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PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS  
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CEPOD-PDC

OCT 03 2017

MEMORANDUM FOR Commander, Alaska Engineer District (CEPOA-PM-C-PL/George Kalli), P.O. Box 6898 JBER, AK 99506-0898

SUBJECT: Approval of the Review Plan for the Lower Matanuska Section 205 Feasibility Report

1. References:

- a. Engineering Circular 1165-2-214, Civil Works Review, 15 Dec 2012.
  - b. Review Plan for the Lower Matanuska Section 205 Feasibility Report, Alaska District, U.S. Army Corps of Engineers. (Encl)
2. This memorandum constitutes approval of the Review Plan for the Lower Matanuska Section 205 Feasibility Report, Alaska District, U.S. Army Corps of Engineers, which does not include a Type I Independent External Peer Review.
3. The approved Review Plan is subject to change as circumstances require, consistent with project development under the Project Management Business Process. Subsequent significant revisions to this Review Plan or its execution require my written approval.
4. For further information or clarification about the review process, please contact the Pacific Ocean Division, U.S. Army Corps of Engineers, at 808-835-4625.
5. POC is Mr. Russell Iwamura, Senior Economist, Civil Works Integration Division, at 808-835-4625 or email [Russell.K.Iwamura@usace.army.mil](mailto:Russell.K.Iwamura@usace.army.mil).

Encl

THOMAS J. TICKNER, PMP  
Colonel, EN  
Commanding

# **REVIEW PLAN**

**Lower Matanuska Section 205 Feasibility Report**

**Alaska District**

**MSC Approval Date: 3 October 2017**

**Last Revision Date: None**



**US Army Corps  
of Engineers ®**

## REVIEW PLAN

### Lower Matanuska Section 205 Feasibility Study

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## 1. PURPOSE AND REQUIREMENTS

**a. Purpose.** This Review Plan defines the scope and level of peer review for the Lower Matanuska Continuing Authorities Program (CAP) Section 205 Feasibility Study at Palmer and Sutton, Alaska.

### **b. References.**

- (1) Engineer Circular (EC) 1165-2-214, Civil Works Review, 15 Dec 2012.
- (2) Engineer Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006.
- (3) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007.
- (4) Pacific Ocean Division (POD) Quality Management Plan, Nov 2014.
- (5) Director of Civil Works' Policy Memorandum #1, Subject: Continuing Authority Program Planning Process Improvements, 19 Jan 2011.
- (6) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007.
- (7) Lower Matanuska Flood Risk Management Project Management Plan, Draft 10 Jul 2017.
- (8) Alaska District (POA) Quality Management Plan, CEPOA-QMP-001, Jan 2010.
- (9) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011.

**c. Requirements.** This review plan was developed in accordance with EC 1165-2-214, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-214).

## 2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically a Planning Center of

Expertise (PCX), POD, or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is POD. Upon approval by the RMO, POA will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the Flood Risk Management (FRM)-PCX to keep the PCX apprised of requirements and review schedules.

The RMO will coordinate with the Civil Works Cost Engineering and ATR Mandatory Center of Expertise (MCX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

