



DEPARTMENT OF THE ARMY
PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

CEPOD-PDC


22 NOV 2010

MEMORANDUM FOR COMMANDER, ALASKA ENGINEER DISTRICT (CEPOA-PM-CW/DAVID MARTINSON), P.O. BOX 898, ELMENDORF AFB, AK 99506-0898

SUBJECT: Review Plan Approval for the Navigation Improvements Valdez, Alaska, Interim Integrated Feasibility Report Environmental Assessment and Finding of No Significant Impact

1. The attached Review Plan for the Navigation Improvements, Valdez, Alaska, Interim Integrated Feasibility Report, Environmental Assessment and Finding of No Significant Impact has been prepared in accordance with EC 1165-2-209.
2. The Review Plan has been coordinated with the Small Boat Harbor Planning Sub-Center of Expertise (SBH-PSCX) within the Alaska Engineer District, U.S. Army Corps of Engineers, which is the lead office to execute this Review Plan. For further information, contact the SBH-PSCX at (907) 753-2627. The Review Plan does not include independent external peer review.
3. I hereby approve this Review Plan, which is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.
4. The point of contact for this memorandum is Mr. Russell Iwamura, Senior Economist, Civil Works Integration Division, at 808-438-8859 or Russell.K.Iwamura@usace.army.mil.

Encl
as


EDWARD J. KERTIS, JR.
COL, EN
Commanding

REVIEW PLAN

Navigation Improvements – Valdez, Alaska
Feasibility Report

Alaska District

MSC Approval Date: November 2010

Last Revision Date: May 2011



US Army Corps
of Engineers ®

REVIEW PLAN

Navigation Improvements – Valdez, Alaska
Feasibility Report

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1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the Navigation Improvement – Valdez, Alaska feasibility report. This version of the review plan is an update of the approved review plan dated August 2007. This update has been prepared to ensure consistency with EC 1165-2-209 and to document the previous review activities.

b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-412, Assuring Quality of Planning Models
- (3) Engineering Regulation (ER) 1110-2-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) Valdez Navigation Improvements Project Management Plan

c. **Requirements.** This review plan was developed in accordance with EC 1165-2-209, 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 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

- (1) District Quality Control/Quality Assurance (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 Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home Major Subordinate Command (MSC).
- (2) 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 US Army Corps of Engineers (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 a designated Review Management Organization (RMO) and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside the home MSC.
- (3) 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 1165-2-209, 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 is generally for decision documents and Type II is generally for implementation products.

- (a) 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 an biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all the 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 1165-2-209.
 - (b) Type II IEPR. Type II IEPR, or Safety Assurance Review (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.
- (4) Policy and Legal Compliance Review. All **decision documents** will be reviewed 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 Chief of Engineers. 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.
 - (5) Cost Engineering Review and Certification. All **decision documents** shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District. The DX, or in some circumstances regional cost personnel that are pre-certified by the DX, will conduct the cost ATR. The DX will provide certification of the final total project cost.
 - (6) Model Certification/Approval. EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, 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 use of a certified/approved planning model does not constitute technical review of the planning product. 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. 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. Engineering models are also subject to DQC, ATR, and IEPR.

2. STUDY INFORMATION

a. **Decision Document.** The Navigation Improvements – Valdez Alaska feasibility report is an integrated feasibility report and Environmental Assessment with a Finding of No Significant Impact. The project was authorized in WRDA 2007. The report will be approved by the Director of Civil Works.

b. **Study/Project Description.**

The feasibility report examines the need for improving navigation facilities in Valdez, Alaska, presents the results of studies conducted to determine the feasibility of Federal participation in potential improvements, and assesses potential environmental effects associated with a range of alternatives. The primary problems addressed in this report are unmet moorage demand and overcrowding in the existing harbor. The authorized purpose is navigation. Beneficial use of dredged material was added as an authority in accordance with regulation.

The city of Valdez is approximately 185 kilometers (km) east of Anchorage, and is accessible by highway from both Anchorage and the interior city of Fairbanks. The existing mooring basin has capacity for about 500 vessels. During the height of fishing season, the transient moorage pier can have vessels rafted six deep, dozens of boats using the launch ramp, and all competing with existing users of the marina for the harbor's limited space. Unavailability of moorage has led to harbor congestion, lost income, vessel damages, and lost time.

Multiple alternative sites and plans to provide additional protected moorage capacity were investigated through the course of the feasibility study, with a detailed focus on five final plans. The East Site Rubblemound 320-Vessel was selected as the recommended plan. The plan is supported by the local sponsor and was carried forward as the tentatively recommended plan. The tentatively recommended plan would provide a basin of about 5.7 hectares (ha) including the entrance channel and maneuvering basin. The entrance channel depth would be -5.5 meters MLLW and decrease to -2.7 meters at the far end of the basin away from the entrance. The south breakwater would be about 473 meters long. The east breakwater would be constructed in a north-south orientation to the entrance channel and would be approximately 240 meters long, and the stub breakwater would be 29 meters long. The plan also includes beneficial use of dredged material, which would be placed at a formerly used log transfer site at Two Moon Bay to return the bark-covered sea bottom at the site to a more natural and productive state.

