

Genetic Stock Composition of the Commercial Harvest of Sockeye Salmon in the Southeastern District Mainland, Alaska Peninsula Management Area, 2010-2012



Tyler H. Dann, Mark J. Witteveen,
Serena D. Rogers Olive, Christopher
Habicht, Matthew B. Foster, Heather
L. Liller, and William D. Templin
RC 7, Tab X

Background

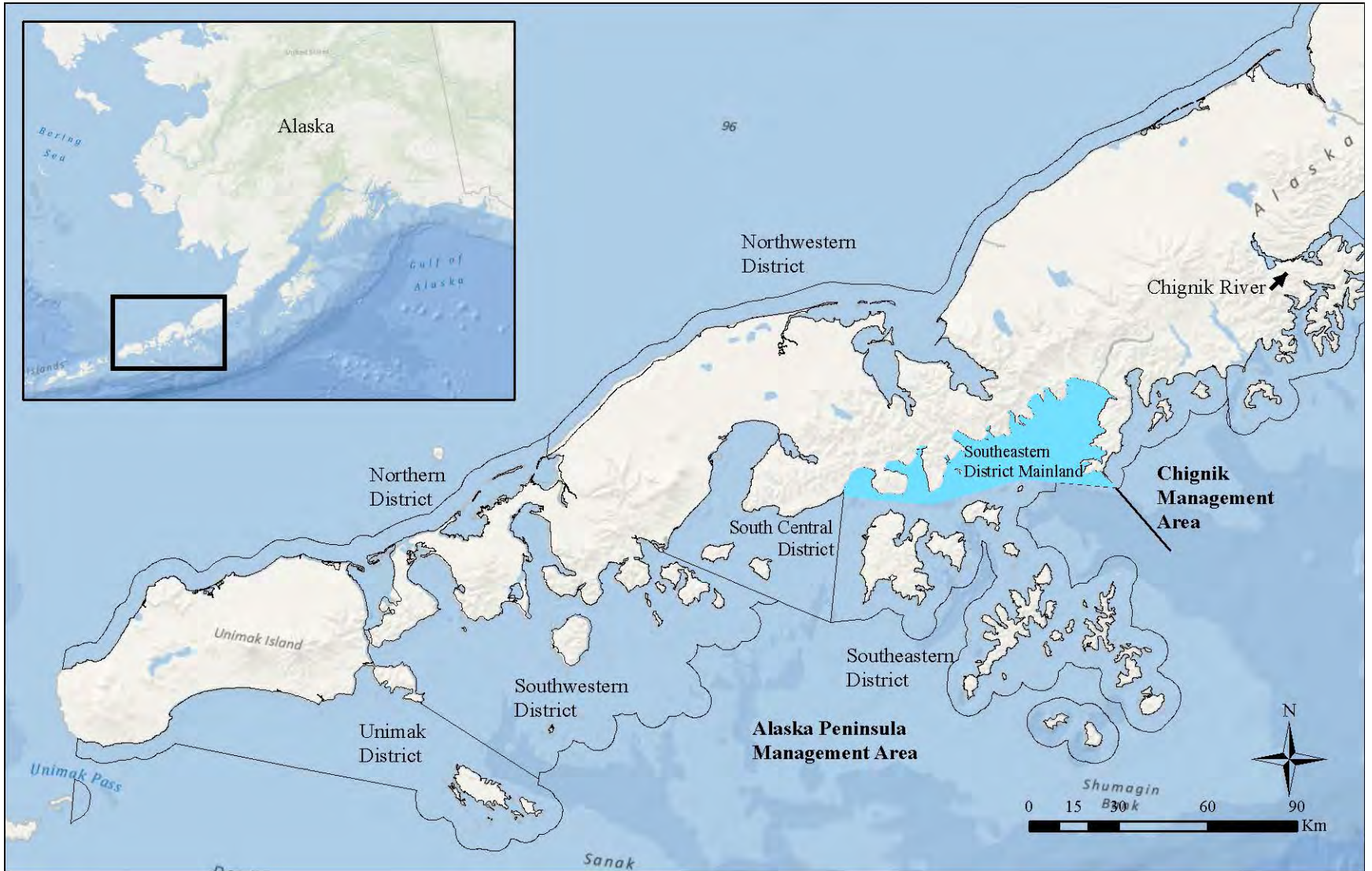
- SEDM during WASSIP years (2006-2008)
 - Small Chignik runs -> Fishery closures -> limited opportunities for genetic stock composition estimates

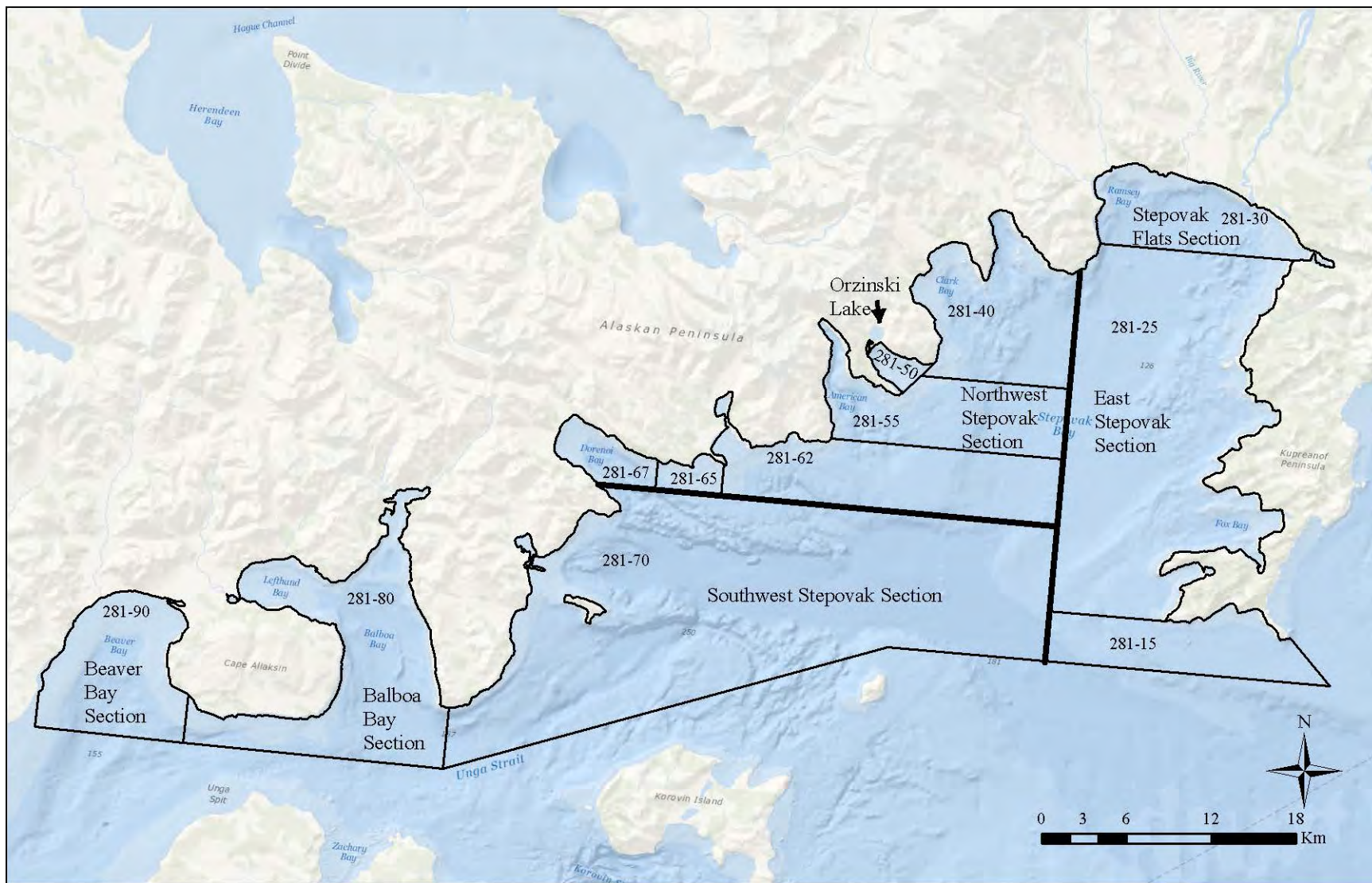
Background

- SEDM during WASSIP years (2006-2008)
 - Small Chignik runs -> Fishery closures -> limited opportunities for genetic stock composition estimates
- Precipitated continuation of fishery sampling
 - 2010 Area M Board of Fisheries meeting
 - Paired commercial and test fishery sampling in case of similar fishery closures

Background

- SEDM during WASSIP years (2006-2008)
 - Small Chignik runs -> Fishery closures -> limited opportunities for genetic stock composition estimates
- Precipitated continuation of fishery sampling
 - 2010 Area M Board of Fisheries meeting
 - Paired commercial and test fishery sampling in case of similar fishery closures
- **Experimental design:**
 - 3 sections of SEDM
 - 3 temporal strata
 - 3 years: 2010-2012
 - Sample both test and commercial fisheries





Management Plan

- Relation to Chignik sockeye salmon abundance

Management Plan

- Relation to Chignik sockeye salmon abundance
 - SEDM can open when the harvestable surplus of Chignik runs are expected to exceed 600,000, the run appears strong as predicted and escapement goals are met (or other scenarios $< 600,000$)

Management Plan

- Relation to Chignik sockeye salmon abundance
 - SEDM can open when the harvestable surplus of Chignik runs are expected to exceed 600,000, the run appears strong as predicted and escapement goals are met (or other scenarios < 600,000)
 - Number of harvested fish in SEDM destined for Chignik River should approach as near as possible 7.6% of the CMA harvest

Management Plan

- Relation to Chignik sockeye salmon abundance
 - SEDM can open when the harvestable surplus of Chignik runs are expected to exceed 600,000, the run appears strong as predicted and escapement goals are met (or other scenarios < 600,000)
 - Number of harvested fish in SEDM destined for Chignik River should approach as near as possible 7.6% of the CMA harvest
 - During June, 80% of SEDM harvests assumed destined for Chignik River (historical tagging study)