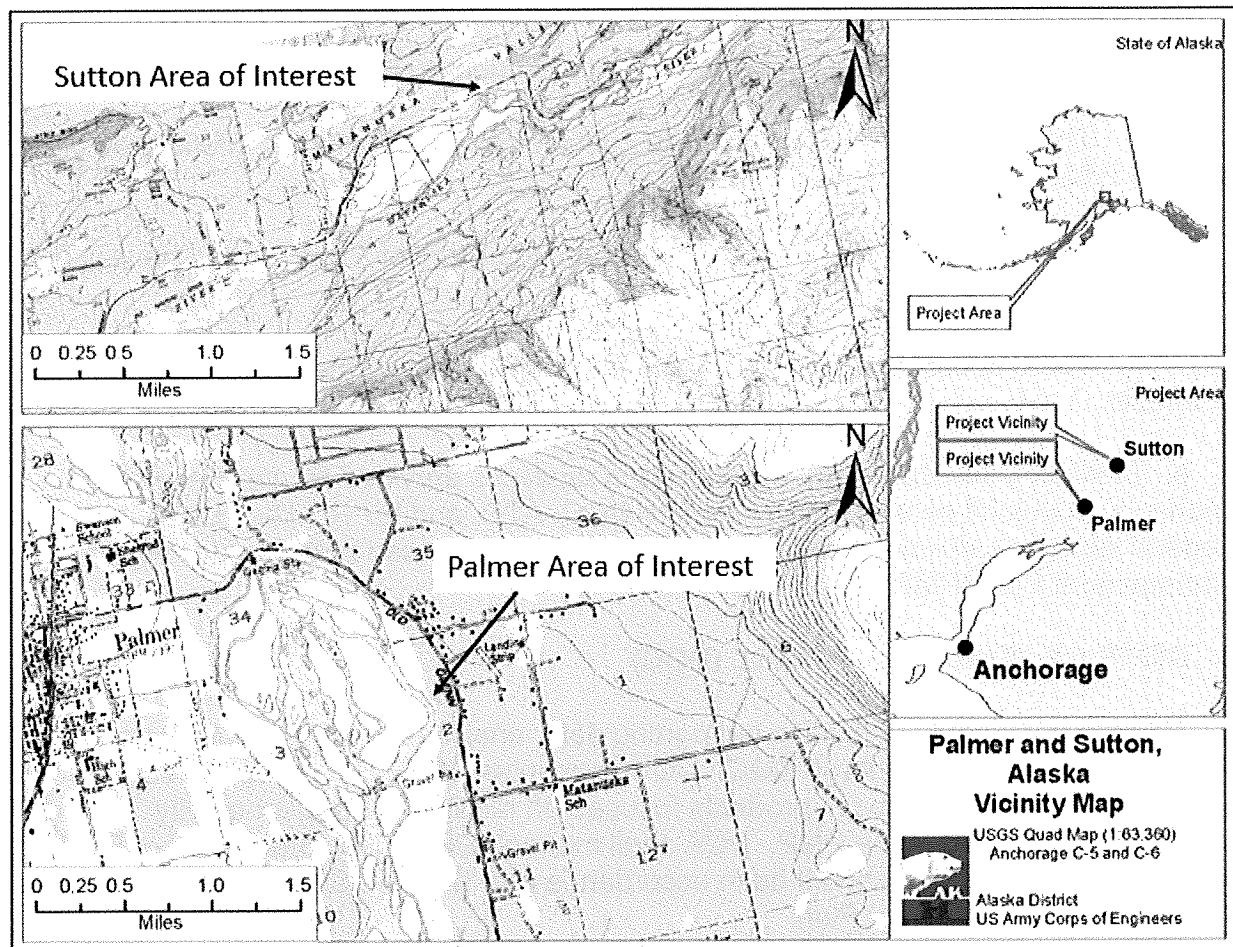
### **3. STUDY INFORMATION**

**a. Study Authority.** This study is being conducted under authority granted under Section 205 of the Flood Control Act of 1948 (PL 80-858), as amended for flood control.

**b. Decision Document.** The Lower Matanuska Section 205 Flood Risk Management project decision document will be prepared in accordance with ER 1105-2-100, Appendix F, Amendment #2, 31 Jan 2007. The approval level of the decision document (if policy compliant) is POD. An Environmental Assessment (EA) will be prepared with the decision document being an integrated feasibility report/EA. If significant environmental impacts are identified, an Environmental Impact Statement (EIS) will be prepared and the decision document will be an integrated feasibility report/EIS.

**c. Study/Project Description.** The purpose of this study is to determine if there is Federal Interest in implementing alternatives to problems and opportunities associated with flood risk management in the Matanuska Susitna (Mat-Su) Borough at Palmer and Sutton, Alaska (Figure 1).

The Matanuska River originates in the glacier fields of the Chugach Mountains and flows westerly about 80 miles to empty into the head of Cook Inlet through Knik Arm. In its upper reaches the river channel is confined within high banks, but in its downstream reaches it meanders over a river bed more than 3/4 mile in width. The effective drainage area is 2,060 square miles (just short of the size of West Virginia). The town of Palmer (population 6,641) and town of Sutton (population 1,447) are located near the Matanuska River (Figure 1). These areas are less than 50 miles from Anchorage and accessible by major highway and air.