The general navigation features of the project were authorized in WRDA 2007 for an estimated total project cost of \$20,000,000. The current estimate for the GNF features is \$22,810,000 which is well within the project's 902 limit. Subsequent implementation guidance stated that the report is to be approved by the Director of Civil Works. The project will not be required to be presented to the Civil Works Review Board.

The following table is a breakdown of the costs showing the cost of the GNF, LSF, and other project features.

Project Cost

Item	Federal (\$)	Non-federal (\$)	Total (\$)
General Navigation Features	19,077,000	3,733,000	22,810,000
Associated costs - local service facilities		30,042,000	30,042,000
Lands, Easements, Rights of Way, Relocation, and Disposal (LERRD)		829,000	829,000
Navigation aids. U.S. Coast Guard	7,000		7,000
Navigation Project Cost(NED)	19,084,000	34,604,000	53,688,000
Beneficial Use of Dredged material Project Cost (NER)			
General Navigation Features	512,000	276,000	788,000
Local Service Features		1,341,000	1,341,000
	512,000	1,617,000	2,129,000
TOTAL PROJECT COST	19,596,000	36,221,000	55,817,000

The features of the recommended plan have a Federal cost of \$19,596,000 and a non Federal cost of \$36,221,000. The annual NED investment cost of the project, including interest during construction and the cost of operation and maintenance, is \$2,968,000 with annual NED benefits of \$5,180,000. The project's benefit-to-cost-ratio is 1.75 with net annual benefits of \$2,212,000. Construction and operation of the harbor would not substantially affect threatened or endangered species, critical habitat, cultural resources, or other human or biological resources.

c. Factors Affecting the Scope and Level of Review.

- This harbor project is similar in nature to the approximately four dozen other harbor projects constructed by the Corps throughout Alaska. There are no special or unique designs or construction techniques associated with this project.
- The risks associated with the project are cost. Fluctuations in the price of fuel and armor rock have been factored into the determination of project cost contingency. Other factors such as potential weather delays and unexpected bedrock rock dredging were also included. There is low risk of the project benefits not been realized. Harbors throughout the area of Prince William Sound (where Valdez is located) have a history of filling to capacity once opened. The cost of fuel, the largest uncertainty, increases both benefit and cost making project justification stay similar regardless of price fluctuation.
- This project is expected to have no significant impact to the environment. An ecosystem restoration component of beneficial use of dredged material has been included in the project. This extra feature was developed through a collaborative effort with various environmental

resource agencies and project stakeholders. This project has been well coordinated with stakeholder concerns being addressed.

- This project has no significant threat to human life/safety assurance.
- This project has had no more than the normal and expected amounts of interagency interest. As mentioned before, a collaborative feature of the project is the inclusion of beneficial use of dredged material for ecosystem restoration.
- This project is not highly controversial. The public review period yielded only two comment letters that mostly focused upon project cost, affordability for the local community, and why the Corps computes benefits the way described in regulation.
- The study contains no influential scientific information and was conducted using common and routine analyses
- The information in the decision document or proposed project design was not based on novel methods and did not involve the use of innovative materials or techniques
- The proposed project design does not require redundancy, or unusual levels of resiliency, and/or robustness. The wave climate is not unusually large, thus the breakwater can be constructed using readily available materials.
- The proposed project has no unique construction sequencing and no reduced or overlapping design construction schedule. The design of this project is estimate to take about one year, with construction being about two years both common durations for similar types of facilities.

- d. **In-Kind Contributions.** Technical products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The in-kind products and analysis to be provided by the non-Federal sponsor have been non technical in nature, related to review, coordination, and management activities, and therefore not subject to review.

3. DISTRICT QUALITY CONTROL (DQC)

- a. Documentation of DQC. District quality control included reviews by office peers, section and branch chief of the various technical disciplines, reviews by the product delivery team, and several editorial revisions. This review occurred for each product and version of the report leaving the District for some form of review including ATR, public, and HQ review. Documentation of the review included written comments inside the reports and review forms as appropriate. At each point of the report leaving the District, the report had a certification sheet signed stating that all review has been complete and comments resolved. As this project was already significantly complete prior to the publishing of EC 1165-2-209 many of the EC compliant review processes were not in place as this product has been developed. Regardless, this project has undergone several robust and detailed reviews.