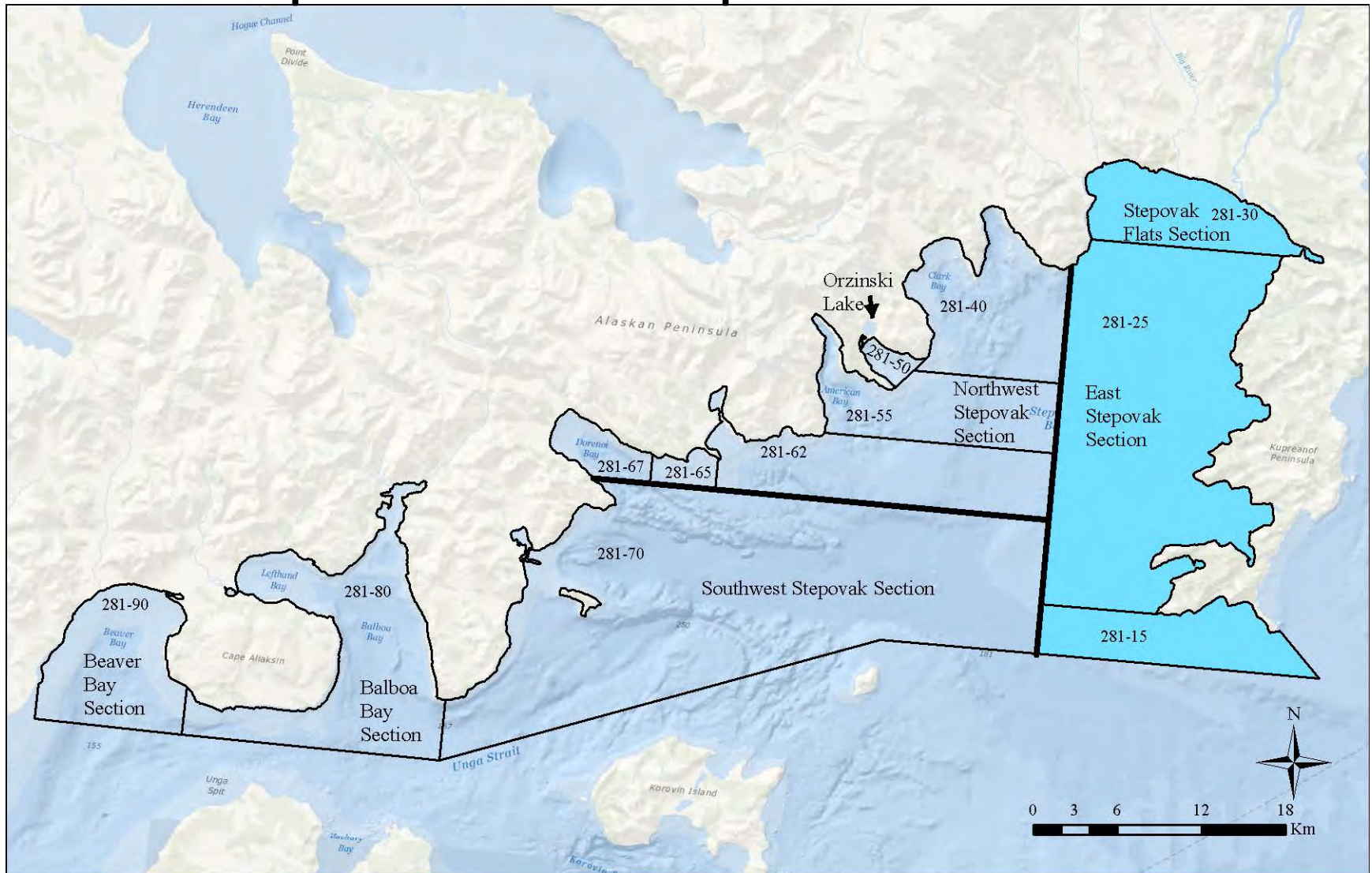
Management Plan

- Relation to Chignik sockeye salmon abundance
 - SEDM can open when the harvestable surplus of Chignik runs are expected to exceed 600,000, the run appears strong as predicted and escapement goals are met (or other scenarios < 600,000)
 - Number of harvested fish in SEDM destined for Chignik River should approach as near as possible 7.6% of the CMA harvest
 - During June, 80% of SEDM harvests assumed destined for Chignik River (historical tagging study)
 - June 26 – July 8 overlap period, fishing restricted

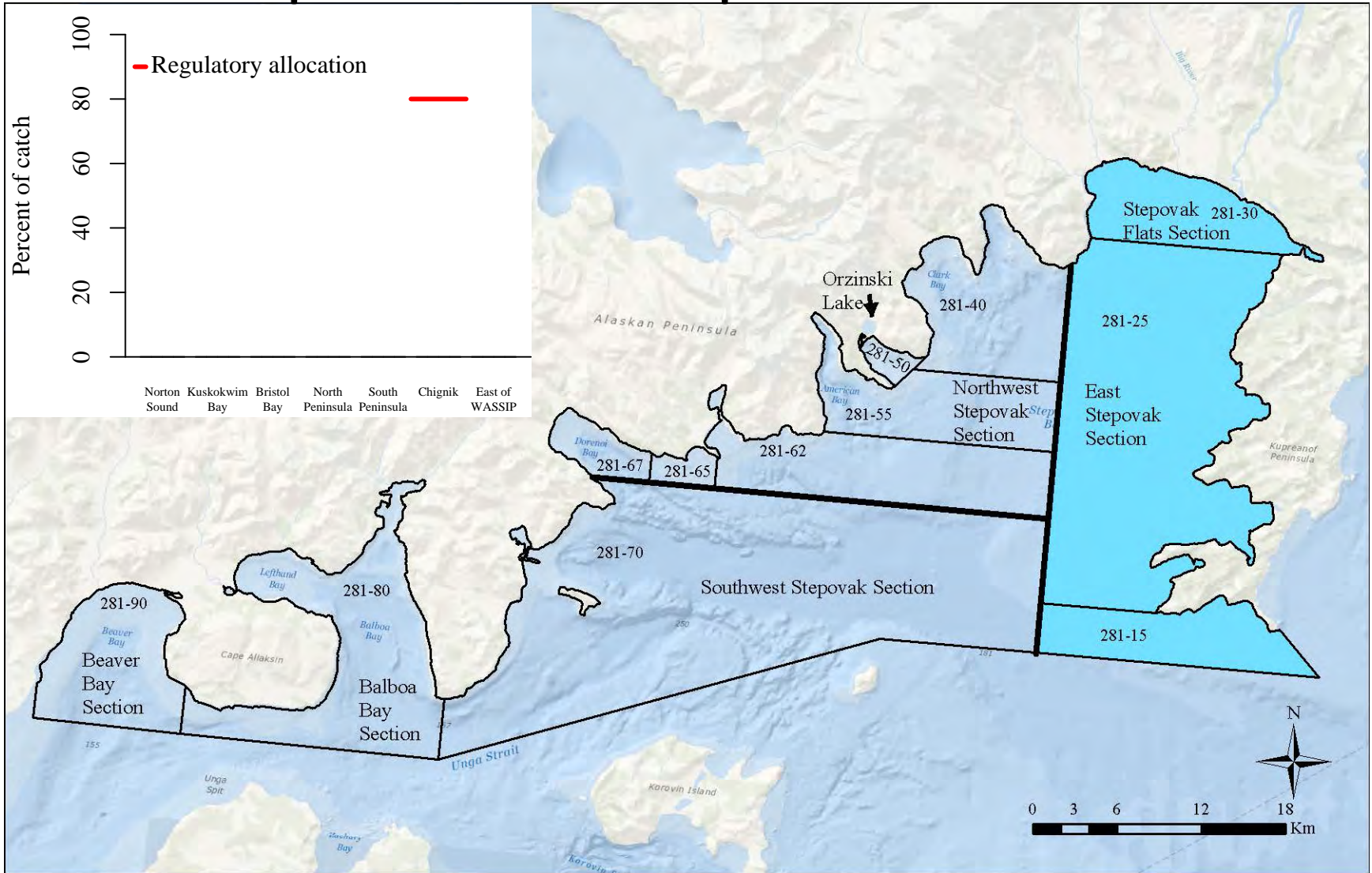
Management Plan

- Relation to Chignik sockeye salmon abundance
 - SEDM can open when the harvestable surplus of Chignik runs are expected to exceed 600,000, the run appears strong as predicted and escapement goals are met (or other scenarios < 600,000)
 - Number of harvested fish in SEDM destined for Chignik River should approach as near as possible 7.6% of the CMA harvest
 - During June, 80% of SEDM harvests assumed destined for Chignik River (historical tagging study)
 - June 26 – July 8 overlap period, fishing restricted
 - In July, Chignik contribution differs by section

