



U.S. Fish & Wildlife Service

# Alaska Fisheries Program

## Conserving America's Fisheries

Linking marine, freshwater, and terrestrial food webs in Alaska and beyond, Alaska's fish form the foundation of subsistence lifestyles and support recreational and commercial fisheries that benefit people around the world and are worth billions of dollars annually to the State's economy.

### Threats to Alaska's Fisheries

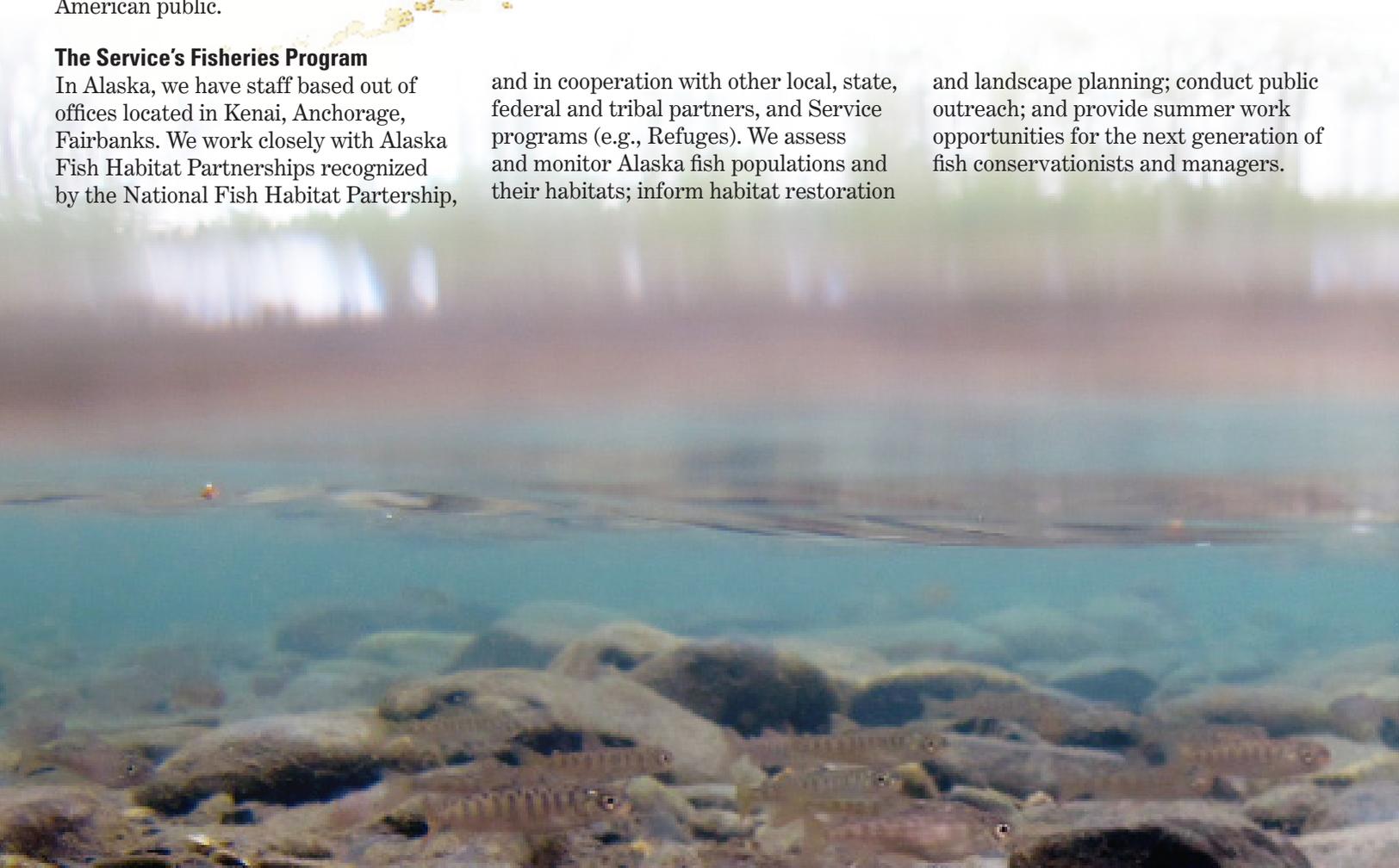
Alaska is subject to the stressors that have resulted in population declines elsewhere in the world. Up-to-date and accurate information about Alaska's fish populations, and their habitat needs, is needed to make informed management decisions and ensure population stay resilient and continue to benefit the American public.

### The Service's Fisheries Program

In Alaska, we have staff based out of offices located in Kenai, Anchorage, Fairbanks. We work closely with Alaska Fish Habitat Partnerships recognized by the National Fish Habitat Partnership,

and in cooperation with other local, state, federal and tribal partners, and Service programs (e.g., Refuges). We assess and monitor Alaska fish populations and their habitats; inform habitat restoration

and landscape planning; conduct public outreach; and provide summer work opportunities for the next generation of fish conservationists and managers.