4. AGENCY TECHNICAL REVIEW (ATR)

- a. **Products to Undergo ATR.** The integrated feasibility report and environmental assessment has undergone independent technical review for the AFB, and draft report documents, and ATR for the final report documents. Buffalo District has performed the agency technical reviews for this project with support from the Cost Center of Expertise in Walla Walla District. The detailed plans and specification will undergo ATR. The AFB feasibility report/EA and appendices underwent ATR in 2000. The draft feasibility report/EA and appendices underwent ATR in 2007. The final feasibility report/EA and appendices underwent ATR in 2010.

b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	The Planning reviewer should be a senior water resources planner with experience in formulating navigation projects specifically related to small boat harbors.
Economics	The Economics reviewer should be a senior economist with experience in the economic analysis of navigation projects specifically related to small boat harbors.
Environmental Resources	The environmental reviewer should be a senior NEPA expert with experience in environmental consideration of navigation projects specifically related to small boat harbors in the marine environment.
Cost Engineer	The cost engineer reviewer should be a senior cost engineer with applicable experience in developing cost estimates for rubble mound structures and dredging projects.
Coastal Engineering	The coastal engineering reviewer should be a senior engineer with experience in the design of navigation projects specifically related to small boat harbors.
Geotechnical Engineering	The geotechnical reviewer should be a senior engineer with experience in developing geotechnical examinations and foundation analysis for navigation projects specifically related to small boat harbors.
Real Estate	The real estate reviewer should be a senior real estate expert with experience in developing real estate plans for navigation projects specifically related to small boat harbors.

c. Documentation of ATR. DrChecks 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 be 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 will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUASACE), 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 ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution. The RMO for this project is the Small Boat Harbor Planning Center of Expertise.

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 AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

5. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

- a. **Decision on IEPR.** IEPR will not be conducted for the decision document and follow-on project implementation documentation. This decision has been based on the discussions in Section 2 – Factors Affecting the Scope and Level of Review and the criteria in EC 1165-2-209. Specifically
- This project does not include an EIS
 - The project is not controversial
 - The project has no more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources

- The project has no substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures
- The project has, before implementation of mitigation measures, no more than a negligible adverse impact on a species listed as endangered or threatened species 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
- The project is for an activity for which there is ample experience within USACE and industry
- Has minimal life safety risk
- The Federal action is not justified by life safety
- The failure of the project would not pose a significant threat to human life;
- The project does 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 does not require redundancy, resiliency, and/or robustness
- The project does not have unique construction sequencing or a reduced or overlapping design construction schedule.
- The cost of the authorized project (the GNF features) are less than \$45 million
- The Governor of Alaska has not requested an IEPR

Approval for IEPR exclusion was received on 26 April 2011. The approval memo is attached.

6. MODEL CERTIFICATION AND APPROVAL

- a. **Planning Models.** No planning models were utilized in the development of the Valdez project. A methodology was developed determining marine benthic habitat values for the Valdez Harbor Navigation Study though classifying the activity as a model would not be valid.

Alaska District recognizes that modeling tools are often helpful in analyzing and assigning habitat values. However, models are expensive and time consuming and are not always practical. After consulting the “White Paper, ECO-PCX Recommendations to Headquarters on Certification of Ecosystem Output Models” and consulting the ERs and ECs, POA concludes that there is no absolute requirement to use a formal model for determining marine benthic habitat values for the Valdez Harbor Navigation Study.

The Valdez Harbor Navigation Study was underway long before much of the present day ecosystem modeling information was available. USACE, the sponsor, and the resource agencies all agreed that the use of excess dredge material beneficially was more acceptable than dumping the dredge material in open water. As a result, the Two Moon Bay Log Transfer Site was identified as a site that would benefit from the disposal of dredge material. A multi-agency team worked together to formulate a methodology to assign values to benthic habitats in the proposed Beneficial Use of Dredge Material Disposal Site. The best available scientific information was used coupled with Dive video footage that was available before and after the site was used as a Log Transfer Facility. Given the remote nature of the site, and the seasonal restrictions for construction activities, the most cost effective method of analysis was agreed to by the team and the results are presented as a “one-time” use methodology for this project.

- b. **Engineering Models.** The following engineering models were utilized in the development of the feasibility report:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study
STWAVE	Used to determine the design wave conditions for each of the primary wave directions as needed for breakwater design.
STFATE	Used to estimate the impact of the deep-water disposal on the seafloor. The model generated a disposal plume footprint and depth of sediment accumulation on the seafloor.

7. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** The AFB, and draft report Agency Technical Reviews have occurred at the cost of about \$30,000 per occurrence. The AFB feasibility report/EA and appendices underwent ATR in 2000. The draft feasibility report/EA and appendices underwent ATR in 2007. The final feasibility report/EA and appendices underwent ATR in 2010. The plans and specification technical review is anticipated to occur in 2012.
- b. **Model Certification/Approval Schedule and Cost.** All the models used are already certified or approved for use.

