

## Southcentral Region Draft Priority Information Needs

8/11/2024

The following are priority information needs captured from discussion during the Southcentral Region PIN development session. Attendees included Greg Encelewski (SCRAC), Andy McLaughlin (SCRAC), and OSM staff Hannah Vorhees, Nissa Pilcher, and Kevin Foley.

- Estimate Chinook, Coho, and Sockeye salmon escapements into the Copper River drainage and delta systems with a high degree of certainty (for example, projects utilizing weir, sonar, and/or mark-recapture methods).
- Collect baseline information on juvenile Chinook, Coho, and Sockeye salmon outmigration including abundance, and/or timing, condition, and mortality across the unique sub-watersheds of the Copper River and the Kenai Peninsula drainages.
- Document food web dynamics and factors affecting early marine survival rates of southcentral origin wild Chinook and Coho salmon stocks including variables such as primary food resources and prey availability, competition with hatchery produced salmon, and prey buffering during periods of high/ low abundance.
- Understand effects of environmental and/or climate change on stock specific migration timing and abundance of juvenile and adult salmon, as well as the implications for harvest management, in the Copper River and Kenai Peninsula drainages.
- Estimate measures of abundance, and/or run timing, spawning site fidelity, fecundity, age, sex, and length composition for Chinook, Coho, and Sockeye salmon in the Copper River or Kenai Peninsula drainages.

Council member McLaughlin identified a priority information need for understanding the effects of toxins and contaminants on Southcentral origin wild Chinook Salmon mortality. Further, Mr. McLaughlin suggested including a comparative analysis of toxin levels and mortality of Chinook Salmon to mortality rates of other salmon species in the region. Lastly, Mr. McLaughlin expressed a need for exploring lethal toxicity (lethal dose and lethal concentrations) of contaminants on marine survival rates of Chinook Salmon.

A review of the types of projects not funded by the FRMP includes projects of contaminant assessment, evaluation, and monitoring. Based on no funding availability for these types of projects, OSM staff did not include Mr. McLaughlin's information need on the draft list put before the Council.