

Recovery of a Subsistence Way of Life: Assessments of Resource Harvests in Cordova, Chenega, Tatitlek, Port Graham, and Nanwalek, Alaska since the *Exxon Valdez* Oil Spill



Photos: Salmon processing in Nanwalek, Surveys in Nanwalek, Wild game in Tatitlek. Credit: ADF&G

Prince William Sound Regional Citizens' Advisory Council
September 18, 2020 - Valdez, Alaska

Jackie Keating
Division of Subsistence
Alaska Department of Fish and Game



The mission of the Division of Subsistence is to scientifically gather, quantify, evaluate, and report information about customary and traditional uses of Alaska's fish and wildlife resources.

Project Staff



Jackie Keating
Social Scientist



Dave Koster
Research Analyst



Jim Fall
Research Director



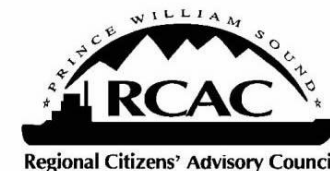
Adam Knight
Publications Specialist



Robin Dublin
SR Program Manager

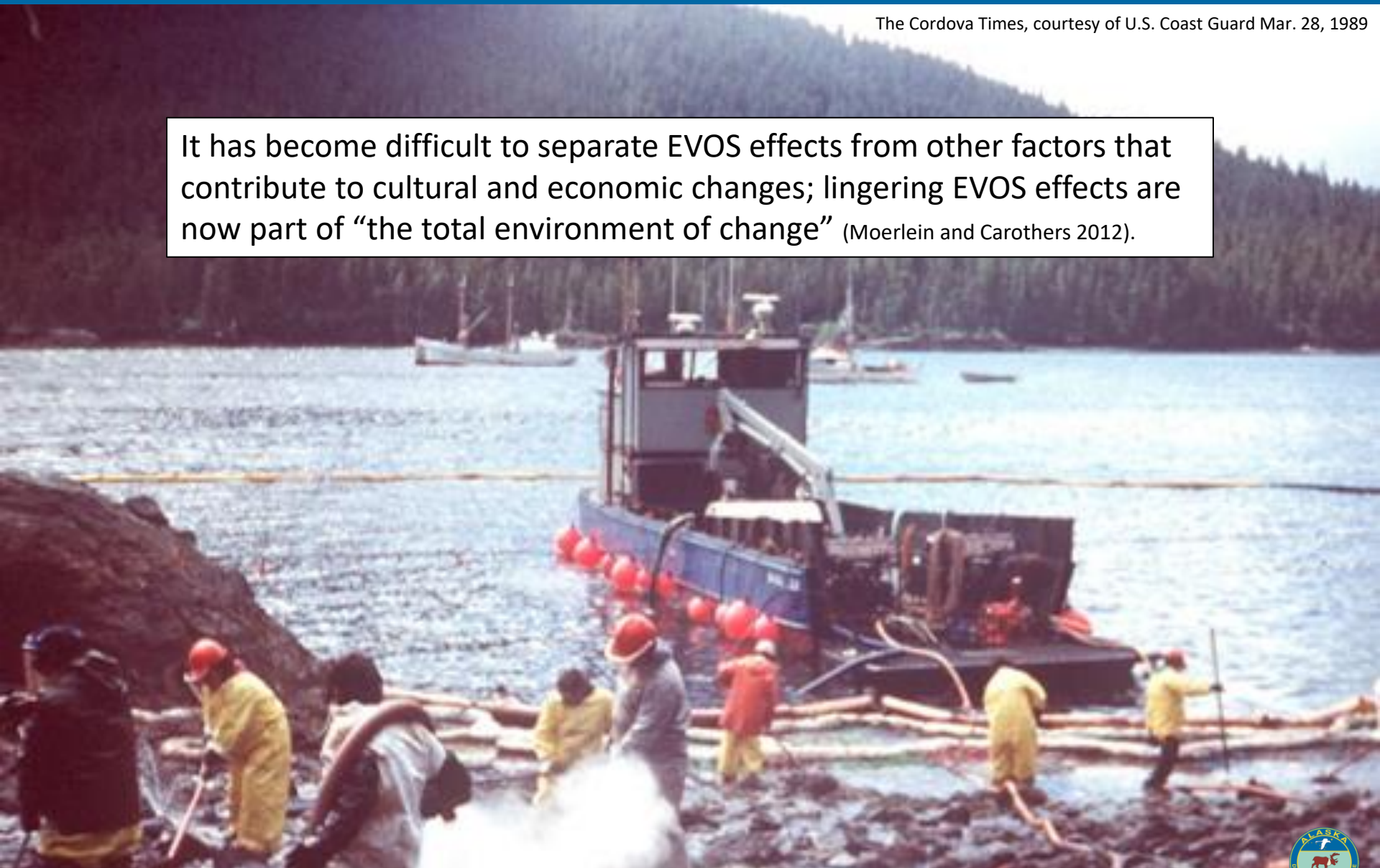
Project Funding

Thanks to the PWSRCAC Scientific Advisory Committee



The Cordova Times, courtesy of U.S. Coast Guard Mar. 28, 1989

It has become difficult to separate EVOS effects from other factors that contribute to cultural and economic changes; lingering EVOS effects are now part of “the total environment of change” (Moerlein and Carothers 2012).



	Population	Study years (years for which comprehensive harvest survey and other data are available)											
		2019	1984	1985	1987	1988	1989	1990	1991	1992	1993	1997	2003
Chenega Bay	61	X	X			X	X	X	X	X	X	X	X
Cordova	2,343		X		X			X	X	X	X	X	X
Nanwalek	280			X		X	X	X	X	X	X	X	X
Port Graham	180			X		X	X	X	X	X	X	X	X
Tatitlek	98			X	X	X	X	X		X	X	X	X

Study findings are summarized in the [Community Subsistence Information System](http://www.adfg.alaska.gov/sb/CSIS/),
at <http://www.adfg.alaska.gov/sb/CSIS/>



Standard Comprehensive Harvest Surveys

- Household composition