8. PUBLIC PARTICIPATION

U.S. Fish and Wildlife Service (USFWS) participation in this study under the Coordination Act started in 2000. A Planning Aid report was received in March 2000. In this report the USFWS recommended an environmentally preferred site on the west side of the Alyeska Service dock or on the East Site with appropriate mitigation. Harbor Cove was considered significant habitat because it borders the Duck Flats. A draft Coordination Act Report was received in May 2001. Several scoping meetings and a design charret were held (March 4, 1999, January 26-27, 2000, October 22, 2001, March 2002, and July 22, 2002) with resource agencies and city of Valdez representatives to discuss issues and formulate appropriate mitigation. Some of the meeting minutes are contained in appendix 3, Correspondence of the environmental assessment. A site survey of a log transfer facility at Two Moon Bay was conducted in November 2001. A final Coordination Act Report was submitted informally in April 2002 with the USFWS recommending the East Site and extensive mitigation.

Coordination under the Coordination Act was re-initiated with a meeting in May 2005. An agency meeting was held on July 19, 2005 to discuss harbor and mitigation alternatives. A multi-agency meeting was held on October 4, 2005 to present the Corps planning process, evaluate designs, and discuss mitigation options. Agencies in attendance were the USFWS, National Marine Fisheries Service, Environmental Protection Agency, State Departments of Natural Resources, Fish and Game and Environmental Conservation. The city manager of Valdez spoke to the group about the existing and future harbor's importance to the city's economy. The agencies agreed that a new harbor was needed and agreed to work toward common goals to develop effective mitigation and to use dredged material beneficially.

A facilitated meeting was held on November 4, 2005, to sort through the mitigation alternatives. Avoidance and minimization measures were an agreed part of the design to the extent practical. A

fuel facility was determined to be necessary for efficient operation of a new harbor and would include best management practices.

On November 21, 2005, the Corps met with the Valdez city council to present the harbor alternatives, including beneficial use and mitigation alternatives. The council agreed to support the beneficial use of dredged material at Two Moon Bay; to construct a bilge disposal facility; and to a number of design, construction, and operation measures for a harbor at the East Site.

At the December 4, 2005, agency meeting, the recommended plan, including mitigation and beneficial use, was presented and accepted, with some reservations, by the participating agencies.

The city of Valdez has conducted public meetings throughout the planning process. In February 2007, a city survey on capital project was mailed to Valdez citizens. Three out of four respondents favored a new harbor and said a harbor was a top priority.

This feasibility report and environmental assessment was distributed in February 2010 for the public and agency review as part of the NEPA process. A public meeting was held during the review period to discuss the project alternatives and solicit public views and opinions.

The final report and EA will be made printed and distributed to the sponsor and key stakeholders. Two copies will be sent to the Alaska library system. The report will also be available on the Alaska District website.

9. 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 either a Planning Center of Expertise (PCX) 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 the Small Boat Harbor Sub Center of Expertise.

The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to conduct ATR of cost estimates, construction schedules and contingencies. The Ecosystem Restoration Planning Center of Expertise was coordinated with for the beneficial use of dredged material habitat methodology.

10. REVIEW PLAN APPROVAL AND UPDATES

This is a revised review plan from the original dated August 2007. The Pacific Ocean Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE 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. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC 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 MSC 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 the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

11. REVIEW PLAN POINTS OF CONTACT

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

Bruce Sexauer, Chief Project Formulation, (907) 753-5619 is the Alaska District POC
Russell Iwamura, Lead Economist, (808) 438-8859 is the Pacific Ocean Division POC
Forest Brooks, Small Boat Harbor PCX, 907-753-2627 is the RMO POC.

ATTACHMENT 1: CURRENT TEAM ROSTERS

Project Delivery Team (All are Alaska District unless noted)

Dave Martinson, Project Manager
Bruce Sexauer, Plan Formulator
Lorraine Cordova, Economist
Mike Salyer, Environmental Resources
Merlin Peterson, Coastal Engineering
Linda Arrington, Real Estate
Coleman Chalup, Geotech
Ike Pace, Cost Engineer, TetraTech
Al Arruda, Cost Engineer
Diane Walters, Editor
Don Tybus, VEO
Gordon Osgood, POA Technical integration

Agency Technical Review Team (All are Buffalo District unless noted)

Jon Brown, Review Team Leader
Jonathan Kolber, Geotech
Michael Mohr, Coastal Engineer
Roger Haberly, Economics
Jennifer Janik, Real Estate
Philip Berkeley, Plan Formulation
James Miller, Environmental Resources
Jim Neubauer, Cost Center of Expertise, Walla Walla District

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <type of product> for <project name and location>. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. 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 DrCheckssm.

