposed for impact (e.g. construction, staging, borrow pits, etc.) and submit a request to the USACE Regulatory program for a jurisdictional determination. This could also occur in Step 5.

USACE 408 also reviews the draft license application or Preliminary Licensing Proposal for USACE 408 purposes and provides feedback to both FERC and the developer. The developer and USACE 408 should also review what is needed to provide 60-100% design information in Step 7. All components related to overall dam safety or life safety during construction or operation should have a high level of design analysis and plan development to show conformance with applicable USACE design criteria and/or FERC standards (the more stringent applies), including but not limited to geotechnical analysis, cofferdam design, emergency flow cut off components, powerhouse structural stability, and hydraulic analysis of construction and ultimate powerhouse operations. The level of research and effort toward design of these critical components is such that the design of these features is unlikely to significantly change as the project proceeds. When combined with less important ancillary features to be designed at a later point, the overall completeness of the plans and specifications is roughly 60% or greater.

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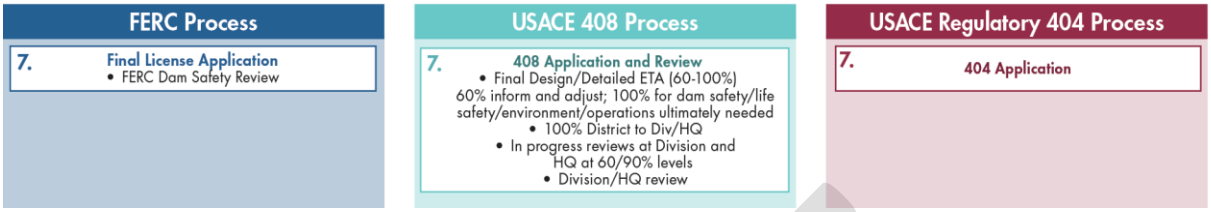
Step 7: FERC License Application, 408 Information and 404 Permit Application



The developer prepares and submits a final license application, as well as the following information for USACE 408 purposes, and for the 404 permit application:

- FERC's Exhibit F;
- Detailed Engineering Technical Analysis (ETA);
- Identification and plans to address potential project operation impacts;
- Identification and plans to address other USACE federal project impacts (e.g., safety, navigation, etc., if applicable);
- FERC's Exhibit G (Although not required by FERC regulations, USACE 408 staff suggests including real estate plans[5] and ways to address impacts).
- A 408 application which will include 60% to 100% design on USACE federal project components, and other key topics identified (e.g., dam safety, life safety, operations, environment, recreation, real estate) for the project.
- A 404 permit application with appropriate drawings, (e.g. 8x11, black and white reproducible drawings showing aquatic resource boundaries and impacts – not engineering specs)

The developer submits to FERC and USACE design documents, plans, project specifications, and supporting design documents. These documents should be organized and prepared so that they can be used for both FERC license and USACE's 408 requirements/reviews. The developer must furnish the USACE 408 and FERC a schedule for the submission of all design documents, the plans and specifications, and various other critical documents for the project. The developer schedules meetings with all parties to address comments and other issues during the design process.

The developer also submits the Section 404 application to USACE Regulatory staff with a copy to FERC. The Section 404 application must include a clear delineation of jurisdictional aquatic resources proposed for impact, location of all regulated impacts (e.g., fill associated with construction, access roads, borrow

[5]Per Engineering Circular 1165-2-216 (Appendix A), real estate plans include a comprehensive identification of properties affected (both temporary and permanent) outside of federal property and/or the FERC project boundary in order to fully assess impacts, including lands required for construction access, fill/spoil areas, transmission lines, lay-down yards, etc.

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pits, staging, dredging, etc.), and include statements fully supporting avoidance, minimization, and compensatory mitigation of impacts to jurisdictional waters of the U.S.

It is also important to note that the information FERC needs to complete its review may not be sufficient for USACE Regulatory 404 purposes. For instance, prior to USACE Regulatory 404 rendering a permit decision, the developer must provide a final compensatory mitigation plan.

During this step, with 60-100% engineering design and other documents such as Water Control Manuals, Operations and Maintenance Manuals, or Hazardous Energy Control Plans or program updates, the USACE District 408 team briefs the Division and Headquarters on the 408 components of the project. Any information needs or topics of interest related to 408 from the Division or Headquarters are then shared with the developer and FERC for future refinement of the project to address USACE 408 needs.

Along with USACE 408, FERC will review and provide comments on all design documents, plans, project specifications, and supporting design documents. Depending on the complexity of the project, FERC may require a Board of Consultants (BOC) to provide an independent review by a panel of experts. In addition, FERC normally requires a Potential Failure Mode Analysis (PFMA) at the 60% design level.

In order to complete site investigations for the design of the project features, FERC will require the developer to enter into an agreement with USACE 408 to coordinate its plans for site access and activities on USACE lands.

Once the 60% - 100% design is complete, which is only required for critical components that could impact USACE 408 infrastructure or operations, the USACE District 408 staff coordinates the Agency Technical Review (ATR) and the developer coordinates the Independent External Peer Review (IEPR).

<u>Step 8: FERC NEPA Document, 408 Process, and USACE 404 Application, Notice</u>

FERC issues its NEPA document based on its record of information for the project, including the final license application and any information subsequently filed by the licensing participants, including USACE 408 and USACE Regulatory 404 staff. The document will either be an EA or EIS as determined by FERC based on the project record of information. Through the FERC process, any required consultations, such as those under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act, will be completed. FERC public notices the environmental document and provides an opportunity for public comment.

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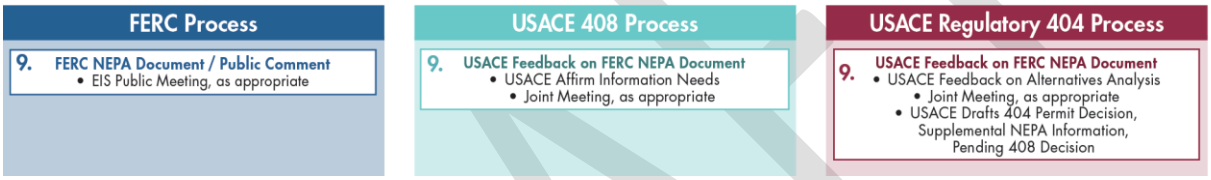
For the USACE 408, USACE will review the 408 application to determine if there are any potential impacts to congressionally authorized purposes or mission areas associated with the dam. USACE District 408 staff prepares any additional supplemental information needed for the FERC NEPA document and submits the 408 Draft Decision Document to the Division and then to Headquarters for review. The USACE Division office will take 60-90 days to review the District's recommendation and then make a recommendation to USACE Headquarters. USACE Headquarters will take no more than 30 days to review the Division recommendation and issue a determination on the proposed project unless additional time is warranted.

For the USACE 404, if the activity requires a standard individual permit, the developer must submit a complete application and USACE Regulatory issues a public notice, soliciting comment on the proposal.

<u>Step 9: USACE Feedback on FERC NEPA Document, 408 and 404 Progress</u>



If USACE is a cooperating agency, USACE 408 and USACE Regulatory 404 staff provides feedback to FERC staff on the NEPA document prior to its issuance, as specified in the LOU, including any comments on the environmental alternatives analysis as it relates to Regulatory 404 needs, areas related to 408 needs, as well as any other additional needs/topics to be addressed, as appropriate.

If USACE is not a cooperating agency, USACE 408 and USACE Regulatory 404 staff would provide similar feedback on the record during the comment period following the issuance of the NEPA document. Also, USACE 408 and/or Regulatory 404 staff may also meet with the developer; however, if USACE is a cooperating agency, then to the extent specified in the LOU with FERC staff, USACE staff should not discuss the contents of the draft, internal working NEPA document (unpublished), or any internal discussions they may have had with FERC staff regarding the draft, internal working document.

USACE 408 and Regulatory 404 begin to prepare any supplemental environmental information to comply with 408 or Section 404(b)(1) Guidelines and its public interest review, if necessary, to include in or supplement the FERC NEPA document. USACE Regulatory will have 404 documentation completed, to the extent possible, prior to the 408 decision. No USACE Regulatory 404 permit will be issued before the USACE 408 determination.

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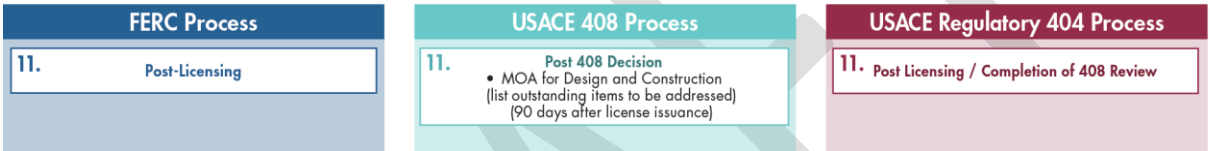
Step 10: FERC Licensing Decision, USACE 408 Decision, USACE 404 Permit

FERC makes the licensing decision. If approved, USACE issues its 408 approval decision and then subsequently grants the 404 permit, along with supplemental NEPA information, as appropriate. USACE 408 issues a letter indicating approval or denial and the basis for decision, and, if approved, USACE Regulatory 404 grants a permit to the developer with copies to FERC. If FERC issues the license, and USACE 408 decision and USACE Regulatory 404 permits are granted then Steps 11 – 14 follow.

Step 11: Post-Licensing



The developer must commence construction of the project works within two years from the issuance date of the license and must complete construction of the project within five years from the date of the issuance date of the license articles. Within 90 days from the issuance date of the license, the developer must furnish the USACE 408 and FERC a schedule for the submission of all final design documents, the plans and specifications, and various other critical documents for the project as required by the license. To the extent required by the license, various documents (e.g., Quality Control Inspection Plans, Surveillance and Monitoring Plan, and Emergency Action plan) must be developed and submitted for review prior to FERC's Construction Authorization.

USACE 408, FERC, and the developer will also coordinate on both USACE 408 and FERC dam safety needs and further design requirements. It is intended that all documents will be reviewed concurrently by FERC and USACE 408. The developer schedules meetings with all parties to address comments and other issues during the post-license, post-408 decision process.

The developer will also submit to USACE 408 staff, with a copy to FERC, a Regulating Plan (or Operating Plan) describing powerhouse operations and noting restrictions needed to protect primary USACE federal interests.

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Step 12: Construction Authorization

Once all preconstruction requirements have been satisfied and FERC receives USACE written approval for construction, FERC then authorizes construction of the project.

If not previously established, a Memorandum of Agreement between the developer and USACE 408 is required prior to the start of construction to finalize terms of site access, bonding, site restoration, safety, security, emergency actions, and other subjects, as appropriate.

Step 13: Construction

The developer constructs the project coordinating with FERC, USACE 408 staff, and USACE Regulatory 404 staff, as appropriate. The developer must review and approve contractor-design features (cofferdams, deep excavation, etc.) and submit copies to FERC and USACE. Various documents (Quality Control and Inspection Reports, Surveillance and Monitoring Reports, design modifications, etc.) are submitted during construction for both FERC and USACE review. On-site inspections are performed by both FERC and USACE.

Within 90 days of completion of construction of the authorized facilities, the developer must file for FERC approval exhibits A, F, and G describing and showing the project facilities as built.

Prior to the start of operation, the developer must develop a Memorandum of Agreement between the developer and USACE (408) describing the detailed operation of the powerhouse. In addition, the developer must develop an Emergency Operating Plan. Once FERC approves both plans then the developer may commence operation.

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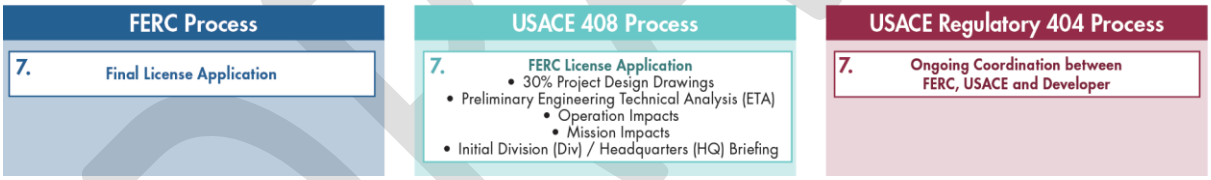
Step 14: Operations / Permit Compliance

The developer then operates the project and provides reports to FERC and USACE as appropriate. FERC performs annual inspections of the licensed project features. Also, FERC requires a Part 12D initial independent consultant's inspection that must be completed and the report is filed no later than five years from the date of first commercial operation or the date on which the powerhouse is subject to normal water levels, whichever comes first.

Option B: Description of the Steps in Conducting the Processes in a Coordinated Manner

Below is a description of a potential approach for conducting the FERC licensing and USACE 408 and USACE Regulatory 404 processes in a coordinated manner. Steps 1 through 6 are the same and, therefore, are not repeated below.

Step 7: FERC License Application



The developer prepares and submits a final license application, as well as the following information for USACE 408 purposes:

- FERC's Exhibit F;
- Preliminary Engineering Technical Analysis (ETA);
- Identification and plans to address potential operations impacts;
- Identification and plans to address other USACE federal project impacts (e.g., safety, navigation, etc., if applicable);
- FERC's Exhibit G (Although not required by FERC regulations, USACE 408 staff suggests including real estate plans and ways to address impacts).

During this step, with 30% engineering design and other documents, the USACE District 408 team briefs the Division and Headquarters on the 408 components of the project. Any information needs or topics

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of interest related to 408 from the Division or Headquarters are then shared with the developer and FERC for future refinement of the project to address USACE 408 needs.

Step 8: FERC NEPA Document and USACE 404 Application, Notice

FERC Process	USACE 408 Process	USACE Regulatory 404 Process
8. FERC NEPA Document	8. FERC NEPA Document	8. 404 Application • FERC NEPA Document Review

FERC issues its NEPA document based on its record of information for the project, including the final license application and any information subsequently filed by the licensing participants, including USACE 408 and USACE Regulatory 404 staff. The document will either be an EA or EIS as determined by FERC based on the project record of information. Through the FERC process, any required consultations, such as those under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act, will be completed. FERC public notices the environmental document and provides an opportunity for public comment.

The developer also submits the Section 404 application to USACE Regulatory with a copy to FERC. The Section 404 application must include a clear delineation of jurisdictional aquatic resources proposed for impact, location of all regulated impacts (e.g., fill associated with construction, access roads, borrow pits, staging, dredging, etc.), and include statements fully supporting avoidance, minimization, and compensatory mitigation of impacts to jurisdictional waters of the U.S. It is also important to note that the information FERC needs to complete its review may not be sufficient for USACE Regulatory 404 purposes. For instance, prior to USACE Regulatory 404 rendering a permit decision, the developer must provide a final compensatory mitigation plan.

For the USACE Regulatory 404, if the activity requires a standard individual 404 permit, USACE Regulatory issues a public notice, soliciting comment on the proposal.

Step 9: USACE Feedback on FERC NEPA Document, 404 Progress

FERC Process	USACE 408 Process	USACE Regulatory 404 Process
9. FERC NEPA Document / Public Comment • EIS Public Meeting, as appropriate	9. USACE Feedback on FERC NEPA Document • USACE Affirm Information Needs • Joint Meeting, as appropriate	9. USACE Feedback on FERC NEPA Document • USACE Feedback on Alternatives Analysis • Joint Meeting, as appropriate • USACE Begins Drafting 404 Permit Decision, Supplemental NEPA Information, Pending 408 Decision

If USACE is a cooperating agency, USACE 408 and USACE Regulatory 404 staff provides feedback to FERC staff on the NEPA document prior to its issuance, as specified in the LOU, including any comments on the environmental alternatives analysis as it relates to 404 needs, areas related to 408 needs, as well as any other additional needs/topics to be addressed, as appropriate.

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If USACE is not a cooperating agency, USACE 408 and USACE Regulatory 404 staff would provide similar feedback on the record during the comment period following the issuance of the NEPA document. Also, USACE 408 and/or USACE Regulatory 404 staff may also meet with the developer; however, if USACE is a cooperating agency, then to the extent specified in the LOU with FERC staff, USACE staff should not discuss the contents of the draft, internal working NEPA document, or any internal discussions they may have had with FERC staff regarding the draft, internal working document.

USACE 408 and USACE Regulatory 404 should begin to prepare any supplemental environmental information to comply with Section 408 or 404(b)(1) Guidelines, respectively, and its public interest review, if necessary, to include in or supplement the FERC NEPA document. USACE Regulatory 404 will have documentation completed, to the extent possible, prior to the USACE 408 decision. No USACE Regulatory 404 permit will be issued before the USACE 408 determination.

Step 10: FERC Licensing Decision

FERC Process	USACE 408 Process	USACE Regulatory 404 Process
10. Licensing Decision	10. USACE Reviews FERC License	10. 404 Permit Decision, Supplement FERC NEPA, As Necessary

FERC makes the licensing decision. If FERC issues the license, then Steps 11 – 14 follow.

Step 11: Post-Licensing /Dam Safety

FERC Process	USACE 408 Process	USACE Regulatory 404 Process
11. Post-Licensing / Dam Safety • FERC Dam Safety Review	11. Post Licensing / Dam Safety 408 Application and Review • MOA for Design and Construction (list outstanding items to be addressed (90 days after license issuance) • Final Design/Detailed ETA (60-100%) 60% inform and adjust; 100% for dam safety/life safety/ environment/operations ultimately needed • 100% District to Div/HQ • In progress reviews at Division and HQ at 60/90% levels • • Division/HQ review	11. Post Licensing / Completion of 408 Review

The developer must commence construction of the project works within two years from the issuance date of the license and must complete construction of the project within five years from the date of the issuance date of the license articles. Within 90 days from the issuance date of the license, the developer must furnish the USACE 408 and FERC with a schedule for the submission of all design documents, the plans and specifications, and various other critical documents for the project. The License's standard articles for a project at a USACE 408 dam list the various requirements, documents, and plans that must be submitted for USACE 408 and FERC review and/or approval.