- Harvest quantities
- Use, harvest, receiving, and giving of resources
- Assessments of harvest and use compared to other years
- Economic information

COMPREHENSIVE SUBSISTENCE SURVEY
CORDOVA, ALASKA
From January 1, 2014 to December 31, 2014
printed: 2015-01-23

EV05

This survey is used to estimate wild food harvests and to describe rural community economies. We will publish a short summary report, that will be available to community members, and game. We work with the Alaska Department of Fish and Game, and with local Fish and Game Advisory Committees to better manage wild food resources. We will NOT identify your household. We will NOT use this information for enforcement. Participation in this survey is voluntary, even if you agree to be surveyed, you may stop at any time.

HOUSEHOLD ID: _____
COMMUNITY ID: 104
WVE MEMBER: _____
INTERVIEWER #1: _____
INTERVIEWER #2: _____
INTERVIEW DATE: _____
START TIME: _____
STOP TIME: _____

DATA CODED BY: _____
DATA ENTERED BY: _____
SUPERVISOR: _____

104



COOPERATING ORGANIZATIONS

ALASKA DEPARTMENT OF FISH AND GAME
333 RASPBERRY ROAD
ANCHORAGE, AK 99518
907-267-2353

NATIVE VILLAGE OF ETYAK
110 NICHOLLOFF WAY
CORDOVA, AK 99574
907-424-7738

DIVISION OF PUBLIC HEALTH AND SOCIAL SERVICES
3801 C STREET, SUITE 540
ANCHORAGE, AK 99503
907-259-8000

Photo by Dawn Hoyer

Page 1

Goal: “holistic” understanding of mixed economy and ways of life

Household Database: responses from all survey questions from 1984 - 2014

- ➔ 40 community-year records
- ➔ Over 2,100 household records
- ➔ Over 6,500 person records
- ➔ Over 24,000 income records
- ➔ Over 1 million harvest detail records



Division of Subsistence researchers speak with a key respondent in Nanwalek, March 2018.

Qualitative Data

- ➔ Key respondent interviews



Anonymous and confidential!