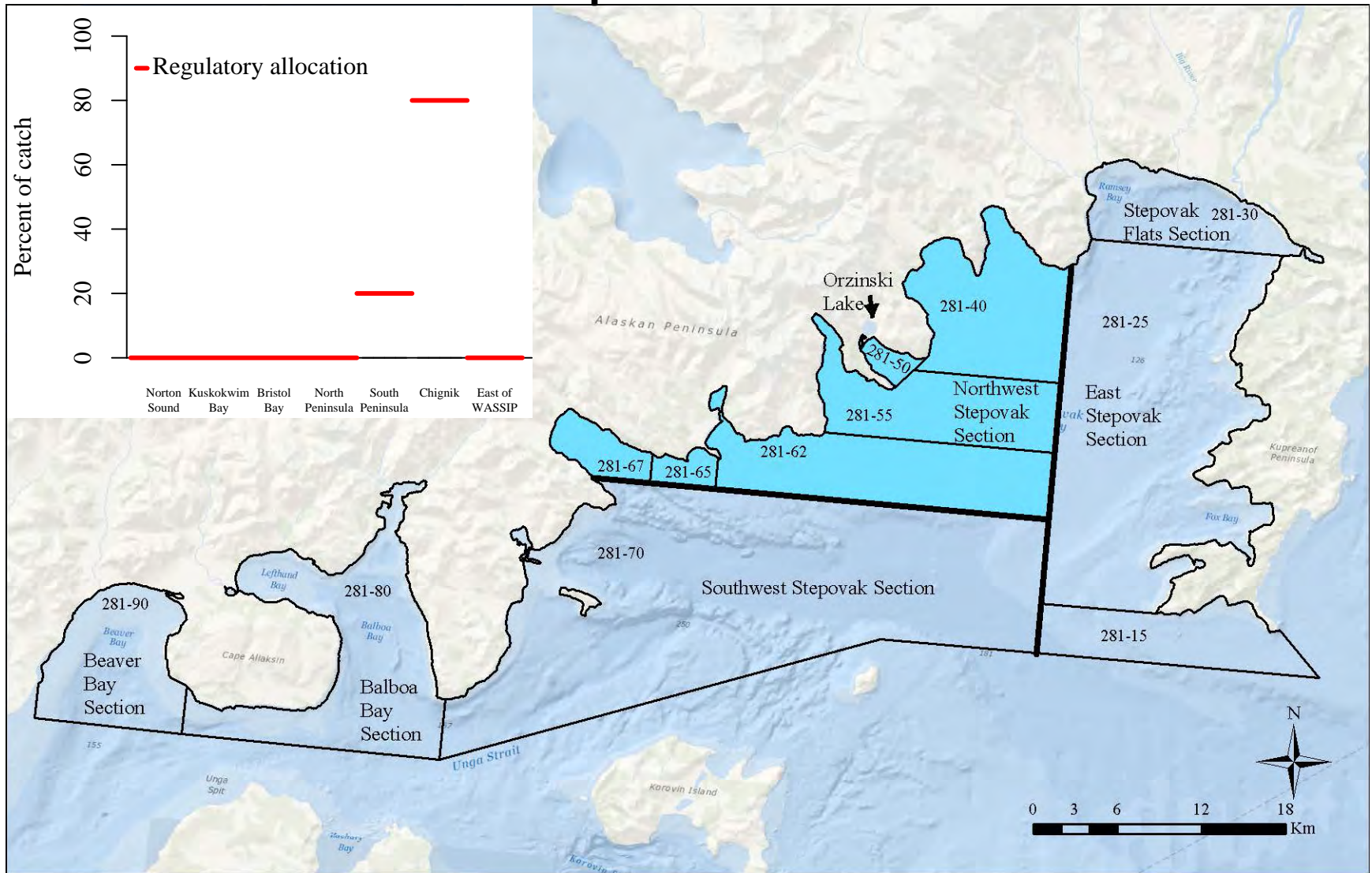
East Stepovak and Stepovak Flats sections



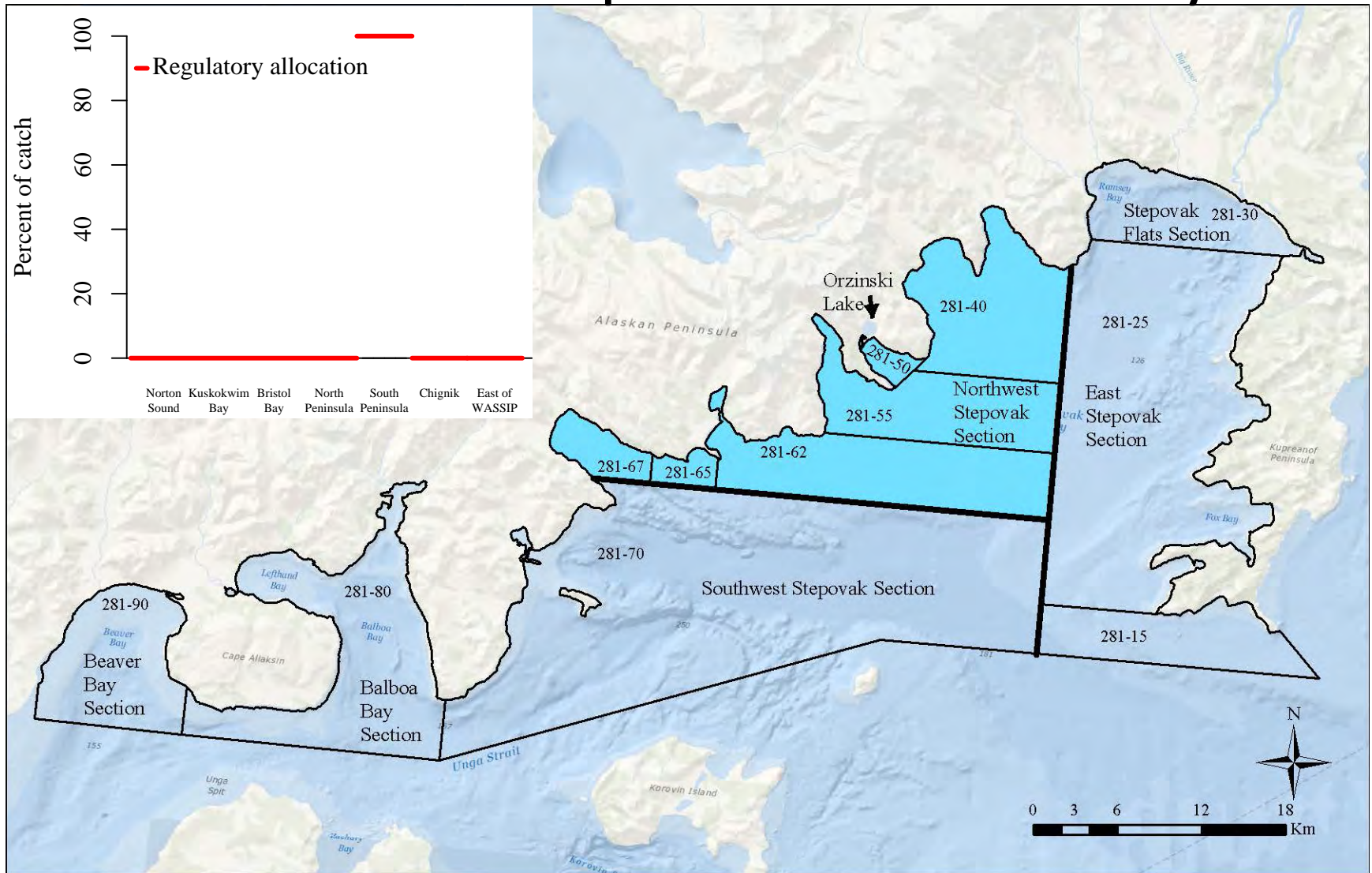
East Stepovak and Stepovak Flats sections