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USACE 408, FERC, and the developer also coordinate on both USACE 408 and FERC dam safety needs. The developer submits to FERC and USACE design documents, plans, project specifications, and supporting design documents. These documents should be organized and prepared so that they can be used for both FERC and USACE's 408 requirements/reviews. It is intended that all documents will be reviewed concurrently by FERC and USACE. The developer schedules meetings with all parties to address comments and other issues during the post-license process.

FERC may require a Board of Consultants (BOC) to provide an independent review by a panel of experts, depending on the complexity of the project. In addition, FERC normally requires a Potential Failure Mode Analysis (PFMA) at the 60% design level.

A standard article in a FERC license for a project at a USACE dam requires the developer to enter into an agreement with USACE to coordinate its plans for site access and activities on USACE lands. Also, USACE requires Design and Construction plans which include a list of outstanding topics to be addressed for the 408 application. The developer then submits a USACE 408 application which will include a minimum of 60% design for the project. USACE will review the 408 application to determine if there are any potential impacts to congressionally authorized purposes or mission areas associated with the dam.

For the 408 process, the developer and USACE staff then coordinate development of the proposed project through to 100% design on USACE federal project components, and other key topics identified (e.g., dam safety, life safety, operations, environment, recreation, real estate).

The developer will also submit to USACE 408 staff, with a copy to FERC, a Regulating Plan (or Operating Plan) describing powerhouse operations and noting restrictions needed to protect primary USACE federal interests.

USACE District 408 staff briefs both the Division and Headquarters staff at the 60% design and 100% design levels. Feedback on 408 from the Division and Headquarters at the 60% design level are shared with the developer and FERC so the topics can be addressed in the final 100% design.

Once the 100% design is complete, which is only required for critical components that could impact USACE 408 infrastructure or operations, the USACE District 408 staff coordinates the Agency Technical Review (ATR) and the developer coordinates the Independent External Peer Review (IEPR). Once the reviews are complete, the USACE District 408 staff prepares any additional supplemental information needed for the FERC NEPA document and submits the 408 Draft Decision Document to the Division and then Headquarters for review. The USACE Division office will take 60-90 days to review the District's recommendation and then make a recommendation to USACE Headquarters. USACE Headquarters will take no more than 30 days to review the Division recommendation and issue a determination on the proposed project unless additional time is warranted.

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Step 12: USACE 408 and 404/FERC Decisions

If approved, USACE issues its 408 approval decision and then subsequently grants the 404 permit, along with supplemental NEPA information, as appropriate. USACE 408 issues a letter indicating approval or denial and the basis for decision, and, if approved, USACE Regulatory 404 staff grants a permit to the developer with copies to FERC.

Once all preconstruction requirements have been satisfied and FERC receives USACE written approval for construction, FERC then authorizes construction of the project.

If not previously established, a Memorandum of Agreement between the developer and USACE 408 is required prior to the start of construction to finalize terms of site access, bonding, site restoration, safety, security, emergency actions, and other subjects, as appropriate.

Step 13: Construction

The developer constructs the project coordinating with FERC, USACE 408 staff, and USACE Regulatory 404 staff, as appropriate. The developer must review and approve contractor-design features (cofferdams, deep excavation, etc.) and submit copies to FERC and USACE. Various documents (Quality Control and Inspection Reports, Surveillance and Monitoring Report, design modifications, etc.) are submitted during construction for both FERC and USACE review. On-site inspections are performed by both FERC and USACE.

Within 90 days of completion of construction of the authorized facilities, the developer must file for FERC approval exhibits A, F, and G describing and showing the project facilities as built.

Prior to the start of operations, the developer must develop a Memorandum of Agreement between the developer and USACE (408) describing the detailed operation of the powerhouse. In addition, the developer must develop an Emergency Operating Plan. Once FERC approves both plans then the developer may commence operations.

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Step 14: Operations / Permit Compliance

The developer then operates the project and provides reports to FERC and USACE as appropriate. FERC performs annual inspections of the licensed project features. Also, FERC requires a Part 12D initial independent consultant's inspection that must be completed and the report is filed no later than five years from the date of first commercial operation or the date on which the powerhouse is subject to normal water levels, whichever comes first.

Conclusion for Options A and B

The FERC/USACE 408/USACE Regulatory 404 improved coordinated efforts as described in this document can reduce redundancies and increase the efficiency of the permitting processes of adding hydropower at USACE non-hydropower dams. The agencies look forward to gathering input from developers and others to determine the best ways to continue to enhance these efforts.

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Appendix A

U.S. Army Corps of Engineers USACE Engineering Circular No. 1165-2-216

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

EC 1165-2-216
Change 1

CECW-CP

Circular
No. 1165-2-216

30 September 2015

EXPIRES 31 JULY 2016
Water Resource Policies and Authorities
POLICY AND PROCEDURAL GUIDANCE FOR PROCESSING REQUESTS TO ALTER US ARMY CORPS OF ENGINEERS CIVIL WORKS PROJECTS PURSUANT TO 33 USC 408

1. This Change 1 to EC 1165-2-216, 30 September 2015, revises Appendix G, "Use of Section 214 of WRDA 2000, as amended, for 33 U.S.C. 408" and references to Appendix G in the main text of the EC, to incorporate changes as a result of Section 1006 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014).

2. The changed information is annotated as follows:

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7. c. (5) (o)	15
8. f	19
Appendix G	G-1 through G-10

FOR THE COMMANDER:

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

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DEPARTMENT OF THE ARMY
US Army Corps of Engineers
Washington, DC 20314-1000

EC 1165-2-216
Change 1

CECW-CP
Circular
No. 1165-2-216

30 September 2015

EXPIRES 31 July 2016
Water Resource Policies and Authorities

POLICY AND PROCEDURAL GUIDANCE FOR PROCESSING REQUESTS TO ALTER US ARMY CORPS OF ENGINEERS CIVIL WORKS PROJECTS PURSUANT TO 33 USC 408

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Appendix G – *Funding Agreements for the Purposes of Reviewing Requests Pursuant to 33 U.S.C. 408* G-1
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DEPARTMENT OF THE ARMY
US Army Corps of Engineers
Washington, DC 20314-1000

EC 1165-2-216
Change 1

CECW-CP
Circular
No. 1165-2-216

30 September 2015

EXPIRES 31 July 2016

Water Resource Policies and Authorities

POLICY AND PROCEDURAL GUIDANCE FOR PROCESSING REQUESTS TO ALTER US ARMY CORPS OF ENGINEERS CIVIL WORKS PROJECTS PURSUANT TO 33 USC 408

1. Purpose.

a. The purpose of this Engineer Circular (EC) is to provide policy and procedural guidance for processing requests by private, public, tribal, or other federal entities, to make alterations to, or temporarily or permanently occupy or use, any US Army Corps of Engineers (USACE) federally authorized civil works project, referred to as "USACE project" within this document, pursuant to 33 USC 408 (Section 408). Proposed alterations must not be injurious to the public interest or affect the USACE project's ability to meet its authorized purpose.

b. The main body of this EC contains policy applicable to all types of Civil Works projects and an overall step-by-step procedural guide to be tailored at the district level to the appropriate level of detail for a specific Section 408 request. Supplemental guidance including additional procedural, decision-making and coordination detail related to specific infrastructure types (i.e. dams, hydropower, levee systems, channels, and navigation) can be found in Appendices B-E.

c. This EC supersedes the previous policy memoranda on this subject as identified in Appendix A.

2. Applicability. This circular is applicable to all headquarters USACE elements, divisions, districts, laboratories, and field operating activities having civil works planning, engineering, design, construction, and operations and maintenance (O&M) responsibilities. Note that for use in this EC, "district" refers to a USACE district office and "division" refers to a USACE division office. This EC applies to requests for alterations received by districts on or after the date of issuance.

3. Distribution Statement. Approved for public release; distribution is unlimited.

4. References. References for the main EC are in Appendix A.

5. Authority. The authority to grant permission for temporary or permanent alterations is contained in Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408, titled *Taking possession of, use of, or injury to harbor or river improvements*, and states the following: "*It shall not be lawful for any person or persons to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, obstruct by fastening vessels*

thereto or otherwise, or in any manner whatever impair the usefulness of any sea wall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the United States, or any piece of plant, floating or otherwise, used in the construction of such work under the control of the United States, in whole or in part, for the preservation and improvement of any of its navigable waters or to prevent floods, or as boundary marks, tide gauges, surveying stations, buoys, or other established marks, nor remove for ballast or other purposes any stone or other material composing such works: Provided, That the Secretary of the Army may, on the recommendation of the Chief of Engineers, grant permission for the temporary occupation or use of any of the aforementioned public works when in his judgment such occupation or use will not be injurious to the public interest: Provided further, That the Secretary may, on the recommendation of the Chief of Engineers, grant permission for the alteration or permanent occupation or use of any of the aforementioned public works when in the judgment of the Secretary such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work."

6. Policy.

a. Alteration. Section 408 authorizes the Secretary of the Army to grant permission for the alteration or occupation or use of the project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. Unless otherwise stated, for ease of reference, the use of the term "alteration" in this document also includes "occupation" and "use." For purposes of this document, the words "alteration" or "alter" refers to any action by any entity other than USACE that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity, of a USACE project. Alterations also include actions approved as "encroachments" pursuant to 33 CFR 208.10.

b. Other Authorizations. A requester has the responsibility to acquire all other permissions or authorizations required by federal, state, and local laws or regulations, including any required permits from the USACE Regulatory Program (Section 10/404/103 permits). In addition, an approval under Section 408 does not grant any property rights or exclusive privileges.

c. Alterations within Project Boundaries. This EC only applies to alterations proposed within the lands and real property interests identified and acquired for the USACE project and to lands available for USACE projects under the navigation servitude.

d. Requesters. A request for Section 408 permission can originate from a non-federal sponsor or an independent requester. For USACE projects with a non-federal sponsor as described in paragraph 6.e., the requester must either be the non-federal sponsor or have the endorsement of the non-federal sponsor prior to a written request, reference paragraph 7.c.(2), being submitted to USACE.

e. Non-Federal Sponsors. The district will provide a hardcopy or electronic copy of this EC to each non-federal sponsor described below:

(1) A non-federal sponsor that has provided assurances pursuant to Section 3 of the Flood Control Act of 1936, as amended (33 USC 701c), or Section 221 of the Flood Control Act of 1970, as amended (42 USC 1962d-5b), is responsible for ensuring that a USACE project is operated and maintained in accordance with requirements prescribed by USACE. Any proposed alteration that would require permission from USACE under Section 408 must be requested by or come through the non-federal sponsor. Accordingly, for improvements, excavations, construction, or changes to local flood protection works referenced in 33 CFR 208.10(a)(4) and (5), approval from USACE under Section 408 (and in accordance to procedures in this EC) must be obtained by the non-federal sponsor. If a USACE project has multiple non-federal sponsors in this category, concurrence in writing must be obtained by all non-federal sponsors prior to USACE approval of a Section 408 request.

(2) For USACE projects that were constructed in whole or in part pursuant to a cost-share agreement with a non-federal sponsor, but are operated and maintained by USACE, the district will obtain written concurrence by each of the non-federal sponsors for the proposed alteration prior to USACE approval of a Section 408 request.

(3) For requested alterations located in inland and intracoastal waterways, the district will issue a public notice to notify users of the waterways, navigation stakeholders, and other interested parties as the district deems appropriate.

f. Routine Operations and Maintenance Activities. Routine operations and maintenance (O&M) activities specified in the O&M manual and performed by the non-federal sponsor or USACE do not require permission from USACE under Section 408.

g. USACE Shoreline Management and Master Planning Programs. Activities contained in 36 CFR 327 do not require review for purposes of Section 408. The processes in 36 CFR 327 ensure that the requested activity will not be injurious to the public interest and will not impair the usefulness of the project. Engineer Regulation (ER) and Engineer Pamphlet (EP) 1130-2-550, Chapter 3, provides the procedures for the USACE Master Plan Program. ER 1130-2-406 provides the procedures for the USACE Shoreline Management Program.

h. Real Estate Outgrants.

(1) Real Estate outgrants are defined in ER 405-1-12, Chapter 8, or subsequent regulation.

(2) Outgrants issued to implement an approved Project Master Plan, including the Shoreline Management Plan or Operational Management Plan, do not require review for purposes of Section 408. See ER/EP 1130-2-550, Chapter 3.

(3) Outgrants issued pursuant to the procedures in ER/EP 1130-2-550, Chapters 16 or 17 ensure the requested alteration in the outgrant request will not be injurious to the public interest and will not impair the usefulness of the project; thus, meeting the intent of Section 408.

However, the USACE team evaluating the outgrant requests involving an alteration to project structures and projects as discussed in Appendices B – E of this EC must consider the additional criteria and factors discussed in those appendices. In addition, the team evaluating outgrant requests will determine if HQUSACE review is required by following the process described in paragraph 6.t. of this EC. If the determination is that HQUSACE review is required, then the outgrant request will require a documented Section 408 decision in accordance with this EC. When a Section 408 decision is required, the Real Estate Contracting Officer will not issue such outgrant unless the appropriate USACE decision maker with delegated authority grants permission for the alteration pursuant to Section 408. Any special conditions included pursuant to Section 408 must be included in the outgrant. If HQUSACE review is not required, then districts may follow procedures in ER/EP 1130-2-550, Chapters 16 or 17 for issuing the outgrant decision.

(4) Outgrant requests not included in ER/EP 1130-2-550, Chapters 16 or 17 require a Section 408 determination in accordance with this EC. The Real Estate Contracting Officer will not issue such outgrant unless the appropriate USACE decision maker with delegated authority grants permission for the proposed alteration pursuant to Section 408. Any conditions included in the grant of permission pursuant to Section 408 must be included in the outgrant.

i. Previously Approved Alterations. All previous approvals granted for alterations, including "encroachments" approved pursuant to 33 CFR 208.10 prior to the date of this EC are not invalidated by this EC.

j. Unauthorized Alterations. The policy of USACE is to pursue enforcement and correction of unauthorized alterations of covered projects. If an unauthorized alteration is discovered, the district, after consulting with the Offices of Counsel and Real Estate, should take the appropriate steps to remedy the unauthorized alteration. The Chief of Regulatory should be notified of any unauthorized alterations so the appropriate course of action can be taken with respect to Section 10/404/103 permits. Specific enforcement steps the district takes will depend on the particular nature of the unauthorized alteration and whether the unauthorized alteration is located on project boundaries where a non-federal sponsor holds the land rights for operations and maintenance. Non-federal sponsors with operations and maintenance responsibilities for the USACE project, reference paragraph 6.e.(1), remain responsible for ensuring no unauthorized alterations are occurring within the project boundaries.

k. Authorized Project Purpose. No granting of permission is allowed under Section 408 for a proposed alteration that would have an effect of deauthorizing a project or eliminating an authorized project purpose.

l. Completeness. Requests must be for complete alterations. A proposed alteration is considered complete if it results in a fully functional element once construction is completed.

m. Design and Construction Standards. A proposed alteration pursuant to Section 408 must meet current USACE design and construction standards. However a requester is not required to bring those portions or features of the existing USACE project that are not impacted by the alteration up to current USACE design standards.

n. Hydrologic and Hydraulics Impacts. As a general rule, proposed alterations that will result in substantial adverse changes in water surface profiles will not be approved.

o. Type I Independent External Peer Review (IEPR). Per EC 1165-2-214, because Section 408 requests are not planning studies, Type I IEPRs are not required.

p. Regulatory Program Coordination.

(1) The granting or denial of permission pursuant to Section 408 is not a permit action handled by the Regulatory Program.

(2) If a proposed alteration also requires authorization pursuant to Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and/or Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (Section 10/404/103), district Regulatory and Section 408 personnel must coordinate throughout their respective evaluations.

(3) The decision on a Department of the Army permit application pursuant to Section 10/404/103 cannot and will not be rendered prior to the decision on the Section 408 request.

(4) Regulatory funds can only be used for a Section 10/404/103 action, which may include those actions with an associated Section 408 request. Regulatory staff can use Regulatory funds to participate in joint meetings and internally coordinate portions of shared documents when a Section 408 request also requires a Section 10/404/103 action. Regulatory funds cannot be used to develop or coordinate any components of the Section 408 request independent of a Section 10/404/103 action.

(5) Processing Department of the Army permit applications pursuant to Sections 10/404/103 will be accomplished in accordance with current regulations and guidance.

(6) In cases when a Section 408 request requires division or HQUSACE coordination and/or review, no Section 10/404/103 permit decision documentation will be forwarded to the division or HQUSACE in order to preserve the independent decision-making authority of the District and Division Commanders. The district, however, should ensure that the Section 408 documentation clearly articulates if Section 10/404/103 authorization is required.

q. In-kind Contribution Credit under Section 221 of the Flood Control Act of 1970, as amended (Section 221).

(1) Alterations of a USACE Project with an Ongoing Feasibility Study. There may be cases where a non-federal sponsor wishes to undertake alterations to an existing USACE project for which there is an ongoing USACE feasibility study and seek credit eligibility for those alterations toward its cost share for the not-yet authorized USACE project (under Section 221 of the Flood Control Act of 1970). In such cases, any proposed alteration for which the non-federal sponsor is seeking credit cannot be initiated until the draft feasibility report is released for public review, an in-kind memorandum of understanding (MOU) for the work is executed, and Section 408 permission is issued. Additional authorizations, such as those required pursuant to Section 10/404/103 under the USACE Regulatory Program, may also be required before the non-federal sponsor can initiate any work.

(2) In Kind Contributions for an Authorized USACE Project. In those cases where a non-federal sponsor is undertaking work as an in-kind contribution on an authorized USACE project pursuant to an executed project partnership agreement that provides credit for such work, Section 408 permission is not required.

