# Kvichak Watershed Subsistence Salmon Fishery an ethnographic study

How families in Iliamna, Newhalen, Nondalton, and Port Alsworth of Bristol Bay's Kvichak District make decisions about subsistence fishing, such as when to fish, where to fish, who to fish with, and how much to harvest, in response to changing sociocultural, economic, and environmental circumstances.



Theodore M. Krieg, and Jory Stariwat, Alaska Department of Fish and Game





Karen Stickman, Michelle Ravenmoon, and Jessica Hay, U.S. Department of the Interior National Park Service

# Bristol Bay Native Association

### Methods

Research methods included:

- Participant observation study team members visited fish camps and helped to harvest and process salmon.
- Key respondent interviews we interviewed community residents about fishing methods, harvest trends, and changing environmental and economic conditions.
- Mapping we produced maps of general fishing locations and fish camp sites.
- Systematic household surveys we conducted two rounds of surveys about salmon harvest information.
- Case study families one family in each study community kept systematic records during one year of subsistence activities; records included photographs, journals, and interviews.
- Findings

Key findings included:

■ The subsistence salmon fishery is vital to the well-being of the local communities. It provides large quantities of healthful food, brings families together during harvesting and processing, provides context for sharing and learning, and nourishes cultural and spiritual connections to the natural environment.

- Families' decisions about subsistence fishing are shaped by many factors, including fish run timing and abundance, weather, access to alternative resources, costs, wage employment, available labor, personal circumstances, and commitments to a traditional way of life.
- Factors that affect long-term trends in the fishery include the elmination of dog teams, variable salmon runs, changing community populations, a developing cash sector in the local economy, and cultural changes that may affect youth involvement in the fishery.
- Two key features of the fishery are the social organization of subsistence fishing and processing by extended families and the extensive sharing of equipment and harvests.
- Relying on permit returns alone likely results in an underestimate of subsistence salmon harvests at the community level. Unreported harvests occur when fishers do not obtain or return permits, or when portions of harvests that are shared are not reported.

State and federal regulatory actions that legalized seines for subsistence salmon fishing had a significant impact, especially for Nondalton residents. Legalization of this method reestablished opportunities not only to harvest salmon in a sustainable and efficient manner, but also to teach traditional skills and knowledge.

Igiugig

Levelock

Nondalton

Newhalen \*\*

Iliamna Lake

Kokhanok

■ Local residents follow fishing and processing methods that promote conservation, such as strategies to acheive (but not exceed) harvest goals and prohibitions against waste. Fostering the continuation of these self-management traditions is key to the long-term health and sustainability of the both the subsistence fishery and the salmon resource of the Kvichak watershed.



Port Alsworth

Pedro Bay







## For more information

Please see The Kvichak Watershed Subsistence Salmon Fishery: An Ethnographic Study, by James A. Fall, Davin Holen, Theodore M. Krieg, Robbin La Vine, Karen Stickman, Michelle Ravenmoon, Jessica Hay, and Jory Stariwat, ADF&G Division of Subsistence Technical Paper number 352, available electronically at http://www.subsistence.adfg.state.ak.us/pubs





Economic factors include fuel prices.



Cultural and personal factors include cooperation during harvest.



Other factors include regulatory actions, such as the reauthorization of seining.



Environmental factors include adapting to inclement weather.



Protecting your subsistence salmon fishery through the subsistence salmon permit program

Obtaining a subsistence salmon permit, recording harvests, and returning the permit helps protect your rights to fish for subsistence. Participation in the permit program:

- Shows the importance of subsistence fishing in each
- Shows how dependent families in each community are on

subsistence salmon,

- ■Illustrates the trends in subsistence harvests and abundance of salmon, and
- ➡ Helps the fisheries managers better understand the salmon

If subsistence fishers fail to obtain or return a permit,

- There may be an underestimation of subsistence
- ➡ Fisheries managers and regulators may misunderstand how much local communities and families rely on subsistence salmon, and
- Management and regulatory decisions may be made based on incorrect harvest information.

For the name of the permit vendor in your community, contact ADF&G in Dillingham at (907) 842-5925 or your local government office.