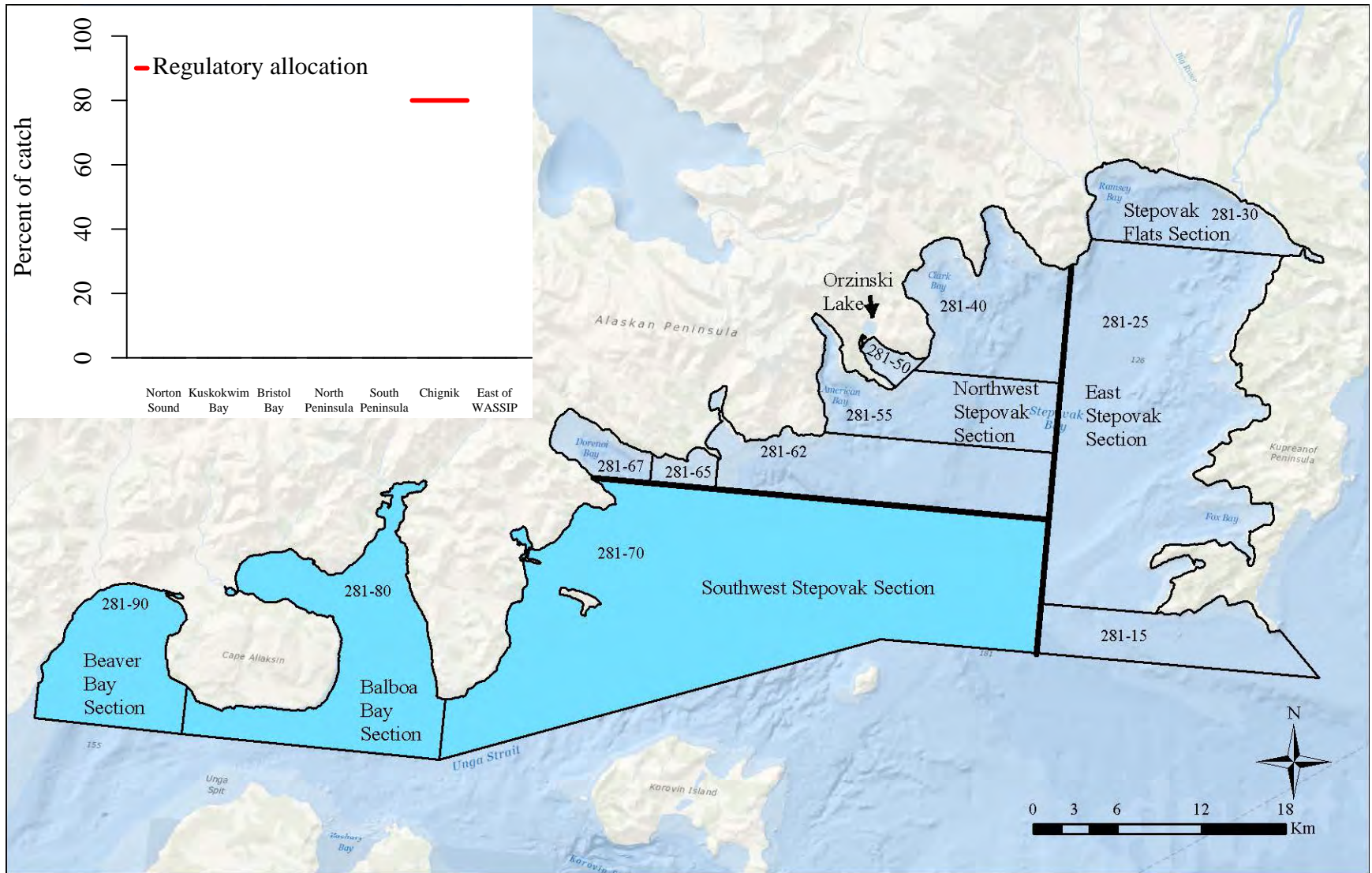
Northwest Stepovak Section – June



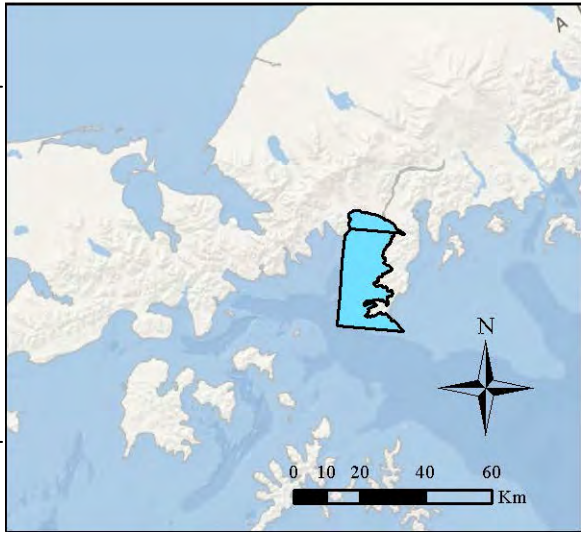
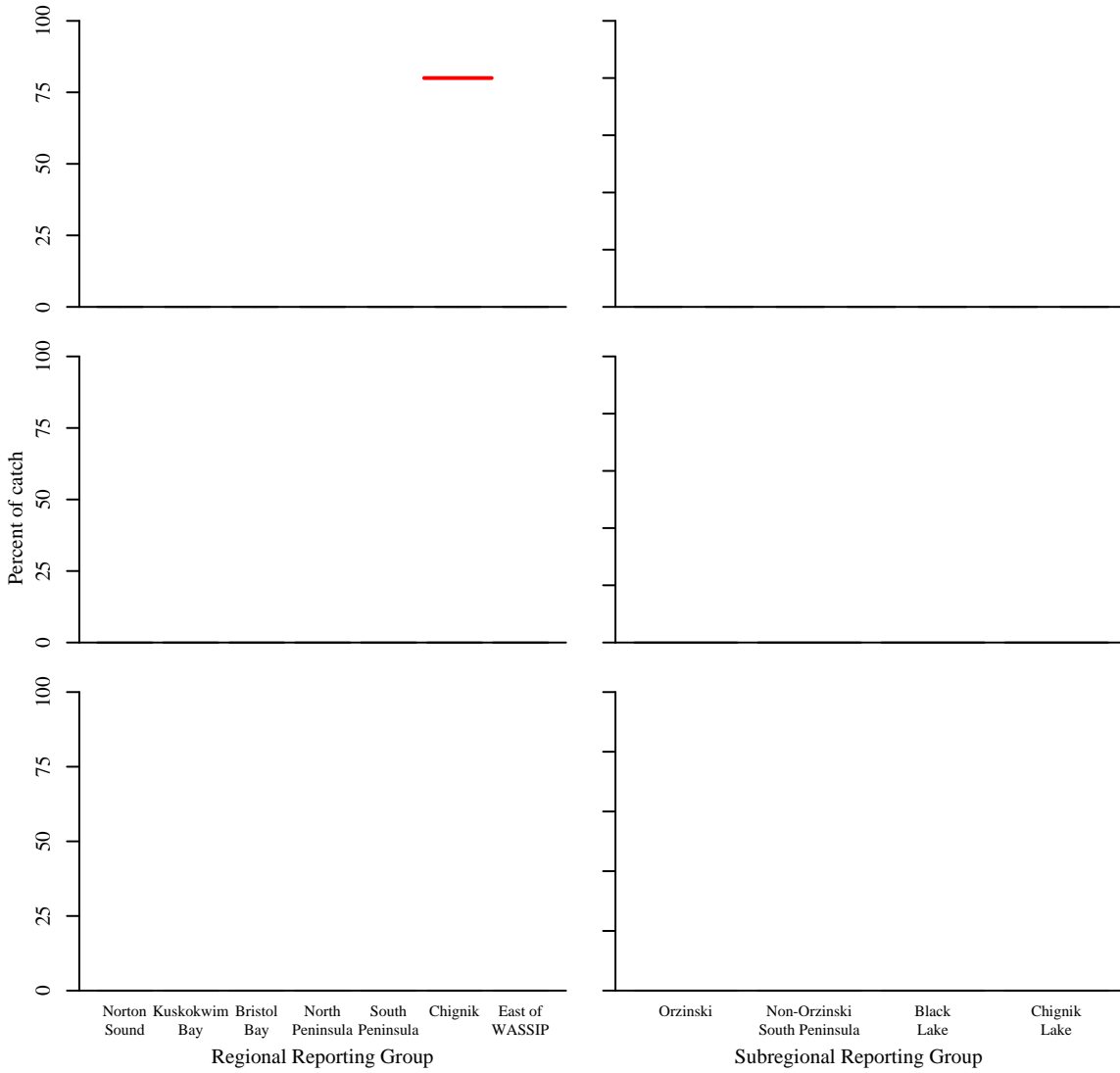
Northwest Stepovak Section – July



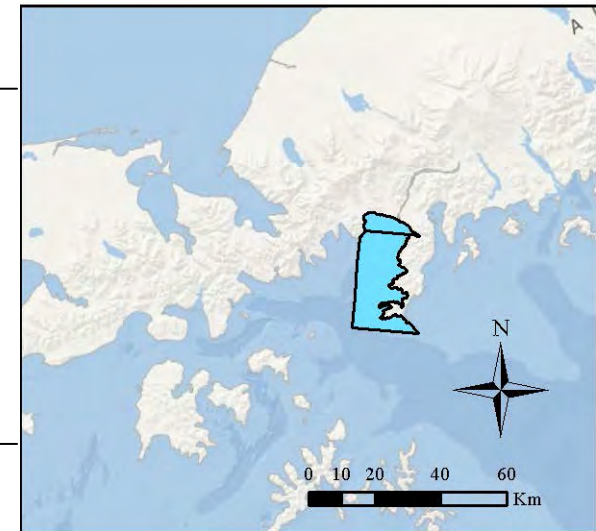
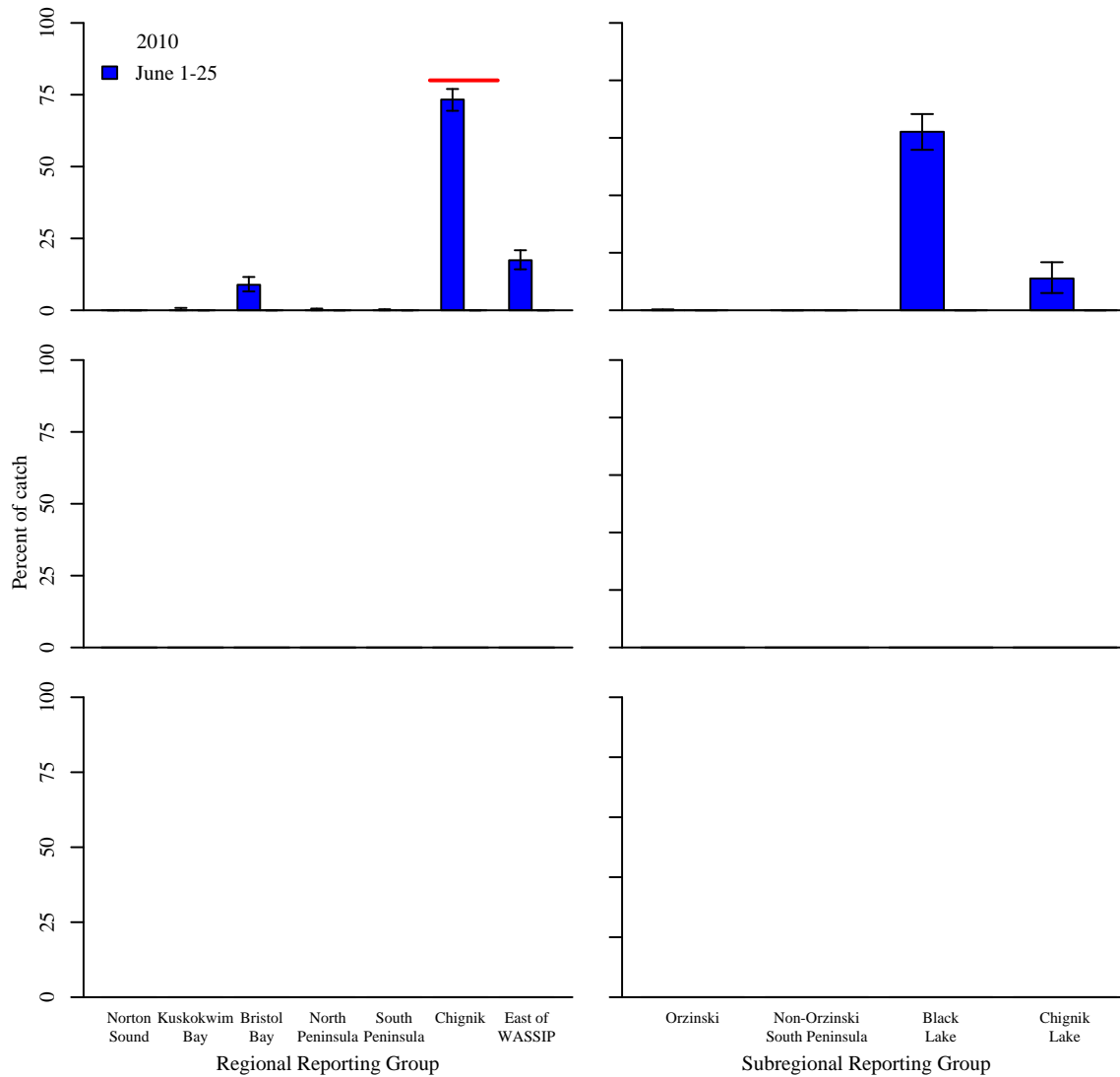
Southwest Stepovak, Balboa Bay and Beaver Bay sections



