<u>Volunteers Draft Southwest Alaska Region PINs – 2024</u> (**Italicize* indicates a new suggestion, and strikethrough indicates a suggested removal.)

The Monitoring Plan for the Southwest Alaska Region is directed at information needs identified by the two Southwest Regional Advisory Councils (Bristol Bay and Kodiak/Aleutians). For the Southwest Alaska Region volunteers suggested that the list of priority information needs from the 2024 cycle be forwarded to the 2026 cycle with the following priority information needs:

A. Reliable estimates of abundance of salmon populations in the Kodiak Archipelago and Aleutian Island areas important for subsistence use and assessment of changes in these populations. Specific areas of concern are McLees Lake, Mortenson's Lagoon, Unalaska Lake and Kodiak Archipelago stocks.

B. Using scale analyses of fresh and saltwater growth patterns over multiple years, examine how recent changes in the ocean affect growth and survival of Chinook and Sockeye salmon within their range and habitats of the Kodiak/Aleutian drainages of particular concern include the following drainages (Buskin, Karluk, Ayakulik, McClees drainages) and/or the Bristol Bay/Alaska Peninsula drainages (Chignik, Nushagak, Big Creek, Alagnak, Meshik, and Togiak drainages). The Chignik drainage is of particular concern.

C. Reliable estimates of Chinook Salmon escapement, evaluation of quality of escapement and harvest monitoring in Alagnak River, Big Creek, *Chignik River* Meshik River, Naknek River, and Togiak River, including egg deposition, sex and size composition of spawners, and spawning habitat quality and utilization for determining the reproductive potential of spawning stocks. Harvest monitoring by user groups for the region is also encouraged.

D. 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.

E. Annual estimates of Sockeye Salmon escapement in the Lake Clark watershed.

F. 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.

G. Evaluate effects on subsistence users in the Southwest Alaska region resulting from changes in fish populations, including biological considerations of run timing, run quality, sex ratios, and age composition, and incorporating local observations and knowledge. Research should include a multi-disciplinary approach and include elements of Traditional Ecological Knowledge as well as Stock Status and Trends.

H. Enumeration of salmon smolt outmigration in the Buskin River system.

I. Understanding subsistence sharing networks of fish throughout the Bristol Bay region and the importance of resource networks.

J. (New) Harvest use survey of Buskin River subsistence and how subsistence practices have changed in recent history during closures or reductions in harvest. Address how subsistence harvest has changed as access to the Buskin River has changed.

Multi-Regional

The Multi-regional category is for projects that are applicable in more than one region. For the Multi-Regional category, the 2024 Notice of Funding Opportunity is focused on the following priority information needs:

A. (KARAC supplied) Gain a better understanding of ecosystem factors negatively impacting subsistence salmon runs and harvest practices in Alaska, including ocean conditions, freshwater conditions, and changing climate conditions.

B. (New) Statewide analyses of archived salmon scales to assess fresh and saltwater growth patterns over multiple years, examine how recent changes in the ocean affect growth and survival of Chinook and Sockeye salmon within their range and habitats.