**Figure 1: Sutton and Palmer Location and Vicinity Map**

**d. Factors Affecting the Scope and Level of Review.** Assumptions about risk factors include:

- The project is not likely to pose a significant threat to human life/safety.
- The estimated project cost is less than \$200 million.
- There are no significant environmental issues identified at this time.
- The information in the decision document will likely not:
  - Be based on novel methods.
  - Involve the use of innovative materials or techniques.
  - Present complex challenges for interpretation.
  - Contain precedent-setting methods or models.

- Present conclusions that are likely to change prevailing practices.
- The project report is not likely to contain influential scientific information or be a highly influential scientific assessment.
- There is no request by the Governor of the State of Alaska for a peer review by independent experts.
- There is unlikely to be significant public dispute over the project's size, nature, or effects.

**e. In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The anticipated non-Federal sponsor's in-kind services for this study are discussed in the study Project Management Plan (PMP).

#### **4. DISTRICT QUALITY CONTROL (DQC)**

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. POA shall manage DQC. Documentation of DQC activities is required and should be in accordance with CEPOA-CW-6.1-2-WI-01 and the POD Quality Management Plan.

**a. Documentation of DQC.** Review comments, evaluations (responses to comments), and response/action taken (for each comment) from the DQC of the Feasibility Study will be maintained in ProjNet (DrChecks) or some comparable tool. Comments should be limited to those that are required to ensure adequacy of the product.

**b. Products to Undergo DQC.** All decision documents, including cost estimates are to be prepared in accordance with the POA Quality Management Plan and will undergo DQC.

**c. Required DQC Expertise.** The following expertise is required for DQC.

<b>DQC Team Members/Disciplines</b>	<b>Expertise Required</b>
DQC Lead	The DQC lead should be a professional with experience in preparing Civil Works decision documents. The lead should also have the necessary skills and experience to lead a team through the DQC process. The DQC lead may also

	serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	The Planning reviewer should be a water resources planner with experience in the U.S. Army Corps of Engineers (USACE) planning process and be knowledgeable of current USACE policies and guidance. He/she should be familiar with flood risk management measures.
Economics	The Economics reviewer should be have experience conducting economic evaluations of flood risk management and recreation benefits and be familiar with the associated policies thereof.
Environmental Resources	The Environmental Resources reviewer should have experience in the evaluation of flood risk management measures and their associated environmental effects. He/she should also have experience in the National Environmental Policy Act (NEPA) process. The Environmental Resources reviewer will also act as the Cultural/Historical Resources reviewer. The Environmental Resources reviewer may choose to delegate the Cultural/Historical Resources review to a professional with equal or greater experience in Section 106 National Historic Preservation Act (NHPA) consultation and other relevant laws, guidance, and policies as they relate to Cultural/Historical Resources.
Hydraulic Engineering	The Hydraulic Engineering reviewer should have experience in the design of flood risk management measures, the analyses required to conduct said design, and the relevant policies governing these activities. A registered professional engineer is recommended.
Geotechnical	The Geotechnical reviewer should have experience in geotechnical analyses as they pertain to the design of flood risk management measures. A registered professional engineer is recommended.
Real Estate	The Real Estate reviewer should have experience in the application of real estate law and Federal policies and guidance in the application thereof.
Cost Engineering	The Cost Engineering reviewer should be familiar with cost engineering of flood risk management measures using the Microcomputer Aided Cost Engineering System (MCACES) model and preparation of MII Cost estimates. The reviewer



	should be a certified cost technician, consultant, or engineer.
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The DQC team members are listed in Attachment 1.

## 5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside POA that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside POD.

**a. Products to Undergo ATR.** ATR will be performed throughout the study in accordance with POA and POD Quality Management Plans. The ATR may still be ongoing but an ATR status update should be discussed at the MSC Decision Milestone (MDM) meeting. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include the draft and final Feasibility Report and Environmental Assessment for the Lower Matanuska Section 205 study.

