RECORD OF DECISION
NAVIGATION IMPROVEMENTS AKUTAN, ALASKA

The Akutan, Alaska, Interim Feasibility Report (IFR) and Final Environmental Impact Statement (FEIS) dated July 2004, address the need for navigation improvements at Akutan, Alaska. The community of Akutan is adjacent to the natural waterbody of Akutan Harbor, on Akutan Island in the Aleutian Islands chain. After consideration of my staff's review of the IFR and FEIS, the views of other agencies and the public, I find the plan authorized by Congress in Section 138 of the Energy and Water Development Appropriations Act, 2006 (Public Law 109-103), with minor changes after authorization which are identified in this Record, to be technically feasible, economically justified, in compliance with environmental statutes, and in the public interest. Thus, I approve the Akutan, Alaska Navigation Improvements as modified and described herein for construction.

The project authorized by Congress in Section 138 was identified in the IFR and FEIS as the "Recommended Plan" and as the "Reconfigured 12-acre, 58-Vessel Mooring Basin". This plan consisted of breakwaters, dredging, and local service facilities to accommodate 58 vessels in a 14.9 acre mooring basin. The 2.6-acres harbor entrance channel included two rubblemound breakwaters totaling 700 feet. The crest of the breakwaters had an elevation of 13 feet Mean Lower Low Water (MLLW) transitioning to 16.0 feet MLLW at the inner harbor. The foundation materials would be excavated to entrance channel depth. Under the breakwater and 50 feet from the toe, the excavation line will slope at 3 Horizontal:1 Vertical (3H:1V). Over-excavation would be backfilled with breakwater core material. The entrance channel will be dredged to an elevation of –18 feet MLLW. Turning basins and mooring basin will be dredged to elevations not to exceed –18 feet MLLW. Basin slopes would be armored with rock to minimize erosion. Disposal of dredged materials would occur in uplands and wetlands of the Central Creek watershed, or be incorporated into a marine restoration/enhancement project.

Several minor design changes have been incorporated since the project was authorized. These changes are in response to resource agency comments, and value engineering changes. To avoid and minimize impacts to Rust Creek the entire harbor is shifted 235 feet south. Modifications to Rust Creek have been eliminated from the project design. The project set back from Rust Creek is changed from 100 feet of reconstructed channel to leave 65 feet of existing undisturbed channel. The basin is rotated 10 degrees to provide better wave protection and dredged material stockpile footprint is reconfigured to avoid the adjacent creek. The entrance channel has been reduced to 100 feet wide and an area of about 1.3-acre. The total length of breakwaters is reduced from 700 feet to 600 feet and breakwater slopes are changed from 2H:1V to 1.5H:1V. Moorage basin side slopes are changed to 3H:1V throughout. The 8-acre staging area and a 20.5-acre dredged material stockpile with approximately 843,000 cubic yards of material dredged during project construction have been repositioned from the Central Creek location described in the IFR and FEIS. The stockpile area will later become staging and support lands. Moorage basin and entrance channel depths, dredging volumes, dredged material footprint area, and total harbor project footprint area remain the same as noted in the feasibility report and the Chief of Engineers Report. The non-Federal project sponsor will construct Local Service Facilities consisting of mooring facilities and other facilities necessary for the safe and efficient operation of the harbor.

The economic justifications and technical engineering aspects of this project were fully considered. Likewise, full consideration of cultural resources, wetlands, sensitive habitats for sea birds, marine mammals, anadromous fish spawning and rearing, and water quality were each critical to the final design of the project. All practical means to avoid and minimize environmental harm and accomplish the project objectives have been adopted. Principal components of mitigation are:

- **Harbor Site.** The harbor is sited to minimize impacts on wetlands and stream habitats and minimize impacts on habitats used by sea birds, marine mammals, and other resources of particular concern. Shifting the harbor site away from Rust Creek minimizes affects to anadromous fish habitat in that stream. The siting modification was fully coordinated with interested agencies.