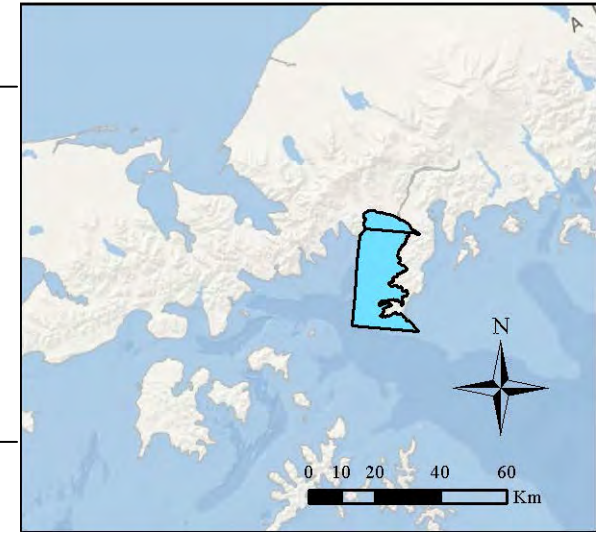
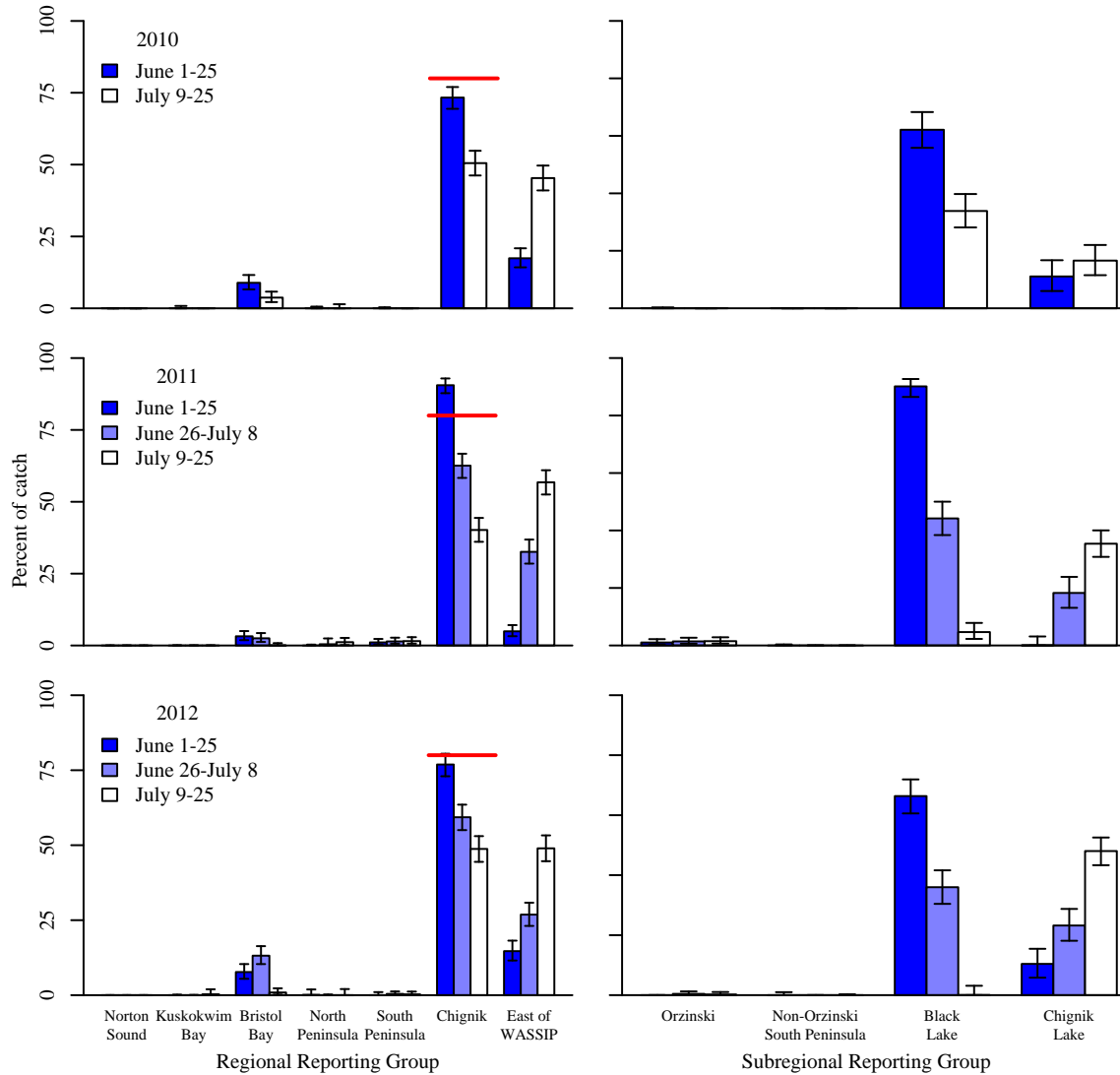
East Stepovak and Stepovak Flats sections



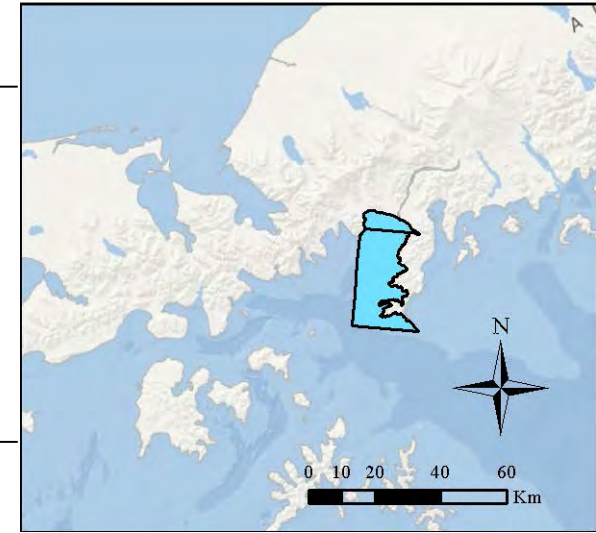
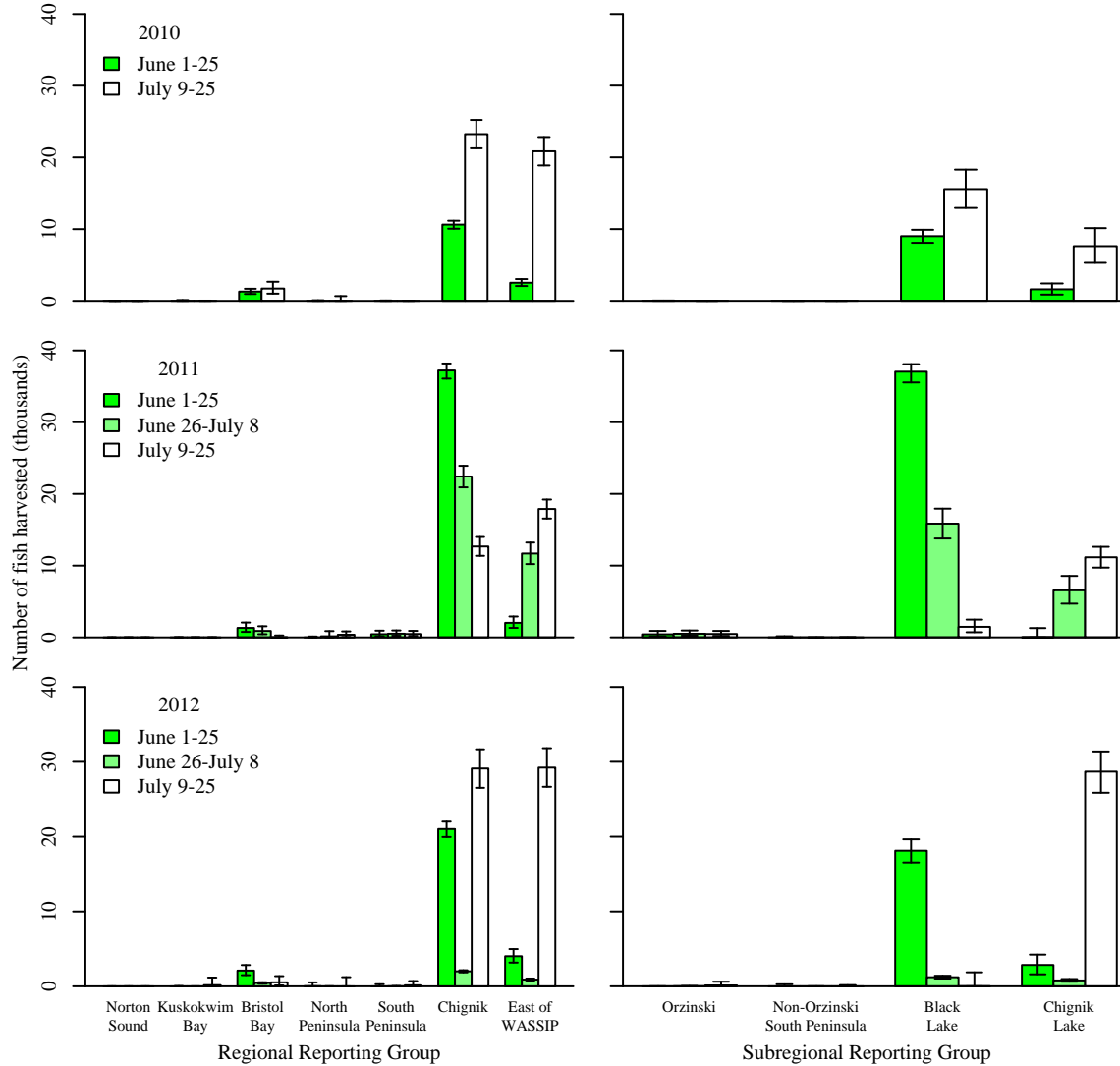
East Stepovak and Stepovak Flats sections