(3) Detailed guidance on crediting can be found in ER 1165-2-208.

r. Sharing of Sensitive Information. Requesters seeking sensitive information about an existing USACE project to develop a proposed alteration will submit requests for that information in writing. Sensitive information includes information that could pose a security risk or aid those intending to do harm to a USACE project. Examples include but are not limited to design analyses, as-builts or other drawings, specifications, location of deficiencies, operational information, and contingency plans. The office that generated or is responsible for the information requested will review the request in coordination with the district operational security officer, to determine whether it is sensitive. Districts should limit the distribution of sensitive information to only the information that is necessary for the proposed alteration. Districts will advise requesters that the information to be provided is sensitive and direct requesters to provide a list of individuals with whom the information will be shared. Districts will advise requesters that the sensitive information will not be shared with individuals not on the list. Reviewers should work with their District Office of Counsel to determine if a non-disclosure statement is needed. Districts may in some cases have to withhold sensitive information regardless of its necessity for the development of a proposed alteration. Requests for data submitted to USACE by other agencies will not be provided and will be referred to the other agency for a release determination.

s. Categorical Permission. The district, division, and/or HQUSACE have the ability to create a categorical permission for Section 408 that would cover potential alterations that are similar in nature and that have similar impacts. Categorical permissions should be established by providing public notice of the activities covered by the categorical permission. There should be appropriate documentation and analysis developed to determine that the impacts of activities covered by the categorical permission are permissible and that environmental compliance for those activities has been met. Once established, a simplified process to validate application of

the categorical permission and specify any special conditions that may apply on a site-specific basis may be used.

t. Section 408 Decision Level. Certain proposed alterations, once recommended by the district and division, will require a final decision by the Director of Civil Works at HQUSACE. All other decisions on proposed alterations may be rendered by the District Commander unless a Division Commander establishes a regional process that requires that the decision be made by the Division Commander. If the answer to any of the following questions is "yes" and the district and division recommend approval, then the Section 408 request requires HQUSACE level review and decision, reference paragraph 7.c.(7):

(1) Does the proposed alteration require a Type II IEPR, reference EC 1165-2-214?

(2) Does the proposed alteration require an Environmental Impact Statement (EIS) in which USACE is the lead agency?

(3) Does the proposed alteration change how the USACE project will meet its authorized purpose? An example would be a proposed alteration to permanently breach a levee system for ecosystem restoration purposes but raise all structures behind the levee to achieve the same flood risk management benefits. This project still meets the authorized flood risk management purpose, but in a different manner.

(4) Does the proposed alteration preclude or negatively impact alternatives for a current General Investigation (GI) or other study?

(5) Is the non-federal sponsor for a USACE project proposing to undertake the alteration as in-kind contributions eligible for credit under Section 221 of Flood Control Act of 1970, as amended?

(6) Is the proposed alteration for installation of hydropower facilities?

(7) Is there a desire for USACE to assume operations and maintenance responsibilities of the proposed navigation alternation pursuant to Section 204(f) of Water Resources Development Act (WRDA) of 1986?

If the district is unsure, the district should engage the division and HQUSACE, reference Paragraph 9 of this EC, Vertical Teaming.

7. Procedures.

a. District Section 408 Coordinator. The District Commander will designate a Section 408 Coordinator responsible for ensuring processes in this EC are met and to ensure the proper coordination occurs among all the necessary district elements, including but not limited to,

regulatory, real estate, counsel, planning, engineering, programs and project management, and/or operations. The Section 408 Coordinator will also ensure proper coordination among other districts if the USACE project crosses more than one district's area of responsibility. In addition the Section 408 Coordinator will track district expenditures, including funding provided by any non-federal interests, for processing Section 408 requests on a fiscal year basis by funding source.

b. Description. In order to grant permission under Section 408, USACE must determine that the proposed alteration does not impair the usefulness of the USACE project, which includes retaining the project's authorized purpose, and is not injurious to the public interest. Because proposed alterations vary in size, level of complexity, and potential impacts, the procedures and required information to make such a determination are intended to be scalable. Based on the proposed alteration, districts will determine data, analyses and documentation necessary in order to make a determination regarding whether or not the proposed alteration does not impair the usefulness of the project and is not injurious to the public interest. Requirements for data, analyses and documentation may be subject to change as additional information about the Section 408 proposal is developed and reviewed.

c. Step-by-Step Procedures. The procedures have been grouped into nine steps: pre-coordination, written request, required documentation (including environmental compliance, if applicable), district-led Agency Technical Review (ATR), Summary of Findings, division review, HQUSACE review, notification, and post-permission oversight. Not all the steps will be applicable to every Section 408 request. In simple cases, steps may be combined or occur simultaneously. For more complex cases, there may be the need for extensive coordination between the district and requester throughout the process. Supplemental information for these steps specific to dams and reservoirs, hydropower, levees and floodwalls, flood risk management channels, and navigation can be found in the appendix appropriate to the type of infrastructure (Appendices B-E). At any time in the process if the district determines that the requirements will not or cannot be met, the district may deny the request prior to completing all the required steps. If a request is denied, the requester will be advised in writing as to the reasons for denial.

(1) Step 1: Pre-Coordination. Early coordination between USACE, the requester and/or non-federal sponsor, if applicable, is strongly recommended because it will aid in identifying potential issues, focusing efforts, minimizing costs, and protecting sensitive information. Districts shall ensure requesters are provided a hardcopy or electronic copy of this EC.

(2) Step 2: Written Request. The purpose of this step is to document the initiation of the Section 408 process. Information from this step will be used by the district to determine documentation and approval requirements.

(a) All requests for Section 408 permission must be submitted in writing to the District Commander of the appropriate USACE district office having jurisdiction over the USACE

project that would be impacted by the alteration. Each district has the flexibility to determine the format in which this written request is submitted; however,

(b) The written request must include:

i. a complete description of the proposed alteration including necessary drawings, sketches, maps, and plans that are sufficient for the district to make a preliminary determination as to the location, purpose and need, anticipated construction schedule, and level of technical documentation needed to inform its evaluation. Detailed engineering plans and specifications are not required at Step 2, but could be submitted at the same time if available;

ii. a written statement regarding whether the requester is also pursuing authorization pursuant to Sections 10/404/103 and, if so, the date or anticipated date of application/pre-construction notification submittal;

iii. information regarding whether credit under Section 221of the Flood Control Act of 1970, as amended, or other law or whether approval under Section 204(f) of WRDA 1986 is being or will be sought;

iv. a written statement of whether the requester will require the use of federally-owned real property or property owned by the non-federal sponsor; and,

v. a written statement from the non-federal sponsor endorsing the proposed alternation, if applicable.

(3) Step 3: Required Documentation. The purpose of this step is to outline the documentation necessary for the district to determine whether the proposed alteration would impair the usefulness of the project or be injurious to the public interest. The list below is meant to provide an overview of the general requirements, but requirements are scalable to the nature of the proposed alteration.

(a) Technical Analysis and Design. The district should work closely with the requester to determine the specific level of detail necessary to make a decision for a particular alteration request. The minimum level of detail will be 60% complete plans and specifications and supporting technical analysis.

(b) Hydrologic and Hydraulics System Performance Analysis. The purpose of a hydrologic and hydraulics system performance analysis is to determine the potential hydrologic and hydraulics impacts of proposed alterations. Districts will determine if such an analysis is needed and, if so, the appropriate scope of analysis based on the complexity of the proposed alteration. The requester will be responsible for the analysis. Hydrologic and hydraulic system performance analyses will be applied to alterations that alter the hydrologic and/or hydraulic conditions (e.g., reservoir operations, bridge constrictions, hydropower installation, etc.) See Appendix F for

more details regarding the requirements of a hydrologic and hydraulics system performance analysis.

(c) Environmental Compliance.

i. A decision on a Section 408 request is a federal action, and therefore subject to the National Environmental Policy Act (NEPA) and other environmental compliance requirements. While ensuring compliance is the responsibility of USACE, the requester is responsible for providing all information that the district identifies as necessary to satisfy all applicable federal laws, executive orders, regulations, policies, and ordinances. NEPA and other analysis completed to comply with other environmental statutes (e.g. Endangered Species Act) should be commensurate with the scale and potential effects of the activity that would alter the USACE project. The district will work with the requester to determine the requirements, which will be scaled to the likely impacts of the proposed alteration and should convey the relevant considerations and impacts in a concise and effective manner.

ii. The NEPA compliance process should be completed in an efficient, effective and timely manner consistent with guidance issued by the Council on Environmental Quality on March 6, 2012 entitled *Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act.* NEPA compliance should follow the process set forth in 40 CFR Parts 1500-1508 and the USACE civil works NEPA implementing regulations found in 33 CFR Part 230. Documentation for Section 408 requests do not require the same level of analysis or documentation needed for planning studies and, therefore, Appendix A and other portions of Part 230 specific to planning studies do not apply. However, in some cases, documentation from studies may be used to inform a Section 408 decision, such as a report that would be required for Section 204(f) of the Water Resources Development Act of 1986.

iii. For any final Environmental Impact Statement (EIS) or Environmental Assessment (EA) or other environmental compliance document, the requester's proposal will be identified as the "requester's preferred alternative."

iv. USACE has jurisdiction under Section 408 only over the specific activities or portions of activities that have the potential to alter a USACE project. Therefore, if a proposed alteration is part of a larger project (and/or its associated features) that extends beyond the USACE project boundaries, the district should determine what portions or features of the larger project USACE has sufficient control and responsibility over to warrant their inclusion in the USACE environmental review. The scope of analysis for the NEPA and environmental compliance evaluations for the Section 408 review should be limited to the area of the alteration and those adjacent areas that are directly or indirectly affected by the alteration. For example, a pipeline can extend for many miles on either side of the USACE project boundary. In this example, the scope of analysis would likely be limited to the effects of the pipeline within the USACE project boundary, but would not address those portions of the pipeline beyond the USACE project boundary. In contrast, a proposal to alter a levee system might require USACE to examine that

proposal's potential effects on the reliability of the levee system to provide flood risk reduction to the area behind the levee system itself. As a general rule, if there are features of a larger project occurring outside of the USACE project boundaries that are so intimately connected to the features of the larger project altering a USACE project that they cannot be meaningfully distinguished (e.g., a setback levee that is located outside of the original project boundary of the levee being replaced), the USACE Section 408 NEPA document should be broad enough to address all those effects. Generally, elements of the larger project that are not intimately connected to the features that would alter the USACE project (e.g., concessions being constructed off USACE property by the same entity requesting permission to construct boat access to a USACE reservoir) should not be included in the USACE environmental review.

v. Only reasonable alternatives need to be considered in detail, as discussed in the CEQ NEPA regulations at 40 CFR Part 1502.14. Reasonable alternatives must be those that are feasible, and such feasibility must focus on the accomplishment of the underlying purpose and need (of the requester) that would be satisfied by the proposed federal action (granting of permission for the alteration). For Section 408 requests, reasonable alternatives should focus on two scenarios: 1) no action (i.e., no proposed alteration in place) and 2) action (i.e. proposed alteration in place). Thus, examination of alternative forms of a proposed alteration that the requester has not proposed should only be included to the extent necessary to allow a complete and objective evaluation of the public interest and informed decision regarding the alteration request.

vi. Districts must make diligent efforts to involve the public in the decision-making process, including soliciting appropriate information from the public to inform the environmental analysis and public interest determination. For the purposes of Section 408 requests that are expected to have less than a significant effect on the human or natural environment, a public notice soliciting input will serve as the method of advising all interested parties of the proposed alteration for which permission is sought and by which information necessary to inform USACE's evaluation and review is solicited. As such, this public notice must be circulated to the public as early in the evaluation of a proposed alteration as possible to generate meaningful public and agency input to inform the evaluation and decision-making processes. Generally, Section 408 EAs should not be circulated for public comment. In circumstances where a proposed alteration is associated with a current study or other uncommon circumstances, the decision to circulate the Section 408 component of that EA will be approved by the Division Commander or the Division Commander's designee. Any decision to circulate an EA/Finding of No Significant Impact (FONSI) for a Section 408 request that also requires a Section 10/404/103 permit decision must be coordinated with the Regulatory Program to ensure that only information pertinent to non-Regulatory Program matters is included in the documented to be circulated.

vii. A number of categorical exclusions that allow completion of the NEPA process in an efficient manner for those activities that individually and cumulatively would not result in significant effects on the environment are included in 33 CFR 230.9. For example, categorical exclusions in 33 CFR 230.9(b) and (i) may have applicability to some of the smaller scale

activities that may be encountered under Section 408. Real estate grants for rights-of-way as referenced in 33 CFR 230.9(i) should be broadly interpreted to include grants of rights-of-way by either USACE or the non-federal sponsor. A categorical exclusion may be used for Section 408, provided that care is taken to ensure that the proposed alteration is within the intended scope of the specific categorical exclusion used and extraordinary circumstances that may require the preparation of an EIS or EA have been taken into consideration. It is recommended that the applicability and use of the categorical exclusion be documented in accordance with recent CEQ guidance, *Establishing, Applying and Revising Categorical Exclusions under the National Environmental Policy Act*.

viii. The district should use, to the extent possible, any NEPA documentation that may already exist for the federal project. In some cases NEPA documentation has already been completed through an existing or ongoing civil works study. The districts should use the information to the extent feasible and supplement the existing information as needed.

ix. If the proposed alteration is covered by an EIS in which USACE is a cooperating agency, the district may adopt or supplement that EIS and develop a Record of Decision (ROD) that is specific to the proposed alteration. For hydropower alterations, USACE and FERC have entered into an MOU for meeting NEPA requirements (see Appendix C).

(d) Real Estate Requirements. A list of all real property interests required to support the proposed alteration must be provided, including those in federally managed lands and those owned by the requester. If a non-standard estate is proposed, the district must follow the normal approval requirements outlined in EC 405-1-11 and Chapter 12, ER 405-1-12 or subsequent regulation. Maps clearly depicting both existing real estate rights and the additional real estate required must also be provided. If the lands are under the control of the Army, the applicant will work with the district to determine lands impacted. Additional information may be needed. If it is determined that an outgrant of Army land is required, a *Report of Availability and Determination of Availability* must be completed by the district in accordance with AR 405-80 and Chapter 8, ER 405-1-12 or subsequent regulation.

(e) Discussion of Executive Order 11988 Considerations. The district may require the requester to submit sufficient data in order that the district may conduct its analysis in accordance with ER 1165-2-26 to ensure that the proposed alteration is compliant with EO 11988. The request should be assessed as to whether there would be induced development in the floodplain as a result of the proposed alteration and address the positive and negative impacts to the natural floodplain functions.

(f) Requester Review Plan Requirement. The district has the flexibility to decide whether or not the requester must prepare a review plan for the alteration for district approval. A review plan is required when a Type II Independent External Peer Review (IEPR) is required. If the district determines, by following procedures in EC 1165-2-214, a Type II IEPR is required, then at minimum the requester is required to submit a Type II IEPR review plan. The Risk

Management Center (RMC) will be the Review Management Organization (RMO) and is required to endorse in writing all review plans for Type II IEPRs to ensure that the review plans reflect a level of review commensurate with the scope and scale of the proposed alterations. All requester-generated review plans for Type II IEPRs will be approved by the Division Commander.

(g) Operations and Maintenance. Requesters must identify any operations and maintenance requirements needed throughout the life of the proposed alteration and the responsible entity for the operations and maintenance into the future. For instances when there may be a desire for USACE to assume or incorporate operations and maintenance of the proposed alteration as part of its responsibilities for the USACE project being modified, a justification must be provided. See Appendix E for federal assumption of maintenance associated with navigation features. Any alteration to a project operated and maintained by a non-federal sponsor and for which an update to the operations and maintenance manual is required, the non-federal sponsor will provide USACE with sufficient information to update the O&M manual. The modified O&M manual will be subject to environmental compliance in the same manner as the requested alteration. The non-federal sponsor will acknowledge in writing their continued responsibility to operate, maintain, repair, rehabilitate and replace the USACE project at no cost to the government and will hold and save the government free from all damages arising from construction, operation, maintenance, repair, rehabilitation, and replacement of the project.

(h) Other Information. Based on the alteration request, the district may require the requester to provide additional information to complete its evaluation.

(4) Step 4: District-Led Agency Technical Review.

(a) District Review Plans. The purpose of the district review plans is to define the requirements, procedures, and specific details of how the district-led Agency Technical Review (ATR) will be conducted for Section 408 proposals. In addition, district decisions about required documentation, Type II IEPRs and approval level should be documented in the review plans. Districts have the option to develop an overarching review plan, called a Procedural Review Plan, that establishes the review procedures to be used for Section 408 requests similar in nature and that have similar impacts. Procedural Review Plans must be endorsed in writing by the Risk Management Center and approved by the Division Commander. Otherwise, the district will develop an alteration-specific review plan to be approved by the Division Commander.

(b) District-led Agency Technical Review. For the purposes of Section 408, the purpose of a district-led ATR is to determine if requirements set forth in this EC have been met. Reviewers can be from the home district. If lacking the appropriate expertise, the district should supplement their staff with outside subject matter experts through appropriate communities of practice, centers of expertise, or other offices. Review teams should be comprised of reviewers with the appropriate independence and expertise to conduct a comprehensive review in a manner commensurate with the complexity of the Section 408 proposal. It should be noted, DrChecks

can be used for Section 408 ATRs, but it is not required. The ATR team will make the following determinations:

i. Impair the Usefulness of the Project Determination. The objective of this determination is to ensure that the proposed alteration will not limit the ability of the project to function as authorized and will not compromise or change any authorized project conditions, purposes or outputs. All appropriate technical analyses including geotechnical, structural, hydraulic and hydrologic, real estate, and operations and maintenance requirements, must be conducted and the technical adequacy of the design must be reviewed. If at any time it is concluded that the usefulness of the authorized project will be negatively impacted, any further evaluation under 33 USC 408 should be terminated.

ii. Injurious to the Public Interest Determination. Proposed alterations will be reviewed to determine the probable impacts, including cumulative impacts, on the public interest. Evaluation of the probable impacts that the proposed alteration to the USACE project may have on the public interest requires a careful weighing of all those factors that are relevant in each particular case. The benefits that reasonably may be expected to accrue from the proposal must be compared against its reasonably foreseeable detriments. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. If the potential detriments are found to outweigh the potential benefits, then it may be determined that the proposed alteration is injurious to the public interest. This determination is not the same as the "contrary to the public interest determination" that is undertaken pursuant to Sections 10/404/103. Factors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation. This evaluation should consider information received from the interested parties, including tribes, agencies, and the public.

iii. Legal and Policy Compliance Determination. A determination will be made as to whether the proposal meets all legal and policy requirements. District Office of Counsel concurrence is required. The compliance determination for any Section 10/404/103 permit decision associated with the proposed alteration is separate from and will not be included in this compliance determination.

