

## Draft of suggested 2022 Information Needs for Southwest Region

1. (Bristol Bay) **Reliable estimates of escapement, quality of escapement, and environmental impacts for Chignik River specifically addressing decline of Chinook/Sockeye salmon**
  - a. (2020 PIN) Evaluation of Chinook and Sockeye salmon populations in the Chignik River area to understand the decline in salmon stocks and associated subsistence harvest opportunities, such as reliable estimates of escapement, quality of escapement, and environmental impacts.
    - i. Chignik River huge concern for both KARAC and BBRAC – Noted by Transcript Review
    - ii. Important PIN carried over from 2018 & 2020 for BBRAC
2. (Southwest) **Reliable estimates of Chinook Salmon escapement and evaluation of “quality of escapement” measures in Big Creek, Naknek River, Alagnak River, Meshik River, and Togiak River**
  - a. (2020 PIN) Reliable estimates of Chinook Salmon escapement and evaluation of “quality of escapement” measures (for example, potential egg deposition, sex and size composition of spawners, spawning habitat quality and utilization) for determining the reproductive potential of spawning stocks in Big Creek, Naknek River, Alagnak River, Meshik River, and Togiak River.
  - b. Important PIN carried over from 2018 and 2020 for BBRAC
3. (Southwest) **Examine how recent changes in the environment affect the finfish and within their range and habitats.** (whole GOA and particular – the Chignik City, Chignik Lagoon, Chignik Lake)
  - a. **Scale analyses to determine the effects of changes in ocean conditions over multiple years and research the decline in size-at-age of salmon in the Nushagek, Naknek, Togiak, Chignik, Buskin, McClees drainages.**
4. (Southwest) **Reliable subsistence harvest data analyzing use and social network of subsistence harvest**
  - a. Reliable estimates of the harvest and use of fish used for subsistence. Of particular interest are harvest trends in the communities of Kodiak, Manokotak, Nondalton, Ouzinkie, Port Alsworth, and Port Lions. **Port Heiden, Cold Bay, Nelson Lagoon, False Pass, Akutan, Atka, Adak, Nikolski, St. Paul, St. George, old believers village on Afognak.**
  - b. Following Project Falls Under PIN:
    - i. 20-450 Kodiak Road System Subsistence Fisheries Harvest Assessment – Addresses Kodiak portion of PIN
5. (KA RAC) **Abundance and assessment of critical subsistence salmon stocks in priority areas such as the Buskin River.**

## 2020 Priority Information Needs Remainders

- (Southwest) Local observations of change in fish populations (quality, run timing, sex ratios, age composition, etc.) in the Southwest Alaska Region, and associated effects on subsistence uses.
  - Following Project Falls Under PIN:
    - 20-450 Kodiak Road System Subsistence Fisheries Harvest Assessment
- (Kodiak/Aleutians) Comparative ecological evaluation of lake rearing habitats of Sockeye Salmon stocks in southwest Kodiak Island, including Olga Lakes and Akalura Lake watersheds, and the assessment of (1) declines of salmon stocks and associated subsistence harvest opportunities, and (2) effects of climate change on salmon production in these lake systems.
- (Bristol Bay) ~~Annual estimates of Sockeye Salmon escapement in the Lake Clark watershed.~~
- (Bristol Bay) Reliable estimates of Chinook Salmon escapement and evaluation of “quality of escapement” measures (for example, potential egg deposition, sex and size composition of spawners, spawning habitat quality and utilization) for determining the reproductive potential of spawning stocks in Big Creek, Naknek River, Alagnak River, Meshik River, and Togiak River.