Effective Engagement of Stakeholders in Designing and Communicating Science

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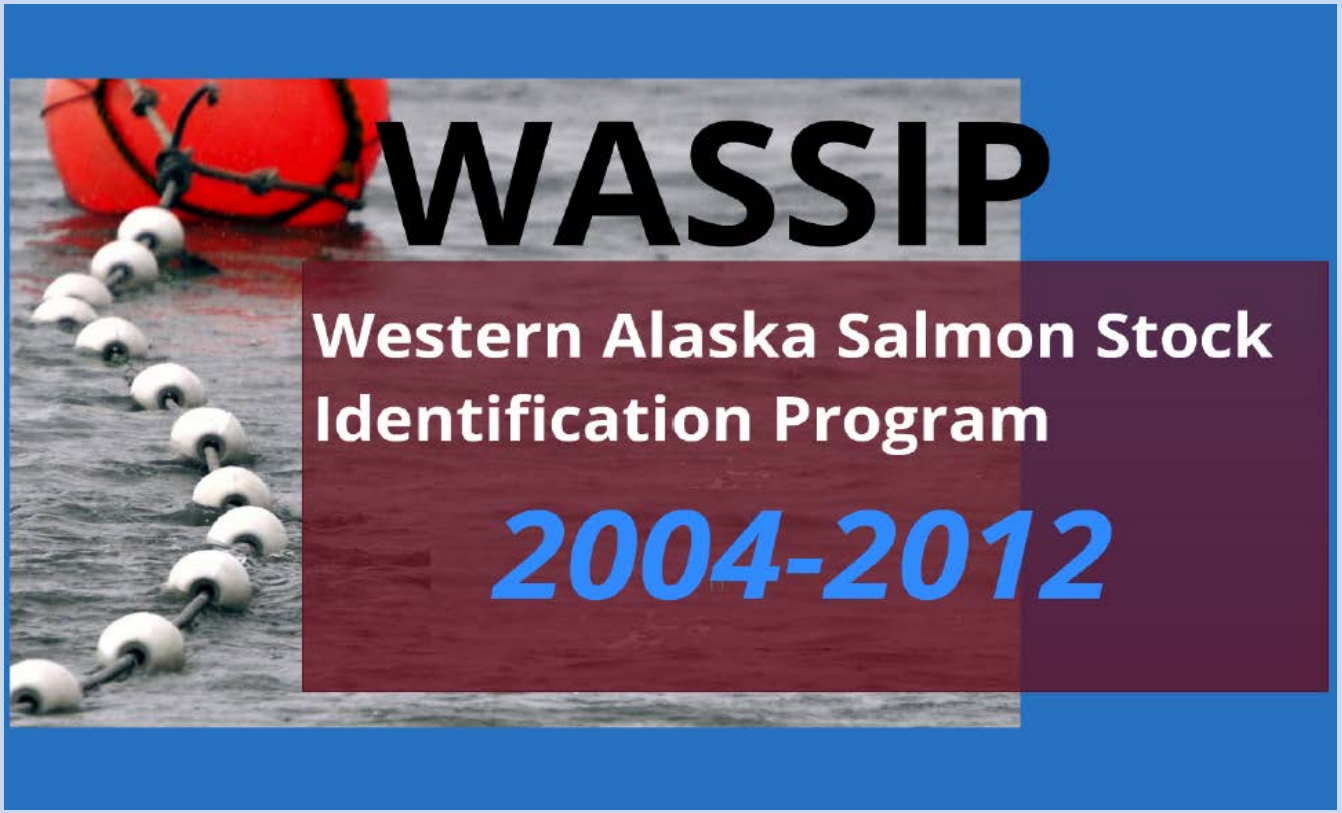
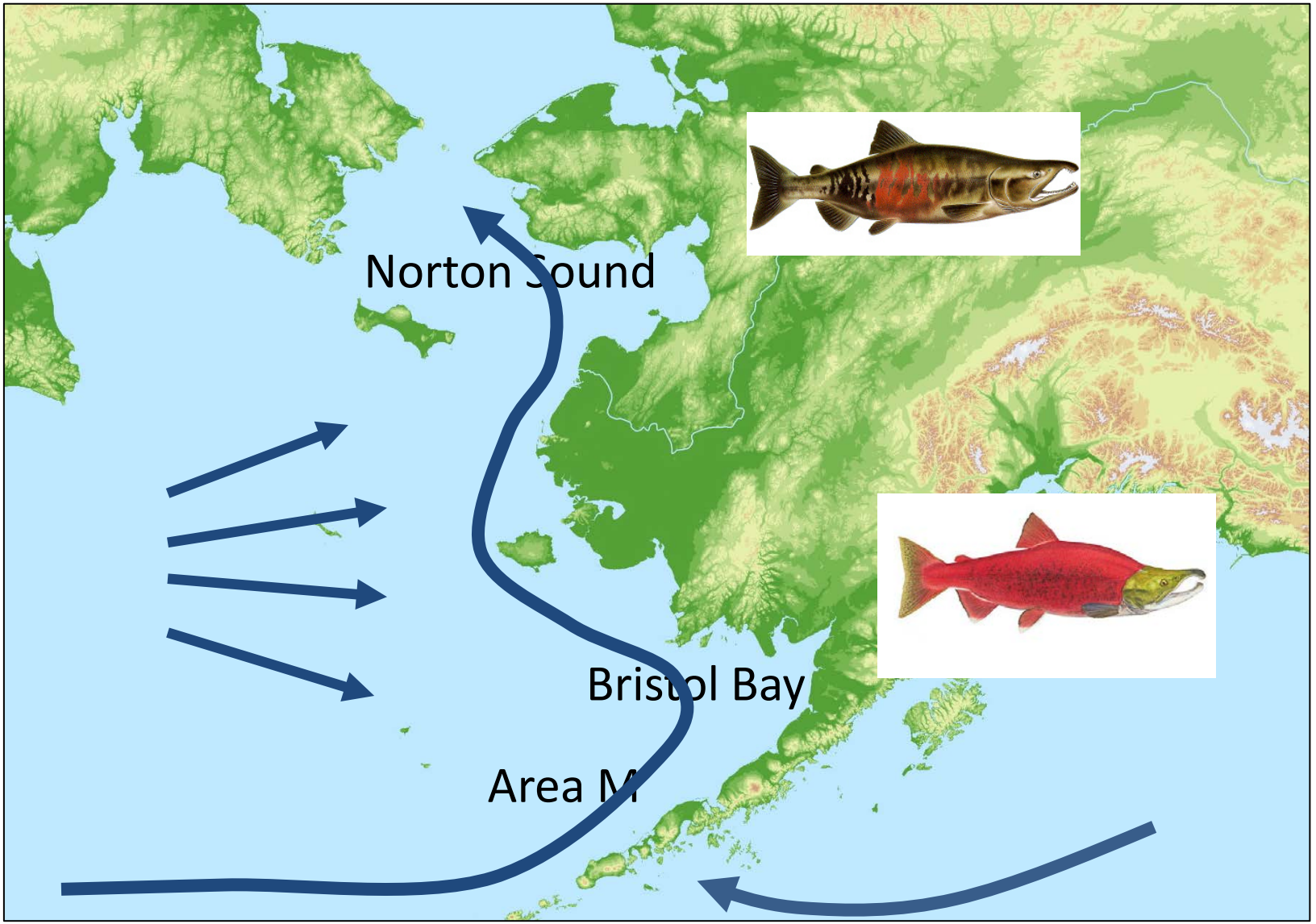
Alaska Department of Fish and Game
Division of Commercial Fisheries