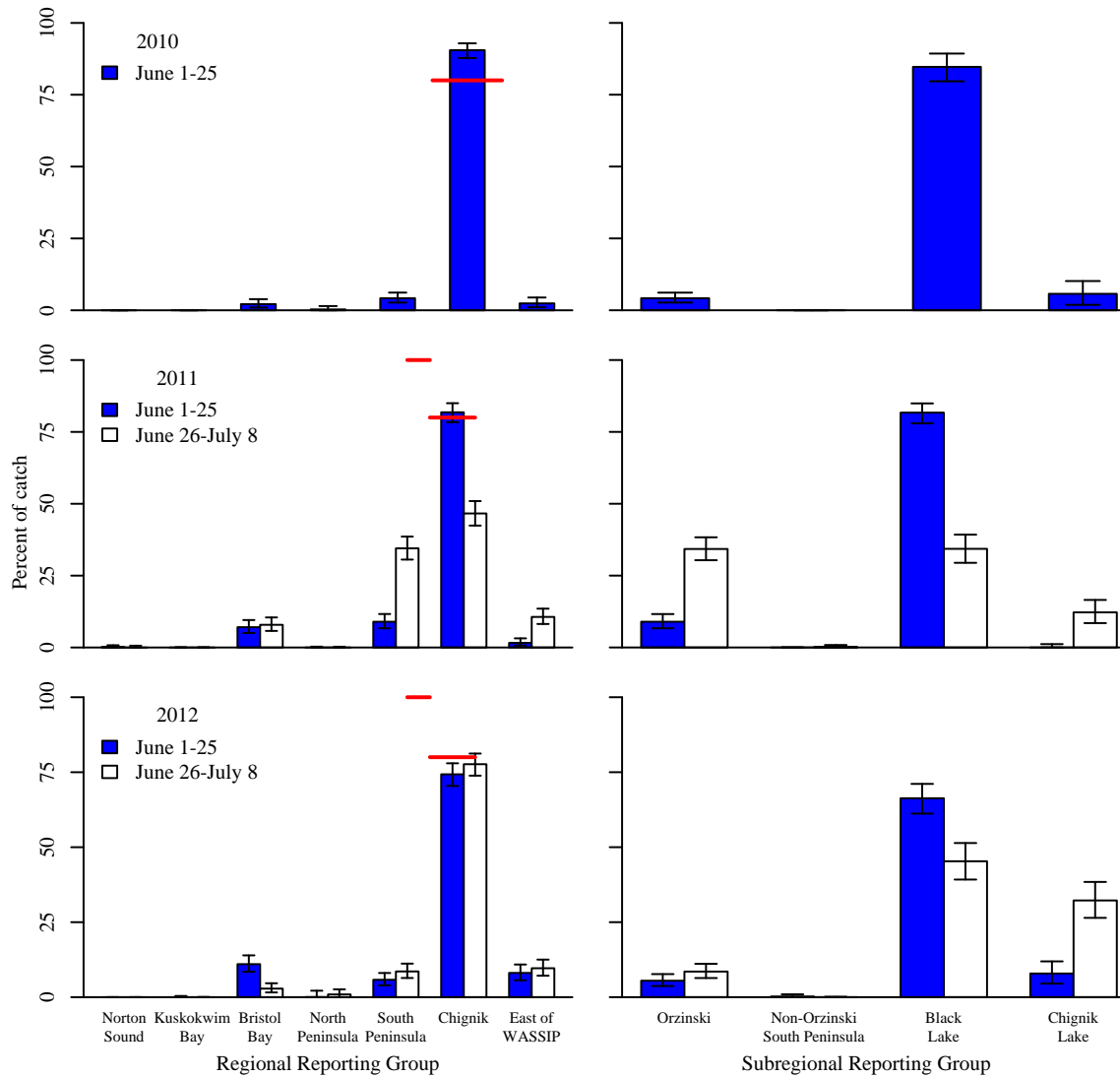
East Stepovak and Stepovak Flats sections



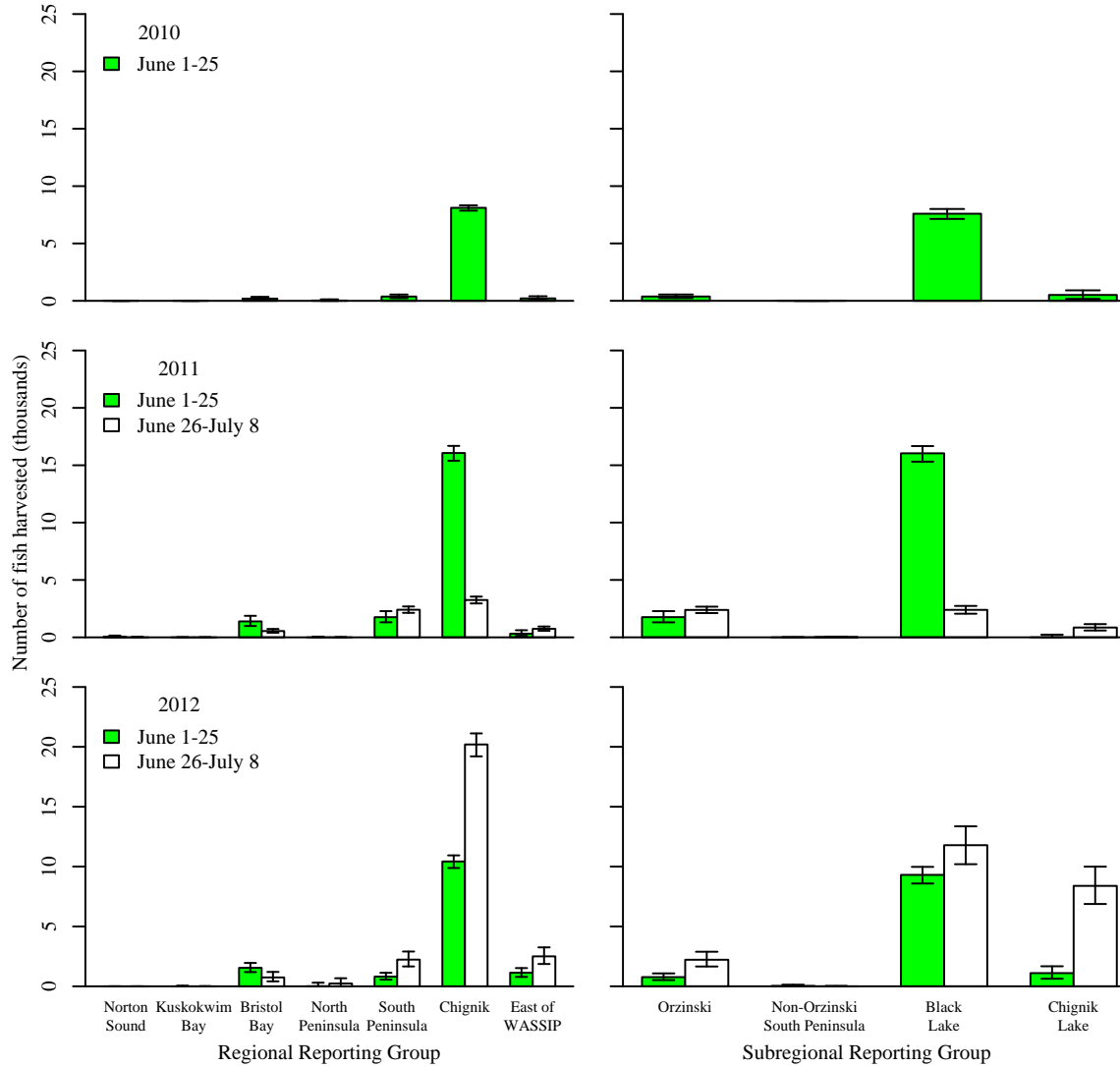
East Stepovak and Stepovak Flats sections