(5) Step 5: Summary of Findings. Upon completion of the district ATR and demonstration of environmental compliance, the district will develop a Summary of Findings (content and format scalable to the alteration) to summarize the district rationale and conclusions for recommending approval or denial. The Summary of Findings will serve as the basis for the final decision on the proposed alteration. If the district determines that HQUSACE approval is required, the district will submit the Summary of Findings to the division for review. The Summary of Findings will be signed by the District Commander (or designee) and contain the following, if applicable:

(a) Summary of rationale and conclusions for recommending approval or denial;

(b) Written request;

(c) A physical and functional description of the existing project, including a map;

(d) Project history and authorization;

(e) Impact to the usefulness of the USACE project determination;

(f) Injurious to the public interest determination;

(g) Policy Compliance certification;

(h) Certification of Legal Sufficiency from District Office of Counsel;

(i) Certification by the Chief of the District Real Estate Division that the real estate documentation is adequate;

(j) A description of any related, ongoing USACE studies (if applicable), including how the proposed alteration may impact those studies;

(k) Summary of any changes to the O&M manual. If the district has determined that USACE would assume O&M responsibilities as part of its responsibilities for the USACE project, include the rationale and any anticipated increase in USACE O&M costs.

(l) Summary of any changes to a project partnership agreement (PPA) or local cooperation agreement (if applicable);

(m) Applicable environmental compliance documentation including but not limited to NEPA documentation, Endangered Species Act (ESA) documentation, and other necessary documentation;

(n) Finding of No Significant Impact (FONSI) or Record of Decision (ROD) (These will be signed concurrently with the Section 408 decision. If HQUSACE approval is required, these will be draft and will be signed by the Director of Civil Works);

(o) Summary of the acceptance and use of funds pursuant to Section 214 *or Section 139(j),* if applicable, as outlined in Appendix G; and,

(p) Any additional final conclusions or information, including any associated controversial issues.

(6) Step 6: Division Review (if required).

(a) Upon receipt of the district prepared Summary of Findings for HQUSACE review and decision, the division will review the submittal and provide comments to the district within 30 days unless the division notifies the district that additional review time is needed. The division will review the Summary of Findings for policy compliance and legal sufficiency; quality assurance and completeness; identification of conflicts with ongoing studies; and confirmation of the need for HQUSACE review and decision. The district is responsible for addressing division comments prior to submission to HQUSACE. The timeline required to address comments may vary depending on significance of the division comments. If the division decides the district may approve the Section 408, that rationale should be documented as part of the administrative record.

(b) The Division Commander will either deny the Section 408 request or recommend approval to HQUSACE. If the division denies the request, this decision will be transmitted to the district. If the division recommends approval, the division will forward an electronic copy of the Summary of Findings and the Division Commander's recommendation to the appropriate HQUSACE Regional Integration Team (RIT). This may be forwarded to HQUSACE during the publication period of the final EIS (if an EIS is required for the alteration).

(7) Step 7: HQUSACE Review (if required).

(a) Upon receipt of the Section 408 submittal from the division, the RIT will forward the Summary of Findings and division recommendation to the HQUSACE Office of Water Project Review (CECW-PC) for a policy compliance review. The RIT will ensure that the appropriate reviewers include engineering and other appropriate subject matter experts such as navigation, levee safety, dam safety, real estate and environmental. HQUSACE will review and provide comments within 30 days, unless HQUSACE notifies the division that additional review time is needed. The timeline required to address comments will vary depending on significance of the HQUSACE comments. The RIT will coordinate the results, as needed, to correct or improve the package as necessary to address concerns. The district is responsible for addressing HQUSACE comments or coordinating with the requester for comment resolution.

(b) The RIT will draft the final HQUSACE decision memorandum for the Director of Civil Work's signature.

(c) If the Summary of Findings contains a draft FONSI, the Director of Civil Works will sign the FONSI concurrently with the Section 408 decision, if permission is granted.

(d) If the Summary of Findings contains a draft ROD, HQUSACE will not finalize the Section 408 decision sooner than 30 days after the publication of the final EIS and the district has transmitted an updated draft ROD. HQUSACE will finalize the ROD concurrently with the Section 408 decision.

(e) The RIT will provide the final HQUSACE decision memorandum and signed FONSI or ROD, if applicable, to the division that will in turn provide the decision to the district.

(8) Step 8: Notification. The District Commander is responsible for providing a written notification to the requester for all Section 408 requests, regardless of the decision level. Appendix H contains an example letter.

(a) If the final decision is to deny the request, the requester will be advised in writing as to the reason(s) for denial.

(b) If the final decision is to approve the request, the District Commander will provide a written approval document. In situations where the district also is evaluating a Section 10/404/103 permit application, the district may forward the Section 408 decision letter with the Section 10/404/103 permit decision, once it is made. For cases involving a categorical permission, the written approval will be validation that the categorical permission is applicable.

(c) Special Conditions. For approved alterations, the District Engineer may include special conditions. Examples of special conditions may include:

i. The requester must obtain approval by the district of 100% plans and specifications prior to construction.

ii. The requester must have both the Section 408 permission and appropriate real estate document prior to construction.

iii. The requester must obtain the appropriate Section 10/404/103 permits prior to construction.

iv. The requester must be responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.

v. Note, in the event of any deficiency in the design or construction of the requested activity, the requestor is solely responsible for the remedial corrective action, and any permission granted under Section 408 should explicitly state this responsibility.

(9) Step 9: Post-Permission Oversight.

(a) Construction oversight. The district should develop procedures for monitoring construction activities. The purpose is to ensure the Section 408 permittee is constructing the alteration in accordance with the permission conditions. Any concerns regarding construction should be directed to the Section 408 permittee (and the non-federal sponsor if the Section 408

permittee is not the non-federal sponsor) for resolution. Oversight should be commensurate with the level of complexity of the alteration.

(b) As-builts. Drawings showing alterations as finally constructed will be furnished by the Section 408 permittee to the district after completion of the work. As-builts must be provided within 180 days of construction completion.

(c) Operations and Maintenance (O&M) Manual Updates. The Section 408 permittee and/or non-federal sponsor is required to provide the district with sufficient information to update the O&M manual, as required. O&M manual updates may range from simple removal and replacement of paragraphs or entirely new manuals depending on the scope and complexity of the alteration. The district is responsible for reviewing and approving or developing any updates needed to the O&M manual as a result of the alteration. At a minimum, the update should include a description of the new features, reference to the Section 408 approvals, as-builts, and instructions regarding O&M of any new features not included in the existing manual. Reference ER 1110-2-401 or ER 1130-2-500 for information on O&M manuals.

(d) Post Construction Closeout. Post construction closeout requires an on-site inspection of the completed alteration. The district may coordinate post construction closeout with the other federal, state or local agency. Where projects require an update to the O&M manual or PPA, the USACE district must conduct the post construction inspection and provide notification to the applicant and non-federal sponsor regarding acceptance or any corrective actions that are required. Notification that the alteration was constructed in accordance with the permit conditions must include a copy of the updated O&M manual.

(e) Administrative Record. The district will keep an administrative record for each Section 408 proposal. The administrative record should include all documents and materials directly or indirectly considered by the decision maker and should be ordered chronologically. It should include documents, materials, and a record of the offices and staff that are pertinent to the merits of the decision, as well as those that are relevant to the decision-making process.

8. Funding. Potential available sources of funds for review activities include:

a. Applicable project-specific appropriated funds in investigations, construction, operations and maintenance, or flood control - Mississippi River and Tributaries may be used for Section 408 reviews that are specific to the applicable project. Vertical team concurrence through division and HQUSACE RIT must be obtained prior to use of investigations or construction funds.

b. For federally authorized levee systems, channels, and dams operated and maintained by a non-federal sponsor, district Inspection of Completed Works funds may be used. In addition, on a case by case basis, for Section 408 requests critical to the functioning of these levee systems,

channels, and dams and for reducing risk to life safety, requests for funding may be submitted to the HQUSACE Levee Safety Program Manager;

c. For federally authorized navigation projects, district project condition surveys funds may be used if the navigation projects do not have funding within their operations and maintenance account;

d. Funding for district coordination on Federal Energy Regulatory Commission (FERC) Activities. The funding for district coordination regarding FERC activities related to non-federal hydropower development will be provided by HQUSACE. Districts should request funding from HQUSACE through their respective division in coordination with their designated FERC Hydropower Coordinators. The request will be processed at HQUSACE through their respective regional integration team and forwarded to the HQUSACE Hydropower Business Line Manager, CECW-CO-H, for final approval and processing;

e. Funding to Process Section 408 Requests under Section 214. Funds may also be accepted under the authority of Section 214 of WRDA 2000, as amended, to expedite the review and evaluation of a Section 408 request. Funds may only be accepted from non-federal public entities. Examples of acceptable uses include, but are not limited to Agency Technical Review, real estate evaluation, copying or other clerical/support tasks, site visits, travel, coordination activities, additional personnel (including support/clerical staff), contracting support for technical services and environmental review and filing the environmental compliance documents. The processes applicable to accepting funds under the authority of Section 214 of WRDA 2000, as amended, are contained in Appendix G.

f. Federal Transportation Projects. In certain circumstances for alterations necessary for federal transportation projects, USACE may accept and expend funds provided by a state DOT agency pursuant to section 6002(j) of Public Law 109-59 (codified at 23 USC 139(j)) provided the Secretary of Transportation finds such review activities directly and meaningfully contribute to an underlying transportation project. In such cases, USACE only may accept funds in amounts necessary for USACE to meet the time limits for environmental review established for the project and may only accept funds for activities beyond the normal and ordinary capabilities permitted by USACE's general appropriations. *The processes applicable to accepting funds under the authority of 23 USC 139(j) are contained in Appendix G;* and,

g. Funding to Process Section 408 Requests under Section 204(b). Water Resources Development Act of 1986, as amended, Section 204(b) allows non-federal interests to contract with USACE to provide technical assistance in obtaining all necessary permits, which includes Section 408 permission, associated with non-federal improvements to navigation features pursuant to Section 204(a) of WRDA 86.

9. Vertical Teaming. Vertical teaming between the district, division, and HQUSACE is encouraged when there is doubt as to the appropriate course of action related to the application of this guidance. Vertical teaming is also recommended to promote early coordination of potential alterations that may have Congressional interest or policy implications. Please coordinate through the appropriate HQUSACE's RIT.

FOR THE COMMANDER:

9 Appendices
See Table of Contents

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

APPENDIX A

References

This appendix is a list of USACE engineer documents (regulations, manuals, and technical letters) and other USACE and non-USACE appropriate references. The intent is to provide a comprehensive listing of appropriate guidance referenced in the main EC. Appendices B-G each list references specific to that appendix.

Rivers and Harbors Appropriation Act of 1899

Flood Control Act of 1970

Clean Water Act of 1972

Marine Protection, Research, and Sanctuaries Act of 1972

Endangered Species Act of 1973

Water Resources Development Act of 1986

Water Resources Development Act of 2000

Public Law 109-59
Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

Executive Order 11988
Floodplain Management

33 USC 408
Taking possession of, use of, or injury to harbor or river improvements

33 USC 701c
Rights-of-way, easements, etc.; acquisition by local authorities; maintenance and operation; protection of United States from liability for damages; requisites to run-off and water-flow retardation and soil erosion prevention assistance

42 USC 1962d-5b
Written agreement requirement for water resources projects

33 CFR 208.10
Local flood protection works, maintenance, and operation of structures and facilities

33 CFR 230
Procedures for Implementing NEPA

36 CFR 327
Rules and regulations governing public use of water resource development projects administered by the Chief of Engineers

40 CFR 1500-1508
Council on Environmental Quality (NEPA)

AR 405-80
Management of Title & Granting Use of Real Property

ER 405-1-12
Real Estate Handbook

ER 1110-2-401
Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for Projects and Separable Elements Managed by Project Sponsors

ER 1130-2-406
Shoreline Management at Civil Works Projects

ER 1130-2-500
Partners and Support (Work Management Policies)

ER 1130-2-550
Project Operations - Recreation Operations and Maintenance Policies

ER 1165-2-26
Implementation of Executive Order 11988 on Floodplain Management

ER 1165-2-208
In-Kind Contribution Credit Provisions of Section 221 of the Flood Control Act of 1970, as Amended

EC 405-1-11
Real Estate Acquisition

EC 1165-2-214
Water Resources Policies and Authorities (Civil Works Review)

EP 1130-2-550
Recreation Operations and Maintenance Guidance and Procedures

Council on Environmental Quality (2010)
Establishing, Applying and Revising Categorical Exclusions under the National Environmental Policy Act

Council on Environmental Quality (2012)
Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act

US Army Corps of Engineers 2006 (This EC supersedes this memorandum.)
Policy and Procedural Guidance for the Approval of Modification and Alteration of Corps of Engineer Projects, CECW-PB Memorandum, 23 October 2006

US Army Corps of Engineers 2008 (This EC supersedes this memorandum.)
Clarification Guidance on the Policy and Procedural Guidance for the Approval of Modifications and Alterations of Corps of Engineers Projects, CECW-PB Memorandum, 17 November 2008

US Army Corps of Engineers 2010 (This EC supersedes this memorandum.)
Implementation Guidance for Utilizing Section 214 of the Water Resources Development Act of 2000, as amended, to Accept Funding from Non-Federal Public Entities to Expedite the Evaluation of Permits pursuant to 33 USC 408, CECW-PB Memorandum, 18 June 2010

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APPENDIX B

Dams and Reservoirs (including Navigation Dams)

B-1. Purpose. The purpose of this appendix is to provide supplemental guidance to be used in conjunction with guidance in the main EC for alterations proposed by others to federally authorized dams and reservoirs, including dams associated with navigation locks. This appendix is also applicable to all associated appurtenances to include lands required to ensure reservoir integrity up to the project probable maximum flood (PMF), in addition to structures and canals where failure would release pool. Federally authorized dams include those operated and maintained by USACE. Also included are dams constructed by USACE, but which are operated and maintained by non-federal sponsors and may also be included under the jurisdiction of a State Dam Safety Agency defined by the National Dam Safety Program. For reservoirs, this appendix is applicable to water intake structures and pump stations constructed on USACE-managed lands. See Appendix C for additional information concerning hydropower facilities.

B-2. References. The main USACE reference document is Engineer Regulation (ER) ER 1110-2-1156, Safety of Dams, Policy and Procedures, which includes details on various dam safety activities, including inspections and risk assessments. ER1110-2-1156 also provides a comprehensive list of references for dams for consideration in review of dam design, construction, and operations and maintenance.

a. Section 6 of the Flood Control Act (FCA) of 1944 (P.L. 78-534), Contracts for sale of surplus water at Army projects – Disposition of revenues

b. Water Supply Act (WSA) of 1958 (P.L. 85-500, as amended)

c. EO 11988, Floodplain management

d. 44 CFR 65.10, Mapping of areas protected by levee systems

e. ER 1110-2-1156, Safety of Dams, Policy and Procedures

f. EC 1165-2-214, Civil Works Review

g. See Appendix A for other applicable references

B-3. Policy. The information below supplements policy in Paragraph 6 of the main EC.

a. Coordination with State Dam Safety Agencies. When the request is for the alteration of a dam operated by a non-federal sponsor, the alteration will be reviewed by the State Dam Safety Agency. In these cases the requester must obtain written concurrence of the proposed alteration from the State Dam Safety Agency be required prior to USACE issuing the final Section 408 decision.

b. National Flood Insurance Program (NFIP). The FEMA criteria related to NFIP mapping purposes (44 CFR 65.10, Mapping of areas protected by levee systems) are not USACE design standards and should not be a consideration for the technical analysis or design review. However, the impacts associated with mapping levee, floodwall, or channel projects for the NFIP, such as influences on floodplain management, should be discussed as part of compliance with EO 11988, reference Paragraph 7.c.(3)(e) in the main EC and considered when discussing potential impacts to associated risks.

c. Design and Construction Standards. Paragraph 6.m. in the main body of the EC specifies that a proposed alteration itself must meet current USACE design and construction standards. However, a requester is not required to bring the remaining existing USACE project up to current USACE design standards. An example might be if a requester submitted a proposed alteration for a landside seepage berm, but the dam has erosion issues on the waterside at the same location. The seepage berm would need to meet USACE design and construction standards, but the proposed alteration would not have to also address the waterside erosion if the district has determined that the seepage berm was a complete alteration that is not influenced by the erosion issue.

d. Additional Considerations for Municipal and Industrial (M&I) Water Supply.

(1) Water supply users entering into an agreement under Section 6 of the Flood Control Act (FCA) of 1944 (PL 78-534) or the Water Supply Act (WSA) of 1958 (PL 85-500, as amended) generally will not need a separate Section 408 permission.

(2) For currently authorized M&I water supply storage, Section 408 considerations will be taken into account in the drafting of a M&I water storage agreement and associated real estate instruments. Any requirements related to the user's facilities (intake structures, etc.) will be included in the agreement and related real estate instruments.