WASSIP Origins

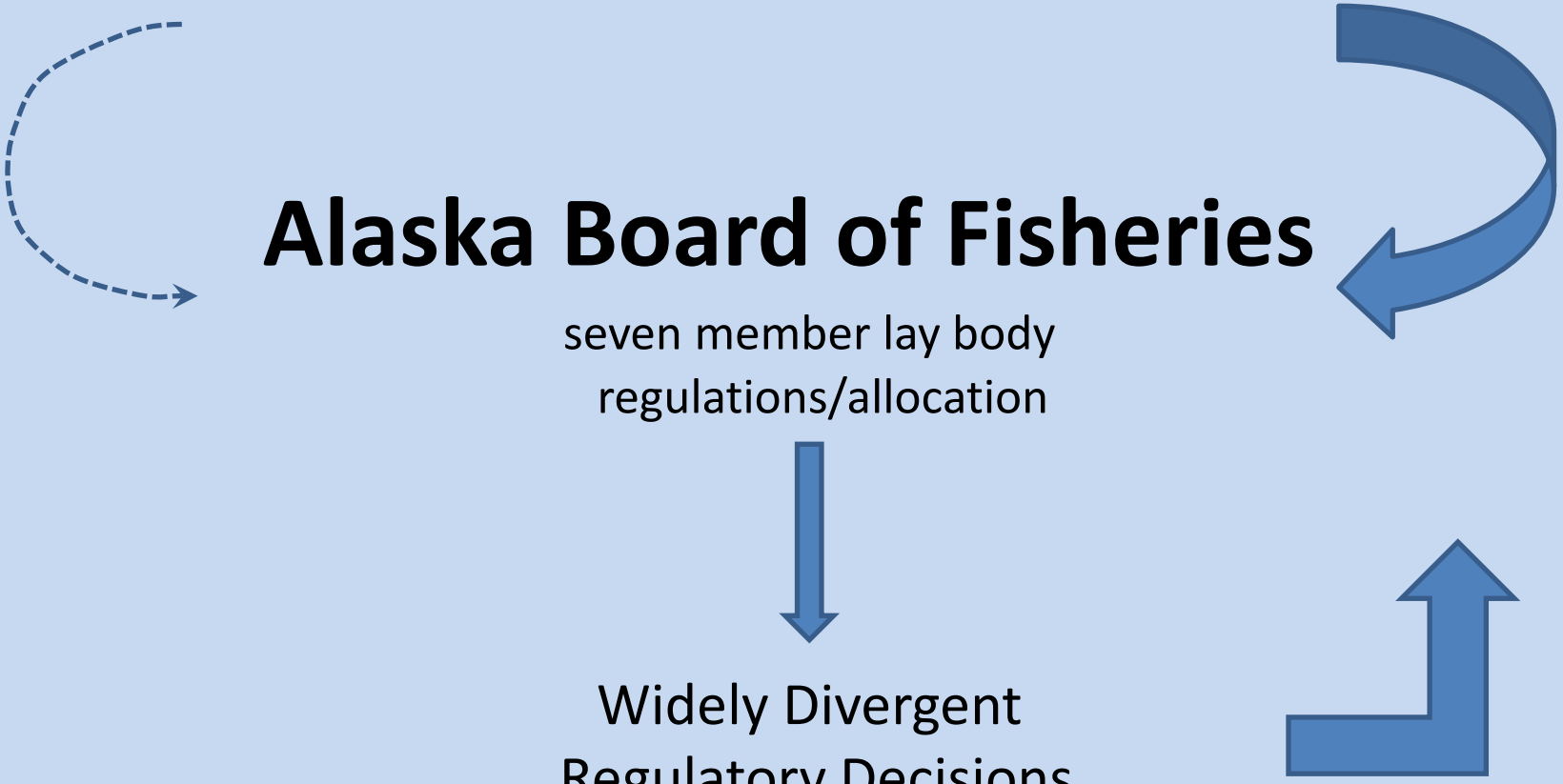
From Long Standing Catch Disputes



Decisions with Limited Information

Available Science

Public Frustration and
Political Pressure



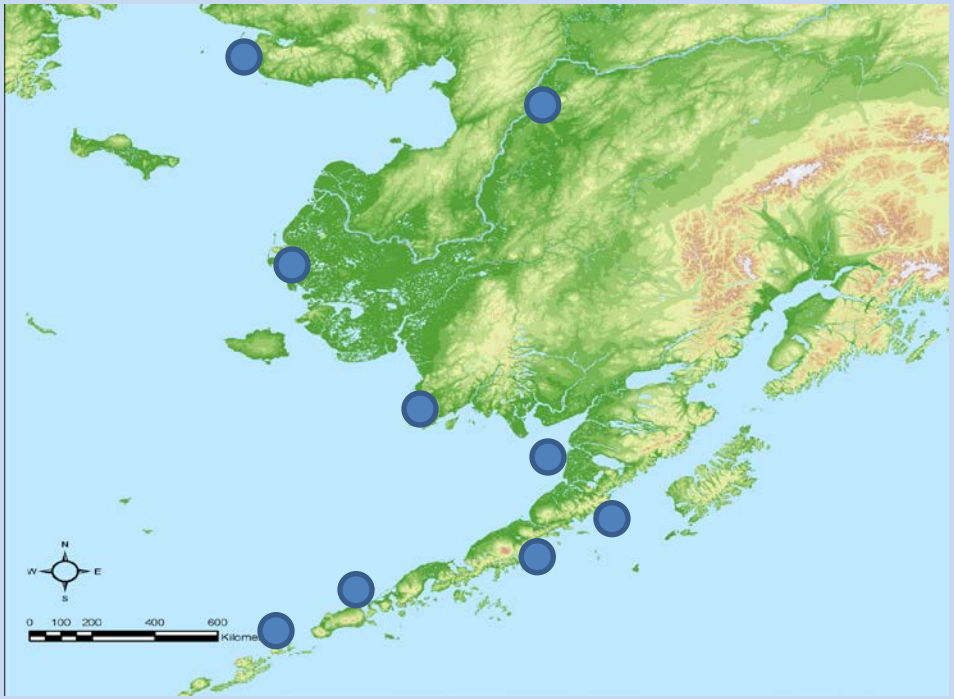
- Political support to fund large scale, collaborative genetic stock identification study

IF

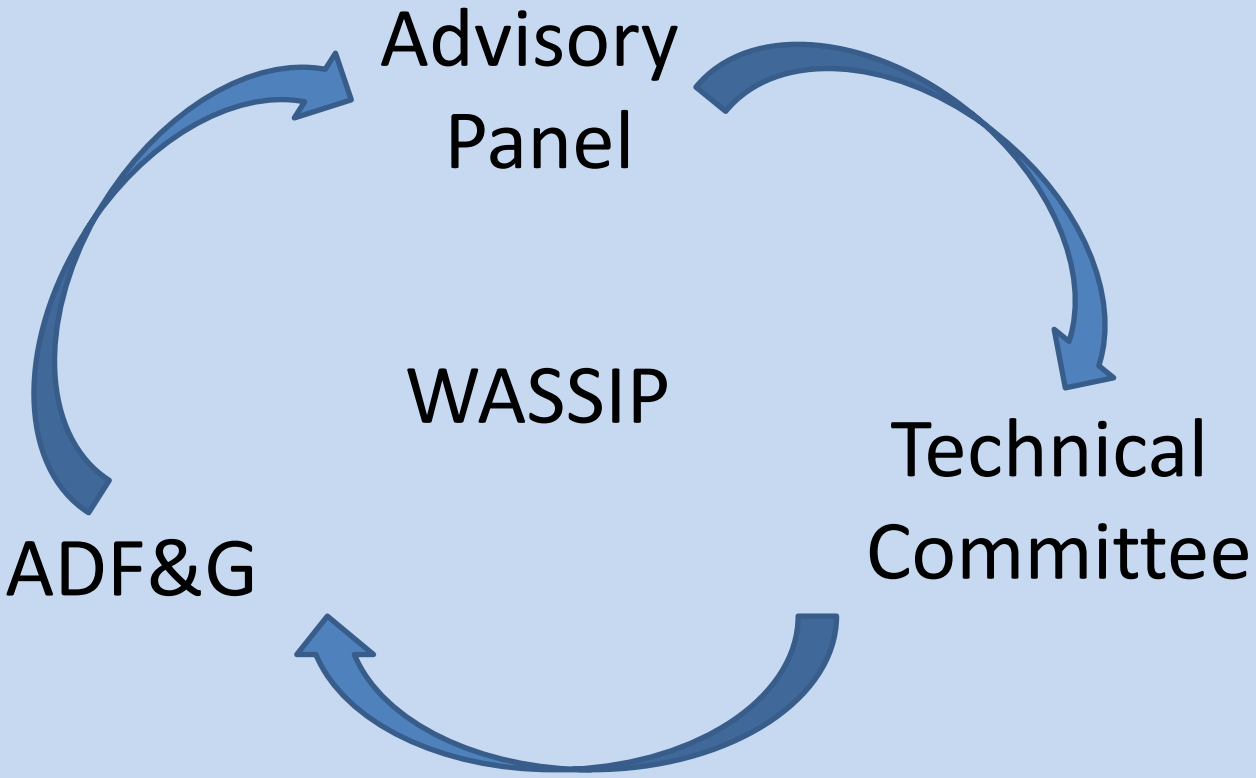
- Stakeholders agree on necessary information, study design and results

WASSIP Advisory Panel

Alaska Fish and Game
Aleut Corp
Aleutians East Borough
Assoc. Village Council Presidents
Bering Sea Fishermen's Association
Bristol Bay Native Association
Concerned Area M Fishermen
Kawerak Inc.
Lake and Peninsula Borough
Tanana Chiefs Conference
Yukon River Drainage Fisheries Assoc.