Concentration of production



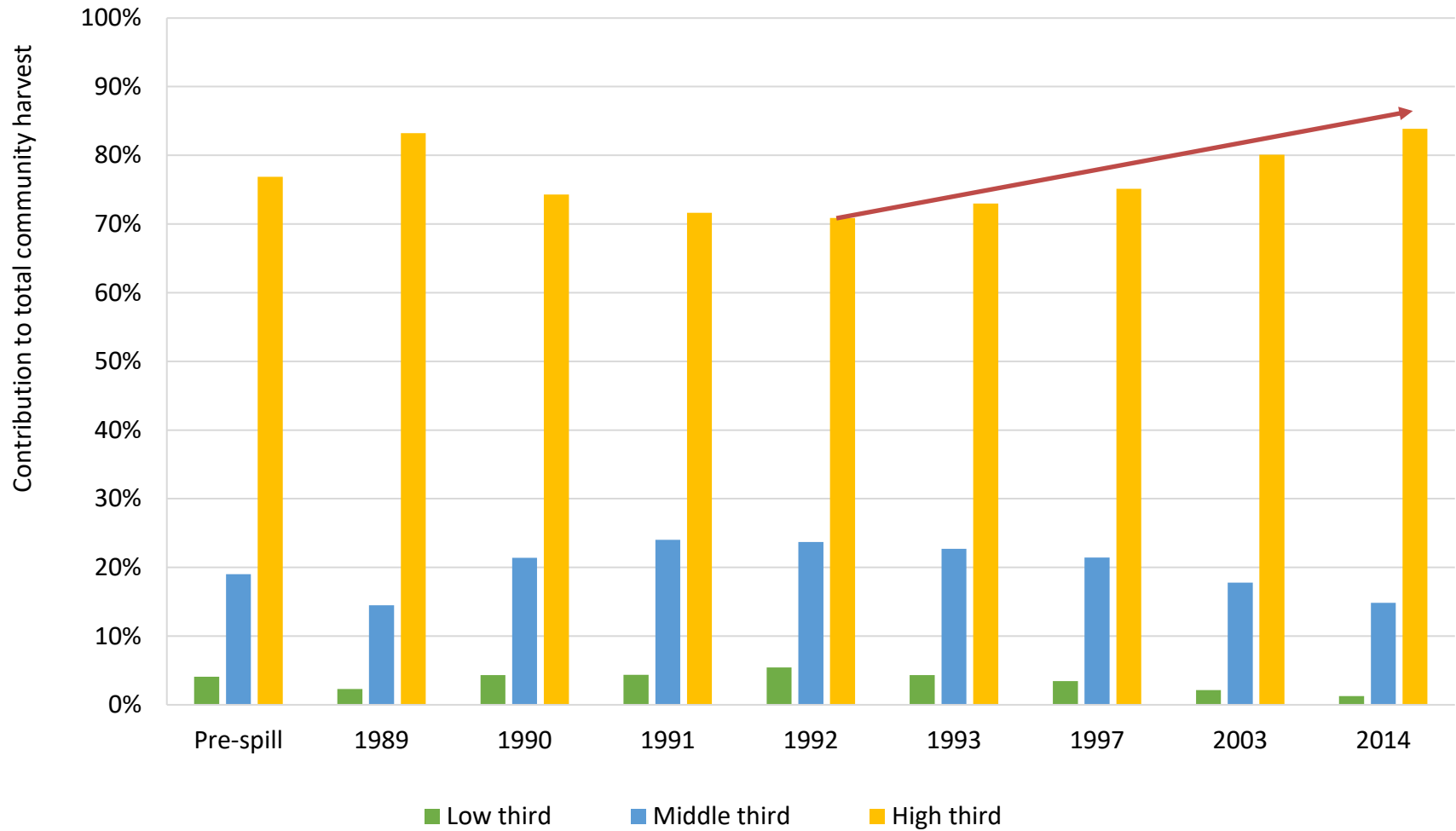
Productive households



Changes in use and harvest



