

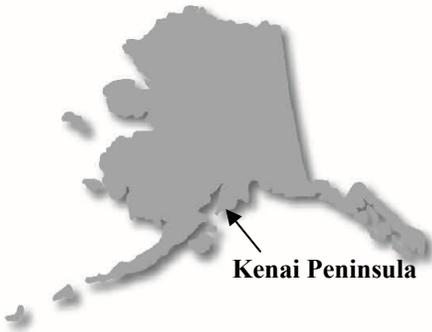
Best practices

Disaster Mitigation Working in Alaska

FEMA



Alaska



Kenai Peninsula

Kenai Peninsula Borough, Alaska -

The Kasilof River gains strength as it approaches its destination at Cook Inlet. This is a very busy and popular river for salmon and trout fishing, but it periodically causes trouble by rising two to four feet above its banks. In recent decades the Kasilof has undermined a boat launch and scoured out pedestrian foot trails. The 2002 flood disaster brought the complete destruction of the river bank portion of River Road.

The need to relocate that section of roadway was evident after Borough officials studied possible alternatives. Abandoning it entirely would leave nine homeowners without access and ten other undeveloped lots cut off. Repairing the damage while providing erosion protection and the required fish friendly habitat along nearly 2,000 feet of riverbank would be prohibitively expensive.

Even if erosion control measures such as placement of rock or root wads were feasible, future floods would almost certainly bring additional damage. The existing road was not in a dedicated right of way, so widening after each erosion event would encroach onto private property.

Kasilof River Road Relocation



Fortunately, a better route through upland terrain with a relatively flat topography was available. Another happy circumstance was that the new roadway could be constructed along a public easement (section-line) that was owned by the State of Alaska.

All of the stars were in alignment! But what would it take to complete a safe, durable, Kenai Peninsula Borough certified and maintained roadway along this conveniently located public easement? Here were the steps:

- **Plan the project and secure funding:**

The Kenai Peninsula Borough worked with the Federal Emergency Management Agency (FEMA) Public Assistance Division, and the Alaska Division of Homeland Security and Emergency Management to plan, estimate the cost (approximately \$187,500 or about \$54 per linear

foot), and fund the project through the FEMA Hazard Mitigation Grant Program;

- **Develop engineering proposals**
- **Select engineering consultant**
- **Develop bid documents**
- **Bid the project**
- **Award the contract**
- **Track administrative expenses**
- **Construction of the project:**

The last step is construction of the project, which involves surveying, clearing and grubbing the site, removing organic material under the proposed road prism, excavating where needed, laying 36' wide geotextile fabric over the silty subgrade, installing culverts in strategic locations, placing and compacting 36" of gravelly fill and abandoning, obliterating and seeding the old roadway. **Go fishing!**