

Research Questions on A-Y-K Fisheries Issues

Funding of ADF&G

- 1. What were the totals for ADF&G's budget broken out by Department Division (except Wildlife) and broken out by Region and by funding source (GF, Federal receipts, AKSSF...)? (Please split out those costs/projects associated with the Fairbanks area from the AYK region.)**

A 12 year funding history for the department was prepared by Legislative Finance and is labeled "Department of Fish & Game FY01 to FY12 Appropriation Summary".

A 12 year history of Commercial and Sport Fish Division Funding Totals are labeled "RDU Detail – Department of Fish & Game".

Each individual division's funding for the AYK Region are broken out for each fiscal year and labeled, "Alaska Department of Fish and Game – Commercial Fisheries – Project Summary Report – FY20XX Allocation" and "Alaska Department of Fish and Game – Sport Fish – Project Summary Report – FY20XX Allocation". The department only has six years of data (FY 2007-2012) at this level of detail.

Summary budget and program information for statewide federal Office of Subsistence Management (OSM) grant funded programs are labeled, "20XX OSM Fisheries Resource Monitoring Plan". Please note that the program skips 2009 as OSM switched from an annual to a 2-year reporting cycle at that time.

- 2. What projects has the state funded over the past 6 years to address concerns associated with stocks of concern by region? (If it's reasonably possible, break down by management area as well.)**

Significant state funding is being directed to addressing Stocks of Concern (SOC) in the AYK region during FY12. For Yukon River Programs associated with addressing SOC there are 15 projects totaling \$2,192,700; for Norton Sound Programs, 12 projects totaling \$506,700; and for the Kuskokwim River Programs, 12 projects totaling \$638,100. The document entitled: "State Funded Programs Associated with Addressing Stocks of Concern – Alaska

Department of Fish and Game, Division of Commercial Fisheries, AYK Region (Region III)” outlines existing and new programs within the Division of Commercial Fisheries, AYK Region budget associated with SOC over the last six state fiscal years (SFY 2007-2012). The table is broken down by the total annual allocation for each program and the percentage of the allocation associated with stocks of concern. The “Total Associated w/SOC by SFY” column was calculated based on the percentage of each budget that was associated with a species that has been or is currently listed as a stock of concern in each area.

3. Would other sonar sites be helpful to ADF&G in managing salmon fisheries in the AYK region? Please provide a justification for the additional site(s) and estimate the first year and subsequent year costs for one new sonar station in the AYK region (Initial capital and operating costs).

There could be additional management benefit derived from using sonar to enumerate salmon at the tributary level. Information on tributary salmon passage and escapement could be used to ensure adequate escapements are being achieved, establishing escapement goals as warranted, providing information inseason and post season to manage terminal fisheries at the tributary level, and provide information that enhances understanding of salmon stock status related to run reconstruction, exploitation, and production.

Dependent on the size of the tributary, geographic differential salary costs of the location, and the number of salmon and other fish species to be enumerated, costs could range from \$150,000 for one time start-up and \$160,000 annual operating on smaller tributaries, up to \$400,000 for one time start-up and \$425,000 annual operating on larger tributaries.

4. Over the last 12 years, what projects in the AYK region have been funded by the AKSSF (this list should not include projects funded through the AYK SSI)?

Over the previous 12 years 68 projects have been funded by the AKSSF within the AYK region. These projects are conducted by a wide array of organizations and agencies including: Alaska Department of Fish and Game, National Marine Fisheries Service, the University of Alaska, Yukon River Drainage Fisheries Association, Norton Sound Economic Development Corporation, and the Bering Sea Fishermen’s Association. An example of projects conducted in the region are: video monitoring of salmon escapement

on the Sinuk River; Chinook and coho salmon productivity studies on the Unalakleet; juvenile chum salmon stock analysis on the Yukon River, and genetic analysis of Chinook salmon. The document titled “Alaska Sustainable Salmon Fund Projects - (Exclusive of AYK SSI Earmark Projects) – FFY 2000-2010 – Current to September, 2011” offers more detail regarding specific projects and funding levels.

