

Highlights of GAO-04-142, a report to the Senate and House Committees on Appropriations

## Why GAO Did This Study

Approximately 6,600 miles of Alaska's coastline and many of the low-lying areas along the state's rivers are subject to severe flooding and erosion. Most of Alaska's Native villages are located on the coast or on riverbanks. In addition to the many federal and Alaska state agencies that respond to flooding and erosion, Congress established the Denali Commission in 1998 to, among other things, provide economic development services and to meet infrastructure needs in rural Alaska communities.

Congress directed GAO to study Alaska Native villages affected by flooding and erosion and to 1) determine the extent to which these villages are affected, 2) identify federal and state flooding and erosion programs, 3) determine the current status of efforts to respond to flooding and erosion in nine villages, and 4) identify alternatives that Congress may wish to consider when providing assistance for flooding and erosion.

### **What GAO Recommends**

GAO presents to Congress a matter for consideration that directs federal agencies and the Denali Commission to assess the feasibility of alternatives for responding to flooding and erosion. In addition, GAO recommends that the Denali Commission adopt a policy to guide future infrastructure investments in Alaska Native villages affected by flooding and erosion.

www.gao.gov/cgi-bin/getrpt?GAO-04-142.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Anu Mittal at (202) 512-3841 or mittala@gao.gov.

## ALASKA NATIVE VILLAGES

# Most Are Affected by Flooding and Erosion, but Few Qualify for Federal Assistance

#### What GAO Found

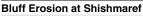
Flooding and erosion affects 184 out of 213, or 86 percent, of Alaska Native villages to some extent. While many of the problems are long-standing, various studies indicate that coastal villages are becoming more susceptible to flooding and erosion due in part to rising temperatures.

The Corps of Engineers and the Natural Resources Conservation Service administer key programs for constructing flooding and erosion control projects. However, small and remote Alaska Native villages often fail to qualify for assistance under these programs—largely because of agency requirements that the expected costs of the project not exceed its benefits. Even villages that do meet the cost/benefit criteria may still not receive assistance if they cannot meet the cost-share requirement for the project.

Of the nine villages we were directed to review, four—Kivalina, Koyukuk, Newtok, and Shishmaref—are in imminent danger from flooding and erosion and are planning to relocate, while the remaining five are in various stages of responding to these problems. Costs for relocating are expected to be high. For example, the cost estimates for relocating Kivalina range from \$100 million to over \$400 million. Relocation is a daunting process that may take several years to accomplish. During that process, federal agencies must make wise investment decisions, yet GAO found instances where federal agencies invested in infrastructure at the villages' existing sites without knowledge of their plans to relocate.

GAO, federal and state officials, and village representatives identified some alternatives that could increase service delivery for Alaska Native villages, although many important factors must first be considered:

- Expand the role of the Denali Commission.
- Direct federal agencies to consider social and environmental factors in their cost/benefit analyses.
- Waive the federal cost-sharing requirement for these projects.
- Authorize the "bundling" of funds from various federal agencies.





Source: GAO.