



PRESS RELEASE

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MORE INFORMATION:

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HEAT WAVE HITS COOK INLET SALMON STREAMS

Climate Crisis Sends Stream Temperatures Off the Charts

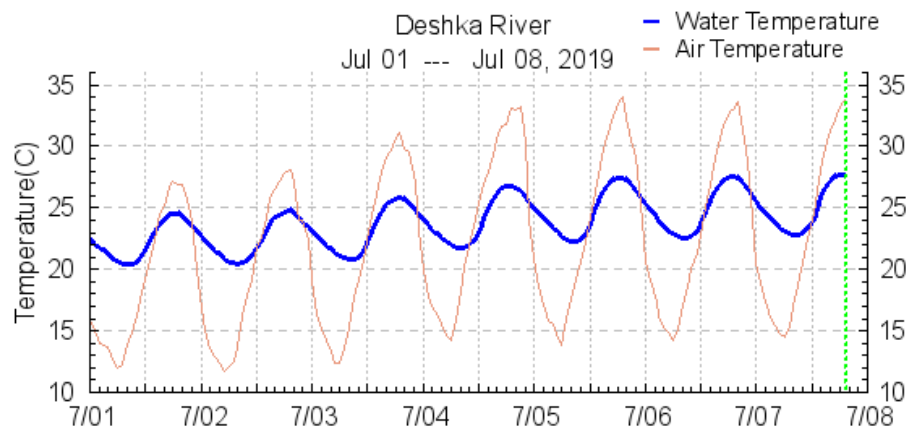
HOMER, AK— As Alaskans suffer through the smoke, haze and danger of a record-breaking heat wave, Alaska's salmon are suffering too. On July 7th, stream temperatures topped 81.7 °F (27.6 °C) in the Deshka River, a major salmon stream on the west side of Cook Inlet in the Mat Su Valley.

"We've been tracking stream temperatures in non-glacial systems across the Cook Inlet watershed since 2002," said Sue Mauger, Cook Inletkeeper's Science Director. "But this is a first – we've never seen stream temperatures above 76 degrees Fahrenheit."

The Deshka River drains extensive lowlands on the west side of the Susitna Valley and generally produces the largest salmon runs in Upper Cook Inlet. The Deshka River has the highest Chinook salmon escapement goal (13,000- 28,000 spawners) among northern Cook Inlet streams and produces over 20% of Chinook salmon escapement for the Susitna River. The Deshka Chinook population also contributes to the subsistence resources for the residents of Tyonek on the west side of Cook Inlet.

Based on data from the Alaska Department of Fish and Game, only 13 Chinook salmon passed the [Deshka weir](#) from July 1 - 9. During upriver migration, high river temperatures are known to block migratory corridors and cause thermal stress or mortality.

"When water temperatures get into the low 70s, we see salmon holding in the lower river, waiting for cooler nighttime temperatures or for rain to help cool the river," Mauger said. "For the last nine days, daytime water temperatures have soared and nighttime temperatures have not dropped much below 70 degrees and we've had no rain. On the Deshka River – one of the most important salmon streams in southcentral Alaska – with temperatures above 80 °F, we're seeing not just stressful temperatures for salmon, but lethal temperatures."



Cook Inletkeeper has installed [real-time temperature sensors](#) in streams across Cook Inlet to track current conditions and to provide in-season, online information (like the graph above) for local fishers, weir operators and fisheries managers to increase our understanding about the relationship between fish movement and water temperature.

Not every stream is as warm as the Deshka. The Anchor River on the lower Kenai Peninsula saw its highest recorded stream temperatures this past week – hitting 73 °F (22.8 °C), but Chinook salmon continue to move upstream and the lower escapement goal of 3,800 has been met.

Increasing stream temperatures associated with climate change are taking Alaska’s salmon into uncharted thermal conditions.

“We know rising temperatures have already taken a toll on Lower 48 salmon. In Alaska, we have a lot to learn about how tolerant our salmon are and how effective they might be in finding patches of cold-water to ride out warm spells,” said Mauger.

Cook Inletkeeper is in the middle of a 5-year effort to map the variability of temperatures within the Deshka River with over 60 monitoring sites. And this summer, the U.S. Fish and Wildlife Service and the Alaska Department of Fish and Game have started to assess juvenile salmon distribution in relation to temperature patterns.

“If we can identify where colder water persists – known as “cold water refugia” - we can implement targeted conservation actions to protect these key habitats. It’s one of the few concrete steps we can take to build resilience in our salmon streams as our climate rapidly changes,” said Mauger.

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Cook Inletkeeper is a community-based nonprofit organization that combines advocacy, education and science to protect Alaska’s Cook Inlet watershed and the life it sustains.