(3) For reallocated M&I water supply storage under the 1958 WSA authority, the water supply user must be advised that the reallocation study itself will not specifically address the Section 408 considerations but that Section 408 considerations will be taken into account in the drafting of a water storage agreement and associated real estate instruments. Any requirements for water supply user's facilities (intake structures, etc.) will be included in the agreement and associated real estate instruments.

(4) For surplus water under the authority of Section 6 of the 1944 FCA, Section 408 considerations will be taken into account in the drafting of the surplus water agreement and associated real estate instruments and any requirements for water supply user's facilities (intake structures, etc.) will be included in the agreement and associated real estate instruments.

(5) For M&I water supply intakes of any size to be placed in projects that do not include specifically authorized water supply storage, Section 408 permission will be required. Intakes with fixed infrastructure placed in impoundments without authorized conservation storage will

require Section 408 permission. Section 408 review should include consideration of physical and operational impacts to the project.

B-4. Procedures. The information below corresponds to and supplements the steps in Paragraph 7 of the main EC.

a. Step 1: Pre-Coordination. Ensure involvement of the District Dam Safety Officer (DSO) and Dam Safety Program Manager (DSPM). In addition, the district should inform the requester of any current dam safety modification studies that are ongoing or are being considered that may have compatible objectives with the potential proposed alteration.

b. Step 2: Written Request. Follow procedures in Paragraph 7 of the main EC.

c. Step 3: Required Documentation.

(1) Technical Analysis and Design. The list below is only a guide for information and/or analyses that may be needed to review alterations to dams and reservoirs. It is not intended to list every item that may be needed to make a final Section 408 decision, nor is it intended that every type of analysis be required for all proposals.

(2) Civil. Each submittal should clearly identify the existing condition of the dam and/or appurtenant structures to include plan, profile and design details of the proposed alteration in relation to the existing USACE project. Below are examples of information necessary to understand the existing and proposed conditions.

(a) Alteration location (Vicinity map and specific alteration location)

(b) Applicable datum

(c) Real estate interests, existing and to be acquired, needed for the proposed alteration

(d) Grading plans

(e) Layout plan, profiles, and cross-sections of the proposed alternation

(f) Previous inspection reports to assist in identifying existing deficiencies and their proximity to the proposed alteration

(g) Sections and details

(h) Temporary measures required during construction (bypasses, cofferdams, etc.)

(3) Geotechnical. The following is a list of analyses or information that may be necessary to consider in evaluating geotechnical impacts if proposed alterations alter the dam embankment or penetrate the natural blanket or foundation.

(a) Erosion control (changes in erosive forces on a slope)

(b) Liquefaction susceptibility

(c) Material usage/borrow/waste/transport/hauling

(d) Placement of stockpiles, heavy equipment, or other surcharges

(e) Results of subsurface investigation – boring logs, test pit logs, laboratory test results, etc.

(f) Seepage analysis

(g) Settlement analysis

(h) Stability analysis

(i) Vegetation

(4) Structural. The following is a list of analysis or information that may be necessary to evaluate the impacts of proposed alterations to concrete, sheetpiling, or drainage structures.

(a) Bridges and related abutments

(b) Design analysis for retaining walls and excavation support system

(c) Design of shallow or deep foundations, including bearing capacity and settlement analysis if the construction is located within the line of protection or right-of-way and creates potential seepage problems

(d) Design recommendations for foundations on expansive soils

(e) Diaphragm walls

(f) Gates or other operable features

(g) Other structural components integral to the project

(h) Pier penetrations of levee embankments

(i) Stability analysis including sliding, overturning, bearing, flotation, uplift and any seismic load effects for any alteration to the channel walls and/or flood walls

(j) Structural drainage control methods

(k) Water stops and contraction/expansion joints

(5) Hydrology and Hydraulics. Refer to Appendix F for details on when and how a hydrology and hydraulics system performance analysis should be conducted. Refer to the list below for examples of factors that should be considered when evaluating hydrology and hydraulics impacts.

(a) Changes in inflow

(b) Changes in velocity

(c) Changes in water surface profiles and flow distribution

(d) Consideration of impacts to energy dissipation measures; hydropower generation; sedimentation; or navigation

(e) Scour Analysis

(f) Sediment transport analysis

(g) Upstream and downstream impacts of the proposed alterations

(6) Water Control Management Plan. Alterations may have impacts on how water control structures are operated. In these cases, the alterations should consider any impacts or changes to water control plans that may be necessary. If a change to a water control manual is required, the NEPA document developed for the Section 408 alteration should incorporate appropriate analysis for updating the water control manual. Alterations that will work in conjunction with an existing federal Water Control Manual (WCM) should be documented and incorporated into that WCM. Items to be considered are:

(a) Effects on existing Biological Opinions, Water Quality Certifications, Coastal Zone Management Concurrences, etc. should evaluate project impacts on any legal document, agreement, or requirement that informs water control management by USACE

(b) Impacts/revisions to the operation of USACE facilities or other projects within the basin

(7) Operations, Maintenance and Flood Fighting. Alterations may change operation, maintenance or require special flood fighting procedures.

(a) Effects on existing maintenance access

(b) Effects on maintenance practices

(c) Flood contingency plan during construction, measures proposed to protect area under construction, monitoring of river level, river stage at which plan will be activated, materials and equipment to be used to activate plan, and personnel contact and telephone number to activate plan.

(d) Flood fighting requirements and practices

(e) Special inspection requirements

(8) Potential Failure Mode Analysis. Depending on the proposed alteration, the requester may be required by the district to provide a potential failure mode analysis with the proposed alteration in place.

(9) Requester Review Plan Requirement. If the district determines a Type II Independent External Peer Review (IEPR) is required for the proposed alteration, the Risk Management Center (RMC) will determine based on information provided in the Requester Review Plan for the Type II IEPR if the dam senior oversight group (DSOG) will review the dam alteration. If it is determined that the DSOG review is required, the RMC will inform the division, which will include the requirement for the DSOG review within the approval memorandum, as required in EC 1165-2-214, for the Requester Review Plan to the district. The district should contact the HQUSACE Dam Safety Program Manager to schedule a briefing with the DSOG as soon as possible. Information to be presented should include available risk assessment (Screening for Portfolio Risk Analysis (SPRA) or higher level risk assessments) information and a description of the proposed alteration. The DSOG briefing can occur concurrently with other steps, but should occur before the request is submitted for division review. The RMC will consider the following in determining whether DSOG review is required:

(a) whether the benefits of the alteration are generally commensurate with the risks

(b) whether the alteration potentially worsens or creates new failure modes or risk drivers for the USACE project; and

(c) whether the alteration is exceptionally complex or high risk.

d. Step 4: District-led Agency Technical Review (ATR).

(1) Risk. For dams with SPRA or higher level risk assessment information, districts should take this information into account to determine whether the proposed alteration may increase the risk associated with the project. If a dam does not have a SPRA or a higher level

risk assessment completed, a risk assessment is not required to be conducted prior to making a Section 408 decision.

(2) Alterations Within the Reservoir Area. These proposed alterations require the same level of technical review as alterations to dams. Generally alterations within the reservoir areas will be requested by the water supply non-federal sponsor for intake facilities. These alterations should be reviewed for impacts to life safety, inundation, and intake levels. When reviewing the intake levels, consideration will be given to drought conditions and also to lake level drawdowns for dam safety water control purposes. When alterations are proposed along the reservoir, the alteration will be reviewed for constructability and for potential failure modes related to misoperation, overtopping, foundation failures, alteration-induced subsidence, and other possible incidents that could cause the uncontrolled loss of pool.

(3) The district Dam Safety Program Manager and Dam Safety Officer are required to review and endorse approval or recommend denial of any Section 408 request that modifies a dam.

e. Step 6. Division Review. For dam alterations requiring HQUSACE approval as determined by answering the questions in Paragraph 6.t. of the main EC, the division Dam Safety Program Manager (DSPM) and Dam Safety Officer (DSO), in addition to any additional division reviewers, are required to review and endorse approval or recommend denial.

f. Step 7. HQUSACE Review. For dam alterations requiring HQUSACE approval as determined by answering the questions in Paragraph 6.t. the main EC, the HQUSACE DSPM or designee review, in addition to the Office of Water Project Review, are required to endorse approval or recommend denial.

g. Step 8: In addition to the other notification procedures in Paragraph 7.c.(8) of the main EC, for alterations related to mapping for the National Flood Insurance Program (NFIP), the written approval document will specify that approval does not constitute, nor should it be construed as, an evaluation to determine if NFIP criteria have been met.

h. Step 9: Post – Permission Oversight.

(1) Inspections. Inspections conducted by USACE should document whether approved alterations are being operated and maintained in accordance with the Section 408 approval and O&M manual.

(2) National Inventory of Dams. Districts should ensure that the National Inventory of Dams is updated for USACE dams and appurtenant structures as applicable to capture new or changed features constructed as part of a Section 408 permission.

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Appendix C

Non-Federal Hydropower Development at USACE Facilities

C-1. Purpose. The purpose of this appendix is to provide supplemental guidance to be used in conjunction with guidance in the main EC and Appendix B for requests for alterations of USACE projects by adding conventional and/or non-conventional hydroelectric power generating facilities. Conventional hydroelectric generating facilities are facilities that have a turbine and generator unit combination contained in a powerhouse adjacent to a USACE non-powered dam that provide the potential energy for the powerhouse. A non-conventional facility, such as a hydrokinetic hydroelectric generating unit, typically is not contained in a powerhouse and not adjacent to a dam but could be attached to other USACE civil works structures such as jetties, levees, and navigation channels. This appendix is applicable to requests received from non-federal entities which have been granted a preliminary permit or license by the Federal Energy Regulatory Commission (FERC).

C-2. References.

a. Federal Power Act, as amended

b. ER 1110-2-401, Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for Projects and Separable Elements Managed by Project Sponsors

c. ER 1110-2-1150, Engineering and Design for Civil Works Projects

d. ER 1110-2-1454, Corps Responsibilities for Non-Federal Hydroelectric Power Development under the Federal Power Act

e. ER 1110-2-1462, Water Quality and Water Control Considerations for Non-Federal Hydropower Development at Corps of Engineers Projects

f. ECB 2008-8, Sharing Technical Information in Support of Non-Federal Hydropower Development

g. US Army Corps of Engineers, Charging and Retaining Fees Charged to FERC Licensees, CECC-G memorandum, 6 June 2006

h. Memorandum of Understanding Between the United States Army Corps of Engineers and the Federal Energy Regulatory Commission on Non-Federal Hydropower Projects, 25 March 2011

i. See Appendix A and B for other applicable references.

C-3. Policy. This information supplements policy in Paragraph 6 of the main EC and Appendix B.

a. USACE and FERC Coordination. USACE and FERC have agreed to work with each other and with other participating agencies or entities, as appropriate to ensure that timely decisions are made and that the responsibilities of each agency are met. Specifically, subject to the availability of resources and in accordance with applicable laws, regulations, Army policies and FERC policies, each agency agrees to: commit to early involvement; participate proactively; share data; communicate informally; attend public meetings; and coordinate on studies of hydropower potential.

b. Sharing of Technical Information. See reference in Paragraph C-2.f. of this appendix.

C-4. Procedures. The information below corresponds and supplements the steps in Paragraph 7 of the main EC.

a. Step 1: Pre-Coordination. When a USACE district receives a written request to modify a USACE civil works project for the addition of hydroelectric generation, the district will confirm that the requester has a valid FERC preliminary permit or license to investigate the potential for adding hydroelectric power facilities to the civil works project. Once validated, the district will initiate coordination with the requester and FERC. Initial coordination should consist of a meeting to discuss the proposed project and inform the requester of any known issues that would impact their proposal, such as any dam safety issues.

b. Step 2: Required Documentation.

(1) National Environmental Protection Act (NEPA) Requirements. Districts should follow NEPA procedures as described in the main EC. In most cases where a requester requests approval for alteration of a USACE civil works structure for the purpose of adding hydroelectric generating facilities, USACE typically acts as a cooperating agency to a lead agency, FERC. Under Section V of the reference in paragraph C-2.g, "...As the agency with the approval/disapproval authority for the licensing of hydropower projects, the FERC shall serve as the lead Federal agency for the preparation of the environmental document" (for non-federal hydropower development at USACE water resources projects). As appropriate, and as resources allow, USACE will assist FERC in the preparation of relevant sections of the environmental document to the extent that the information is necessary for USACE to adopt the document/incorporate portions by reference to support its independent Section 408 decision and/or any other required USACE permit decision (e.g. Section 10/404/103).

c. Step 3: Remaining Procedures. Districts should follow remaining procedures outlined in the main EC and Appendix B.

Appendix D

Levee, Floodwall or Flood Risk Management Channel Projects

D-1. Purpose. The purpose of this appendix is to provide supplemental guidance to be used in conjunction with guidance in the main EC for proposed alterations by others to federally authorized USACE civil works' levee, floodwall, or flood risk management channel projects, including their associated features. Supplemental information for alterations to navigation channels is in Appendix E. If a levee, floodwall, or flood risk management channel is associated with a dam project, Appendix B should be consulted. Common associated features for levee, floodwall, or channel projects include sheetpile walls, berms, relief wells, cutoff walls, foundation, drainage structures, ponding areas, closure structures, pump stations, transitions, and erosion protection.

D-2. References. The following is a list of references containing evaluation processes, design standards, and operations and maintenance procedures that may be relevant to consider for alterations to levee, floodwall, or channel projects.

a. P.L. 84-99, as amended, flood emergencies; extraordinary wind, wave, or water damage to federally authorized hurricane or shore protective structures; emergency supplies of water; drought; well construction and water transportation

b. 33 CFR 208.10, Local flood protection works; maintenance and operation of structures and facilities

c. 44 CFR 65.10, Mapping of areas protected by levee systems

d. ER 500-1-1, Civil Emergency Management Program

e. ER 1110-2-1806, Earthquake Design and Evaluation of Civil Works Projects

f. ER 1110-2-1942, Inspection, Monitoring, and Maintenance of Relief Wells

g. EM 1110-1-1005, Control and Topographic Surveying

h. EM 1110-1-1804, Geotechnical Investigations

i. EM 1110-1-1904, Settlement Analysis

j. EM 1110-2-1418, Channel Stability Assessment for Flood Control Projects

k. EM 1110-2-1601, Hydraulic Design of Flood Control Channels

l. EM 1110-2-1902, Slope Stability

m. EM 1110-2-1906, Laboratory Soils Testing

n. EM 1110-2-1913, Design and Construction of Levees

o. EM 1110-2-1914, Design, Construction, and Maintenance of Relief Wells

p. EM 1110-2-2002, Evaluation and Repair of Concrete Structures

q. EM 1110-2-2007, Structural Design of Concrete-Lined Flood Control Channels

r. EM 1110-2-2100, Stability Analysis of Concrete Structures

s. EM 1110-2-2104, Strength Design for Reinforced-Concrete Hydraulic Structures

t. EM 1110-2-2502, Retaining and Flood Walls

u. EM 1110-2-2504, Sheet Pile Walls

v. EM 1110-2-2902, Conduits, Culverts, and Pipes

w. EC 1110-2-6066, Design of I-Walls

x. ETL 1110-2-583, Engineering and Design: Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures

y. ETL 1110-2-575, Evaluation of I-Walls

z. U.S. Army Corps of Engineers, Policy for Development and Implementation of System-Wide Improvement Frameworks (SWIFs), CECW-HS memorandum, 29 November 2011

aa. U.S. Department of Interior Bureau of Reclamation and US Army Corps of Engineers, Best Practices in Dam and Levee Safety Risk Analysis, 3 December 2012

bb. See Appendix A for other applicable references.

D-3. Policy. The information below supplements policy in Paragraph 6 of the main EC.

a. National Flood Insurance Program (NFIP). The FEMA criteria related to NFIP mapping purposes (44 CFR 65.10, Mapping of areas protected by levee systems) are not USACE design standards and should not be a consideration in the technical analysis or design review. However, the impacts associated with mapping levee, floodwall, or channel projects for the NFIP, such as influences on floodplain management, should be discussed as part of compliance

with EO 11988, reference Paragraph 7.c.(3)(e) in the main EC and considered when discussing potential impacts to associated risks.

b. Completeness. Reference to Paragraph 6.l. in the main EC. An example is one reach of a levee system may require a slurry wall to address seepage and a different reach may require a seepage berm. The slurry wall and seepage berm can be constructed and function independently of each other, and, therefore, could be considered as two complete alterations.

c. Design and Construction Standards. Paragraph 6.m. in the main EC specifies that a proposed alteration itself meet current USACE design and construction standards. However, a requester is not required to bring the remaining existing USACE project up to current USACE design standards. An example is a requester has submitted a proposed alteration for a landside seepage berm for a levee, but the levee has erosion issues on the waterside at the same location. The seepage berm would need to meet USACE design and construction standards, but the proposed alteration would not have to also address the waterside erosion if the district has determined that the seepage berm was a complete alteration that is not influenced by the erosion issue.

D-4. Procedures. The information below corresponds and supplements the steps in Paragraph 7 of the main EC.

a. Step 1: Pre-Coordination. Ensure involvement of the district Levee Safety Officer (LSO) and Levee Safety Program Manager (LSPM).

b. Step 2: Written Request. If a proposed alteration is being requested as part of an approved System Wide Improvement Framework (SWIF), the requester must supply that information within their written request.

c. Step 3: Required Documentation.

(1) Technical Analysis and Design. The list below is only a guide for information and/or analyses that may be needed to review alterations to levee, floodwall, or channel projects. It is not intended to list every analysis or design consideration that may be needed for all proposals.