Circle of Trust



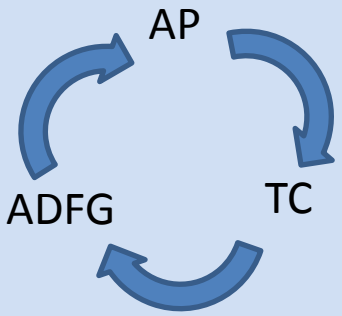
What stocks are caught in a given fishery?
What fisheries catch a given stock?

Alaska Board of Fisheries

Ground Rules
(Memorandum of Understanding)

Stakeholder Input/Oversight for all Decisions

- Sampling plan
  - fisheries, time/area strata, N
- Genetic reporting groups
- Estimating harvest
- Estimating escapement



Technical Committee Interface

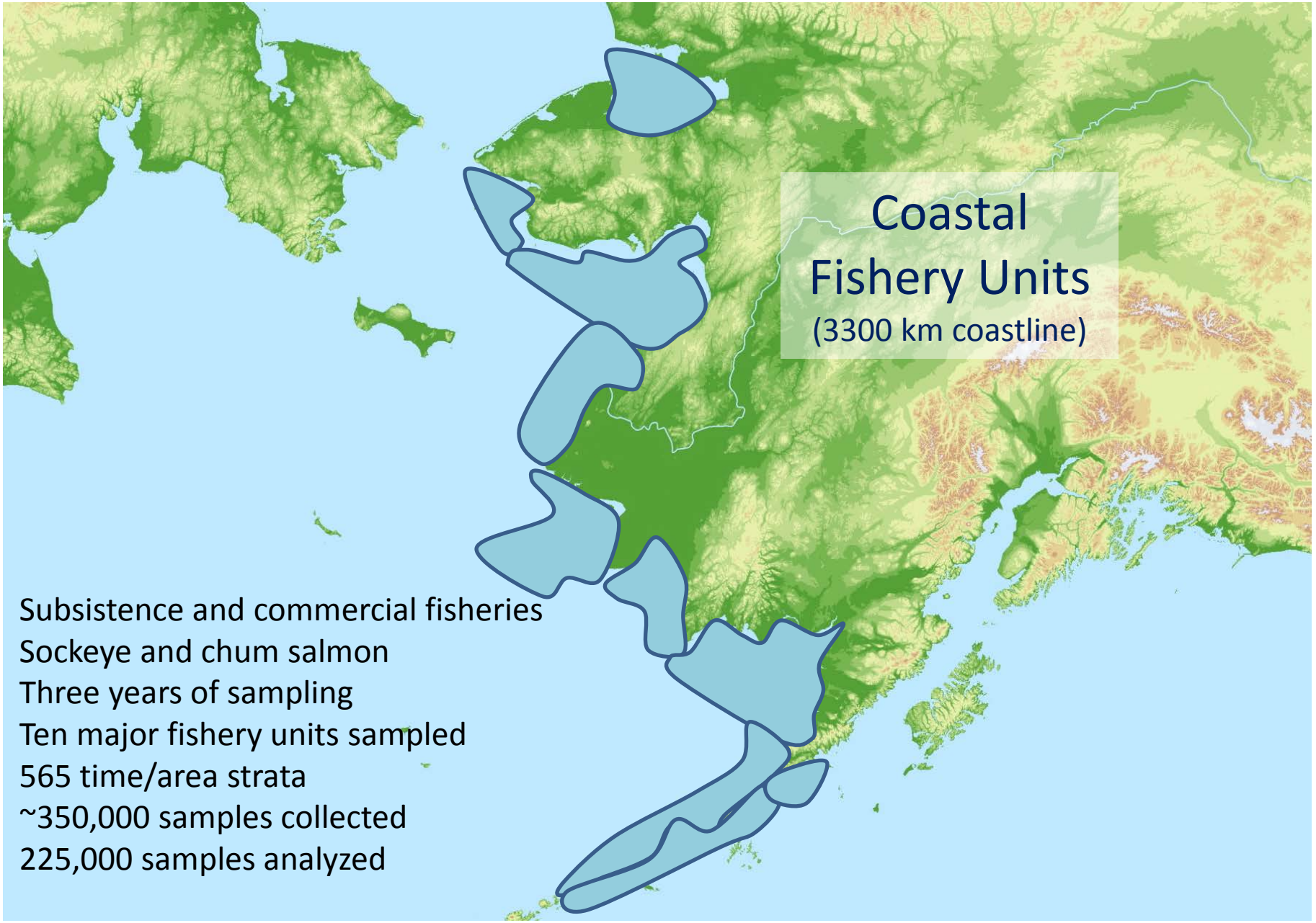
- Technical document series

!

- No analyses until sampling complete
- All data inputs agreed upon before analyses conducted
- No reporting until analyses complete

Decisions by Consensus!

WASSIP Scope and Purpose



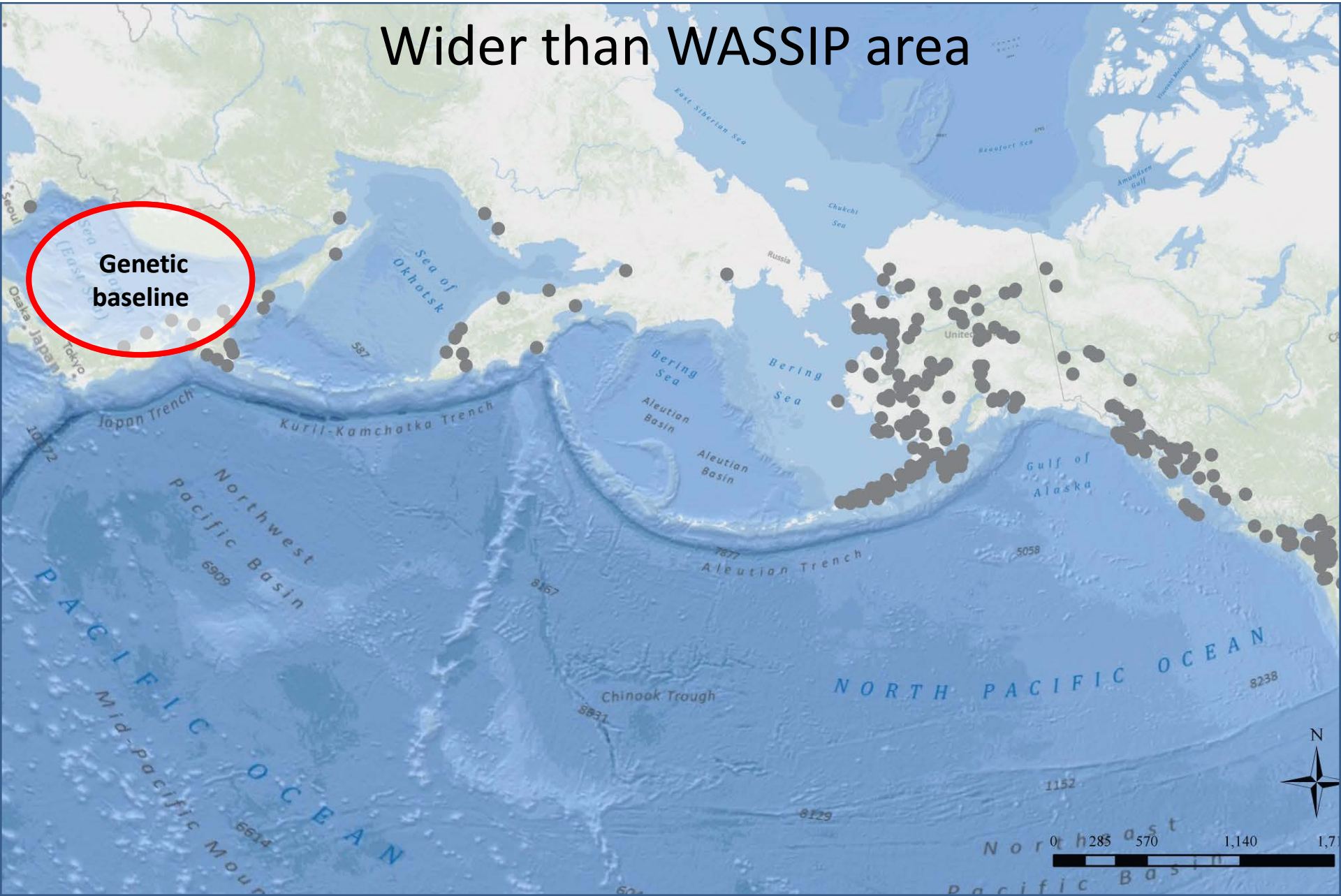
Subsistence and commercial fisheries
Sockeye and chum salmon
Three years of sampling
Ten major fishery units sampled
565 time/area strata
~350,000 samples collected
225,000 samples analyzed

