# DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS

# COMPLETE STATEMENT OF

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## **BEFORE THE**

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

SUBCOMMITTEE ON EMERGENCY MANAGEMENT, INTERGOVERNMENTAL RELATIONS AND THE DISTRICT OF COLUMBIA

UNITED STATES SENATE

ON

Vulnerable Communities in Alaska: Ensuring a Whole of Community Response to Extreme Weather

#### INTRODUCTION

Chairman Begich and distinguished members of the subcommittee, I am Colonel Christopher D. Lestochi, Commander of U.S. Army Corps of Engineers (Corps) Alaska District. Thank you for the opportunity to appear before you today to discuss coastal storm damage and erosion issues in Alaska.

I will provide you with a brief overview of the Alaska District, a review of Corps erosion authorities and programs, and highlights of the challenges regarding coastal erosion affecting Alaskan communities.

#### PACIFIC OCEAN DIVISION

The Pacific Ocean Division is headquartered in Honolulu, Hawaii with district offices located in Hawaii, Alaska, Japan, and South Korea. All of our districts have important military missions. In addition, the Honolulu and Alaska Districts have a Civil Works mission that provides for water resources development and restoration, primarily in the areas of commercial navigation, flood and coastal storm damage reduction risks, and ecosystem restoration. It is through our Alaska District's Civil Works program that we are involved in addressing erosion problems that affect Alaskan communities.

#### CORPS OF ENGINEERS AUTHORITIES

The Corps has several Civil Works authorities to address flooding and erosion problems. They include specific congressional authorizations for the programs; the Continuing Authorities Program, the Planning Assistance to States Program, the Tribal Partnership Program, the Flood Control and Coastal Emergencies authority, and Alaska-specific authorizations such as Section 116 (P.L. 111-85) of the 2010 Energy and Water Development and Related Agencies Appropriations Act relating to Alaska flood, erosion and ice damage. Each of these authorities has different implementing rules and limitations.

In addressing erosion problems, the Corps works closely with local, state, federal, tribal, and private interests to understand and incorporate the concerns represented by these various stakeholders. The Corps weighs the concerns, balances the needs, and examines the risks, costs and benefits to determine federal interest, and to make technically, environmentally, socially, and economically sound risk-informed decisions. I would like to outline each of the authorities related to coastal erosion and what we have accomplished under them.

## Specifically Authorized Studies and Projects

Specifically authorized studies may be initiated as provided by the Rivers and Harbors in Alaska Study Resolution, adopted by the U.S. House of Representatives Committee on Public Works on December 2, 1970. Construction of a project studied under this authority does, however, require specific congressional construction authorization. The

non-federal cost sharing requirements are 50 percent for feasibility studies, 25 percent for preconstruction engineering and design, and 35 percent for construction of erosion projects.

The Corps has completed construction of three congressionally-authorized projects at, Galena, Homer Spit, and Talkeetna. Additional authorized projects involve construction at Bethel and Dillingham, which are not yet completed.

## Continuing Authorities Program

This program authorizes the Corps to plan, design, and construct erosion projects without additional and specific congressional authorization. The Continuing Authorities Program is funded nationwide and is subject to specific limits on allowable federal expenditures at both the program and project level. The applicable program authorities that address erosion include the following:

- Section 14 of the Flood Control Act of 1946, as amended. This authorizes emergency stream bank and shoreline erosion protection for public facilities subject to a federal limit of \$1,500,000 per project and \$15,000,000 nationwide per year. The nonfederal cost sharing requirement is 35 percent. The Alaska District has constructed five projects under this authority at Shishmaref, Emmonak, Deering, Metlakatla, and Bethel; and is working on two on-going studies at Saint Michaels and Karluk.
- Section 103 of the River and Harbors Act of 1962, as amended. This authorizes shore protection for publicly owned property from hurricane and storm damage, subject to a federal limit of \$5,000,000 per project and \$30,000,000 nationwide per year. The non-federal cost sharing requirement is 35 percent. The Corps has not constructed any projects under this authority in Alaska and currently has two on-going studies at Kwigillingok and Golovin.

### Planning Assistance to States

Section 22 of the Water Resources Development Act (WRDA) 1974 (PL 93-251) allows the Corps to assist states in the preparation of comprehensive plans for the development, utilization, and conservation of water and related resources of drainage basins. This may include consideration of erosion problems. There is no construction authority associated with this program. Annual federal funding is limited to \$2,000,000 per state or tribe. The non-federal cost sharing requirement is 50 percent. The Planning Assistance to States program has been used to provide relocation planning assistance to the villages of Kivalina and Newtok.