(2) Civil. Each request should clearly identify the existing condition of the portion of the levee, floodwall, or channel project being altered and include plan, profile and design details of the proposed alteration in relation to the existing USACE project. Below are examples of information that may be necessary to understand the existing and proposed conditions:

(a) Alteration location (Vicinity map and specific alteration location in station or river mile and/or decimal degrees)

(b) Applicable datum

(c) Real estate interests, existing and to be acquired, needed for the proposed alteration

(d) Grading plans

(e) Layout plan, profiles, and cross-sections of proposed alteration

(f) Previous inspection reports to assist in identifying existing deficiencies and their proximity to the proposed alteration

(g) Temporary measures required during construction (bypasses, cofferdams, etc.)

(3) Geotechnical. The following is a list of analyses or information that may be necessary to consider for geotechnical considerations and assessing their impacts if proposed alterations alter the levee, floodwall or channel bank cross-section or penetrate the natural blanket or foundation.

(a) Erosion control (changes in erosive forces on a slope)

(b) Material usage/borrow/waste/transport/hauling

(c) Placement of stockpiles, heavy equipment, or other surcharges

(d) Results of subsurface investigation – boring logs, test pit logs, laboratory test results, etc.

(e) Seepage analysis

(f) Settlement analysis

(g) Stability analysis

(h) Vegetation

(4) Structural. The following is a list of analyses or information that may be necessary to evaluate the impacts of proposed alterations to concrete, sheetpiling, or drainage structures:

(a) Bridges and related abutments

(b) Design analysis for retaining walls and excavation support system

(c) Design of shallow or deep foundations, including bearing capacity and settlement analysis if the construction is located within the line of protection or right-of-way and creates potential seepage problems

(d) Design recommendations for foundations on expansive soils

(e) Diaphragm walls

(f) Gates or other operable features

(g) Other structural components integral to the project

(h) Pier penetrations of levee embankments

(i) Stability analysis including sliding, overturning, bearing, flotation, uplift and any seismic load effects for any alteration to the channel walls and/or flood walls

(j) Structural drainage control methods

(k) Water stops and contraction/expansion joints

(5) Hydrology and Hydraulics. Refer to Appendix F for details on when and how a hydrology and hydraulics system performance analysis should be conducted. Refer to the list below for examples of factors that should be considered when evaluating hydrology and hydraulics impacts.

(a) Changes in velocity

(b) Changes in water surface profiles and flow distribution

(c) Scour analysis

(d) Sediment transport analysis

(e) Upstream and downstream impacts of the proposed alterations

(6) Water Control Management Plan. Alterations may have impacts on how water control structures are operated. In these cases, the alterations should consider any impacts or changes to water control plans that may be necessary. If a change to a water control manual is required, the NEPA document developed for the Section 408 alteration should incorporate appropriate analysis for updating the water control manual. Alterations that will work in conjunction with an existing Federal Water Control Manual (WCM) should be documented and incorporated into that WCM. Items to be considered are:

(a) Effects on existing Biological Opinions, Water Quality Certifications, Coastal Zone Management Concurrences, etc. should evaluate project impacts on any legal document, agreement, or requirement that informs water control management by the USACE

(b) Impacts/revisions to the operation of USACE facilities or other projects within the basin

(7) Operations, Maintenance and Flood Fighting. Alterations may change how a levee, floodwall or channel project is to be operated, maintained or require special flood fighting procedures. Reviews should consider the factors below to determine potential effects.

(a) Effects on existing project access

(b) Special inspection requirements

(c) Effects on maintenance practices

(d) Flood fighting requirements and practices

(e) Flood contingency plan during construction, measures proposed to protect area under construction, monitoring of river level, river stage at which plan will be activated, materials and equipment to be used to activate plan, and personnel contact and telephone number to activate plan

(8) Requester Review Plan Requirement. If the district determines a Type II Independent External Peer Review (IEPR) is required for a proposed alteration to a levee or floodwall project, the Risk Management Center (RMC) will determine based on the information provided in the Requester Review Plan for the Type II IEPR if the Levee Senior Oversight Group (LSOG) will review the proposed alteration. If it is determined that the LSOG review is required, the RMC will inform the division who will include the LSOG review requirement within the final approval memorandum, as required in EC 1165-2-214, for the Requester Review Plan to the District. The district should contact the HQUSACE Levee Safety Program Manager to schedule a briefing with the LSOG as soon as possible. Information to be presented should include available risk assessment (screenings or higher level risk assessments) information and a description of the proposed alteration. The LSOG briefing can occur concurrently with other steps, but should occur well before the request is submitted for division review. The RMC will consider the following in determining whether LSOG review is required:

(a) whether the benefits of the alteration are generally commensurate with the risks

(b) whether the alteration potentially worsens or creates new failure modes or risk drivers for the USACE project; and

(c) whether the alteration is exceptionally complex or high risk.

d. Step 4: District-Led Agency Technical Review (ATR).

(1) Rehabilitation Program. Proposed alterations to federally authorized levees, floodwalls, and channels, must also be evaluated to determine whether the alteration will become an integral component of the project. If it is determined that the proposed alteration will become an integral component of the project that is necessary for proper functioning of the project for its authorized purpose, the completed alteration will be included as a project feature eligible for rehabilitation assistance pursuant to PL 84-99. The district is responsible for making a determination as to whether or not a proposed alteration will become an integral component of the project. Factors to consider will vary depending on the type of infrastructure and the proposed alteration. This determination must be made for all proposed alterations to flood risk management projects, regardless of their status in the Rehabilitation Program at the time of the Section 408 request, to ensure that the proposed alteration is appropriately considered in future decisions about project eligibility for rehabilitation assistance. Examples of such alterations include stability or seepage berms, and changes to the structure type or geometry. For more information on USACE emergency activities and the rehabilitation program, see ER 500-1-1, Emergency Employment of Army and Other Resources – Civil Emergency Management Program.

(2) Risk. For levee and floodwall projects with risk screening or higher level risk assessment information, districts should take this information into account to determine whether the proposed alteration may increase the risk associated with the project. If the project does not have a risk screening or a higher level risk assessment completed, a risk assessment is not required to be conducted prior to making a Section 408 determination.

(3) The district Levee Safety Program Manager and Levee Safety Officer are required to review and endorse approval or recommend denial of any Section 408 request that modifies a levee or floodwall project.

e. Step 6: Division Review. For levee or floodwall project alterations requiring HQUSACE approval as determined by answering the questions in Paragraph 6.t. of the main EC, the division LSPM and LSO, in addition to any additional division reviewers, are required to review and endorse approval or recommend denial.

f. Step 7: HQUSACE Review. For levee or floodwall alterations requiring HQUSACE approval as determined by answering the questions in Paragraph 6.t. of the main EC, the HQUSACE LSPM or designee in addition to the Office of Water Project Review are required to review and endorse approval or recommend denial.

g. Step 8: Notification. In addition to the other notification procedures in Paragraph 7.c.(8) of the main EC, for alterations related to mapping for the National Flood Insurance Program (NFIP), the written approval document will specify that approval does not constitute, nor should it be construed as, an evaluation to determine if NFIP criteria have been met.

h. Step 9: Post-Permission Oversight.

(1) Inspections. Inspections conducted by USACE should document whether approved alterations are being operated and maintained in accordance with the approved Section 408 and/or updated O&M manual.

(2) National Levee Database (NLD). Districts should ensure that the NLD is updated for levee and floodwall projects, as needed, to capture new or changed features constructed as part of a Section 408 permission. The district will provide the requester with the requirements for any needed surveys, including updated centerline information and cross sections, in order to update the project information in the NLD to capture the alterations.

Appendix E

Navigation Channels, Harbors, Locks, Jetties, Bridges, and Features

E-1. Purpose. The purpose of this appendix is to provide supplemental information to be used in conjunction with guidance in the main EC for alterations proposed by others to USACE navigation projects, including channels, harbors, locks, jetties, bridges, and other associated features. Refer to Appendix B for proposed alterations to navigation dams.

E-2. References. The following is a list of references that may be relevant to consider for alterations to navigation features.

a. Section 204 of Water Resources Development Act of 1986, Public Law (PL) 99-662

b. 33 USC 565, River and Harbor Improvement by Private or Municipal Enterprise

c. ER 1110-2-1403, Studies by Coastal, Hydraulic, and Hydrologic Facilities and Others

d. ER 1110-2-1404, Engineering and Design - Hydraulic Design of Deep Draft Navigation Projects

e. ER 1130-2-520, Project Operations - Navigation and Dredging Operations and Maintenance Policies

f. ER 1140-1-211, Non-Department of Defense Reimbursable Services

g. ER 1165-2-124, Construction of Harbor and Inland Harbor Projects by Non-Federal Interests

h. EM 1110-2-1611, Layout and Design of Shallow-Draft Waterways

i. EM 1110-2-1613, Engineering and Design - Hydraulic Design of Deep Draft Navigation Projects

j. EP 1130-2-520, Project Operations - Navigation and Dredging Operations and Maintenance Guidance and Procedures

k. See Appendix A for other applicable references.

E-3. Policy. The information below supplements policy in Paragraph 6 of the main EC.

a. Mission of the Navigation Program. The mission of the USACE navigation program is to provide safe, reliable, efficient, effective, and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation. This

mission is accomplished by ensuring adequate project dimensions to provide safe passage of commercial navigation through the federally-authorized navigation project, while minimizing environmental impacts. Accordingly, any proposed alterations to an authorized navigation project must be evaluated to determine that such alteration will not impair the usefulness of the project and will not be injurious to the public interest.

b. Categories of Navigation Alterations. Proposed navigation alterations fall into two categories:

(1) Category 1: Improvements Associated with Water Resources Development Act of 1986, Section 204 (Section 204), Construction of Projects by Non-Federal Interests.

(a) Section 204(a) authorizes a non-federal interest to undertake navigational improvements in harbors or inland harbors of the United States, subject to obtaining any permits pursuant to Federal and State laws in advance of construction. Except for projects or improvements implemented under Section 204(e) and Section 204(f), non-federal interests will be responsible for the operations and maintenance of such improvements. Section 408 applies to these improvements and procedures in this EC must be followed.

(b) When there is a request for USACE to assume operations and maintenance responsibilities of the non-federal improvements pursuant to Section 204(f), processes in ER 1165-2-124 for Section 204(f) approval should be followed. Section 408 permission will also be required; however, the Section 204(f) report prepared for the Secretary of the Army may also serve as the documentation to inform the Section 408 permission decision. In general, the Section 204(f) report will not be submitted to the Assistant Secretary of the Army for Civil Works (ASA(CW)) for approval until after the requests for the Section 408 permission and Section 10/404/103 permit have been approved. In addition, a written agreement addressing the assumption of maintenance is required. To remain eligible for assumption under Section 204(f), the ASA(CW) determinations must be made and the agreement executed prior to initiation of construction, which is defined as award of the first construction contract. Approval by the ASA(CW) is required to grant an exception to policy to allow for solicitation of the construction contract prior to the required approvals, permissions and permits, and agreement.

(c) Section 204(b) allows non-federal interests to contract with USACE to provide technical assistance in obtaining all necessary permits for a non-federal interest to construct navigation improvements pursuant to Section 204(a) if the non-federal interest pays all the costs for such assistance. Authority to provide this assistance has been delegated to the field in accordance with the Support For Others guidance (ER 1140-1-211). This provision may be used to provide assistance for the Section 408 process.

(d) Section 408 is not applicable to construction undertaken by non-federal interests pursuant to Section 204(e).

(2) Category 2: Alterations not included in Category 1, which will follow guidance in this EC.

(a) Project Specific Setbacks. In order to help streamline the coordination and evaluation process, districts are encouraged to develop project specific setback distance criteria that establish minimum distances (adjacent, over, and/or below a navigation feature). The purpose would be to use the pre-determined technical analysis accomplished to determine the setbacks as a way to facilitate an expedited district-led Agency Technical Review (reference Paragraph 7.c.(4)). These criteria would then be used in a manner to determine that if any future construction and maintenance activities occur beyond these distances, then the alteration will likely not impact the federal navigation project nor be injurious to the public interest under Section 408. At a minimum, the following should be considered when developing setbacks:

- Maximum dredging depth and width, to include advanced maintenance, allowable over-depth, and non-pay overdepth

- Top edge of the navigation channel, including appropriate side slopes and overdepth

- Sufficient clearances of equipment needed for dredging the navigation channel to its full depth and width, including side slopes

- Minimum air gap required for lines or structures crossing above the channel

- Weather, tides, flow rates, velocities, and other factors related to the region

- Dredged Material Disposal facility availability

E-4. Procedures. The information below corresponds to and supplements the steps in Paragraph 7 of the main EC.

a. Pre-Coordination (reference step 1 in Paragraph 7 of main EC). Depending on the extent of the proposed alteration, coordination with other agencies such as the U.S. Coast Guard, National Oceanic and Atmospheric Administration (NOAA), USFWS, US EPA, US Navy, etc. may be necessary.

b. The following should be considered when implementing steps 1-8 in Paragraph 7 of the main EC:

(1) Activities proposed in federal navigation channels may also require evaluation by Regulatory pursuant to Section 10/404/103. In accordance with regulations, Regulatory must consider general impacts to navigation in its review of a permit application. A regulatory permit will not be issued if it is not compatible or conflicts with the authorized purpose of a federally authorized project. Therefore, Regulatory and Navigation should coordinate throughout their respective reviews.

(2) The majority of proposed alterations to federal navigation projects that also require Section 10/404/103 authorization are proposals for utility line crossings, boat docks, bulkheads, revetments, dredging, and other similar activities. Generally, Navigation can quickly and easily determine whether these proposed alterations could be constructed to avoid impacts to operation and maintenance of the navigation project (e.g. compare the proposal to approved set-back policies and/or overdepths) and thereby recommend Section 408 approval of an alteration request rapidly.

(a) In these basic cases, Navigation will document the results of their Section 408 evaluation and decision in a brief written letter to be signed by the District Commander, see Appendix H for an example. This letter will serve as the documented Section 408 decision that will accompany the Section 10/404/103 decision in the district file. This letter also can be sent to the requester at the same time with the Section 10/404/103 permit, if granted, so long as the requester and Section 10/404/103 permittee are the same entity and the approval and permit decisions are distinct in the transmittal.

(b) If Navigation determines the proposed alteration must be revised (e.g. installed at deeper depth than that proposed), Navigation will coordinate directly with the requester and copy Regulatory on the correspondence since such an alteration would likely affect the Regulatory evaluation. Likewise, Regulatory should also copy Navigation on any changes to the proposed alteration it may require for Section 10/404/103 purposes.

(c) In instances where the proposed alteration cannot be quickly and easily reviewed as outlined above, such as if technical analyses are warranted, and/or Navigation has determined it cannot approve the proposal under Section 408, the Navigation business line must conduct its review in accordance with the main EC.

c. Step 9: Post-Permission Oversight. Any long-term monitoring and maintenance of the approved navigation alteration will be the responsibility of the Section 408 permittee throughout the life of the alteration and without cost to the government. Navigation will continue to conduct routine inspections, maintenance and monitoring of the USACE navigation project, except for any features added by the Section 408 permittee's alteration. If the Section 408 permittee identifies potential impacts to the USACE project as a result of the construction and/or maintenance of the alteration the Section 408 permittee will notify USACE immediately. If USACE identifies potential impacts from the Section 408 permittee's construction or maintenance/monitoring activities, USACE will notify the Section 408 permittee immediately. USACE will work collaboratively with the Section 408 permittee to identify the appropriate corrective action. The Section 408 permittee will be responsible for implementing the appropriate corrective action as determined by USACE. It should be noted that any proposed corrective action may require a change to the original approved alteration or a new Section 408 request depending on the proposed action. Navigation should engage Regulatory in these discussions in case the impacts and/or corrective actions also require authorization under Section 10/404/103.

Appendix F

Hydrologic and Hydraulics System Performance Analysis

F-1. Purpose.

a. This appendix is intended to outline the requirements for a hydrologic and hydraulics system performance analysis as referenced in paragraph 7.c.(3)(b) of the main EC. The purpose of a hydrologic and hydraulics system performance analysis is to determine the potential upstream and downstream hydrologic and hydraulic impacts of proposed alterations. Districts will determine whether a hydrologic and hydraulics system performance analysis is needed and if so, the appropriate scope of analysis based on the complexity of the proposed alteration. The requester will be responsible for the analysis. This appendix describes when an analysis is required, how to perform the analysis and how to display the data.

b. The hydrologic and hydraulics system performance analysis described in this appendix is not a risk assessment. A risk assessment considers explicitly the performance of the structural flood risk management measures and the consequence of exposure of people and property to the entire range of likely flood events. The hydrologic and hydraulics system performance analysis only considers the likely flood events and the hydraulic loading and assumes the structural measures (dams, levee and floodwall systems, and channels) perform as authorized. It does not consider consequences.

F-2. References.

a. ER 1105-2-101, Risk Analysis for Flood Damage Reduction Studies.

b. EM 1110-2-1619, Risk-Based Analysis for Flood Damage Reduction Studies.

c. U.S. Army Corps of Engineers (USACE) Hydrologic Engineering Center (HEC). 2008. *HEC-FDA Flood Damage Reduction Analysis, User's Manual, Version 1.2.4.*, CPD-72. Hydrologic Engineering Center, Davis, CA.

d. USACE HEC. 2009. Project Report-71 (PR-71). Documentation and Demonstration of a Process for Risk Analysis of Proposed Modifications to the Sacramento River Flood Control Project (SRFCP) Levees.

e. Davis, Darryl W., Beth A. Faber, and J. R. Stedinger. 2008. *USACE Experience in Implementing Risk Analysis for Flood Damage Reduction Projects*, Journal of Contemporary Water Research and Education 140(1):3-14.