### b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a professional with experience in preparing Civil Works decision documents. The lead should have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc). The ATR Lead must be from outside of POD.
Planning	The Planning reviewer should be a water resources planner with demonstrable experience in planning related to flood risk management studies.
Economics	The Economics reviewer should have experience in conducting economic analyses as it relates to flood risk management studies.
Environmental Resources	The Environmental Resources reviewer should have experience in preparation of NEPA documents

	related to flood risk management studies. The Environmental Resources reviewer will also serve as the Historical/Cultural Resources reviewer. The Environmental Resources reviewer may choose to delegate the Cultural/Historical Resources review to a professional with equal or greater experience in Section 106 NHPA consultation and other relevant laws, guidance, and policies as they relate to Cultural/Historical Resources.
Hydraulic Engineering	The Hydraulic Engineering reviewer should have experience in the design of flood risk management measures.
Geotechnical Engineering	The Geotechnical Engineering reviewer should have experience in conducting geotechnical analyses as they pertain to the design of flood risk management measures.
Cost Engineering	The cost engineering reviewer will be Cost MCX Staff or a Cost MCX Pre-Certified Professional with experience in preparing cost estimates for flood risk management studies.
Real Estate	The real estate reviewer should be a real estate professional with experience in developing real estate plans for civil work projects.

Once identified, the members of the ATR team and a brief description of their credentials will be listed in Attachment 1.

**c. Documentation of ATR.** DrChecks<sup>sm</sup> review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

(1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;

(2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;

(3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and

(4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks<sup>sm</sup> will include the text of each ATR concern, the Project Delivery Team (PDT) response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes POA, POD, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks<sup>sm</sup> with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the draft and final report. A sample Statement of Technical Review is included in Attachment 2.

## **6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)**

IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria

where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- **Type I IEPR.** Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214.

- **Type II IEPR.** Type II IEPR, or Safety Assurance Reviews (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

**a. Decision on IEPR.** Type I and Type II IEPR will not be required for this Section 205 decision document (Feasibility Phase) based on the following factors and criteria stated in EC 1165-2-214 and reiterated in the Director of Civil Works' Policy Memorandum #1.

- Preliminary indications are that the Project will not require an EIS.
- The life safety consequences and risks for this project will be no greater than those expected conditions experienced under the "Without Project Conditions". The Alaska District Chief of Engineering is in concurrence with this assessment. The alternatives under consideration will purchase and remove threatened structures and purchase privately owned vacant land currently at threat from flooding. These shall be replaced with low-development recreational areas. To address potential life safety issues related to the recreational areas created, an Operation and Maintenance manual including parameters for evacuation of the recreational areas will be created.
- The project is not controversial.

- Preliminary indications are that the project will have no more than negligible adverse impacts on scarce or unique cultural or historic resources.
- Preliminary indications are that the project will have no significant adverse impacts on fish and wildlife species and their habitat.
- Preliminary indications are that the project will have no more than a negligible adverse impact on species listed as endangered or threatened under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the critical habitat of such species designated under such Act.
- Preliminary indications are that the project has no significant local, State or Federal interagency interest related to potential adverse impacts on the environment, cultural or other resources.
- The project is for an activity for which there is ample experience within USACE and industry.
- The Federal action is not justified by life safety.
- The project will not involve the use of innovative materials or techniques where the engineering is based on novel methods, does not present complex challenges for interpretations, does not contain precedent-setting methods or models, or does not present conclusions that are likely to change prevailing practices.
- The project design will not require redundancy, resiliency, and/or robustness.
- The project will not have unique construction sequencing, or a reduced or overlapping design construction schedule.
- The risk associated with this project is the construction cost. Fluctuations in the construction cost index are factored into the determination of the project cost contingency. Other factors such as potential weather delays are also included.
- This study will contain no influential scientific information and will be conducted using standard and routine analyses typically associated with flood risk management projects.
- The consequences of non-performance on project economics, the environment, and public safety have been assessed and do not warrant IEPR.
- There has been no request by the Governor for a peer review by independent experts.

- This study is so limited in scope that it would not significantly benefit from IEPR.

- The total projects costs are not expected to exceed \$200 million dollars.

**b. Products to Undergo Type I IEPR. N/A.**

**c. Required Type I IEPR Panel Expertise. N/A.**

**d. Documentation of Type I IEPR. N/A.**

## **7. POLICY AND LEGAL COMPLIANCE REVIEW**

All decision documents will be reviewed by POD throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the POD Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents. For this study, policy and legal compliance review will be conducted concurrently with ATR.

## **8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION**

All decision documents shall be coordinated with the Cost Engineering MCX, located in the Walla Walla District. The MCX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The MCX will also provide the Cost Engineering MCX certification. The RMO is responsible for coordination with the Cost Engineering MCX. In accordance with the Director of Civil Works' Policy Memorandum #1, the MCX has the authority to delegate certification responsibility at its discretion.