Analysis Objectives

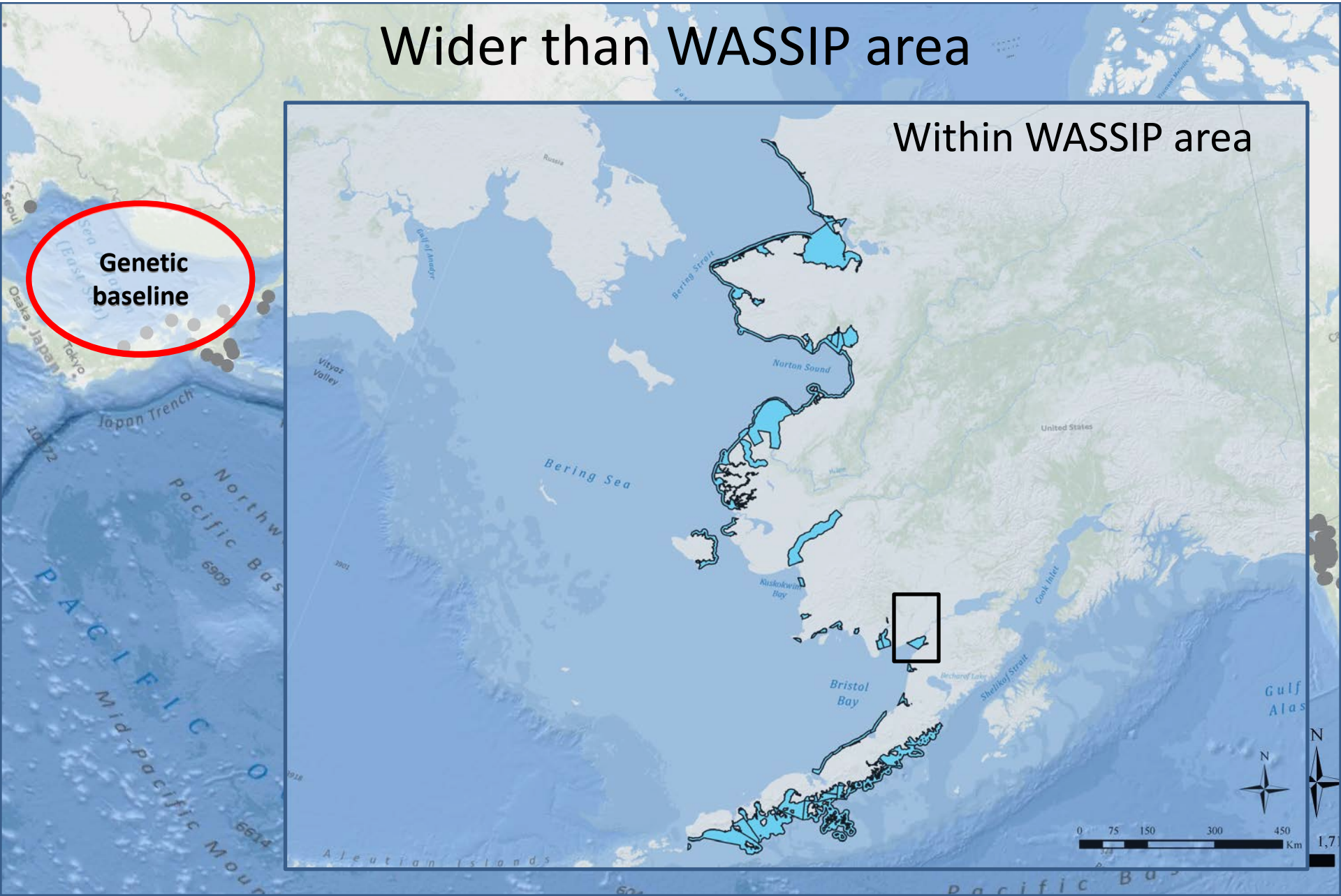
- Stock composition
- Stock-specific harvest number
- Stock-specific harvest rate

- Board of Fisheries presentations
- Community outreach with stakeholders

Inputs and Outputs



Inputs and Outputs



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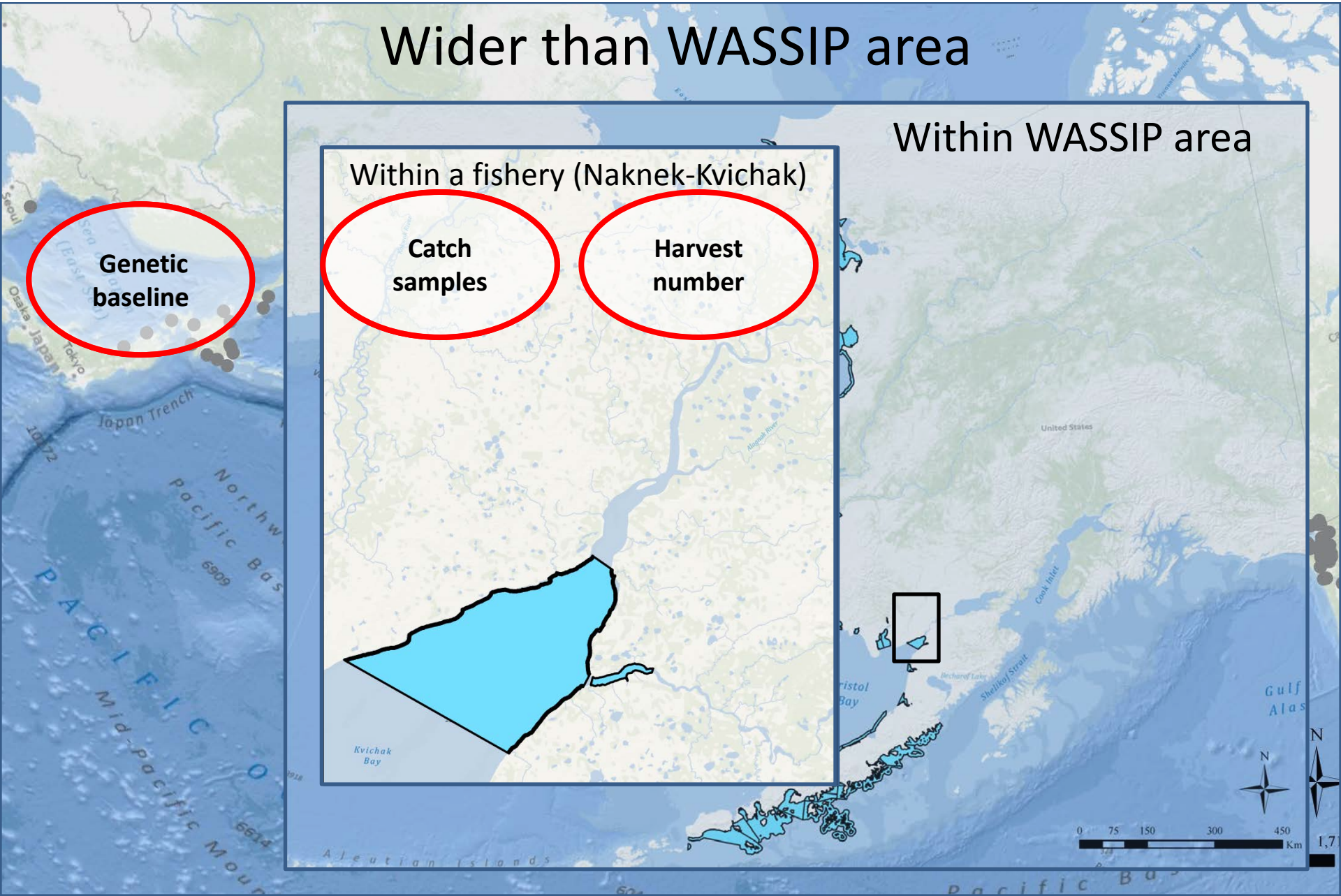
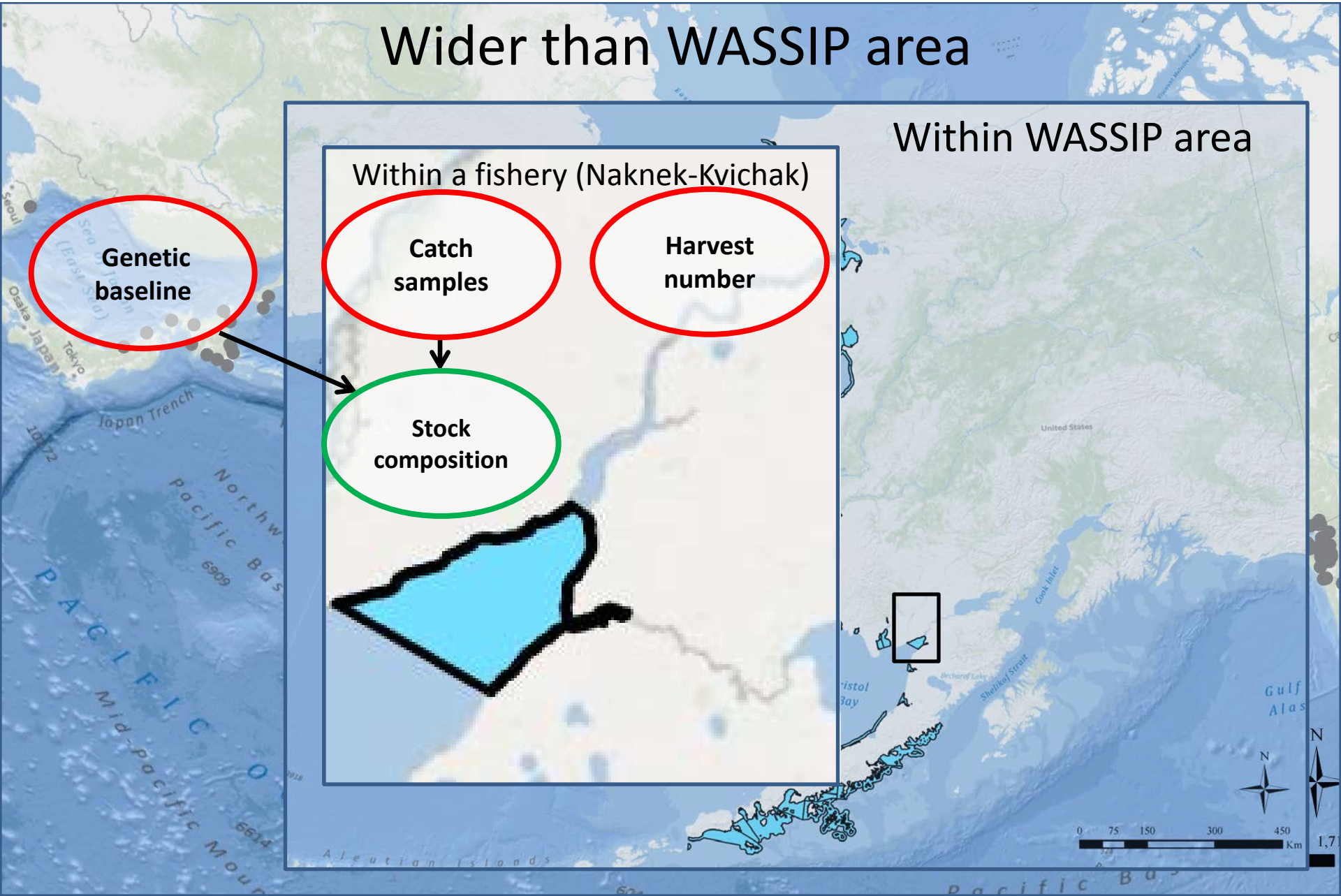