Concentration of Production

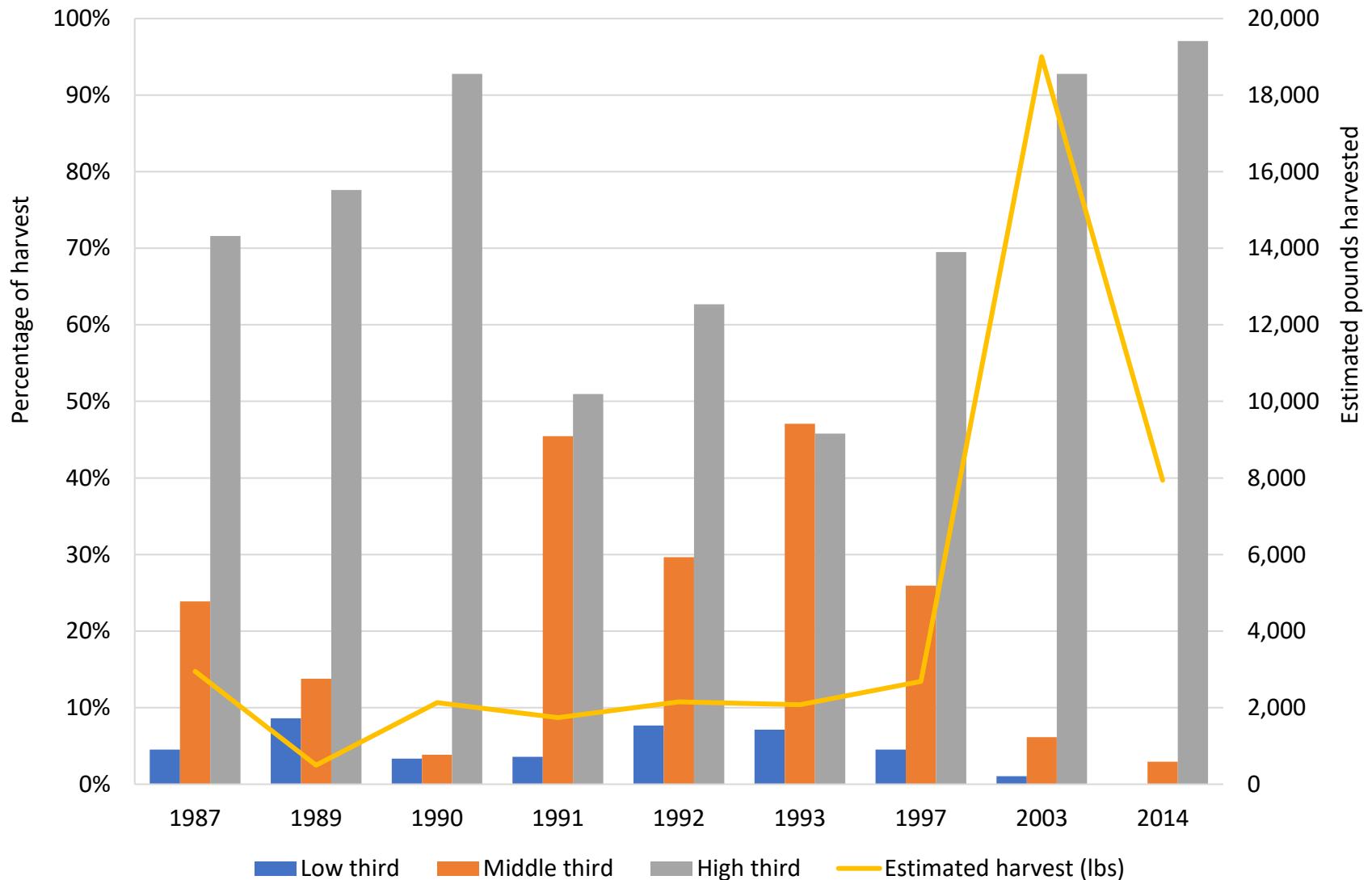


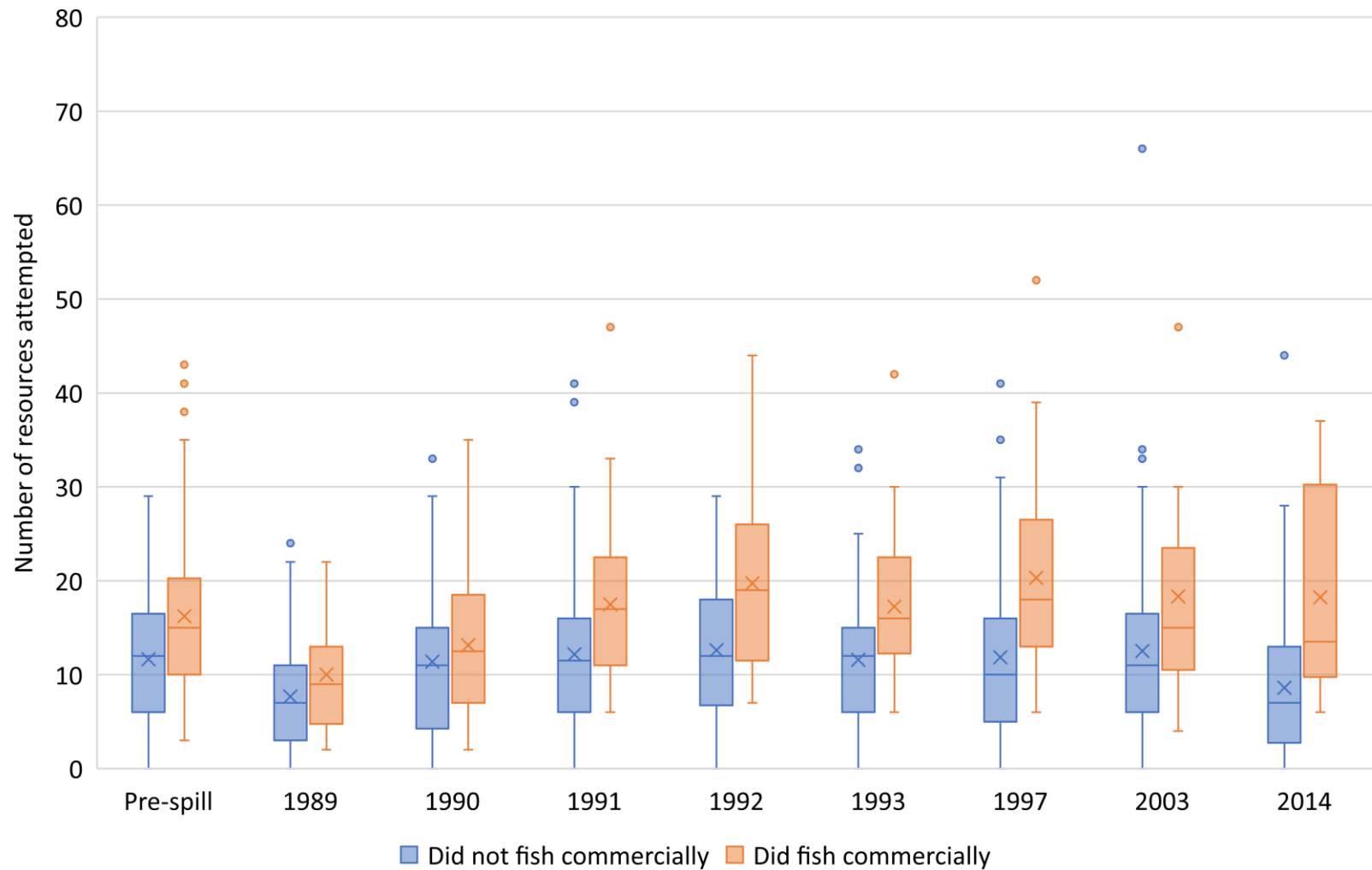
Note "Pre-spill" includes Chenega 1984 and 1995, Nanwalek 1987, Port Graham 1987, and Tatitlek 1987 and 1988.