F-3. Policy.

a. For the purposes of this appendix, the word "system" is an integrated combination of features, property, and environment that are hydraulically interconnected in which the extent downstream and upstream of the proposed alteration captures the areas expected to be influenced by changes in discharge, volume, or corresponding water surface elevation at the proposed alteration site.

b. System performance analyses will be applied to alterations that alter the hydrologic and/or hydraulic conditions (e.g., reservoir operations, bridge constrictions, etc.) of federally authorized USACE projects. Districts will determine the appropriate scope of analysis based on the complexity of the proposed alteration.

c. The hydraulic analysis will evaluate pre- and post-project water surface elevations, changes in velocity, flow regime, and scour potential.

d. The hydraulic analysis will consider the full range of loading conditions.

e. For loading conditions where flood waters exceed the project's system capacity, the analysis will assume weir flow.

f. Under no circumstances will the analysis assume breach or malfunction of any existing or altered component of the project system for the flood up to the top of containment as a means of relieving system impacts. The project is to be considered stable and functional to top of containment. The assumption is that the project can be stabilized to the authorized condition. Based on this assumption, fragility curves are not required.

g. Impacts will be determined by comparing performance parameters (annual exceedance probability (AEP), assurance (conditional non-exceedance probability (CNP), etc.) for the existing and authorized conditions, if they are different, to the conditions resulting from the project alteration.

F-4. Strategy.

a. Hydrologic and hydraulics system performance analysis for proposed alterations must assess system performance at the proposed alteration site and at all locations reasonably considered to be affected by the proposed alteration. The procedures described in this appendix are, in general, appropriate, with some adaptation to reflect the effects of hydraulic connectivity.

b. Hydrologic and hydraulics system performance analysis includes the following steps:

(1) Step 1: Define the spatial extent of the system for which hydrologic and hydraulic impacts must be assessed, and select index locations within that extent for the performance analysis.

(a) The extent of the hydraulically interconnected system must be defined as the first step in performance analysis. This extent must be broad enough to include channel reaches and floodplains downstream and upstream of the proposed alteration site that a reasonable analyst would expect to be influenced by changes in discharge, volume or corresponding water surface elevation at the proposed alteration site. Within that extent, impact areas should be identified and index locations selected to allow fair assessment of likelihood of inundation transference. If initial findings show significant impacts at the outer extents represented by the selection of index locations, additional index points may be required out to the locations showing no impacts. Guidance for identifying impact areas and selecting index locations is included in the user's manual for the HEC-FDA (HEC, 2008) software and in EM 1110-2-1619.

(b) Review of hydraulic model results will aid in determining the appropriate extent. For example, examination of computed water surface profiles will identify locations upstream or downstream of a proposed alteration site at which changes in channel geometry at the site will have an impact on water surface elevations. Care must be exercised and results scrutinized to judge if changes in computed elevations are logically related to the changes in channel geometry or if changes seen in the model results are an artifact of computational imprecision. In some cases downstream flows at a confluence will increase for a proposed alteration, but the increase will be due to a change in timing between contributing hydrographs. Consideration should be given to whether the change in timing would be expected to be reflected in historical events, or whether the change in timing is an artifact of the synthetic hydrology developed.

(2) Step 2: Identify the authorized and existing condition (if different) for all features (e.g. levee, floodwall, channel, and/or dams) of that system to serve as the basis for assessing impacts of proposed alterations.

(3) Step 3: Collect or develop the necessary functions and transforms to compute authorized and existing performance at all index locations within the system.

(a) Performance computations are completed on an index location by index location basis following the procedure described in EM 1110-2-1619 and illustrated in Figure F-1. Each of the applicable functions described in Figure F-1 must be developed for each index location. The unregulated discharge-probability function (Figure F-1a) must include all flows that accumulate at the index location, including tributary inflows upstream. The unregulated-regulated flow transform (Figure F-1c) must represent, in the aggregate, the impact of all regulation upstream of the index location. This impact will include the impacts of intentional regulation by upstream reservoirs and diversions, and the incidental impact of regulation if any upstream design features, such as levee systems, overtop and flows onto an adjacent floodplain. The discharge-stage transform (Figure F-1g) is a localized function, representing conditions at each index location, unaffected by upstream conditions, but including perhaps the impact of downstream conditions if backwater influences stage. Finally, the stage-damage relationship (Figure F-1k) is typically used to assess the economic risk. However, for proposed alterations, it is only required to consider hydrologic and hydraulics performance of the system, therefore the stage-damage relationship need not be "real" unless the requester has the information and chooses to include

economic damages. Reference F-2.d. of this appendix contains an example of how to utilize a "dummy" stage-damage relationship.

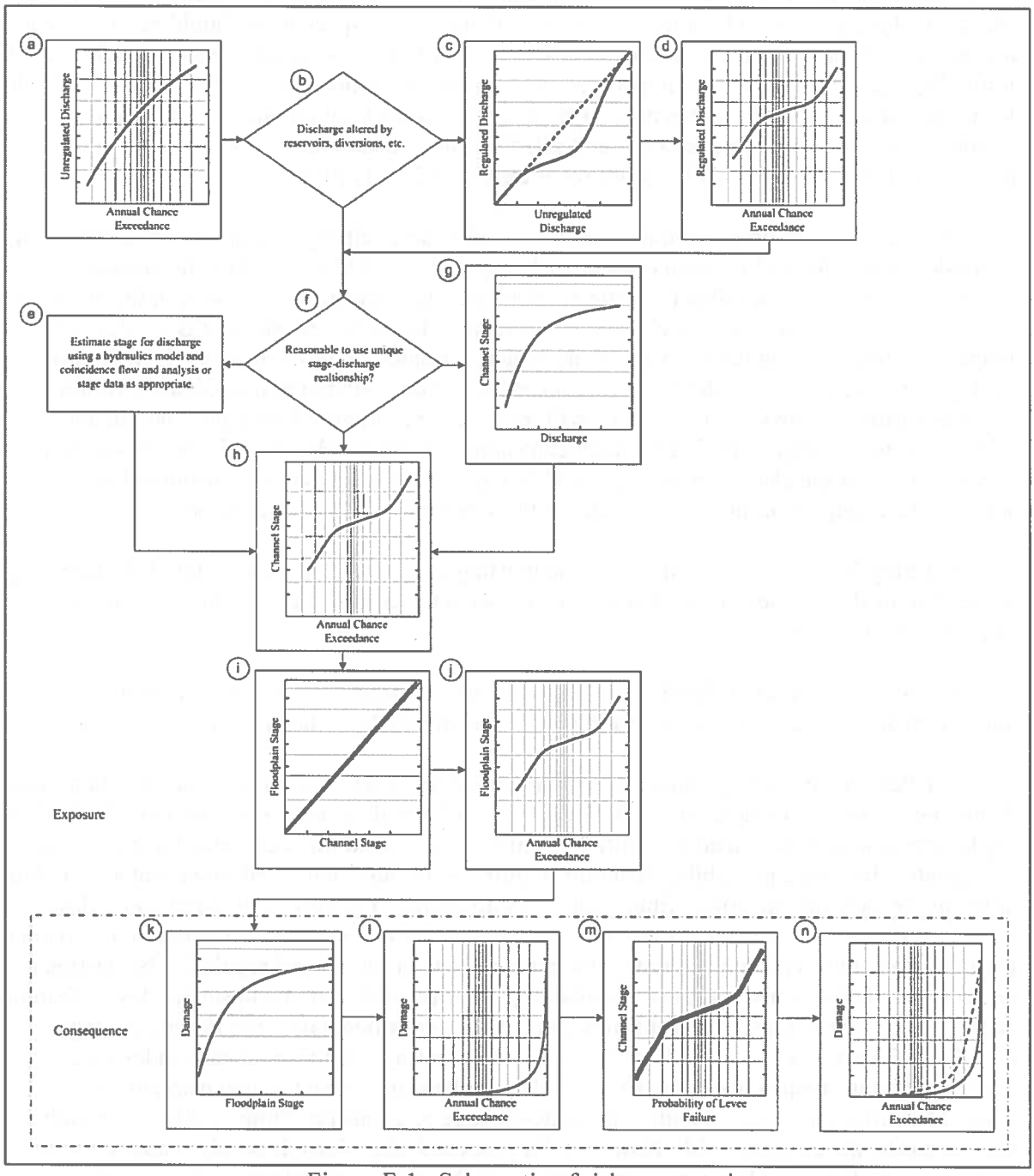

Figure F-1. Schematic of risk computation

(b) In addition to the various functions required for hydrologic and hydraulics system analysis, the uncertainty about each function must be described. This task is completed following the general guidance presented in this appendix and EM 1110-2-1619. However, current policy does not cover how to describe the uncertainty about functions that represent accumulated impacts. For example, the uncertainty about the unregulated to regulated discharge transform at a location downstream of multiple reservoirs must reflect the accumulated uncertainty about joint operation of those reservoirs. If the district needs assistance in determining accumulated impacts, districts should consult experts at Engineer and Research Development Center (ERDC), HEC, or engage the division and HQUSACE, reference paragraph 9 of the main EC, Vertical Teaming.

(4) Step 4: Assess hydrologic and hydraulics performance of the existing and authorized conditions, if they are different, at all index locations. Hydrologic and hydraulics performance is computed location by location within the extent of the system. The software HEC-FDA (HEC, 2008) may be used for this computation. Results may be reported as shown in paragraphs F-4 and F-5.

(5) Step 5: Simulate system behavior and performance with the features of the proposed alteration in place as necessary to revise and modify all functions and transforms throughout the system to reflect changes due to the proposed alteration.

(a) Analysis needed in this step will depend upon the proposed alteration. For example, if the alteration includes the addition of flood storage or changes to the manner in which available storage is operated, a reservoir system simulation model such as HEC-ResSim may be developed and ran with a period of record or selected hypothetical events. Through this model, a new unregulated to regulated discharge transform can be developed.

(b) Similarly, if the proposed alteration includes changes to the channel, for example through levee setbacks, these changes must be simulated to derive new transforms for downstream locations. Those transforms may change as a result of the channel changes.

(c) The system analysis must include a forecast of future hydrologic and hydraulics conditions with proposed alteration features in place. The analysis must consider the effects of reasonably foreseeable future alterations and/or projects throughout the system in conjunction with the proposed alteration.

(6) Step 6: Compute hydrologic and hydraulics conditions with the proposed alteration performance indices at index locations system-wide. Hydrologic and hydraulics performance are computed point by point within the extent of the system. The HEC-FDA software (HEC, 2008) may be used for this computation.

(7) Step 7: Determine if likelihood of inundation is transferred by comparing hydrologic and hydraulics performance indices system-wide. Once various indices of hydrologic and hydraulics performance is computed and reported, system-wide impact of a proposed alteration

can be assessed. For proposed alterations that reduce the likelihood of inundation, the AEP will be less and confidence in reduction in likelihood of inundation will be greater. However, these outcomes may not be true for all index locations within the system; therefore all locations must be assessed. Proposed alterations may have adverse changes, thus shown as increases in AEP and to decreases in assurance at one or more index points. If these adverse changes are determined to be significant, then the proposed alteration likely must be denied. If the district is unsure about determining if adverse impacts are significant, the district should engage the division and HQUSACE, reference paragraph 9 of the main EC, Vertical Teaming.

F-5. Display of Hydrologic and Hydraulics System Performance Reporting.

a. The performance is required to be described. Useful measures of this performance include the following:

(1) Annual exceedance probability for overtopping only. This measure is well represented by the annual exceedance probability computed for a location in the floodplain if that computation includes the entire range of exposure. For example, in the case of a floodplain containing a levee, the annual exceedance probability may be computed considering capacity exceedance due to overtopping only. Uncertainty about all functions must be included in the annual probability computations. Annual exceedance probability must also consider the entire range of discharge or elevation represented by the probability functions, from the $p = 0.50$ to $p = 0.002$ events, for example. Uncertainty about all functions must be included in the annual probability computations. Table F-1 provides a way to describe the performance at each index point in terms of AEP.

Table F-1 AEP

Index Point	Existing AEP	With Alteration AEP	Change in AEP
1			
2			
N			

(2) Assurance for overtopping only for selected flood loading. This performance measure represents the probability that an index point will perform as expected when the system is loaded with a single selected flood. For example, this index of performance may quantify the probability that the system will perform as expected if the flood discharge is 350,000 cfs (9,911 cu m/sec), or if the annual maximum event is a $p = 0.01$ event. The computation must consider uncertainty. Table F-2 provides a way to describe the performance at each index point for various flood events in terms of assurance (also referred to as "CNP").

Table F-2 Assurance

Index Point	Probability of Annual Event					
	0.02		0.01		0.004	
	Existing	With Alteration	Existing	With Alteration	Existing	With Alteration
1						
2						
N						

In other words, this index of performance shows the probability that the target stage associated with each alteration plan will not be exceeded, given the occurrence of an event of specified annual chance exceedance probability.

b. To improve the understanding of the impacts of the proposed alteration, inundation maps showing flood depths for the two scenarios of 1) without the proposed alteration and 2) with the proposed alteration will be required. The inundation maps will include the location of the proposed alteration and areas within the system where hydrologic and hydraulics impacts may occur.

F-6. Display of System-Wide Hydrologic and Hydraulics Performance and Uncertainty Information. Displaying and reporting of system-wide hydrologic and hydraulics performance and uncertainty will require engineering judgment. Reference F-2.d. of this appendix may be used as an example. There may be challenges in developing consistent system-wide inflow flood-frequency curves with uncertainty; accurately representing reservoir operation rules with attendant uncertainty to develop regulated flow frequency curves; and adequately reflecting the integrity or lack thereof of the system with its associated uncertainty. The reference in paragraph F-2.e. contains further description of the challenges. Displaying and reporting of system-wide hydrologic and hydraulics performance and uncertainty information is an extension of displaying and reporting of hydrologic and hydraulics performance and uncertainty for a single site or impact area.

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Appendix G

Funding Agreements for the Purposes of Reviewing Requests Pursuant to 33 U.S.C. 408

G-1. Purpose. The purpose of this appendix is to provide guidance on the establishment, management, and oversight of funding agreements under two statutory authorities that allow the US Army Corps of Engineers (USACE) to accept and expend funds to expedite the review process for requests to alter USACE civil works projects pursuant to 33 U.S.C. 408, Section 14 of the Rivers and Harbors Appropriations Act of 1899, as amended (Section 408). The first statutory authority is 33 U.S.C. 2352, Section 214 of WRDA 2000, as amended (Section 214). This memorandum incorporates changes as a result of Section 1006 of the Water Resources Reform and Development Act of 2014 (WRRDA). The second statutory authority is 23 U.S.C. 139(j) (Section 139(j)), added to Title 23 of the United States Code by Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU). Districts should select one or the other authority as applicable to the funding agreement. This appendix describes the specific requirements applicable to funding agreements under each authority, and in addition, common requirements that must be included in both types of funding agreement.

G-2. References.

a. 25 USC 479a. Publications of List of Recognized Tribes.

b. 20 USC 139(j). Efficient Environmental Reviews for Project Decision-Making.

c. Section 214 of the Water Resources Development Act of 2000 (Public Law 106-541), as amended (33 USC 2352).

d. Section 404 of the Clean Water Act. Permits for Dredged or Fill Material.

e. Section 10 of the Rivers and Harbors Act Section 10. Obstruction of Navigable Waters, Generally; Wharves, Piers, and Excavations and Filling In.

f. 10 USC 2695. Acceptance of Funds to Cover Administrative Expenses Relating to Certain Real Property Transactions.

g. US Army Corps of Engineers, Updated Implementation Guidance for Section 1006 of the Water Resources Reform and Development Act of 2014 and Guidance on the Use of Funding Agreements within the Regulatory Program, memorandum, 2 September 2015.

G-3. Authority.

a. Section 214 provides that the Secretary of the Army, after public notice, may accept and expend funds contributed by a non-federal public entity, natural gas company, or public-utility company to expedite the permit review process. The authority to accept and expend funds

from non-federal public entities does not expire, unless modified by law. The authority to accept and expend funds from public-utility companies and natural gas companies expires on June 10, 2021, unless otherwise extended or revoked by law.

b. Section 139(j) provides that the Secretary of Transportation may approve a request by a State to provide funds to affected Federal agencies participating in the environmental review process to support activities that directly and meaningfully contribute to expediting and improving transportation project planning and delivery for projects in that State.

G-4. Funding Agreements Pursuant Only to Section 214 of WRDA 2000, as amended.

a. By memorandum dated 29 June 2015, the Secretary of the Army delegated his authority to the Assistant Secretary of the Army for Civil Works. This authority has been re-delegated by memorandum dated 1 July 2015 to the Chief of Engineers and his authorized representatives to, after public notice, accept and expend funds contributed by non-federal public entities, public-utility companies, or natural gas companies to expedite the evaluation of permits under the jurisdiction of the Department of the Army. The Chief of Engineers re-delegated this authority to District and Division Commanders by memorandum dated 3 August 2015. The Administrative Assistant to the Secretary of the Army was provided copies of these delegations on 3 August 2015. These delegations of authority shall remain in effect until 10 June 2021.

b. Although not a limitation on the authority of any official that has been delegated the authority indicated in paragraph G-4.a., in those cases where a proposed action or decision regarding the acceptance of funds contributed by non-federal public entities, natural gas companies, or public-utility companies represents a change in precedent or policy is of significant White House, Congressional, Department of the Army or public interest; or has been or should be of interest or concern to the Assistant Secretary of the Army for Civil Works or the Secretary of the Army for any reason, the following procedure should be followed:

(1) Prior to making a decision on whether to accept and expends funds under Section 214 or rendering a Section 408 decision under a Section 214 agreement, the district shall notify the appropriate HQUSACE Regional Integration Team (RIT) through the division of the circumstances of the action or decision.