Inputs and Outputs



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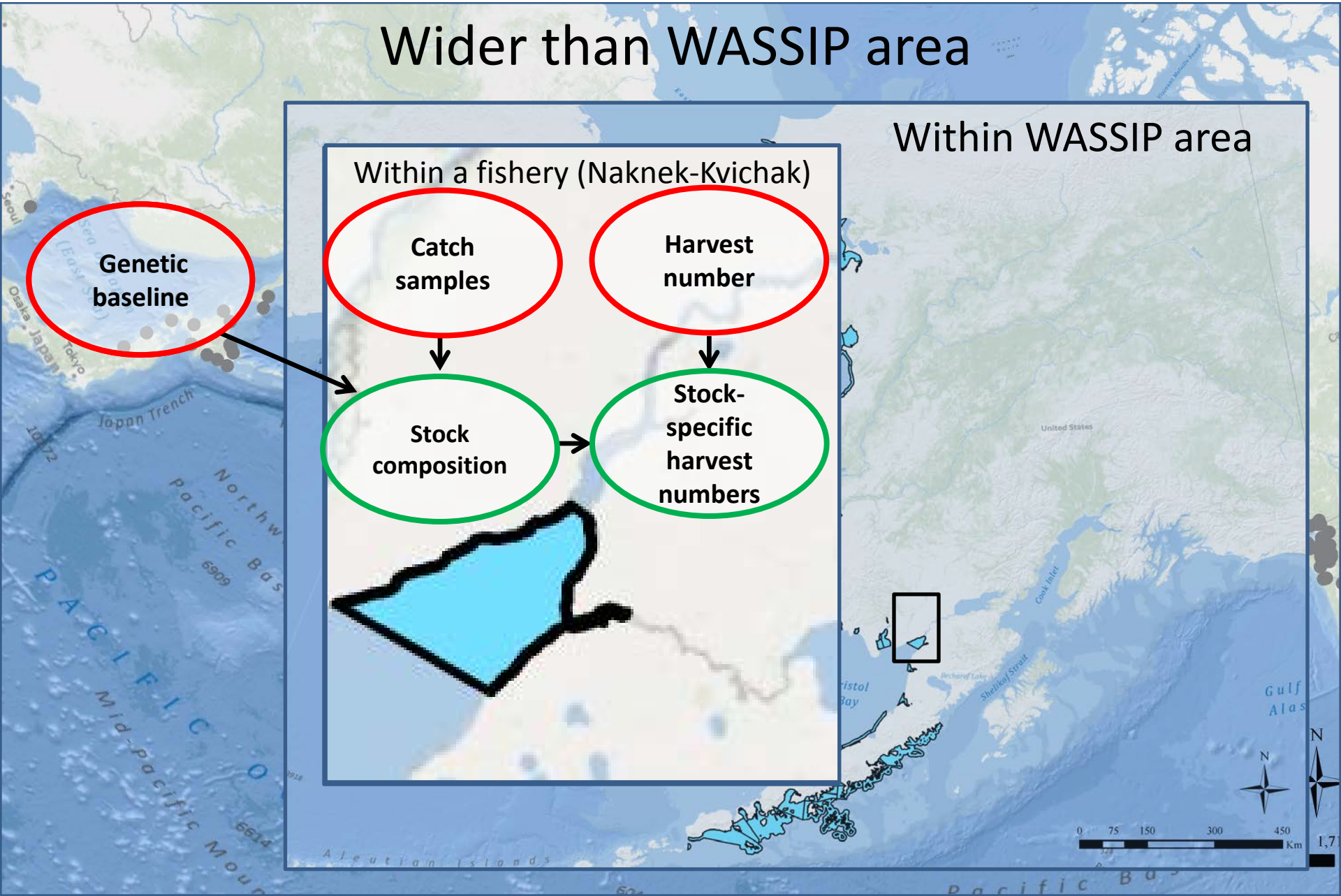

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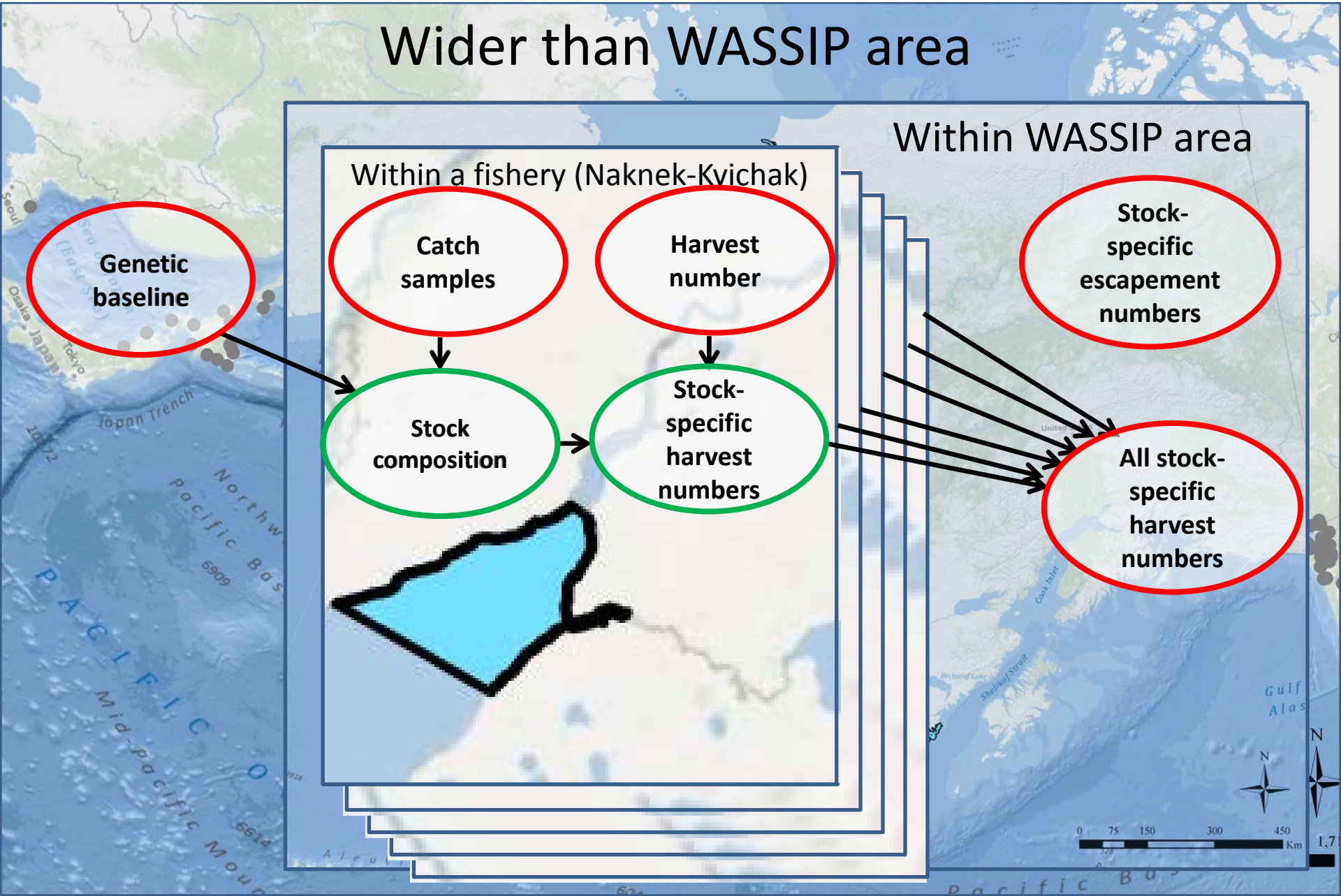

