



FEMA

Best practices

Disaster Mitigation Working in Alaska

Living Simply:

Facing Challenges in Rural Alaska



Stevens
Village

The native village of Stevens is located on the north bank of the Yukon River, 90 miles north of Fairbanks. Isolated by the lack of roads, the village can be reached easily only by plane or boat. The population consists mostly of Athabascan Natives, along with a small number of non-natives that have chosen to embrace the subsistence-based life the villagers pursue.



Photo By Christopher Smith FEMA

Andy Bratrud stands in front of the raft he constructed to save his vehicles and dogs from the floodwaters.

STEVENS VILLAGE, ALASKA - Andy Bratrud, a Minnesota native, has lived on the Yukon River for the past nine years. Three of those years have been spent in Stevens Village, and one year ago, he moved into the home he currently occupies with his wife, Barbara. The traditional log cabin originally sat very close to the bank of the river, but being familiar with the hazards posed by the Yukon, especially during the turbulent period of Spring ice thaw and break-up, Bratrud elected to move the house.

“We were seeing about four feet of bank erosion every year,” said Bratrud. “We didn’t know if it was going to be this year or the next, but it was definitely going to go in (to the river). We pulled it back

one cabin length the first year, and then another cabin length this past Spring.”

The decision to move the cabin a second time proved a wise one. During the last week of April, 2009, the ice on the Yukon River began to break-up and the river started flowing. Unusually heavy snowfall in the previous winter, higher-than-normal temperatures as Spring approached, and ice-jams at several bends in the river combined to cause disastrous flooding.

The City of Eagle and Eagle Village, approximately 386 miles upriver from Stevens Village, were the communities first and hardest hit by flood waters as well as by huge chunks of ice that were forced out of the river. The water and ice

devastated the Eagle communities. As the river ice continued to break and the flow increased, the flood levels moved downriver.

After several upstream communities had been impacted by the high water and ice, the Stevens Village council met to discuss the situation. The Council informed the villagers to expect hazardous conditions, and a general evacuation was declared. Many of the families departed the village for the safety of Fairbanks. The Brattruds and a number of other residents decided to stay behind to do what they could to prepare.

“They put all the vehicles up on the airstrip, because that was the highest point in the village,” said Brattrud. “I could have gotten my four-wheeler up there, but not my snowmobile, so instead I decided to build a raft in my back yard.”

The Brattrud’s cabin lies downriver from the village, and can only be conveniently reached by boat during the Summer and by dog-sled or snowmobile during the

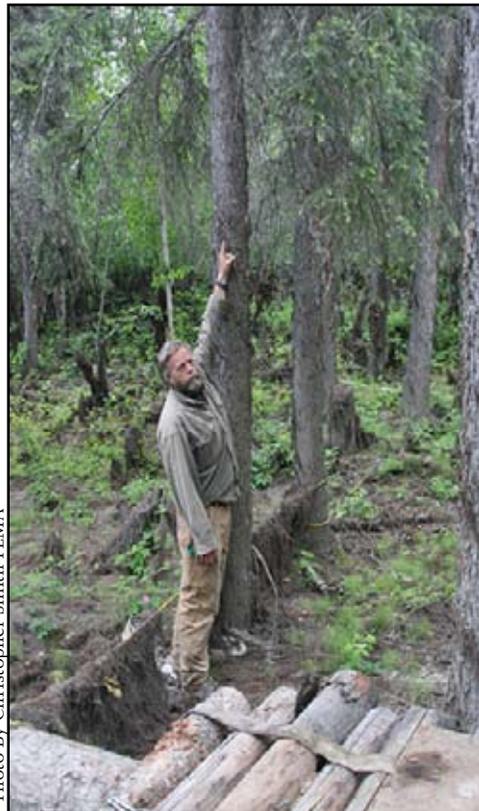


Photo By Christopher Smith FEMA

Floodwater reached heights of 8 feet on the Brattrud’s Property

Winter. It also happens to sit at a lower elevation than other homes in the area.

Over the next ten hours, Brattrud constructed a raft out of materials gathered from around his home. Calling on his logging background, he began by felling two trees in his back yard to use as the base for the raft. In addition, the roller logs once used to move the cabin were utilized for additional bracing. He then dismantled one of his storage huts, or caches, to provide logs for the raft’s structure. To tie it all together, Brattrud used an old fire hose he had saved from years before and also fastened the raft with several 12-inch nails he found, hammering them in at crucial points. Finally, several 20-foot long boards were nailed down to provide a deck. The only money spent on the raft was for some rope for additional strength and several boxes of nails. The completed raft was 14-feet wide and 20-feet long. To secure it in place, he tied it off to several surrounding trees.

By now, running out of time, Brattrud loaded his four-wheeler and snowmobile onto the raft, followed by his entire team of 11 dogs, as well as a litter of pups. Though Brattrud does not race his dogs, they are all from champion-team stock, and vital for the Brattrud’s existence in Stevens Village.

The Brattrud’s final chore was making sure their home was safe. “They were saying we were going to get hit pretty hard,” said Brattrud. “I didn’t want to take any chances of losing the cabin, so I tied it off not once, but in four places, one on each corner. And it worked. It’s still sitting there.”

Brattrud used two high-test nylon straps and two lengths of chain to tie off the cabin corners to four large trees that surround the house. Even as the Brattruds completed the last of their preparations, the water and ice had begun to top the river banks. They were left with no choice but to get aboard their supply-laden canoe and paddle out through treacherous waters.

“Out here, you have to make do with what you’ve got,” said Brattrud. “If you don’t have something you need, you make it out of something else. You have to do it all with little or nothing.”

After remaining in the village center overnight, the Brattruds returned to their home the next day to check on their property and to feed the dogs. The cabin had taken on water, but securing it had been the right thing to do, as there were indications that the structure had been lifted by the floodwater. Once the waters had receded, Brattrud discovered that a 50-gallon barrel had become wedged under the cabin. In total, Brattrud estimated that the water depth reached eight feet in his yard.

By taking these emergency precautions, Brattrud not only likely saved his home from destruction, but also avoided the loss of his vehicles and dogs. And all for an investment of a day’s labor and less than \$50 in supplies.

Are you and your community ready for the next flood?

Do you have a plan to protect people, valuable property, and the environment?

Do you know what to do before, during, and after a disaster?

Make a copy of the very useful “2009 Spring Flood Breakup Guide”, available on this website: www.ak.prepared.com (Alaska Division of Homeland Security and Emergency Management)

Another link to learn about getting ready: www.fema.gov (Federal Emergency Management Agency)