SIGNATURE

Name

ATR Team Leader

Office Symbol/Company

Date

SIGNATURE

Name

Project Manager

Office Symbol

Date

SIGNATURE

Name

Architect Engineer Project Manager¹

Company, location

Date

SIGNATURE

Name

Review Management Office Representative

Office Symbol

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

Name

Chief, Engineering Division

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division

Office Symbol

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number
August 2007	Original Review Plan	
August 2010	Revised to make EC 1165-2-209 compliant	multiple
May 2011	Approval for IEPR exclusion was noted.	5.a

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	NED	National Economic Development
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	PCX	Planning Center of Expertise
EC	Engineer Circular	PDT	Project Delivery Team
EIS	Environmental Impact Statement	PMP	Project Management Plan
ER	Engineering Regulation	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	SAR	Safety Assurance Review
MSC	Major Subordinate Command	USACE	U.S. Army Corps of Engineers
		WRDA	Water Resources Development Act



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Buffalo District

Jon Brown, Regional Technical Specialist – Navigation Economics, Buffalo District, Planning Branch, Planning Services Team



Biography (SBH Focus)

Jon Brown has 30 years experience and has been the Lead Economist in the Planning Branch of the Buffalo District since 1990. As a regional team member, he assists in the evaluation and formulation of regional studies in LRD and other MSC's. Mr. Brown served as U.S. technical work group leader for the recreational navigation component of International Joint Commission's St. Lawrence River-Lake Ontario Criterion study. Mr. Brown developed the recreational boating and tourism methodology portion for this is a five-year \$20M bi-national plan of study. Other recent work include: developing the methodology and designing contingent valuation mail survey questionnaire for measuring economic impacts of proposed Valdez SBH. AK expansion.

As regional technical specialist, Mr. Brown serves as Independent Technical Review Team leader and performs review on economic sections for navigation, flood damage reduction, coastal storm damage and recreation studies as well as for economic model certification reviews. He served as a regional team member or leader for numerous Independent Technical Review Teams including Little Diomedea Navigation Improvements (FSM), Valdez Navigation Improvements Feasibility Report, John Glenn Great Lakes Recreational Boating Study, JT Myers Dam Major Rehab Study, Center Hill Seepage Rehabilitation, Green River Dam Safety Modification Study (DSMS), Canadaway Creek, Cleveland DMMP/EIS, Gateway Point GI, Ottawa River Shoreland Ave Section 14, Ottawa River Navigation Study, Rochester Harbor, South Park Lake, Sylvan Beach, Walnut Creek Section 107, Whiting Small Boat Harbor Information Report, UMR-IWW Economic Re-Evaluation, Nolin River Dam Safety Modification Study (DSMS), Rough River Dam Safety Modification Study (DSMS), Rough River Dam Safety Assurance Project, Southwest Louisville FDR Feasibility Study. He manages and coordinates the District's Harbor Operation & Maintenance Evaluation Program, which evaluates the economic viability of two or three harbors annually. He conducted the economic recreation evaluation for the Soo Lock Reevaluation. He has been with the Buffalo district his entire career with the exception of two extended details to Alaska District and a three-year detail to Pacific Ocean Division.

Buffalo District:

- Developed methodology and designed complex contingent valuation mail survey questionnaire for measuring economic impacts of a proposed lake access expansion project at Olcott Harbor, N.Y.
- Analyzed contingent valuation mail survey questionnaire of proposed recreation navigation improvements in the City of Buffalo, NY.
- Conducted economic evaluation and technical appendix for rehabilitation of the inner breakwater NFTA Small Boat Harbor. Analysis included contingent valuation survey technique for sample of existing harbor users.
- Conducted contingent valuation survey technique and economic evaluation New York State Barge Canal Study.
- Conducted economic evaluation of Cooley Canal Section 107 – Commercial Charter Fishing Analysis.

- Conducted economic evaluation of East Harbor Section 107 – Commercial Charter Fishing Analysis.
- Developed methodology and designed complex contingent valuation mail survey questionnaire for measuring economic impacts of a proposed lake access expansion project at Olcott Harbor, N.Y.

Pacific Ocean Division:

- Lead recreation economist
- Conducted over a dozen contingent valuation method surveys, with associated recreation navigation evaluations and technical appendices.

International Joint Commission:

- U.S. technical work group leader for the recreational navigation component of International Joint Commission's St. Lawrence River-Lake Ontario Criterion study.
- U.S. Task Group Leader for Recreational Boating and Commercial Navigation Task Groups for Phase II of the IJC Reference Study on Impacts of Fluctuating Water Levels.
- Lead both the recreation work group and commercial fishing work group of the Sociological and Economic Functional Group for the International Joint Commission's Levels Reference Study.