## **9. MODEL CERTIFICATION AND APPROVAL**

**a. Planning Models.** The approval of planning models under EC 1105-2-412 is not required for CAP projects. The POD Commander is responsible for assuring models for all planning activities are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The selection and application of the model and the input and output data are still the responsibility of the users and are

subject to DQC, ATR, and IEPR (if required).

For this decision document, the PDT plans to use the USACE Hydrologic Engineering Center's Flood Damage Analysis (HEC-FDA) model. HEC-FDA is certified by USACE as an acceptable model. A detailed description of this model is provided in the table below.

<b>Model Name and Version</b>	<b>Brief Description of the Model and How It Will Be Applied in the Study</b>	<b>Certification / Approval Status</b>
HEC-FDA 1.2.4 (Flood Damage Analysis)	The HEC-FDA program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods. The program will be used to evaluate and compare the future without- and with-project plans along the Matanuska River to aid in the selection of a recommended plan to manage flood risk.	Certified

**b. Engineering Models.** EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on USACE studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

The following engineering models are anticipated to be used in the development of the decision document:

<b>Model Name and Version</b>	<b>Brief Description of the Model and How It Will Be Applied in the Study</b>	<b>Approval Status</b>
HEC-RAS 4.0 (River Analysis System)	The Hydrologic Engineering Center's River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Matanuska River.	HH&C CoP Preferred Model
Microcomputer Aided Cost Engineering System	The MCACES MII construction cost estimating software is a tool used by cost engineers to develop and prepare all USACE Civil Works cost estimates. Using the features in this system, cost	Cost Engineering MCX

(MCACES) 2 <sup>nd</sup> Generation (MII)	estimates are prepared uniformly allowing cost engineers throughout USACE to function as one virtual cost engineering team.	Required Model
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## 10. REVIEW SCHEDULES AND COSTS

**a. ATR Schedule and Cost.** The ATR for the Lower Matanuska Section 205 study will be accomplished in accordance with the cost and schedule in the Project Management Plan. The estimated cost of the ATR is \$40,000.

**b. Type I IEPR Schedule and Cost.** N/A.

**c. Model Certification/Approval Schedule and Cost.** For CAP decision documents prepared under the POD Model Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved models are used, review of the model for use will be accomplished through the ATR process. The ATR team should ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. However, model approval is not required for CAP studies per Director of Civil Works' Memorandum #1.

## 11. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this Review Plan as partner agencies or as technical members of the PDT, as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. The ATR team will be provided copies of public and agency comments. This Review Plan and all decision documents will be posted on the Alaska District's website for public review.

## 12. REVIEW PLAN APPROVAL AND UPDATES

The POD Commander is responsible for approving this Review Plan and ensuring that use of the POD CAP Model Review Plan is appropriate for the specific project covered by the plan. The Commander's approval reflects vertical team input (involving POA and POD members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. POA is responsible for keeping the Review Plan up to date. Minor changes to the Review Plan since the last POD Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the POD Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on POA's webpage. The latest Review Plan should also be provided to POD.



### **13. REVIEW PLAN POINTS OF CONTACT**

Public questions and/or comments on this Review Plan can be directed to the following points of contact:

Alaska District POC:

Cindy Upah  
Chief of Civil Works Planning  
U.S. Army Corps of Engineers, Alaska District  
Bldg. 2204  
JBER, AK 99506  
Telephone: (907) 753-5788

Pacific Ocean Division POC:

Russell Iwamura  
Senior Economist, Civil Works Integration Division  
U.S. Army Corps of Engineers, Pacific Ocean Division  
Building 525  
Fort Shafter, HI 96858-5440  
Telephone: (808) 835-4625

## ATTACHMENT 1: TEAM ROSTERS

Project Delivery Team. The Project Delivery Team is comprised of the following individuals:

Discipline	Team Member
Project Manager	Jeff Herzog
Planning	George Kalli
Economics	Brent Andrews
Environmental Resources	Michael Rouse
Real Estate	Ron Green
Hydraulic Engineering	Wendy Shaw
Geotechnical Engineering	Matthew Perrett
Survey	Tom Sloan
Office of Counsel	Phil Santerre
Cost Engineering	Karl Harvey