Port Graham Sockeye Salmon Harvest by Thirds

9



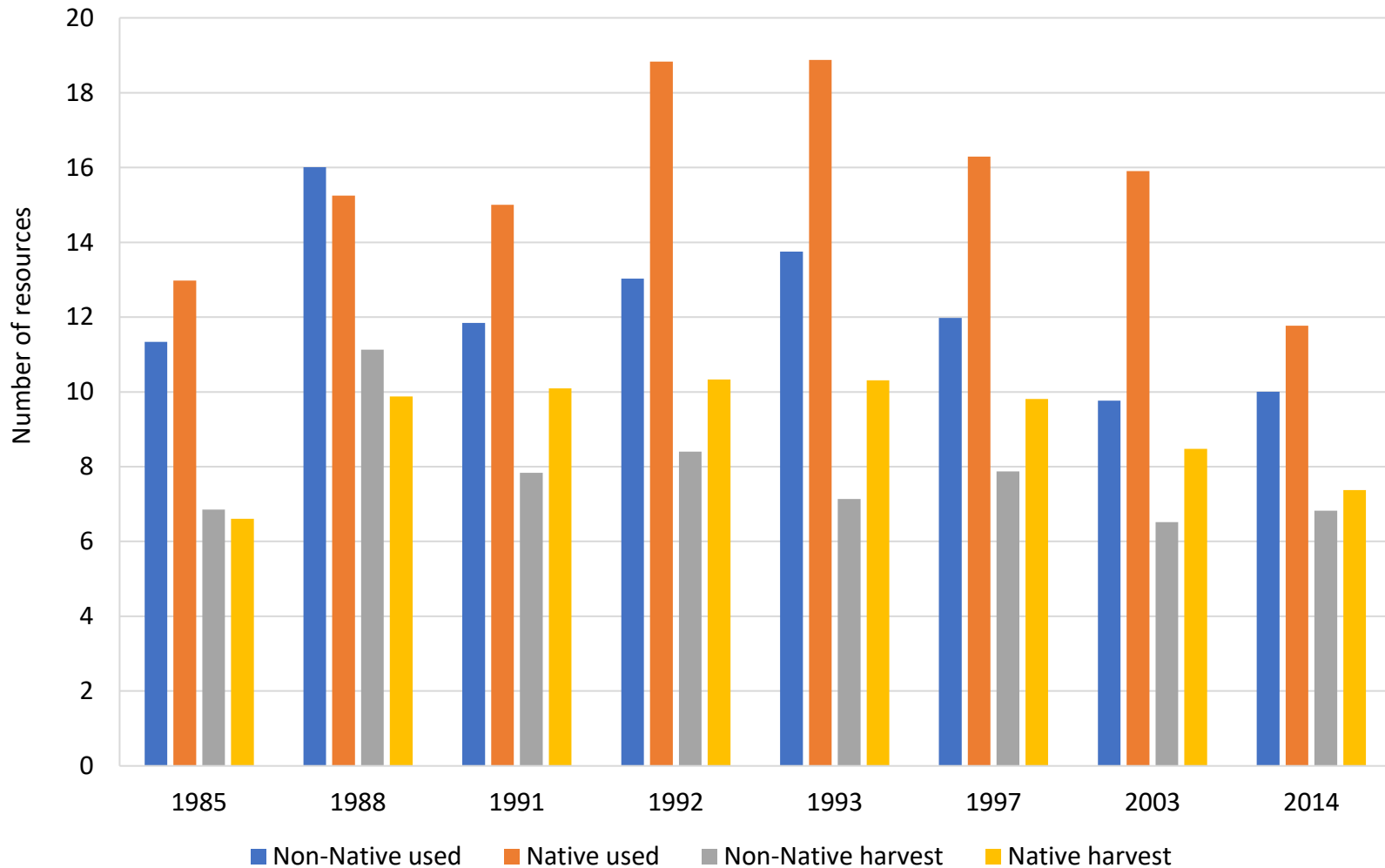


Note "Pre-spill" includes Chenega 1984 and 1995, Nanwalek 1987, Port Graham 1987, and Tatitlek 1987 and 1988.



Characteristics: Native Households (Cordova)