Education and Training:

- M.A. in Economics
- B.A. in Mathematics
- Leadership Development Program (FY08)
- Planning Associates (Class 2003)
- Advanced Recreation Economics Techniques, 40 hours, Prospect

Published Journals:

- Journal of the American Water Resources Association, Measuring the Net Economic Value of Recreational Boating As Water Levels Fluctuate, Aug 2007.

Regional & National Committees

- HarborSym Deepening Field Review Group
- National Transportation Systems Field Review Group
- National Public Survey Task Force
- National Coastal Damage Evaluation Model Development Team

Lakes and Rivers Division Regional Technical Specialist

U.S. Army Corps of Engineers
Buffalo District
CELRB-TD-DC
1776 Niagara Street
Buffalo, NY 14207
Work Phone - (716)879-4168
Work Fax - (716)879-4355
E-Mail: Michael.C.Mohr@usace.army.mil

Michael C. Mohr, P.E. Coastal Engineer

QUALIFICATIONS

Education

B.S. Civil Engineering State
University of New York at
Buffalo, 1975.

M.S. Civil Engineering (Fluid
Mechanics and Hydraulics)
University of Connecticut. 1977.

Professional Registration

Professional Engineer #060886-1
NY 1988

Professional Associations

American Society of Civil
Engineers (ASCE)



EXPERTISE

Mr. Mohr's expertise includes the hydraulic design and evaluation of all features of a Coastal Engineering project from inception to completion. Functional areas include commercial deep draft navigation harbors and channels (structure layout and design, channel sizing and evaluation), wave propagation, littoral transport, small boat harbors and complex beach (nourishment, offshore breakwaters, artificial headland breakwaters), and shoreline erosion control (nourishment, revetments, emergency shore protection) projects.

REPRESENTATIVE EXPERIENCE

May 2002 – Present, Regional Technical Specialist - Coastal Engineering (Great Lakes), Serves as Regional Technical Specialist in all Coastal Engineering matters pertaining to the Great Lakes. Maintains awareness of current practices and latest advances in coastal engineering. Recent projects include participation in numerical modeling of Western Lake Erie Basin with ERDC, report on the west coast of Florida for IWR, analysis of shoreline change at Indiana National Lakeshore for Chicago District. Completed ITRs and VEs on Coastal projects.

September 1983 – May 2002, Civil Engineer (Coastal/Geotech Team), U. S. Army Corps of Engineers Buffalo District, Served as a technical expert in Coastal Engineering design and construction. Provided guidance, mentoring and training to other Corps employees and performs duties of supervisor in his absence. By way of illustration, the differing types of projects I have been involved in follow:

Commercial Deep Draft Navigation: Worked with and wrote contract for Steven's Institute of Technology concerning fast-time modeling for channel enlargement of St. Lawrence River. Worked with WES on real-time navigation simulation of the Black River in Lorain, OH. Presently investigating several potential sites for a fast-ferry commercial truck port on Lake Ontario.

Beach Projects: Applied state of the art techniques to design an artificial headland beach, segmented shore-connected breakwater and terminal groins at Sims Park. Responsible for siting 55 offshore, segmented breakwaters and beach fill at Presque Isle, PA. Performed one-line shoreline evolution modeling using GENESIS to confirm my idea of deferring construction of the first three breakwaters. Develops the annual nourishment program and evaluates shoreline change and project effectiveness through a monitoring program for which SHOALS data and aerial photographs are analyzed using Microstation CADD and INROADS.

Shoreline Protection: Performed the complete coastal analysis (waves, runoff, erosion rates, structure design using COE programs such as ACES and CEDAS) for emergency protection using rubblemound revetments at Linwood Park, Great Sodus Lighthouse, Van Buren Point and State Route 531.

Small Boat Harbor: Designed (interior waves, depth requirements, channels & mooring basin layout, breakwaters), assessed the bypassing requirements, and completed the plans for construction of Sturgeon Point Marina, Cooley Canal Small Boat Harbor and the East Canal Basin (US Brig Niagara).

O&M Repair: Assessed the need for repair of existing harbor structures. Completed coastal design of Cleveland East Breakwater, Cleveland Dike 14 and Chicago Reach 5. Section 111: Sediment budget analysis and effect of West Harbor and Fairport Harbor structures. Member of the Regional Breakwater Assessment Team.

Aug 1987 – May, 1988, Hydraulic Engineer, Water Control Section, USAED Buffalo, As a senior hydraulic engineer, I assisted in computing weekly regulation of Lake Ontario.

Aug 1977 – Sept 1983. Hydraulic Engineer, Hydrologic Investigations Section, USAED Buffalo, As senior hydraulic engineer completed rainfall/runoff analyses, river routing, unsteady flow analysis, reservoir regulation and hydropower evaluation.