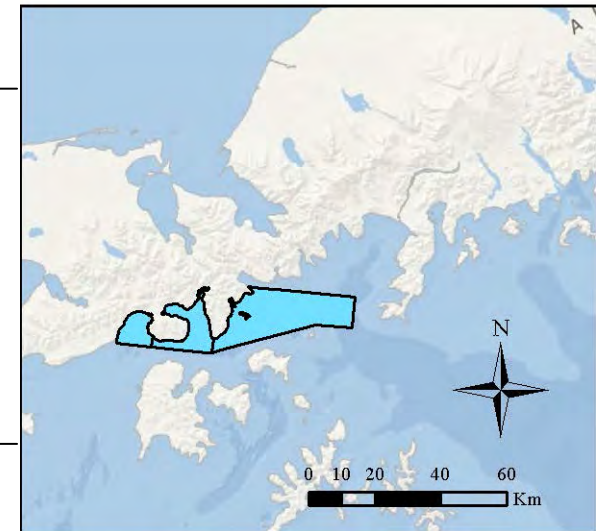
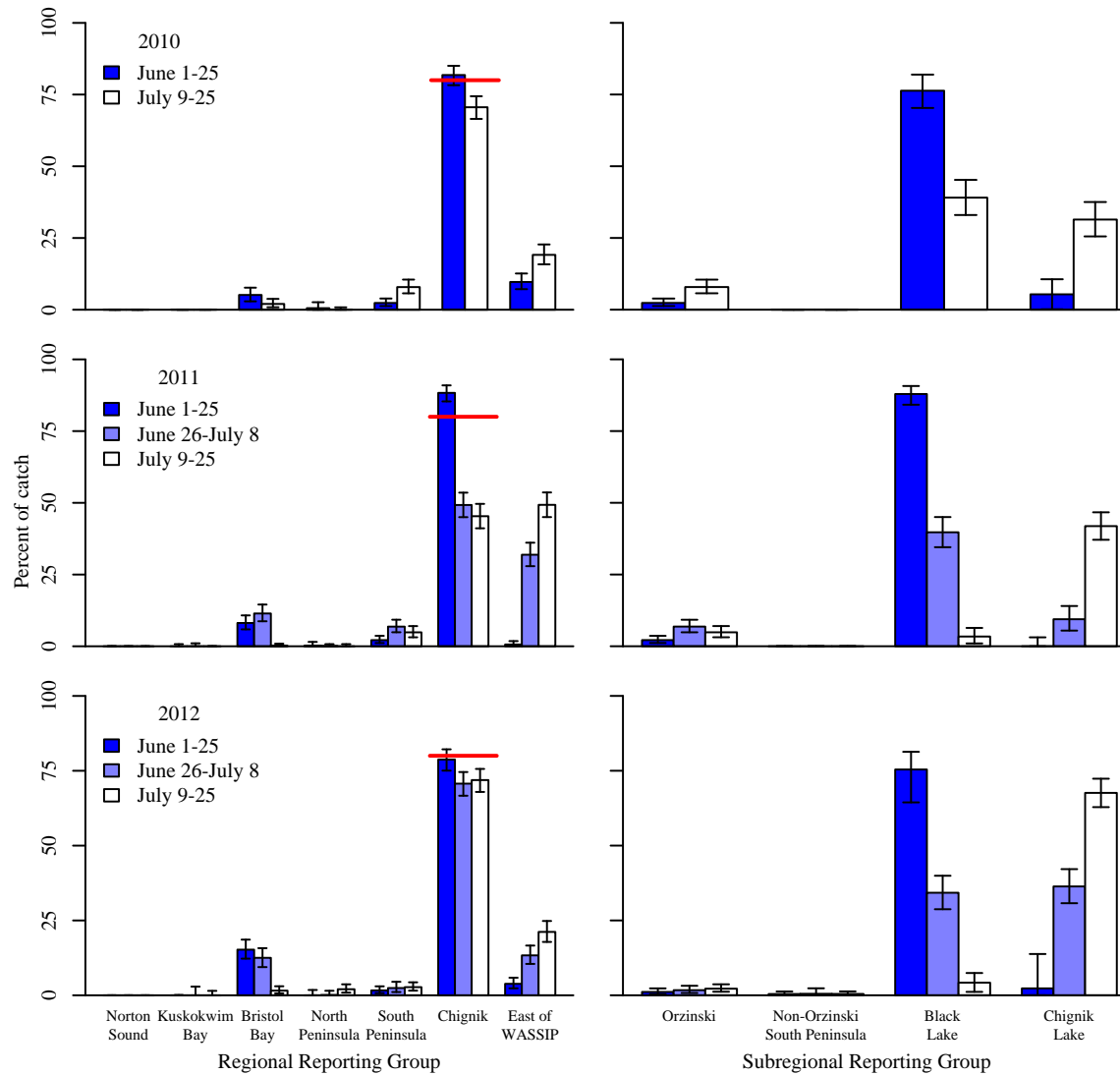
Northwest Stepovak Section



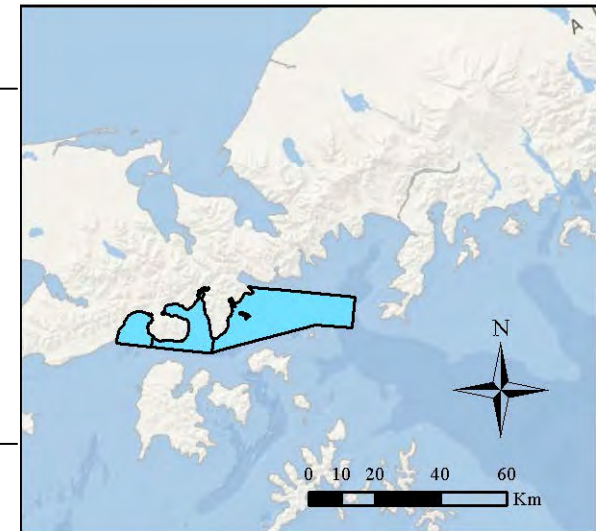
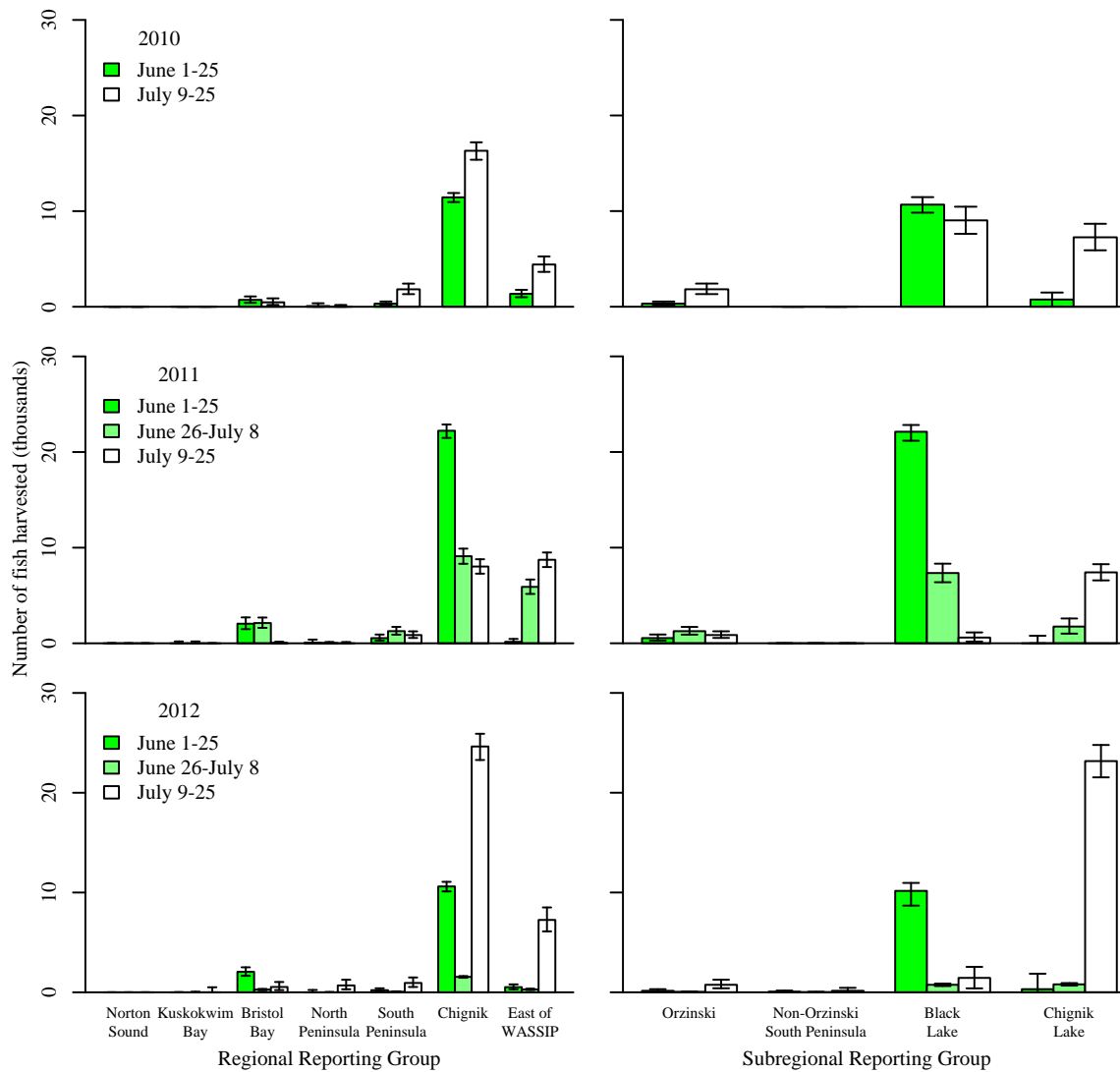
Northwest Stepovak Section



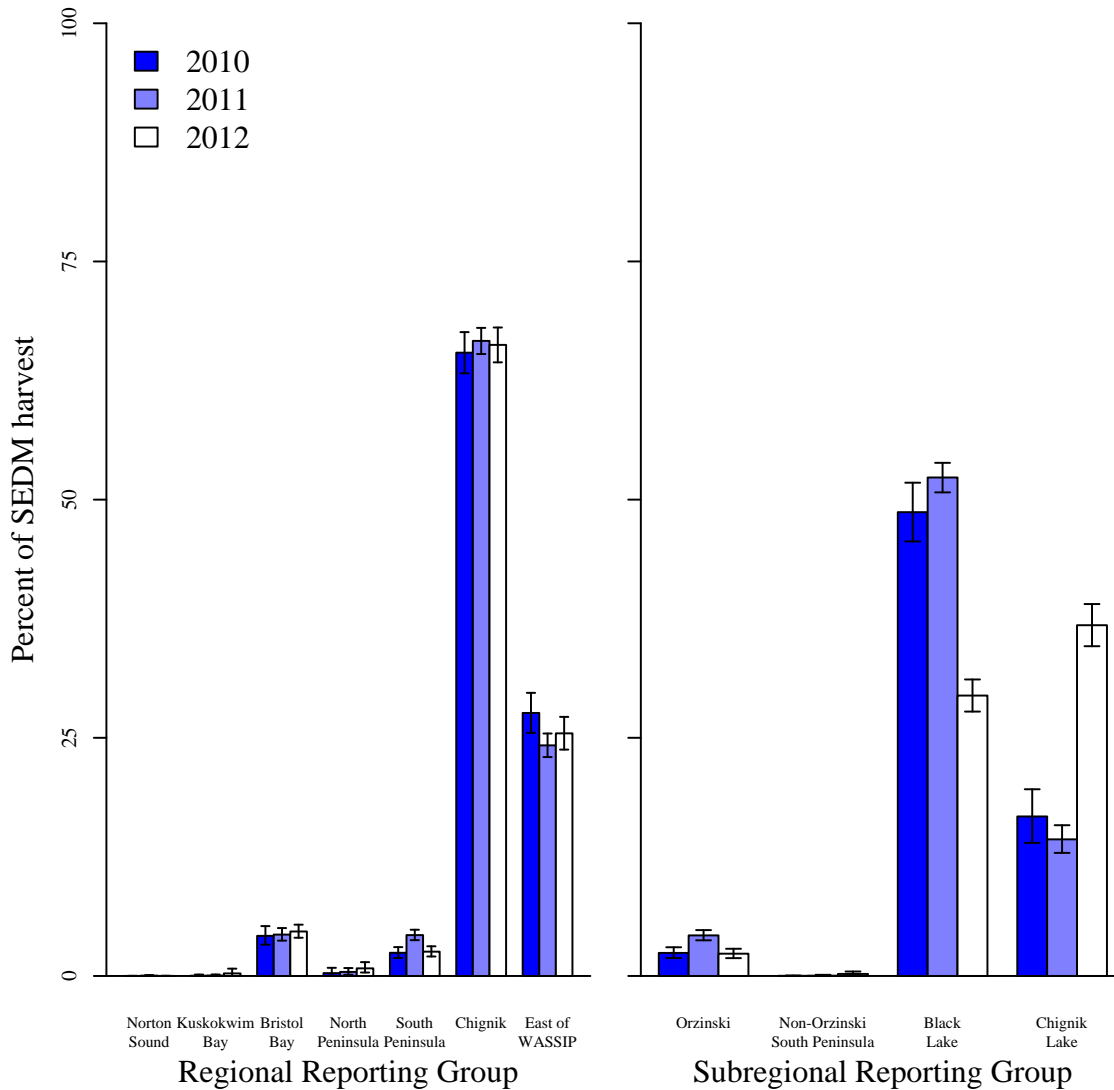
Southwest Stepovak, Balboa Bay and Beaver Bay sections