11





The concentration of wild resource production has increased steadily since 1992



Specific resources



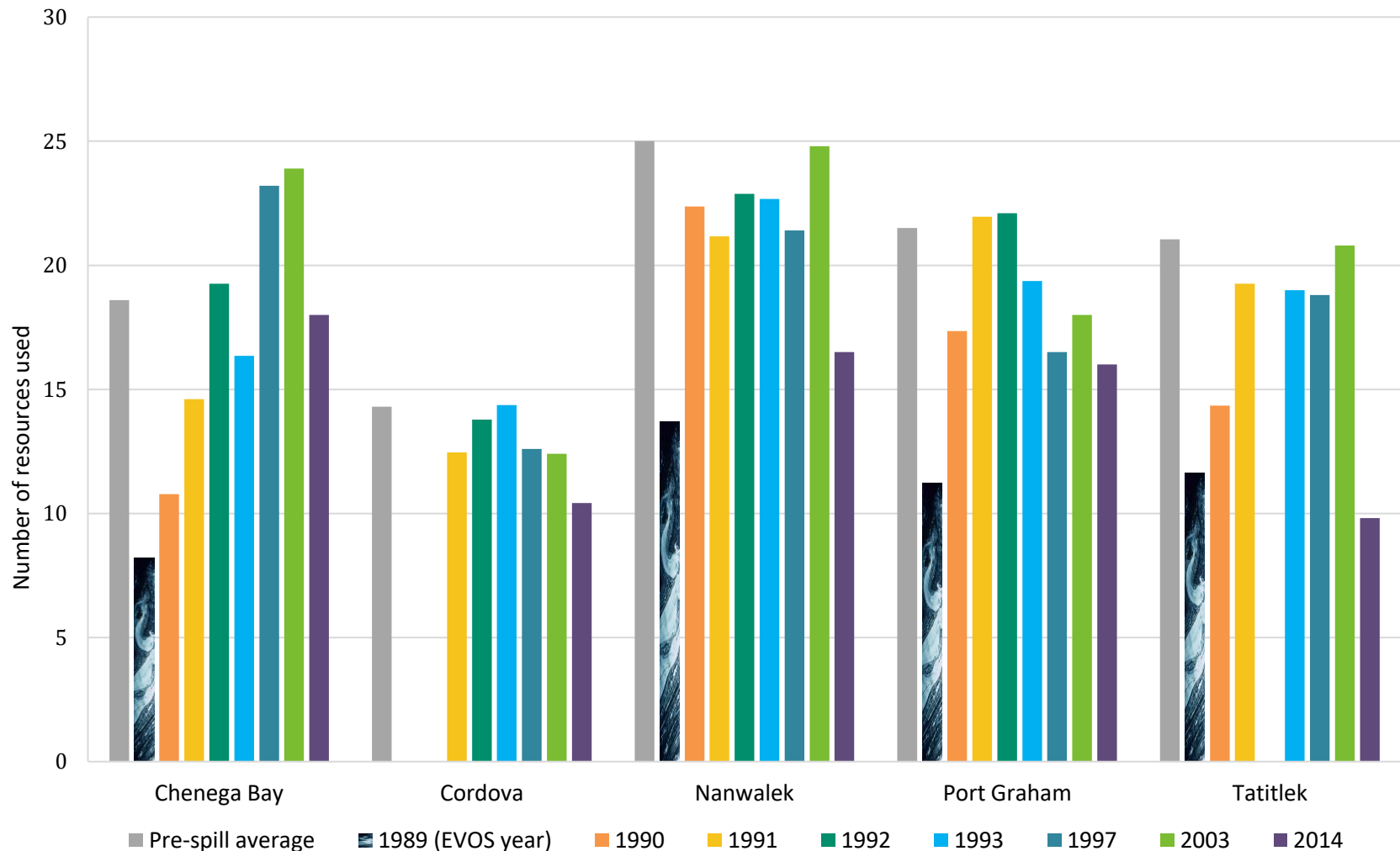
Concentration on consistently available species



