

Alaska Fish-Friendly Culverts Hold Tight Through 100 year flood

Southcentral Alaska – This past September, residents and visitors experienced heavy rains, strong winds, and widespread flooding. Many roads with undersized culverts or near rivers were overtopped by flood waters, resulting in road closures, erosion of road material, culvert damage, and at least five culverts/bridges becoming overwhelmed and flushed downstream.

In contrast, the 81 road culverts that had been fitted with larger, channel-spanning structures over the past decade survived the flood with flying colors. These enhancements are the result of investments and leveraging of U.S. Fish and Wildlife Service funding and staff time into partnerships and projects aimed at improving fish passage and ultimately salmon production. Preliminary post-flood field evaluations indicate that roads would have been over-topped or potentially compromised had the original, smaller culverts still been in place.

This recent flood event showed that road-stream crossing structures designed to let juvenile salmon move unimpeded among important rearing habitats are also immensely valuable from a road maintenance and public safety perspective. “The fish passage culverts definitely lowered the potential for failure on many roads during these last floods” said Jim Jenson, the Mat-Su Borough’s Director of Operations and Maintenance.

Approximately sixty-five percent of inventoried culverts in the Mat-Su Valley still present partial or total barriers for fish seeking upstream and/or downstream passage. Replacement with fish-friendly culverts will help keep fish habitat and communities connected, no matter what the weather!

Learn more about USFWS's Fish Passage Program at work in Alaska:

<http://alaska.fws.gov/fisheries/restoration/passage.htm>



Post-flood: the Mat-Su Borough and USFWS upgraded a 5 foot round culvert on Colter Creek with this fish-friendly 14 foot arch following 2006 floods. Fish-friendly culverts have water depths, velocities, and channel characteristics that mimic the natural stream. K.Mueller / USFWS



Post-flood: an undersized culvert on Nurses Creek sustained damage both its inlet and outlet, and caused flood waters to overtop the road. K.Mueller / USFWS