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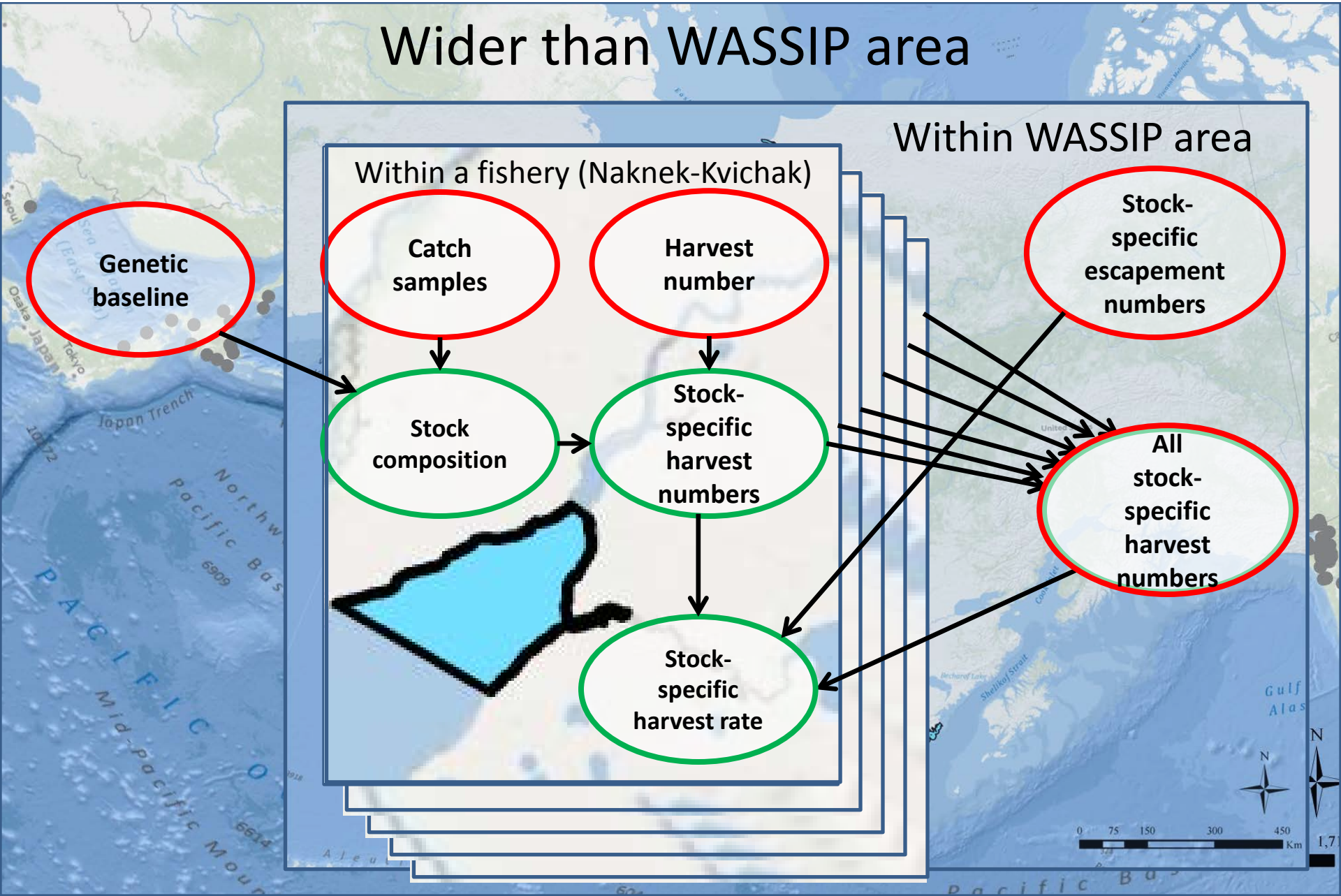


Communicating WASSIP Results

(9 reports, 2200 pages, 1,593 tables, 20 pounds)

http://www.adfg.alaska.gov/index.cfm?adfg=wassip.main

Egegik District Stock Compositions

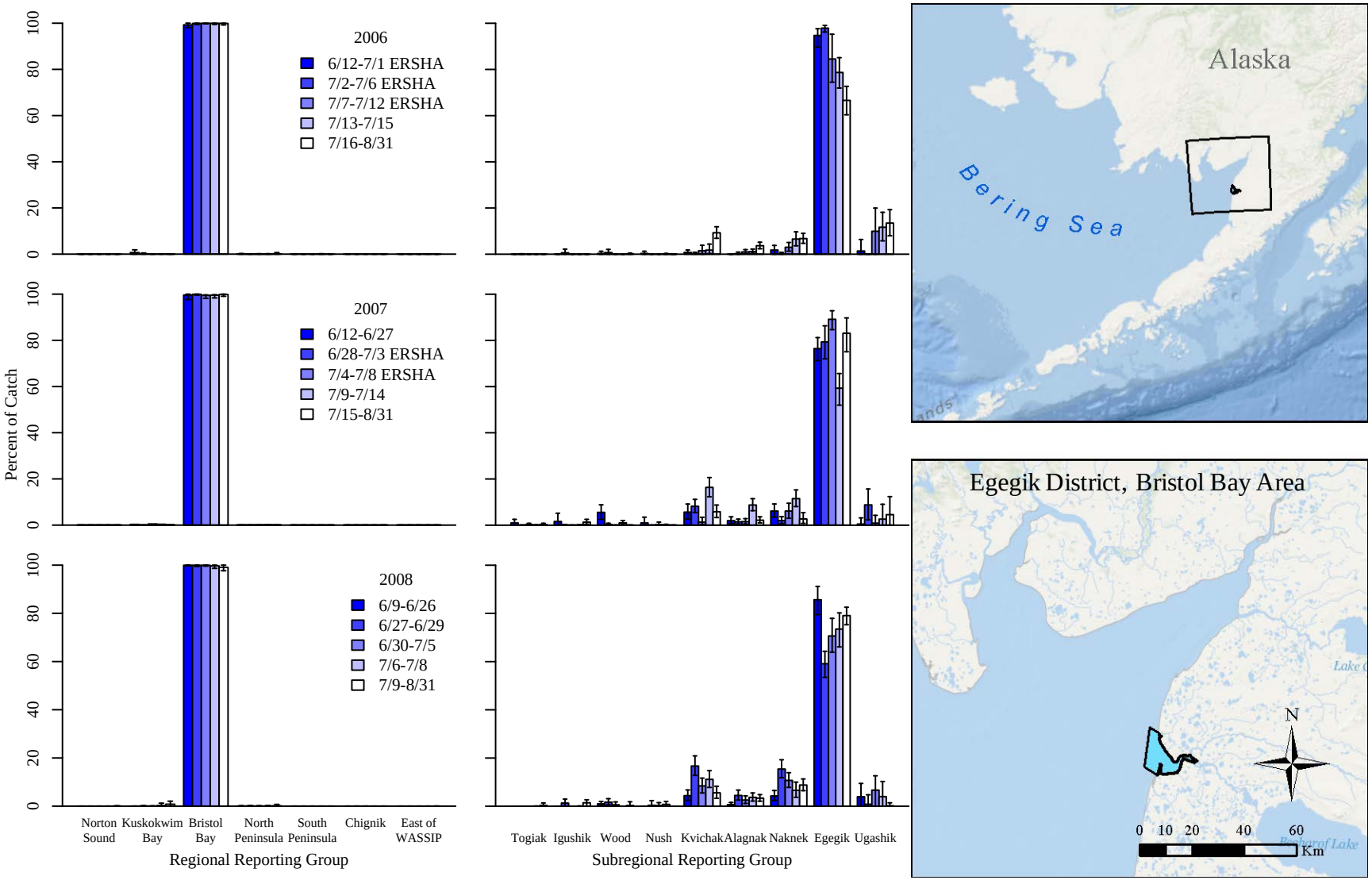


Figure 21.– Mean regional and subregional (within Bristol Bay) stock composition estimates (bars) and 90% credibility intervals (whiskers) by temporal stratum within years for sockeye salmon sampled from Egegik District, Bristol Bay Area, Central Region (map) in 2006-2008 for the Western Alaska Salmon Stock Identification Project. See Tables 64 and 66 and Eggers et al. (2011) for a description of fishery restrictions.