EVOS jobs and payments affected harvest practices

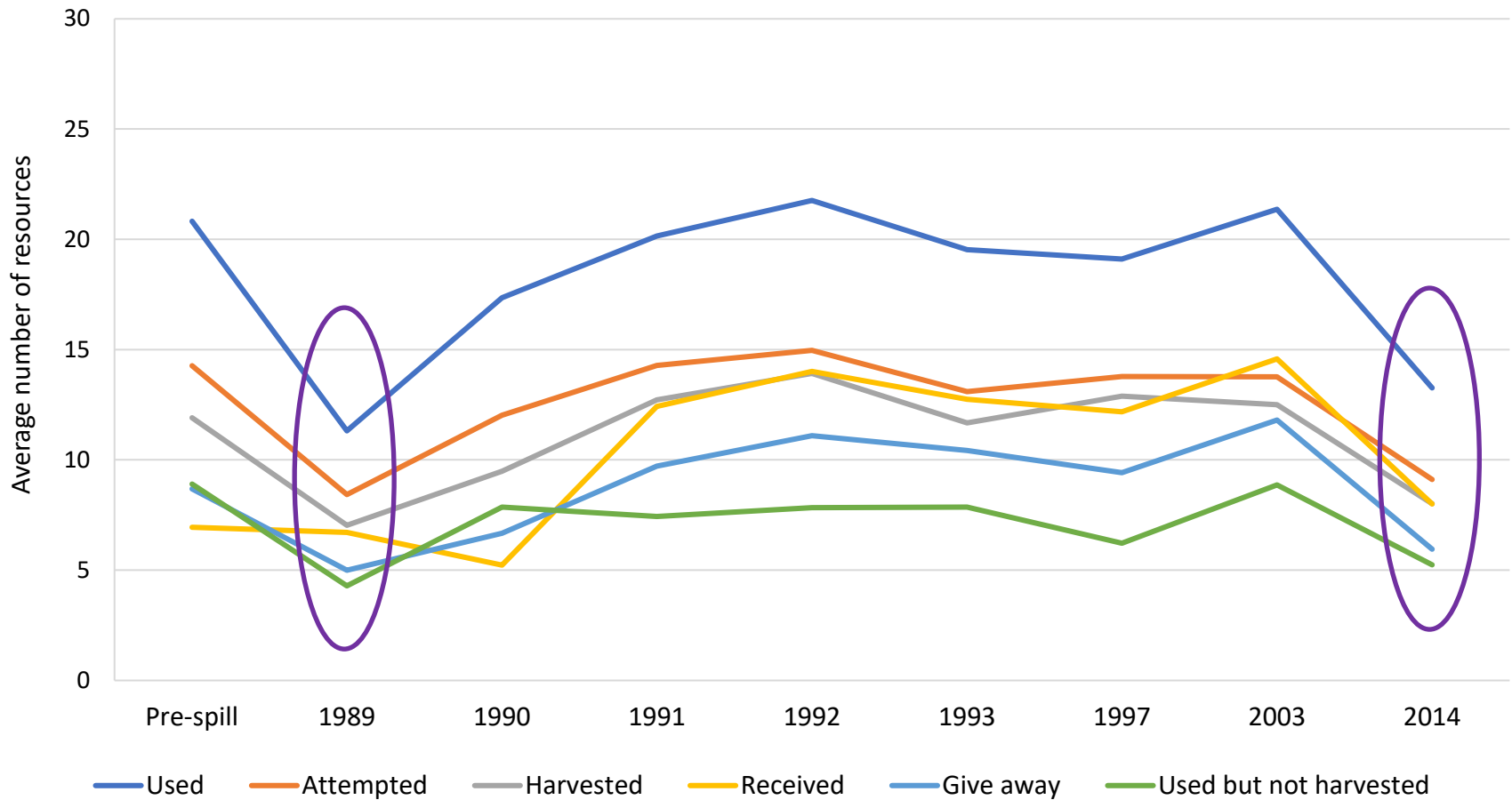
Number of Resources Used

13



Note Data not available for Cordova 1989 or 1990, and Tatitlek 1992. "Pre-spill" includes Chenega 1984 and 1995, Nanwalek 1987, Port Graham





Note "Pre-spill" includes Chenega 1984 and 1995, Nanwalek 1987, Port Graham 1987, and Tatitlek 1987 and 1988.





The number of types of resources used in 2014 approached EVOS-year levels.



No clear link between resource diversity and shifting demographics



Not blamed on EVOS effects like contamination and other perceived food safety concerns



Decreases in abundance blamed on outside pressures and localized pressure on accessible resources

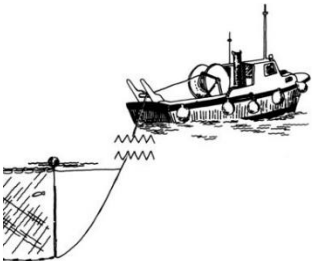
Additional years of survey data are needed to determine if the sharp decline in resource diversity in 2014 is part of a downward trend.



Digital technology



Cost barriers



Commercial fishing



Local subsistence concerns



A researcher conducts salmon harvest surveys in Nanwalek

Thank you!

For more information:

Community Subsistence Harvest Information System

<http://www.adfg.alaska.gov/sb/CSIS/>

Division Technical Paper Series

<http://www.adfg.alaska.gov/sf/publications>

Jackie Keating: jacqueline.keating@alaska.gov

Austin Love: austin.love@pwsrca.org

Photo: Sunset from Nanwalek, March 2018 (J. Keating)