Name: Roger E. Haberly
Position: Regional Economist
Organization Buffalo District- Planning,
Programs and Project Management
Division, Planning Branch, Planning Services
Education B.A. Economics-Canisius College,
M.A. Economics- SUNY At Buffalo
Years of experience 29



Section 107 Evaluations

Have performed and been a team member on a number of Section 107 economic evaluations. Was a major team player in the following Section 107 evaluations: Cooley Canal Section 107-1995, Buffalo Inner Harbor, 2005. Was the team leader on the following section 107s; Rochester Harbor section 107-2003; Olcott Harbor Reevaluation-Section 107, 2006, Two Harbors, Minnesota, 2007. Currently involved in an Ogdensburg Harbor, New York section 107.

Analyses have involved developing surveys for dock owners, and charter fishing operators to generate willingness to pay values and charter fishing operating budgets. Analyses have developed the full range of Associated Costs needed to make the project fully operational (from parking lots, to floating docks, gasoline docks, winter storage facilities, roadways, signage, etc.).

Recent Activities.

U.S. co-lead for Commercial Navigation on a 5 year International Joint Commission Study that quantified the impacts on commercial navigation of re-regulating Lake Ontario outflows, and their impacts on commercial shipping on Lake Ontario and the St. Lawrence River (2002-2006). Was a major contributor in the development of the computer based commercial navigation impact model that calculated changes in vessel operating costs due to changes in system outflows.

Have prepared complete Operations and Maintenance Evaluations for various Buffalo District ports (Toledo Harbor -2007, Ashtabula Harbor (2009), Ohio). Used water transportation costs developed by the Buffalo District GL SAND Model (Great Lakes System Analysis of Navigation Depths). This model provides transportation costs by commodity, by origin destination pair, by dock, for a range of channel depths, for a given year of vessel transit movements. Water costs were developed for the major commodities that move through the harbors: iron ore, coal and limestone. Water transportation costs were provided by origin destination pair, by commodity. This resulted in over 90 percent of the Harbors total tonnage being included in the economic evaluation.



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JAY M. MILLER

716-879-4394

James.Miller@usace.army.mil

Position:

Biologist, Environmental Analysis Section (GS-0401-12), with USACE since August of 1999.

Experience:

NEPA Coordination: Responsible for coordinating and conducting investigations, planning, and preparing environmental reports such as Environmental Impact Statements, Environmental Assessments, Coastal Zone Management (CZM) consistency determinations, Water Quality Certification applications, Section 404 Evaluations, and other associated National Environmental Policy Act (NEPA) documents for District Operations and Maintenance (O&M), Continuing Authorities Program (CAP), Construction General (CG), General Investigation (GI), and other projects. Coordinates District projects with Federal, state, and local government representatives and officials, as well as special interest groups and the general public. Assures environmental compliance of District projects by applying knowledge of applicable Federal, State and local environmental regulations and executive orders. Undertakes coordination, development and technical evaluation of biological assessments for required consultation under the Endangered Species Act.

Biological Applications: Provides authoritative information on matters pertaining to ecology, biology, fisheries, wetlands, and coastal resources in order to resolve complex biological issues. Provides additional environmental support for District projects by conducting biological and/or ecological studies related to streams, wetlands, uplands, and coastal areas. Provides technical assistance and recommendations to project delivery teams (PDT) in the development of environmentally sensitive project plans. Performs extensive field support activities for District projects including sediment sampling and analysis, biological assessments, habitat delineations, and watershed quality assessments.

Environmental Media Sampling and Analysis: Performs extensive sample collection and analysis for all types of environmental media, particularly sediment sampling for District Operations and Maintenance (O&M) dredging projects, Great Lakes Areas of Concern (AOC), and other applicable programs, as appropriate. Responsible for planning, preparing Scopes of Work (SOW), choosing sample locations, collecting samples, performing contractor oversight, and analyzing chemical results for risk assessment, open-lake placement decisions, and contaminant determinations. Also performs various types of sampling at several different sites to include radon flux sampling, groundwater sampling, soil sampling, and air sampling.

Education:

B.S. - Environmental Studies with Biological Applications, 1998 State University of New York College of Environmental Science and Forestry (SUNY ESF)

Graduate Studies - Multidisciplinary Studies – Great Lakes Research, 1999 – Present, SUNY College at Buffalo.

Training/Certifications:

40-hour Hazardous Waste Site Worker Training (includes Confined Space Competent Person, Trenching and Excavation Competent Person, and First Aid/CPR) - September 1999 (and subsequent 8-hour refresher courses).

Wetland Identification and Delineation Certificate Program - December 2000.