Egegik District Harvest Numbers

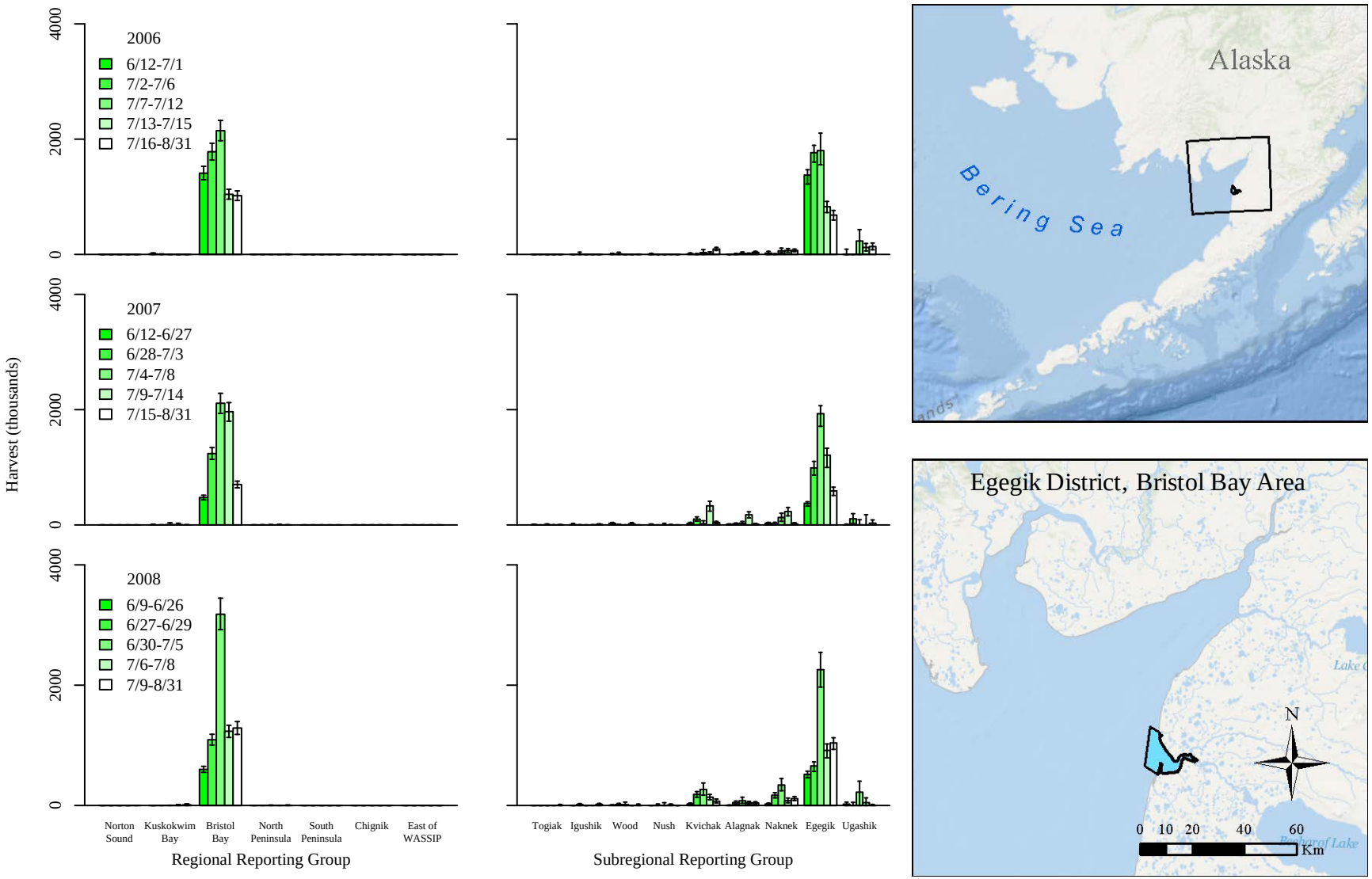


Figure 22.–Median regional and subregional (within Bristol Bay) reporting group harvest estimates (bars) and 90% credibility intervals (whiskers) by temporal stratum within years for sockeye salmon sampled from Egegik District, Bristol Bay Area, Central Region (map) from 2006 to 2008 for the Western Alaska Salmon Stock Identification Program.

Egegik District Harvest Rates

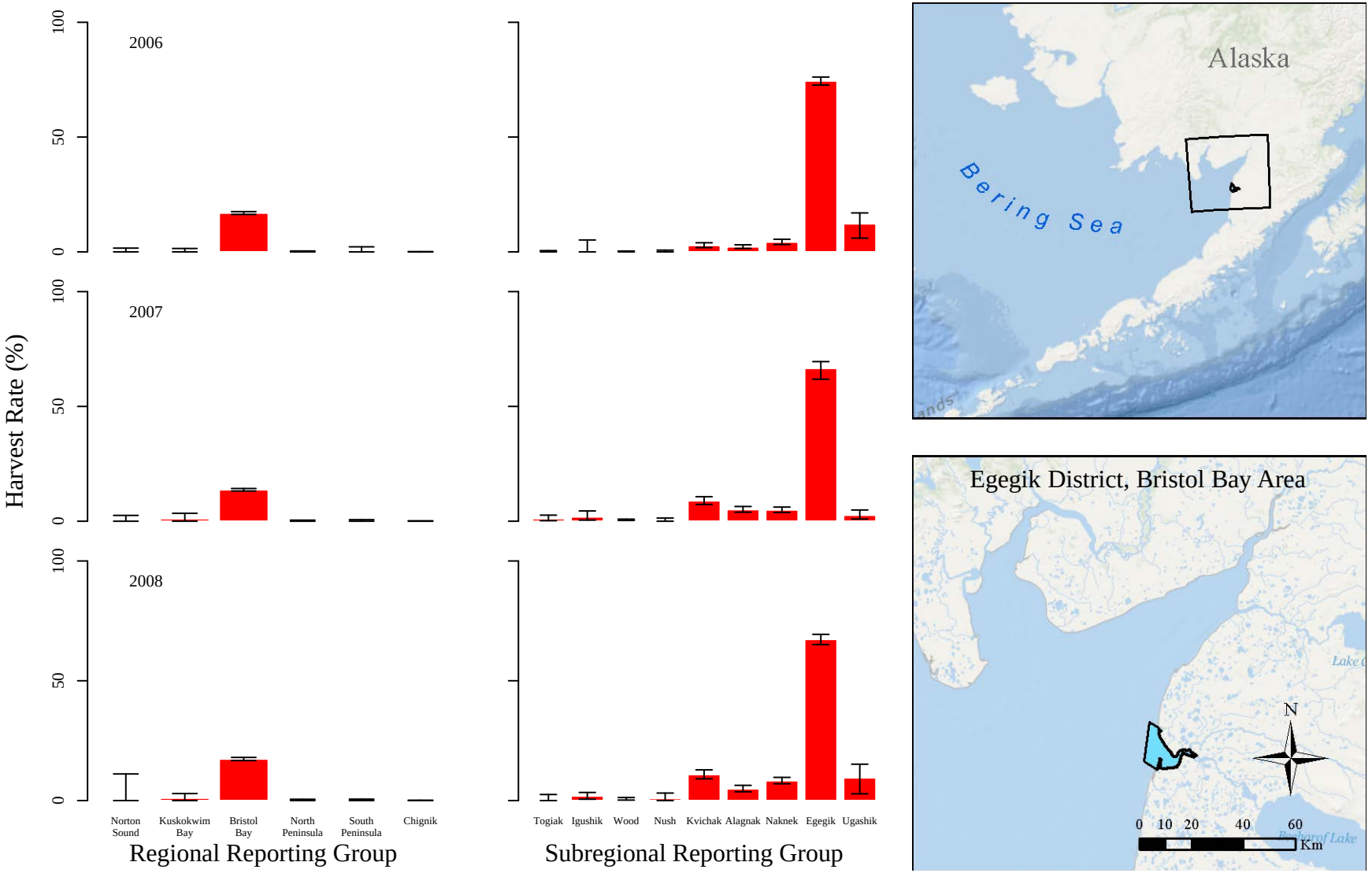


Figure 47.–Median regional and subregional (within Bristol Bay) reporting group harvest rate estimates (bars) and 90% credibility intervals (whiskers) within years for sockeye salmon sampled from Egegik District, Bristol Bay Area, Central Region (map) from 2006 to 2008 for the Western Alaska Salmon Stock Identification Program.