## Other Corps Authorities

• Technical Assistance – Section 55 of WRDA 1974 (PL 93-251) allows the Secretary of the Army, acting through the Chief of Engineers, to provide technical and engineering assistance to non-federal public interests in developing structural and non-

structural methods of preventing damages attributable to shore and stream bank erosion. Section 55 provides no construction authority. Non-federal cost sharing is not required. The Corps is currently working on Kenai River Bluff under this authority.

- Tribal Partnership Program Section 203, WRDA 2000 (PL 106-541) authorizes feasibility studies of water resources projects that will "substantially benefit Indian tribes and that are located primarily within Indian country or in proximity to Alaska Native villages." Section 203 has a \$5,000,000 annual program limit and allows no more than \$1,000,000 for one Indian tribe. The program provides no construction authority. The non-federal cost sharing requirement is 50 percent for feasibility studies. Under this authority and at the direction of Congress, the Corps has conducted several studies including the Alaska Baseline Erosion Study, Alaska Coastal Erosion Data Collection, and provided technical assistance for the village of Newtok relocation effort.
- Flood Control and Coastal Emergencies Under the Flood Control and Coastal Emergencies Advance Measures (P.L. 84-99), assistance may be provided to prevent loss of life and catastrophic property damage when there is an imminent threat of unusual flooding. Under this authority, the Corps provided assistance to Kivalina during the fall storms of 2006 and more recently, for the August and September 2007 storms.

## Alaska Specific Coastal Erosion Authorities

Section 117 (now repealed) of the Fiscal Year 2005 Consolidated Appropriations Act (P.L. 108-447) authorized the Secretary of the Army "to carry out, at full Federal expense, structural and non-structural projects for storm damage prevention and reduction, coastal erosion, and ice and glacial damage in Alaska, including relocation of affected communities and construction of replacement facilities." The Corps has utilized this authority. At Kivalina, 2,000 feet of shoreline protection was installed in 2008-2009. At Shishmaref, 1,375 feet of shoreline protection was installed in 2007-2009.

Section 117 was repealed by Section 117 of Division C of the Omnibus Appropriations Act of 2009 (P.L. 111-8).

A new authority, Section 116 of the Energy and Water Development and Related Agencies Appropriations Act, 2010 (P.L. 111-85) provides a similar authority, however; Section 116 requires cost sharing of up to 35 percent non-federal whereas Section 117 had no cost sharing requirement. The only Section 116 construction project undertaken to date is at Unalakleet, under the Alaska Coastal Erosion program, where the existing 671 feet of revetment is currently being extended to 1,500 feet. Appropriations under the heading of the Alaska Coastal Erosion program have been provided to fund projects using the Section 116 authority.

#### **CHALLENGES**

As noted in the June 2004 Government Accountability Office report on Alaska Native villages affected by flooding and erosion, it is often difficult for the majority of Alaska's small and remote communities to finance and meet the multiple criteria required for federal participation in implementing a solution. The remoteness of many of the areas, severe weather conditions, and the subsistence economies of the communities are major contributing factors. Perhaps the biggest challenges are the costs and risks associated with implementing erosion control solutions in these often remote communities. These include high mobilization costs, the limited construction season, and the difficulty of transporting and obtaining adequate rock and other materials.

The March 2009 Alaska Baseline Erosion Assessment identified 178 communities that reported erosion problems, 26 of which were deemed to warrant immediate attention. All 26 were contacted regarding ways the Corps could assist the communities. Six currently have active projects with the Corps. The remainder either did not request assistance, their projects were found to not meet the requirements of existing Corps programs, or the non federal sponsor could not meet the cost share requirement.

The risks associated with the coastal erosion challenges in Alaska are complex. Risk considerations include determining the acceptable level of protection from erosion and flooding, deciding whether to relocate or remain, and consideration of the economic, social, cultural, and environmental impacts.

#### CONCLUSION

The Corps has the technical expertise to address solutions based on a systems approach, and the capability to communicate and assist with risk informed decision making associated with the complex storm damage and erosion problems in Alaska's coastal villages. We are proud to work in collaboration with the many federal, state, local, and tribal entities to assist in recommending and implementing solutions for the coastal erosion challenges faced by the Alaskan communities.

Mr. Chairman and subcommittee members, this concludes my statement. Again, I appreciate the opportunity to testify today and look forward to answering any questions you may have.