Ohio Rapid Assessment Method for Wetlands Training, Ohio Environmental Protection Agency (OEPA) - April 2002.

Qualitative Habitat Evaluation Index Training, OEPA - June 2002.

Streambank Investigation, Stabilization and Design - July 2002.

Primary Headwater Habitat Evaluation Index Training, OEPA - August 2003.

U.S. Army Corps of Engineers License to Operate or Navigate Motorboats up to and including 26 feet in Length. Serial Number 25517 – October 2007 (expires October 2012).

Wetland Stream Ecology – August 2008.

James G. Neubauer, PE, CCE, PM1

Civil Engineer, Senior Cost Engineer, Cost Engineering Dx ATR Coordinator

Since August 2007 Mr. Neubauer has served as the ATR coordinator and a lead reviewer in the Cost Engineering Directory of Expertise for Civil Works located in Walla Walla District (Cost DX). He has served 29 years as a civil engineer with experience in military and civil works construction, project management and cost engineering. Mr. Neubauer is a licensed professional engineer, a certified cost engineer and a certified project manager – level 1. Since 1992, Mr. Neubauer has served as a senior lead cost engineer for Albuquerque District, Europe District and Walla Walla District in both military and civil works. His current reviews include civil works cost estimates, schedules and risk analyses. Mr. Neubauer assisted the development of the current civil works cost Engineer Regulation ER 1110-2-1302, was a main author of the civil works cost Engineering Technical Letter ETL 1110-2-573, the current Cost and Schedule Risk Analysis Guidance and the Cost ATR Guidance for the US Army Corps of Engineers. Mr. Neubauer has led many cost ATRs and numerous teams in developing or reviewing multi-billion dollar estimates for the Corps and the Department of Energy.

Philip E. Berkeley

Philip E. Berkeley is a Biologist in the Planning Branch at the USACE, Buffalo District. He received a B.S. in Biology from Springfield College in Springfield, Massachusetts and M.S. in Biology from the State University of New York (SUNY) at Buffalo. He has over 30 years Federal government experience in Corps of Engineers Planning and Project Evaluation, for navigation, flood risk management and ecosystem restoration.

Jennifer R. Janik

Realty Specialist - GS-12

US Army Corps of Engineers, Detroit District/Assigned to Buffalo Real Estate Field Office

Jennifer.R.Janik@usace.army.mil

716-879-4113

Employed as a Realty Specialist by U.S. Army Corps of Engineers since 2003. Serve as the Real Estate Specialist at the Buffalo District field office under the management the Detroit District. Manage a wide range of real estate matters, to include formulating initial assessments, real estate plans, acquisitions, outgrants, and working with the non-Federal sponsors in their acquisition of necessary Lands, Easements, Rights-of-Way, Relocations and Disposal areas (LERRDs). Have negotiated and processed several right-of-entry agreements with public and private property owners for projects under the Formally Utilized Sites Remedial Action Program (FUSRAP). Serve as a Project Delivery Team member for all Buffalo District projects. Serves as an Agency Technical Review Team member for the real estate discipline for numerous authorities.

Education

Masters of Business Administration from Medaille College, Buffalo, NY – 1999.

Affiliations

Member of the Air Force Reserves,
Member of Niagara Falls Military Affairs Council.



REPLY TO
ATTENTION OF

CEMP-POD

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
WASHINGTON, D.C. 20314-1000

APR 26 2011

MEMORANDUM FOR Commander, U.S. Army Corps of Engineers, South Atlantic Division
(ATTN: CEPOD-ET-P)

SUBJECT: Request for Independent External Peer Review (IEPR) Exclusion for the Valdez,
Alaska Navigation Improvement Study.

1. HQUSACE has reviewed the IEPR exclusion request for the Valdez, Alaska project. Based on applicable laws and policy, this project study is not subject to peer review as it does not meet any of the mandatory requirements. The project has a cost estimate of less than \$45 million; does not represent a threat to health and safety; is not controversial; and has not had a request for IEPR from the Governor of an affected State or the head of a Federal or state agency.
2. Approval of the exclusion request was based on the following information. The proposed project will provide additional mooring capacity for Valdez. The formulation of this project is not based on novel methods and does not present complex challenges for interpretation or conclusions that are likely to change prevailing practices. Precedent-setting methods or models were not used in the evaluation. The total cost is approximately \$23 million and the average annual costs are approximately \$3 million, including operation and maintenance and interest during construction. The project includes the beneficial use of dredged material at a formerly used log transfer site at Two Moon Bay.
3. Questions or concerns should be directed to Ms. Sharon Wagner, Deputy Chief, Pacific Ocean Division Regional Integration Team, at 202-761-7094.

FOR THE COMMANDER:

A handwritten signature in black ink, appearing to read "S. L. Stockton".

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