- **Harbor Design and Construction.** The harbor 14.9-acre basin is designed with rounded interior corners and an entrance channel as narrow as practical for safe navigation to achieve water quality objectives developed by the State of Alaska.

- **Harbor Development.** The non-Federal sponsor will, in concert with state and Federal agencies, develop an Akutan Harbor Development Plan. The non-Federal sponsor will acquire necessary real estate rights and establish a 41.7-acre conservation easement along Rust and North Creeks to protect anadromous fish spawning and rearing habitat.

- **Harbor Operation.** The non-Federal sponsor will prepare a harbor management plan containing each of the elements defined in section 2.4.2 of the final EIS.

- **Protection of Threatened/Endangered Species.** Measures to protect threatened/endangered species include construction timing; maintaining a visual barrier between the harbor and eider habitat; monitoring bird strikes in the harbor, monitoring Steller's eider habitat use after construction; developing and implementing plans and cooperative agreements for harbor management and spill responses, and cleaning up of material hazardous to wildlife on adjacent beaches. Project activities will be conducted in accordance with the Terms and Conditions contained in the Biological Opinion dated September 2, 2003 and amended May 30, 2007.

- **Monitoring of Harbor Effects on Salinity.** Salinity in North Creek will be sampled before and after construction to determine whether the harbor causes saltwater intrusion into salmon habitat in that stream. If initial sampling indicates that salinity is altered after construction more extensive monitoring will be conducted and adaptive measures may be recommended.

Alternatives considered are presented in the IFR and FEIS. These alternatives included a broad range of siting and construction options in addition to the No Action alternative. Non-structural alternatives would not meet project objectives. Sites at four locations other than at the head of Akutan Harbor were evaluated and determined infeasible because water depths and wave climate would make construction economically infeasible. The selected location at the head of Akutan Harbor was the only site that is economically feasible to develop.

A range of locations, configurations, and sizes for a harbor at the head of Akutan Harbor were evaluated. Economic considerations related to costs of construction in the deep water and soft near-shore sediments further narrowed the range of viable alternatives to configurations that would be dredged into lands adjacent to the coast, with only the entrance channel and wave protection extending offshore.

Final siting, design, and sizing were based largely on environmental considerations. Three harbor sizes were evaluated and found to be economically feasible. The largest harbor size (20 acres) generated the most economic benefits, but would cause the most adverse environmental impacts. The smallest harbor (12 acres) option presented in the draft EIS was selected, further refined, enlarged by almost 3 acres to potentially improve water quality, and presented as the recommended plan in the IFR and FEIS. All of the alternatives are discussed in the IFR and FEIS. The plan selected for construction by the Corps of Engineers and the Aleutians East Borough is the "Reconfigured 12-acre, 58-Vessel Mooring Basin plan," with minor changes made after authorization as noted in this Record.

The project has been extensively coordinated with the public and resource agencies to fully address concerns and issues. The project is in compliance with all environmental requirements, including the Endangered Species Act, the National Historic Preservation Act, the Clean Air Act, the Clean Water Act, Fish and Wildlife Coordination Act, the Magnuson-Stevens Fishery Conservation, the Marine Mammal Protection Act, and Management Act, and the Coastal Zone Management Act. There are no significant unresolved issues.

Technical and economic criteria used in the formulation of alternative plans were those specified in the Water Resources Council's *Principles and Guidelines*. All applicable laws, Executive Orders, regulations, and local government plans were considered in evaluating the alternatives. The authorized project was the environmentally preferred alternative and post authorization changes have further enhanced the environmental acceptability of this alternative. This is also the locally preferred alternative. This alternative incorporates features to avoid, minimize, or mitigate adverse environmental and social effects to the maximum extent practicable. Based on review of these evaluations, I find the navigation benefits gained by construction of the authorized plan, as modified, far outweigh any adverse effects. Thus, I approve the navigation improvements at Akutan, Alaska for construction. This Record of Decision completes the National Environmental Policy Act process for this Federal action.

31 Jan 08
Date

Don T. Riley
Major General, USA
Director of Civil Works