### District Quality Control Team

Discipline	Team Member Office Symbol
Planning	CEPOA-PM-C-PL
Economics	CEPOA-PM-C-PL
Environmental Resources	CEPOA-EN-CW-ER
Hydraulics & Hydrology	CEPOA-EN-CW-HH
Cost Engineering	CEPOA-EN-CE
Chief, Civil Works Branch	CEPOA-PM

### Agency Technical Review Team

An ATR Team will be constructed based on the expertise and qualifications provided in paragraph 5.b. of this Review Plan. Team members that are currently identified will be listed in the table below. Their qualifications will be appended below. Team members not currently identified will be added during the feasibility phase.

Discipline	Team Member
ATR Lead/Planning	To Be Determined (TBD)
Economics	TBD
Environmental Resources	TBD
Hydraulic Engineering	TBD
Geotechnical Engineering	TBD
Real Estate	TBD
Cost Engineering	TBD

Division Points of Contact

Name	Title	Telephone
Steven Yamamoto	POD CAP Manager	808-835-4627
Linda Hihara-Endo	POD Civil Works Planning Team Leader	808-835-4621

**ATTACHMENT 2: SAMPLE STATEMENT OF DISTRICT QUALITY CONTROL FOR  
DECISION DOCUMENTS**

**Lower Matanuska  
Section 205 Feasibility Report  
Palmer and Sutton, Alaska**

**COMPLETION OF DISTRICT QUALITY CONTROL REVIEW**

The District has completed the Section 205 Feasibility Report for Flood Risk Management at Palmer and Sutton, Alaska. Notice is hereby given that District Quality Control review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the District Quality Control review, compliance with established policy, principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including adherence to Civil Works policy and guidance.

\_\_\_\_\_  
Cindy Upah, Chief, Planning

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mike Noah, Chief, Environmental Resources

\_\_\_\_\_  
Date

\_\_\_\_\_  
Ken Eisses, Chief, Hydraulics & Hydrology

\_\_\_\_\_  
Date

\_\_\_\_\_  
Karl Harvey, Chief, Cost Engineering

\_\_\_\_\_  
Date

\_\_\_\_\_  
George Kalli, Lead Planner (Technical Lead)

\_\_\_\_\_  
Date

**CERTIFICATION OF DISTRICT QUALITY CONTROL REVIEW**

As noted above, all concerns resulting from independent technical review of the project have been considered. The report and all associated documents required for this phase of the study by the National Environmental Policy Act have been fully reviewed.

\_\_\_\_\_  
Bruce Sexauer, Civil Works Branch

\_\_\_\_\_  
Date

### ATTACHMENT 3: SAMPLE STATEMENT OF AGENCY TECHNICAL REVIEW FOR DECISION DOCUMENTS

#### COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Section 205 for Lower Matanuska at Palmer and Sutton, Alaska. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks<sup>sm</sup>.

SIGNATURE

TBD  
ATR Team Leader  
TBD

Date

SIGNATURE

Jeff Herzog  
Project Manager  
CEPOA-PM-C

Date

SIGNATURE

Russell Iwamura  
Review Management Office Representative  
CEPOD-PDC

Date

#### CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: Describe the major technical concerns and their resolution.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE

Jim Jeffords  
Chief, Engineering Division  
CEPOA-EN

Date

#### ATTACHMENT 4: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

## ATTACHMENT 5: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	NER	National Ecosystem Restoration
ASA(CW)	Assistant Secretary of the Army for Civil Works	NEPA	National Environmental Policy Act
ATR	Agency Technical Review	O&M	Operation and maintenance
CSDR	Coastal Storm Damage Reduction	OMB	Office and Management and Budget
DPR	Detailed Project Report	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DQC	District Quality Control/Quality Assurance	OEO	Outside Eligible Organization
DX	Directory of Expertise	OSE	Other Social Effects
EA	Environmental Assessment	PCX	Planning Center of Expertise
EC	Engineer Circular	PDT	Project Delivery Team
EIS	Environmental Impact Statement	PAC	Post Authorization Change
EO	Executive Order	PMP	Project Management Plan
ER	Ecosystem Restoration	POD	Pacific Ocean Division
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MSD	The District or MSD responsible for the preparation of the decision document	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act
NED	National Economic Development		