(2) The HQUSACE RIT in coordination with the HQUSACE Section 408 proponent for this policy will determine if briefing of Army is required in accordance with the delegation requirements, and arrange an informational briefing, as necessary. Should a briefing be required, the district will hold the decision of concern in abeyance until the briefing is completed.

c. Funding can only be accepted and expended through Section 214 funding agreements to expedite a Section 408 review if the proposed alteration serves a public purpose. Districts must evaluate proposed agreements from non-federal public entities to ensure that the proposed projects serve a public purpose, and districts have discretion in making that determination. It is recognized and allowable that funds provided under a Section 214 agreement with a non-federal public entity may potentially originate from a private entity or a combination of public and

private entities, so long as it is verified that the project serves a public purpose. In the WRRDA 2014 amendments to Section 214, Congress added public-utility companies and natural gas companies as potential parties to funding agreements under Section 214. Congress has determined which activities carried out by public-utility companies and natural gas companies serve a public purpose, as discussed in paragraphs G-4.c.(2) and G-4.c.(3) below.

d. Funding agreements pursuant to Section 214 may be executed with the following entities:

(1) Non-Federal Public Entities. The term "non-federal public entity" is limited to governmental agencies or governmental public authorities, including governments of Federally recognized Indian Tribes, e.g., any Indian or Alaska Native Tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994 [25 U.S.C. 479(a)]. Typical Section 408 requesting public entities may include: flood risk management districts, water conservation agencies, storm water management agencies, transportation departments, hydropower agencies, and port authorities. Private entities cannot be considered non-federal public entities. If the entity executing the Section 214 agreement is not the non-federal sponsor of the affected project, the executing party must have the endorsement of the non-federal sponsor as outlined in paragraph 6.d. of EC 1165-2-216.

(2) Public-Utility Companies. Public-utility companies include the following two subcategories: (i) electric utility companies, which are companies that own or operate facilities used for the generation, transmission, or distribution of electric energy for sale; and (ii) gas utility companies, which are companies that own or operate facilities used for distribution at retail of natural or manufactured gas for heat, light, or power (other than the distribution only in enclosed portable containers or distribution to tenants or employees of the company operating such facilities for their own use and not for resale). These companies are subject to Federal regulation outside of USACE authorities dating from the 1930's because Congress determined that such companies affected the public interest. Section 214 agreements with public-utility companies, as defined in this guidance, involving Section 408 requests will be limited to proposed alterations involving facilities for the generation, transmission, or distribution of electric energy for sale and facilities used for distribution at retail of natural or manufactured gas for heat, light, or power. Questions about possible exceptions to these limitations or appropriate courses of action should be coordinated through the division to HQUSACE.

(3) Natural Gas Companies. Section 214 also allows for funding agreements to be entered into with a natural gas company. A natural gas company is a company engaged in the transportation of natural gas in intrastate or interstate commerce or the sale of such gas in interstate commerce for resale. The transportation of natural gas in interstate commerce is subject to Federal regulation outside of USACE authorities dating from the 1930's because Congress determined that such activities affected the public interest. Section 408 requests reviewed under a Section 214 agreement with a natural gas company will be limited to alterations involving the transportation of natural gas (inclusive of gas gathering lines, feeder lines, transmission pipelines, and distribution pipelines) and any attendant storage facilities, as

these projects serve a public purpose. Questions about possible exceptions to these limitations or appropriate courses of action should be coordinated through the division to HQUSACE.

e. Funding agreements with municipal electric or gas authorities that meet the definition of non-federal public entity and the definition of public-utility company or natural gas company are not subject to the June 10, 2021, expiration date of the authority for public-utility and natural gas companies because they meet the definition of non-federal public entity.

f. Energy exploration and production activities, such as drilling, hydrofracturing, or mining, are not to be reviewed under Section 214 agreements with public-utility companies or natural gas companies, as these activities do not involve the generation, transmission, or distribution of electric energy or the transportation and/or distribution of natural gas.

g. No funds provided by a federal agency to a non-federal public entity may be accepted by USACE under Section 214 unless the non-federal public entity forwards to USACE a written confirmation from the federal agency that the use of the funds to expedite the evaluation of Section 408 permit applications is acceptable.

h. Activities conducted in accordance with a Section 214 agreement must expedite the Section 408 review process. Expediting the review process could include generally shorter review times as compared to prior to the agreement and the facilitation of a smoother review process through improved coordination and communication or through the development or use of programmatic agreements or standard operating procedures. The expedited review cannot result in an adverse effect on the timeframes for review of other Section 408 requests within the same district, when considered collectively.

G-5. Funding Agreements Pursuant Only to 23 U.S.C. Section 139(j).

a. Section 139(j) only allows for USACE to enter into funding agreements with state agencies. The U.S. Department of Transportation (USDOT) has additionally interpreted the statute as allowing tolling commissions and some Municipal Planning Organizations (MPOs) to be eligible to enter into a funding agreement. Section 139(j) agreements additionally require approval by the Secretary of Transportation, as state agencies are eligible to receive reimbursement with USDOT funds for these agreements. The USDOT has delegated approval of funding agreements down to the division level of either Federal Highways Administration (FHWA) or the Federal Transit Administration (FTA). The USDOT has not interpreted Section 139(j) as allowing other modal administrations (Federal Railroad Administration, Federal Aviation Administration, Maritime Administration) to support agreements with state agencies. Therefore, districts may only enter into a Section 139(j) agreement with highway and/or transit agencies.

b. Activities conducted in accordance with a Section 139(j) agreement must directly and meaningfully contribute to expediting and improving transportation project planning and delivery within the given State. In addition, Section 139(j) restricts the state transportation agency to only provide funds for activities beyond USACE's normal and ordinary capabilities

under its general appropriations. Because transportation project planning and delivery encompasses a variety of activities and reviews, participation in the transportation planning (pre-NEPA) process and streamlining initiatives such as NEPA/Section 408 synchronization efforts are encouraged under Section 139(j), along with activities described in paragraph G-6.a., so long as those activities result in review times that are less than the customary time necessary for such a review. FHWA has provided guidance that the development of programmatic agreements and initiatives satisfies the requirement to reduce time limits as long as the results of those efforts are designed to provide a reduction in review time. Section 139(j) puts the onus on FHWA and FTA to interpret allowable activities under the statute. Districts shall consider FHWA or FTA's approval of a funding agreement as certification that the agreement is compliant with Section 139(j). Section 139(j) agreements must meet FHWA/FTA's standards and requirements contained in this guidance.

c. FHWA or FTA may require documentation of the "customary time" necessary for a review and/or establishment of performance metrics for the agreement to demonstrate it is contributing to expediting and improving transportation project planning and delivery. Districts have discretion on the number and type of performance metrics within an agreement, including which milestones to use to determine time in review (receipt of request, date determined complete, etc.). When considering the quantity and content of any performance metrics for an agreement, the district must consider the potential effect of those metrics on performance management within the whole district. Districts must be cautious to not agree to any performance metrics that would be so onerous or stringent that achieving them comes at the cost of decreased performance for other Section 408 requests in the district.

d. Funding Agreements. A Section 139(j) funding agreement between the district(s) or division(s) and the funding transportation agency must include the projects and priorities to be addressed by the agreement. If the funding transportation agency does not know a list of projects and/or priorities at the time of the agreement, then the funding agreement should describe the process to identify or change projects and/or priorities for the agreement.

G-6. Guidance for Funding Agreements Pursuant to Both Section 214 or Section 139(j).

a. Acceptable Uses of Funds. Prior to expending funds on any activity, the district must determine that the activity contributes to meeting the specific purpose of the appropriate authority.

(1) Examples of acceptable activities that the funds may be expended on include, but are not limited to: district-led Agency Technical Review, real estate evaluation, technical writing, site visits, training, travel, field office set up costs, coordination activities, additional personnel (including support/clerical staff), technical contracting, programmatic tool development and improvement, and acquisition of geographic information system (GIS) data. Funds may also be used to hire contract staff. If contracts are used to develop decision documents or other NEPA documentation, such documents must be drafts only and be reviewed and adopted by the USACE decision maker pursuant paragraph 6.t. of EC 1165-2-216 before a Section 408 decision can be made.

(2) No funds received under Section 214 or Section 139(j) will be used by the Division or District Commanders for their review, recommendation, or decision concerning a Section 408 request.

(3) Section 214 and Section 139(j) will not be used to accept and expend funds to cover administrative expenses related to the issuance of real property instruments required if the Section 408 permission is granted. Those administrative costs for drafting, negotiating, or issuing any necessary real estate instruments will be accepted under the provisions of 10 USC 2695.

(4) Funds will not be used for enforcement activities. However, funds from these agreements may be used for compliance activities, including monitoring and compliance inspections. Enforcement activities must be charged to the applicable appropriations account based on the USACE civil works project.

b. Initial Public Notice for Intent to Accept Funds.

(1) Prior to accepting and expending funds, the division or district must issue a public notice, post the public notice in a clearly identified and easily accessible area (e.g., "Acceptance of Funds for Expediting Section 408 Requests") on its webpage, and distribute the notice to concerned agencies, organizations, and the interested public.

(2) The public notice will describe the entity providing such funds, the USACE authority to accept and expend such funds, the reason for such contributions, how acceptance of the funds is expected to expedite the Section 408 review process, what types of activities the funds will be expended on, what procedures will be in place to ensure that the funds will not impact the division or district's impartial decision making, and information on the impacts, if any, to the district's and division's Section 408 review and evaluation process that is not subsidized by funds contributed. Further, if funds are also intended to be accepted or have been accepted to expedite the evaluation of Section 10/404/103 permit applications for the same proposed alteration and/or by the same non-federal public entity, such intention should be clearly stated in the public notice. The public notice must also include information on the impacts of the proposed funding agreement on the division or district's ability to review other Section 408 requests.

c. Basis for Acceptance of Funds.

(1) Following the review of the comments received in response to the public notice, the Division or District Commander will determine if the acceptance and expenditure of funds is appropriate in consideration of the requirements under the applicable statutory authority, if the division or district will be able to preserve impartial decision making, and if the acceptance and expenditure of funds will not adversely affect review timeframes for other Section 408 requests. A final draft of a funding agreement, see paragraph G-6.d., must be completed to inform the decision.

(2) If the Division or District Commander determines, after considering public comments, that the acceptance and expenditure of the funds is appropriate, the funds may be accepted and expended. This decision will be documented in a Memorandum for the Record (MFR). An informational public notice will be issued regarding the Division or District Commander's decision. The division or district will post the informational public notice on its webpage in the same, easily identifiable and accessible area used for the initial public notice, and distribute the notice to concerned agencies, organizations, and the interested public. The districts must also provide a link on its webpage to the HQUSACE Section 408 webpage at http://www.usace.army.mil/Missions/CivilWorks/Section408 where active funding agreements will be posted.

d. Acceptance of Funds.

(1) Funds may only be accepted after the finalization of the decision MFR and issuance of the public notice of the execution of the funding agreement. Funding agreements will typically be executed in the format of a Memorandum of Agreement (MOA). At a minimum, the agreement must include a scope of work and an itemized budget estimate, address the provision of additional funds if needed, as well as the return of unused funds, and must identify the total annual cost for each federal fiscal year covered by the term of the MOA. The itemized budget estimate must include identification of personnel, hourly rates, indirect labor costs, estimated hours of work, and travel costs related to the MOA scope of work.

(2) Section 408 funding agreements may additionally cover the review of related Section 10/404/103 permits.

(3) Issuance of a new public notice is not required for renewal or modification of a funding agreement if the purpose of the agreement remains the same. For example, a new public notice would not be required if the MOA is amended to extend the term of the agreement, modify the proposed alteration identified in the MOA, adjust the terms of the advance payment contemplated under the MOA, or allow funding to be used for related Section 10/404/103 permit applications. The decision and basis for the renewal or modification should be documented in the MFR described in paragraph G-6.c.(2).

(4) Upon execution of any new, modified, or renewed funding agreement, the district or division shall forward a signed copy of the agreement to the HQUSACE Section 408 proponent for this policy for posting on the HQUSACE Section 408 website at http://www.usace.army.mil/Missions/CivilWorks/Section408.

e. Impartial Decision Making.

(1) Maintaining impartiality in decision making is of utmost importance under any funding agreement. Division and District Commanders must ensure that the acceptance and expenditure of funds from external entities will not impact impartial decision making with respect to application review and any final decision, either substantively or procedurally.

(2) Since Section 408 decisions may be at the Director of Civil Works level or the District Commander level, depending on the estimated magnitude of the impacts of the proposed alterations on the relevant USACE projects, impartial decision making at all review levels must be ensured. In cases where the approval authority is at the level of the Director of Civil Works, and the district has accepted funds, the district, through the division, must provide sufficient information to assure the decision maker that the acceptance and expenditure of funds by the district have not affected the district's or the division's evaluation of the Section 408 request, either substantially or procedurally. This information must be included as part of the Summary of Findings for the Section 408 request.

(3) When a final Section 408 decision has been made either by the Director of Civil Works or District Commander, that decision will be made publicly available on the originating district's webpage in an area clearly identifiable as being for Section 408 reviews funded through Section 214 or Section 139(j).

f. Tracking of Funds. The funds must be accounted for to ensure that they are expended for their intended purpose. Each district will establish a separate account to track receipt and expenditure of the funds in the Corps of Engineers Financial Management System. USACE personnel accomplishing the technical and administrative tasks required to expedite the evaluation of the Section 408 request covered by the MOA will charge their time against a specific account when working on those requests.

g. Annual Reporting. Within 30 calendar days of the conclusion of each fiscal year, district and division Section 408 coordinators will provide to the HQUSACE Section 408 proponent for this policy an annual letter report using the template provided below in G-7, documenting the following:

(1) A list of all active funding agreements during the subject fiscal year, including the date in which the agreement was initiated and whether Section 214 or Section 139(j) was used;

(2) An accounting of the total funds accepted and total funds expended per funding agreement;

(3) A list of all Section 408 decisions issued for the subject fiscal year under each funding agreement;

(4) A quantitative or qualitative assessment of how the use of funds expedited the Section 408 review process for each funding agreement;

(5) A brief description of the process used to ensure impartial decision making for each of the Section 408 decisions issued in the subject fiscal year;

(6) A statement certifying that all funded personnel are aware of and are appropriately trained on the requirements contained in this guidance memorandum; and,

(7) The MFR documenting the District or Division Commander's decision to accept funds for each active funding agreement.

HQUSACE will compile the reports received and provide a combined annual report to the Assistant Secretary of the Army for Civil Works (ASA(CW)). The ASA(CW) will submit the combined annual report to the specified Congressional committees within 90 days of the conclusion of each fiscal year.

G-7. Annual Reporting Template.

SUBJECT: *XXX* District FY 20*XX* Reporting for Funding Agreements to Expedite the Section 408 Review Process

1. Active Funding Agreements: (*In a table format such as below, list all funding agreements by name of the entity the agreement is with that were active during the subject fiscal year. Include initiation date of the agreement in MM/DD/YY format; mark an X in the cell indicating whether Section 214 or Section 139(j) was used; total funds accepted for the entire length of the agreement; total funds accepted for the subject fiscal year per agreement; total funds expended for the subject fiscal year per agreement; and the final Section 408 decision made associated with the agreement if a final decision has been made (mark this "review still pending" if no decision has been made yet).*)

Active Funding Agreement Name of Entity, (select one: non-federal, natural gas company, or public utility company)	Initiation Date	Section 214	Section 139(j)	Total Funds Accepted for the Agreement	Total Funds Accepted this FY	Total Funds Expended this FY	Section 408 Decision

2. Assessment: The goal of these funding agreements is to expedite the Section 408 review process. The following describes how funds from these agreements have been used to expedite the Section 408 review process.

(*Qualitatively or quantitatively describe how the use of the funds expedited the Section 408 review process. Include a separate description for each agreement if different means were used. For example, qualitative examples may include describing the dedication of staff for review, improved communication, and/or faster responses. Quantitative examples may include number of days of review time reduced or percentage of milestones met.*)

3. Impartial Decision Making: While funds may be accepted to expedite the Section 408 review process, the funds must not impact impartial decision making. The following outlines what measures have been taken to maintain impartial decision making for the Section 408 requests under these funding agreements.
(*List and describe all measures in place to monitor impartial decision making. If there were any issues or lapses, indicate so, and what steps were taken to resolve the situation.*)

4. Training: (*Include a statement certifying that all funded personnel are aware of and appropriately trained on the requirements contained within EC 1165-2-216 and this guidance memorandum. A description of training methods should be included*).

Encls (Attach decision MFRs)

XXX District (or Division) Section 408 Coordinator

Appendix H

Example Section 408 Decision Letter

District Letterhead
(*Date here*)

(*Name and address of requester of determination here*)
[Mr./Ms.] (Full Name of Requester)
(Title of Requester**)**
(Requester Address**)**
(City, State Abbreviation**, and Zip Code)**

Dear [Mr./Ms.] (Last Name of Requester),

The *(district name here)* District of the U.S. Army Corps of Engineers (USACE) has performed an evaluation of your request to *(brief description of proposed alteration)* to *(name of federal project to be altered)* operated and maintained by *(name (s) of non-federal sponsor (s) and/or USACE)* pursuant to Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408). This evaluation was performed in accordance with Engineer Circular (EC) 1165-2-216.

Based on this evaluation, the *(district name here)* District ("grants" or "denies") the request to alter *(name of federal project to be altered)* for the following reasons: *(summarize rationale)*. (*Add optional language related to any special conditions*). (*If permission is granted, include the following statement – "As the requestor, you are solely responsible for any remedial action needed to correct any deficiency in the design or construction of the requested alteration.")*

For any questions regarding this evaluation, please contact *(name and title of district Section 408 point of contact here)* at *(contact information here)*.

Sincerely,
(Name of District Commander)

(district name here)
U.S. Army Corps of Engineers

Enclosures (*Attach supplemental documentation as needed).*

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Appendix I

Acronyms

CFR	Code of Federal Regulation
CEQ	Council on Environmental Quality
EC	Engineer Circular
EP	Engineer Pamphlet
ER	Engineer Regulation
EA	Environmental Assessment
EIS	Environmental Impact Statement
FONSI	Finding of No Significant Impact
IEPR	Independent External Peer Review
M&I	Municipal and Industrial
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
O&M	Operations and Maintenance
PPA	Project Partnership Agreement
ROD	Record of Decision
USACE	United States Army Corps of Engineers
USC	United States Code

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