Alaska's vastness poses unique logistical challenges for assessing and monitoring fish and the habitat they use: there is currently no status and trends information for over 70% of the fish species of management concern to the Service in Alaska. Effective fisheries management and habitat conservation actions rely on adequate baseline data and long-term habitat and population monitoring conducted in strategic locations.



*By monitoring migrating fish passing through weirs (top) with video technology, we reduce costs, minimize disturbance to fish, and increase the accuracy of counts.*

## Fisheries Management

**Data needs:** estimates of fishing effort and harvest ♦ stock of origin determination for fish harvested in mixed-stock fisheries ♦ number, composition, distribution, and condition of adult spawners ♦ assessment of non-native invasive species that may affect fish production.

**Data uses:** subsistence fisheries management ♦ fulfilling treaty obligations ♦ protecting population diversity ♦ informing harvest allocations ♦ responding to invasive species introductions and disease outbreaks.

**Techniques we use:** harvest surveys ♦ tissue sampling for genetic assessments ♦ obtaining otoliths for age determination ♦ tracking fish with weirs, video monitoring, hydroacoustics, and tagging studies ♦ monitoring potential vectors for invasive species introductions and spread.



*Habitat assessments, coupled with juvenile fish sampling (above), help our biologists understand what habitats are important for different life stages of salmon, whitefish, and other native fishes.*

## Habitat Conservation

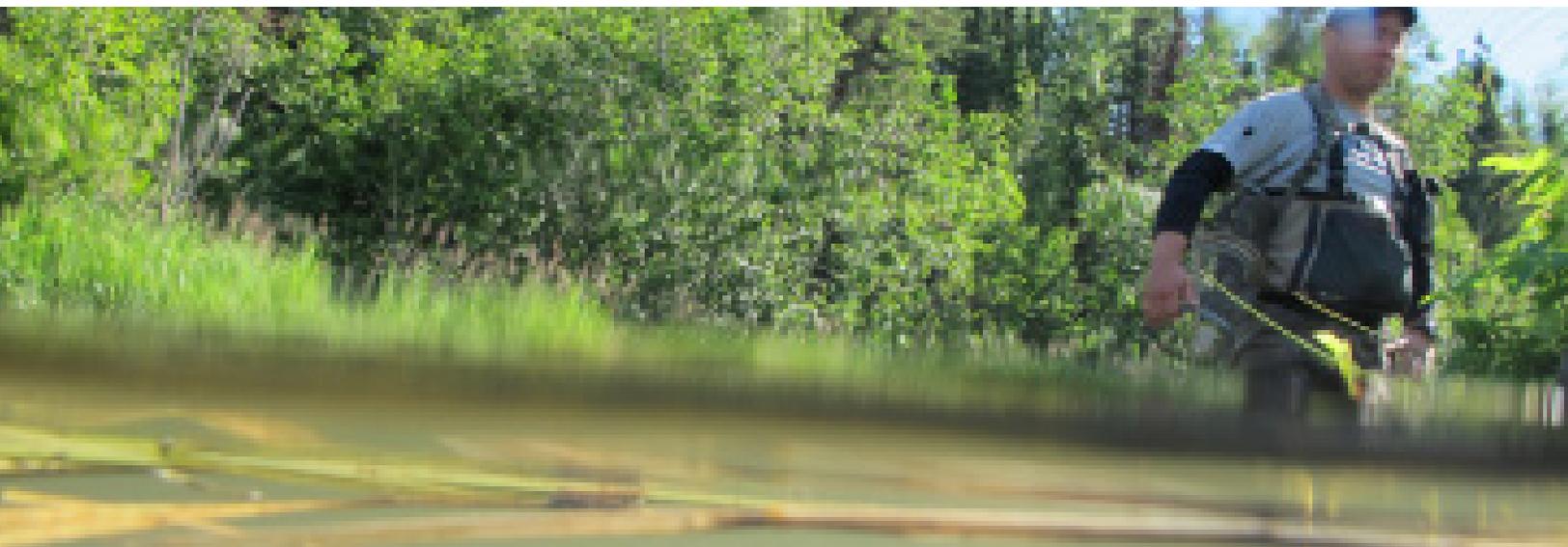
**Data needs:** distribution and habitat use by adult and juvenile fish.

**Data uses:** increasing statutory protection by adding to the State of Alaska Anadromous Waters Catalog ♦ prioritizing and evaluating habitat restoration activities ♦ predicting the spread of invasive species ♦ informing the development and issuing of permits ♦ monitoring biological response to climate change.

**Techniques we use:** weirs ♦ juvenile fish surveys via electrofishing and trapping ♦ assessment of fish movement and distribution with tagging studies ♦ assessment of physical habitat features ♦ habitat modeling.



*Juvenile coho outfitted with Passive Integrated Transponder (PIT) tags are being tracked in areas with increasing human development to determine movement patterns. Antennas spanning the stream channel detect tagged fish as they swim by (above). This study informs the prioritization of fish passage restoration projects.*



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