Southwest Stepovak, Balboa Bay and Beaver Bay sections

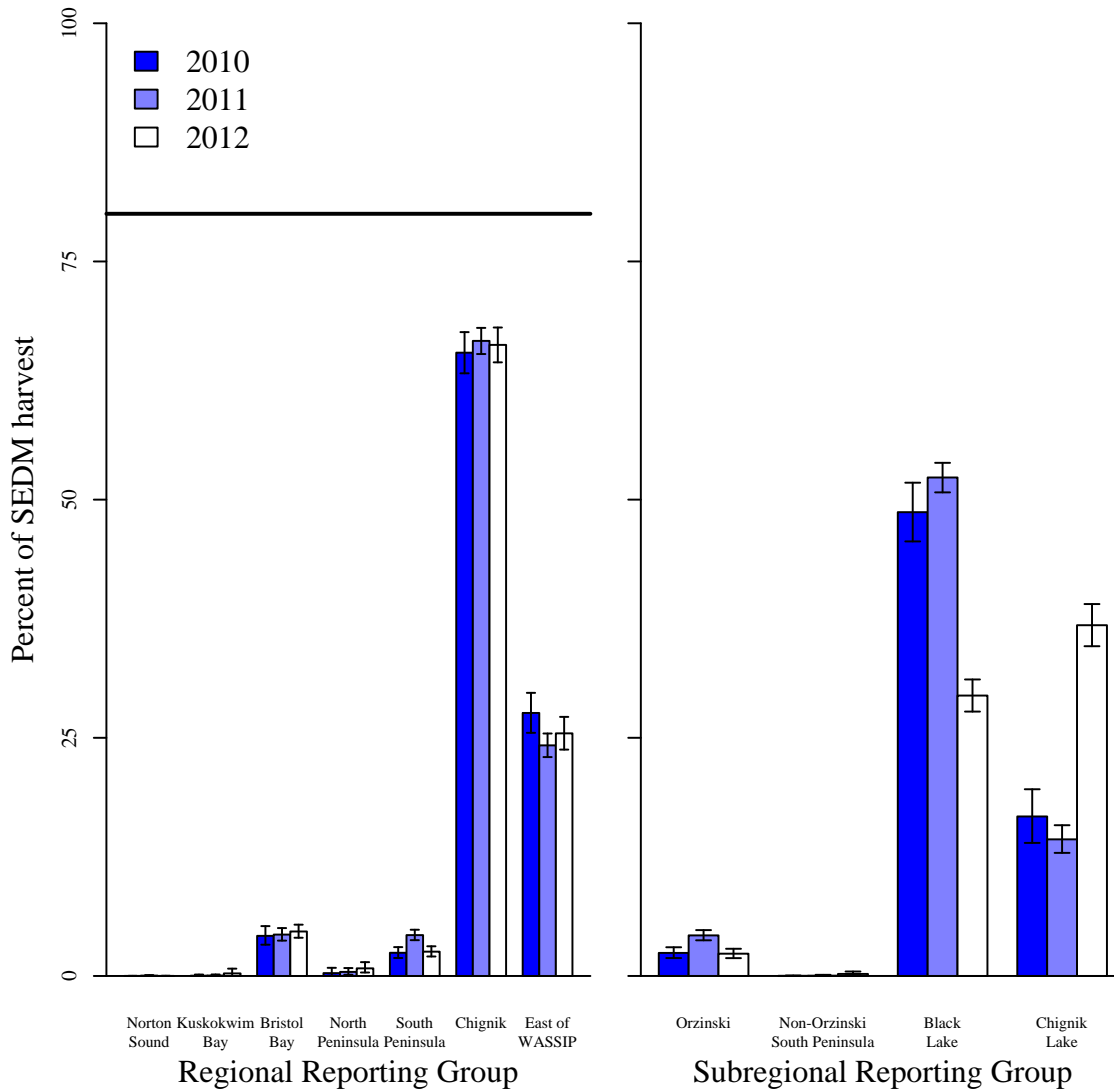


Southeastern District Mainland



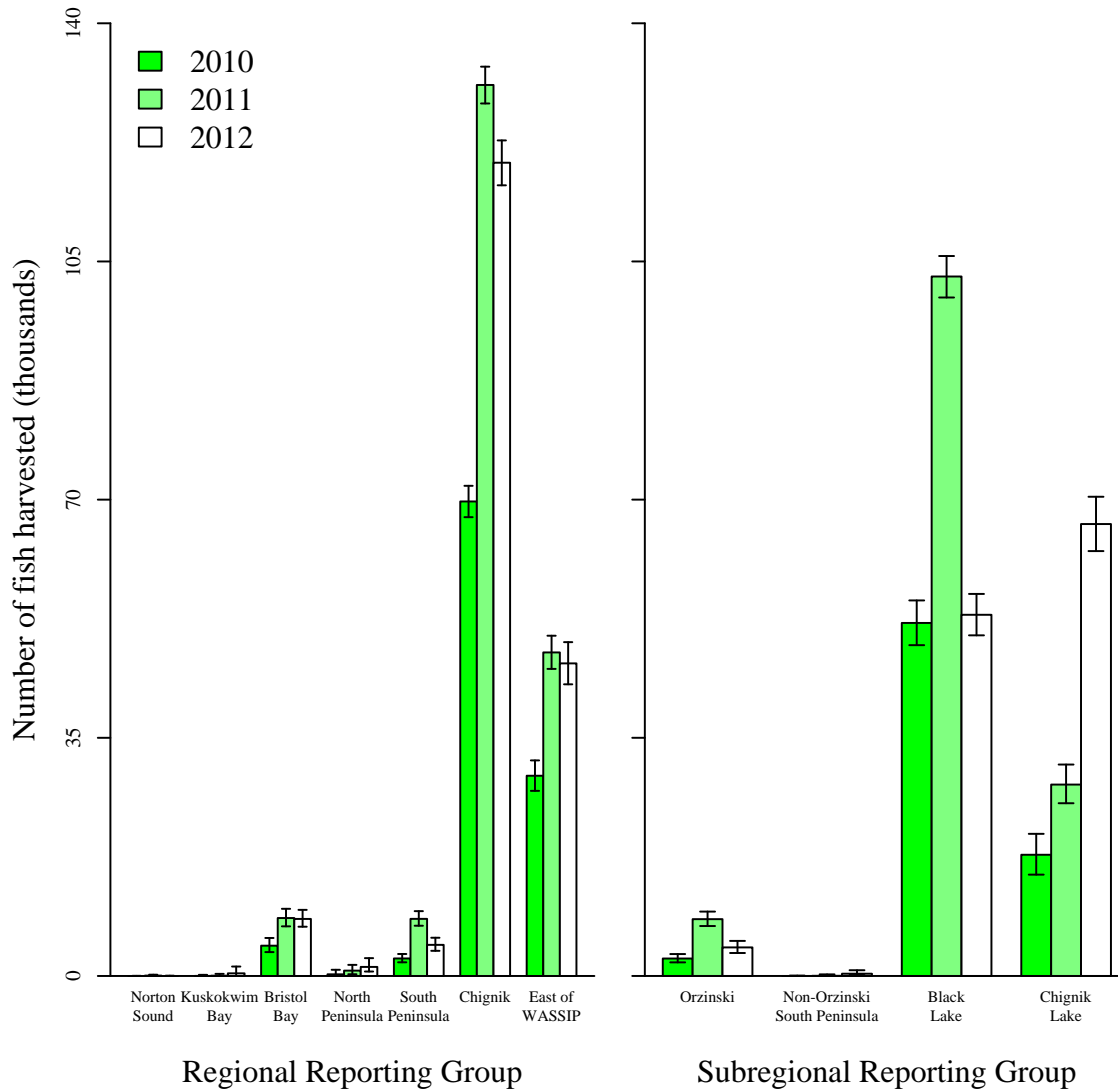
Note: experimental design did not mirror management plan.

Southeastern District Mainland



Note: experimental design did not mirror management plan.

Southeastern District Mainland



Southeastern District Mainland



Note: experimental design did not mirror management plan.

All results publically available

Special Publication No. 12-31

**Genetic Stock Composition of the Commercial
Harvest of Sockeye Salmon in Southeastern District
Mainland, Alaska Peninsula Management Area,
2010–2012**

by

Tyler H. Dann,

Mark J. Witteveen,

Serena D. Rogers Olive,

Christopher Habicht,

Matthew B. Foster,

Heather L. Liller,

and

William D. Templin

December 2012

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

Google: SEDM genetic stock composition

Collaborative project funded by the State of
Alaska and Aleutians East Borough.

Questions