5. Please identify those projects/activities which the State currently funds to improve fishing opportunities and runs, whether it be for commercial, sport or subsistence fishing. Include the amount of money spent and the location of the project. (i.e., planting of trout fry in lakes, etc.)

The department has been involved in a technical support and consultation role to provide oversight, direction, and permitting of enhancement activities in northern Norton Sound. Staff at the area, regional, and headquarters level have provided in-kind contributions to these processes as part of their normal job duties and responsibilities. This has included serving on the Norton Sound Regional Planning Team (RPT) and working with the local aquaculture association and interested stakeholders in the development of a long range enhancement plan, review and approval of enhancement program permitting and implementation, and serving as a resource for consultation and expertise on enhancement planning and program implementation.

Enhancement programs implemented in the Norton Sound area to date have primarily been small scale and exploratory in nature, and funded through local organizations or grants. Programs to date have included lake fertilization to enhance sockeye populations and incubation and egg planting of chum and Coho in select Nome area streams. Interest and activity in Norton Sound Area enhancement programs has fluctuated since formation of the RPT and Aquaculture association. The Department remains responsive to this activity and will continue to guide and support ongoing enhancement efforts.

Please reference the spreadsheets relative to question one which catalog specific projects currently conducted in the AYK region.

The Stocked Fisheries Program for Sport Fish Region III stocks hatchery reared fish in 105 to 145 lakes annually in the Tanana River drainage and the Upper Copper/Upper Susitna drainages. Annual program cost has varied but averages about \$250,000. This estimate does not include the cost for the hatcheries to produce the fish.

6. Please provide the details for how all PCSRF funding has been disbursed by region.

Pacific Coastal Salmon Recovery Funds (PCSRF) and Alaska Sustainable Salmon Funds (AKSSF) are the same. As a context for evaluating funding allocations, please note this program originated in the Southeast Alaska region as the Southeast Sustainable Salmon Fund; the scope of the program was broadened in 2007 to include other regions in competitive calls for proposals (CFPs). The document titled “Alaska Sustainable Salmon Fund Projects - (Exclusive of AYK SSI Earmark Projects) – FFY 2000-2010 – Current to September, 2011” is germane to this question. Total funding by region is provided at the end of the document.

Fisheries Management

1. What stocks are currently identified as stocks of concern by ADFG in the AYK Region? What actions (by river) is the Department taking to address these stocks of concern?

In 2000 there were 9 SOC designations throughout the AYK whereas in 2011 there are now four. These are all Stocks of Yield Concern and include Norton Sound chum and Chinook, and Yukon River Chinook. A yield concern arises from a chronic inability, despite the use of specific management measures to maintain expected yields or harvestable surpluses, above a stock’s escapement needs. Please see the document titled “AYK Stocks of Concern Designations” and “State Funded Programs Associated with Addressing Stocks of Concern – Alaska Department of Fish and Game, Division of Commercial Fisheries, AYK Region (Region III)” for AYK Stocks of Concern designations and programs.

Based on guidelines and definitions contained in the Sustainable Salmon Policy (5 AAC 39.222. Policy for the management of sustainable salmon fisheries), action plans were developed and adopted by the Board of Fisheries as regulatory management plans and associated regulations for the stock or management district affected. These regulations have been amended over time consistent with stock of concern status. The following regulations are in place for the current stocks of concern in the AYK Region:

Norton Sound Subdistrict 1 chum salmon:

5 AAC 01.175. Waters closed to subsistence fishing.

5 AAC 01.182. Tier II subsistence chum salmon fishery.

5 AAC 01.184. Tier II subsistence chum salmon fishing permits for Subdistrict 1 of the Norton Sound District.

5 AAC 01.190. Subdistrict 1 of the Norton Sound District Chum Salmon Management Plan.

5 AAC 04.358. Chum salmon optimal escapement goal ranges for river systems in Subdistrict 1 of the Norton Sound District.