Egegik River Stock Harvest Rates

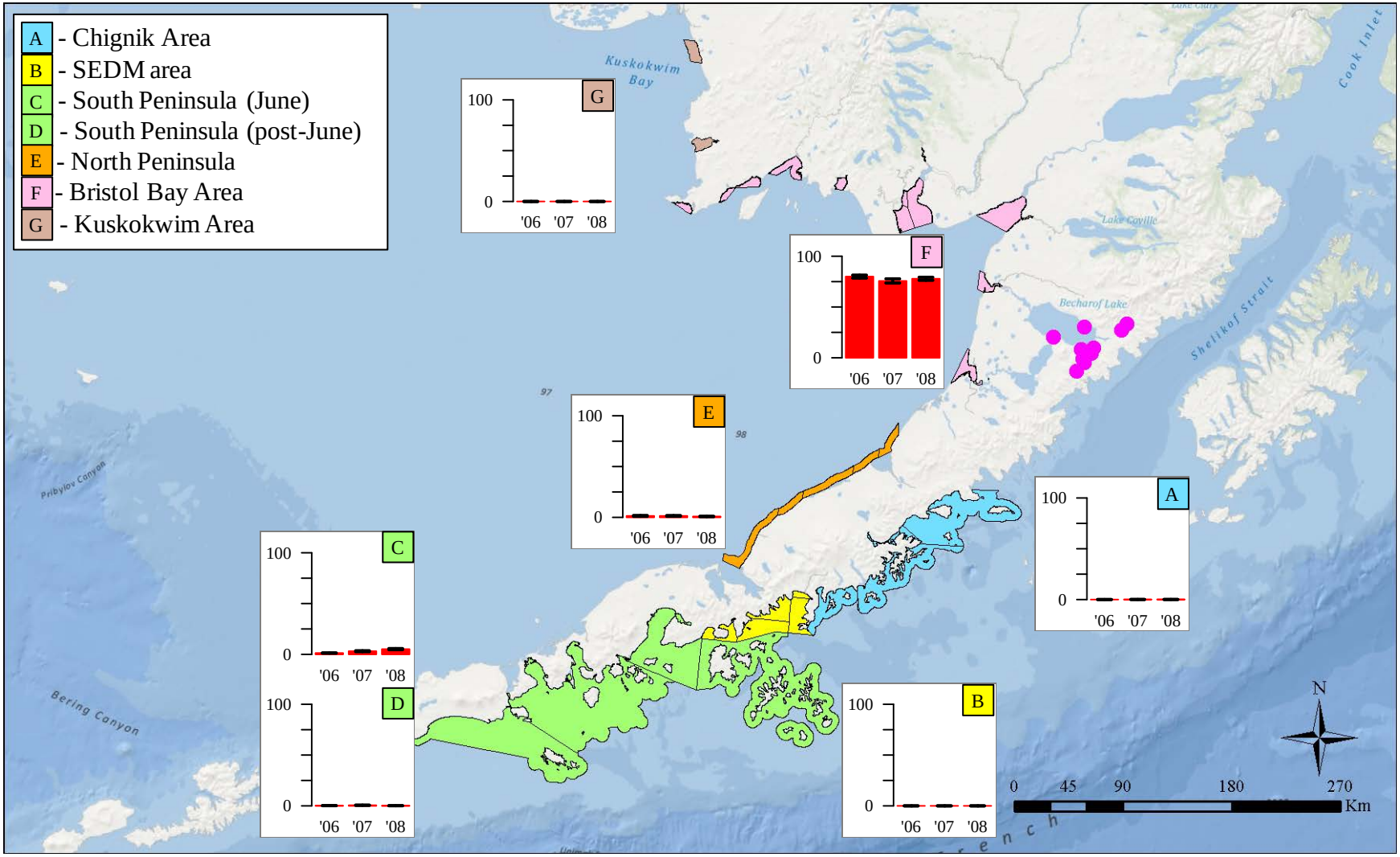
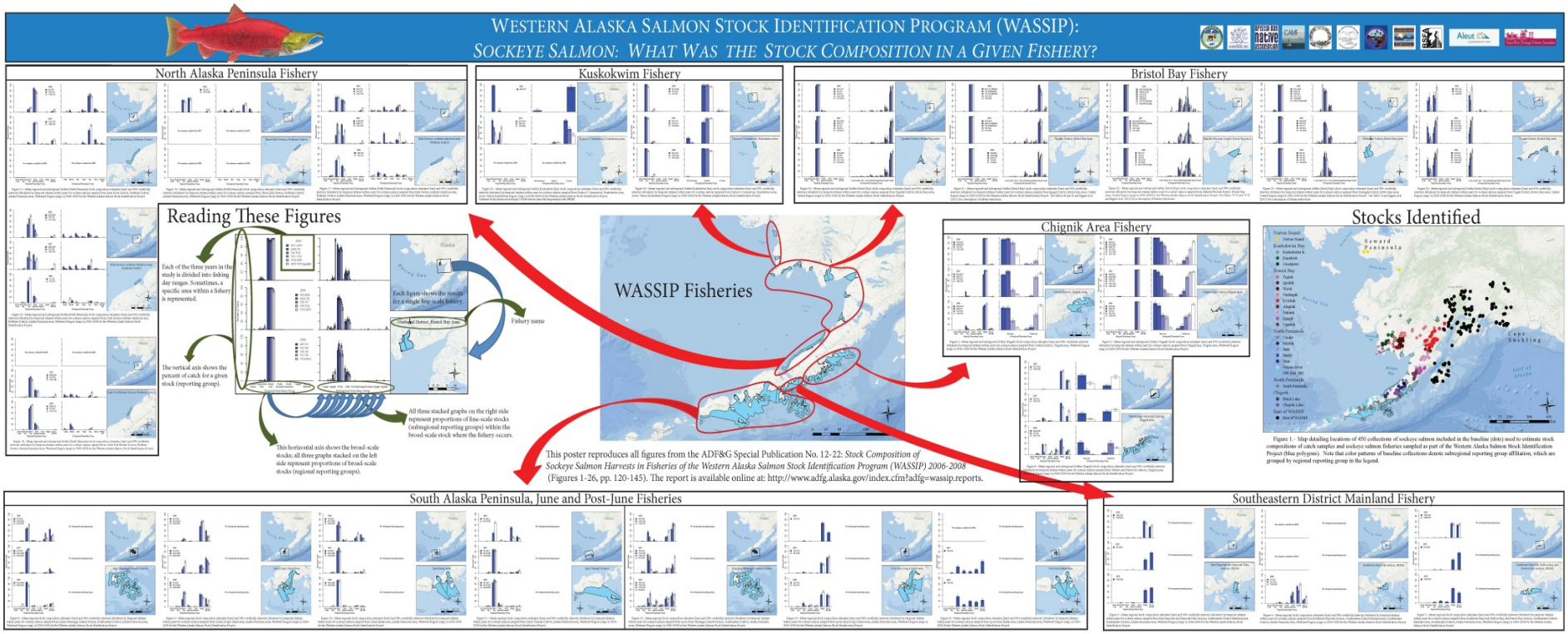


Figure 64.–Median harvest rates (bars) and 90% credibility intervals (whiskers) of sockeye salmon from the Egegik reporting group by fishery from 2006 to 2008 for the Western Alaska Salmon Stock Identification Program. Circles indicate populations in the Egegik reporting group.

Stock Composition in a Given Fishery



Measures of Success

- Unprecedented sampling/analysis effort
- Much improved information to Board and public
- Broad acceptance of results

- Stakeholder (consensus) driven with specific contributions

  - Comprehensive population level analyses (harvest rates)
  - Technical solutions recognizing stakeholder needs
  - Independent expert evaluation (avoid dueling experts)
  - Communication of results

- Better stakeholder relations
- Increased credibility of management agency

Is WASSIP Process a Future Model?

- Uncomfortable/Uncertain
- Substantial time commitment for everyone
- Short-term inefficiency
- Less control for management agency

Only if stakeholders demand it

Technical Committee

Robin Waples
Bruce Weir
Milo Adkison
Tom Quinn