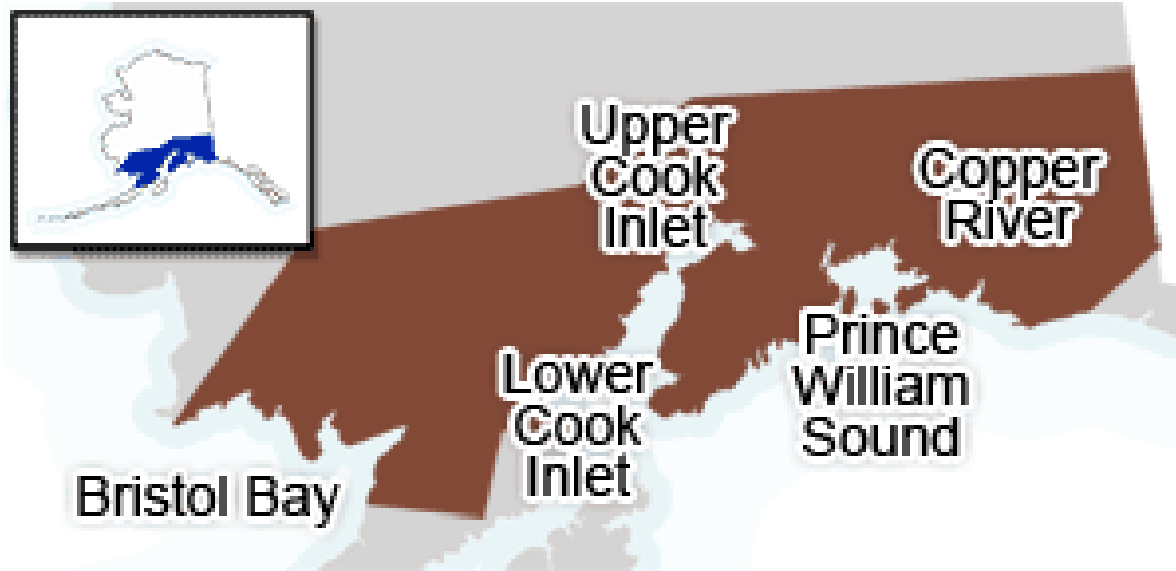# Central Region

Team Members

Tommy Sheridan – Co-lead, University of Alaska Fairbanks
Mike Flores – Co-lead, Charter Boat Fisher
Caroline Brown – ADF&G Subsistence
Tom Carpenter – Commercial Fisher
Austin Estabrooks – At-Sea Processors Association
Ed Farley – NOAA Ecosystem Monitoring and Assessment Program
Karla Jensen – Native Village of Pedro Bay
Andrew Munro – ADF&G Commercial Fisheries / NPFMC
Michelle Stratton – Alaska Marine Conservation Council & Fisher
Bill Templin – ADF&G Commercial Fisheries
Noelle Yochum – Trident Seafoods & Alaska Pacific University

Impact : Climate

Related impact info:
- changing marine foodweb
- estuarine/predators

Areas w/in Central Region
- CI, BB, PWS/CR

Gap Description:
- marine juvenile abundance
- available prey base in western Gulf of Alaska
- abundance of marine predators
- early forecast of future adult returns

Species:
- all species

Lifecycle:
- all life stages

Why should we prioritize this, what are the factors that make this a priority?
- Tbd
- Tbd
- Tbd

Research Need / Project Idea:
- western Gulf of Alaska juvenile salmon surveys
- southern Bering Sea juvenile salmon surveys
- Tbd

Impact : Competition at sea

Related impact info:
- high-seas species/stock distribution
- changes in marine foodweb
- Hatchery/wild interactions at sea

Gap Description:
- mechanistic understanding of competion at sea
- Incomplete understanding of salmon distribution
- diet and condition of marine juveniles

Species:
- all species

Areas w/in Central Region
- PWS/CR, CI, BB

Lifecycle:
- immature, adult

Why should we prioritize this, what are the factors that make this a priority?
- Projects like these allow us to identify where in the lifecycle survival issues occur and help to better understand stock dynamics.
- Tbd

Research Need / Project Idea:
- Gulf of Alaska juvenile salmon surveys
- Bering Sea juvenile salmon surveys
- Plankton/nekton analyses

Submitted by: __AYK, __West, __ SE, _X_ Central

Region(s) Impacted: _X_AYK, _X_West, _X_ SE, _X_ Central

Impact : Health/Condition of Returning Adults

Related impact info:
- warming freshwater habitat

Areas w/in Central Region
- PWS/CR, CI, BB

Gap Description:
- effect of heat stress on disease suceptibility, egg retention, egg quality, and prespawn mortality

Species:
- all (primarily Chinook and sockeye)

Lifecycle:
- adult

Why should we prioritize this, what are the factors that make this a priority?
- Tbd
- Tbd
- Tbd

Research Need / Project Idea:
- disease studies/monitoring (i.e., Ichthyophonus)
- studies on metabolic drivers of spawning quality (e.g., thiaminase, fat)
- Tbd

Impact : Freshwater/Marine Predation

Related impact info:
- climate

Areas w/in Central Region
- PWS/CR, CI

Gap Description:
- timing, movement and distribution through freshwater and nearshore marine waters
- survival from freshwater outmigration to nearshore marine habitats

Species:
- Chinook, sockeye, coho

Lifecycle:
- smolt

Why should we prioritize this, what are the factors that make this a priority?
- Tbd
- Tbd
- Tbd

Research Need / Project Idea:
- Chinook salmon smolt tagging (Kenai River)
- Juvenile/smolt assessment
- Tbd

Impact : Marine/Freshwater Harvest

Related impact info:
- Most factors occuring in mainstem freshwater and marine waters
-

Areas w/in Central Region
- PWS, CI, BB

Gap Description:
- stock identification at finer resolution than currently possible

Species:
- All species (especially chum, pink, coho)

Lifecycle:
- adult, immature

Why should we prioritize this, what are the factors that make this a priority?
- Stock identification of individuals captured in marine waters is necessary for most analyses
- Tbd
- Tbd

Research Need / Project Idea:
- Improvement of genetic baselines
- Stock composition of fishery harvest
- Tbd

Impact : Hatchery/Wild Interactions

Related impact info:
- Competion

Areas w/in Central Region
- PWS, CI, BB

Gap Description:
- Limited understanding of genetic changes sustained by wild salmonids, adaptive consequences, and effects inhibiting capacity to adapt.
- Hatchery/wild interaction at sea

Species:
- Pink, chum

Lifecycle:
- juvenile, immature, adult

Why should we prioritize this, what are the factors that make this a priority?
- Foundational long-term research is almost complete; subsequent studies are needed.
- Genetic effects may have long term effects.
- Tbd

Research Need / Project Idea:
- monitoring of pink pHOS in indicator streams
- Otolith analysis of marine samples
- Tbd

Impact : Other

Related impact info:
- all potential factors

Areas w/in Central Region
- PWS/CR, CI, BB

Gap Description:
- life cycle modeling synthesis of factors affecting species and stock-specific abundances
- Identification of indicator stocks for each species

Species:
- Chinook, sockeye

Lifecycle:
- Sequentially across all life stages

Why should we prioritize this, what are the factors that make this a priority?
- intensively studying all life stages of selected species and stocks (i.e. gravel to gravel) will provide better understanding of which factors are (or are not) driving changes in salmon abundance

Research Need / Project Idea:
- comprehensive understanding of factors driving changes in abundance for a particular stock at all life stages
- Tbd
- Tbd