Norton Sound Subdistricts 2 and 3 chum salmon:

5 AAC 04.390. Subdistricts 2 and 3 of the Norton Sound District Salmon Management Plan.

Norton Sound Subdistricts 5 and 6 Chinook salmon:

5 AAC 01.170. Lawful gear and gear specifications

5 AAC 04.395. Subdistricts 5 and 6 of the Norton Sound District and the Unalakleet River King salmon Management Plan.

Yukon River Chinook salmon:

5 AAC 01.210. Fishing seasons and periods.

5 AAC 01.220. Lawful gear and gear specifications.

5 AAC 05.331. Gillnet specifications and operations.

5 AAC 05.360. Yukon River King Salmon Management Plan.

2. What are the implications to a river system and those Alaskans who live nearby if a salmon run is declared a stock of concern?

The primary goal of salmon management is to ensure adequate escapements to sustain salmon runs. If a stock warrants a stock of concern designation the specific designation (Yield, Management, Conservation) dictates the scope and breadth of the affects upon the user of that stock. Once the designation has been determined the State is then obligated to develop or amend management plans and regulations sufficient to address the concern.

The primary tool available to fishery managers to ensure adequate escapements is the management of harvest. If total run size is not adequate to provide for escapements and fulfill the overall harvest demand on the run, harvest must be reduced to ensure adequate escapements. How this impacts Alaskans that rely on these fishery resources is variable dependent on what type of stock of concern designation is warranted (Yield, Management, or Conservation concern in order of severity).

If a yield concern, the lowest level of concern, the typical impacts are seen in the level of commercial and sport harvest opportunities. A yield concern does not necessarily preclude commercial and sport harvest, but the level of harvest and opportunity available will likely be reduced compared to historical trends or expectations.

If a management concern, the impacts would be seen in the commercial, sport, and subsistence fisheries. A management concern designation would typically follow a yield concern. If the management plans and regulations adopted to address a yield concern still result in a chronic inability to achieve adequate escapements and harvest remained below historical or average levels, a management concern may be warranted. The likely impacts of a management concern would be complete closure of the commercial and sport fisheries, and reductions in subsistence harvest and opportunity (such as a Tier II subsistence fishery).

If a conservation concern, the impacts would again be seen in the commercial, sport, and subsistence fisheries, and perhaps have an effect on nearby or proximal fisheries. A conservation concern designation would likely follow a management concern if the management plans and regulations adopted to address a management concern still resulted in a chronic inability to achieve adequate escapements and harvest remained below historical or average levels. A conservation concern would maintain the closure to commercial and sport fisheries, and severe restrictions or a complete closure to the subsistence fishery. It may also require restrictions to nearby or proximal fisheries that do not target the stock of concern in an effort to reduce or eliminate incidental harvest or other indirect impacts on the stock in question.

3. What management actions does the State take to protect stocks of concern as they progress through commercial fishing areas?

As referenced in the answers to questions 1 and 2, general actions range from reductions in harvest and opportunity, inclusive of fishery closure, and may also include restrictions in gear, methods and means, and time and area for the fisheries targeting the stock in question. This may include nearby or proximal fisheries contingent on the level of concern.

4. When a stock is designated as a stock of concern, what is the process for rebuilding the stock?

The answer to question 1 outlines the process for developing action plans and regulatory changes to ensure adequate escapements will be achieved under stock of concern designations.

5. Has ADF&G considered beginning test fisheries in the lower Yukon before June 1? Would the Department require any additional resources to start testing before June 1?

The target operational time for initiating lower Yukon River test fishery operations is late May and prior to June 1 each year. In some years operations have been initiated as early as the third week of May. However, this is contingent on break-up timing and ice conditions, high water, and in-river debris loads. In those years when late break-up or poor river conditions do not allow for test fishery operations in late May, the start date may be after June 1.