

# **Summary of the Alaska Department of Fish and Game Consideration of NSRAA Request for Potential New Salmon Enhancement Sites/Opportunities**

## **Introduction**

The Alaska Department of Fish and Game (Department) received a request from the General Manager of the Northern Southeast Regional Aquaculture Association for a preliminary scoping or review, of potential new salmon enhancement opportunities in Northern Southeast Alaska (April 1, 2013 email sent to the Regional Supervisor, Division of Commercial Fisheries). Department staff met in Sitka on October 22 to have internal discussions regarding the request. This document summarizes those discussions and is presented to NSRAA as a precursor to potential follow up discussions between NSRAA and the Department.

## **Department Staff in Attendance**

Scott Kelley	Brian Frenette
Dave Gordon	Troy Tydingco
Troy Thynes (telephone)	Patrick Fowler
David Harris	Dan Teske
Steve Heint	Dan Gray (telephone)
Ron Josephson	Grant Hagerman
Kristen Case	Flip Pryor

## **Department Sideboards/Preconsideration Criteria**

Because of the large geographic scale encompassed by the scope of NSRAA's operating area Department staff viewed it as impractical to complete this exercise on a bay by bay basis. Some broad parameters, or side boards, were adopted up front that precluded some areas from detailed consideration for new enhancement projects. Many of these parameters are included in "*The Comprehensive Salmon Enhancement Plan for Southeast Alaska: Phase III*" (CSP). Specifically, the guidelines for enhancement planning and the stock appraisal tool were considered. Some of the broad parameters the Department settled upon include:

- Areas with sockeye salmon populations important for subsistence/personal use were excluded. Examples include Necker Bay, Mitchell Bay, Redfish Bay, Bay of Pillars, Excursion Inlet, Sitkoh Bay, etc (Figures 1-3 and Table 1);
- Areas with existing, productive wild stock commercial fisheries were excluded. These areas include Tenakee Inlet, Section 13-C, Redbluff Bay, Slocum Arm, Southwest Admiralty (Chaik, Hood, Wilson, and Whitewater bays); Southeast Admiralty (Eliza, Gambier, and Pybus) , Western Kuiu (Tebenkof, Rowan, Bay of Pillars, Saginaw, and Security) District 10 Mainland (Farragut, Houghton, Hobart, and Windham), Seymour Canal, Port Frederick, Port Althorp, Idaho Inlet, Freshwater Bay, Basket Bay Shoreline,

Lisianski Inlet, Portlock Harbor, Salisbury Sound, Kelp Bay, West Crawfish Inlet, Whale Bay, Sitka Sound and areas of high Chinook salmon abundance in regulation (Figure 4).

- All salmon and steelhead index streams were considered. While the presence of one, or several, index streams in a given location did not preclude consideration of that location for new salmon enhancement project(s) the presence of several index streams or single large index stream in a given bay certainly reduced the likelihood that the Department would be favorably inclined to situating a remote release site/hatchery in such areas.
- Other factors considered included Statewide Harvest Survey information, freshwater guide logbook information, recreational use cabin survey information, boating access locations, and “Gold Pin/Red Pin Quality Watersheds” developed for use during Tongass Land Management Planning processes with the USFS (Figures 1-3);
- Locations that have recently been considered via draft or final Management Feasibility Analyses (MFA) and/or the Northern Regional Plan Team were excluded. Examples include Lisianski/Pelican, No Name Bay (south of Hidden Falls), and Baranof Warm Springs;
- Locations within Glacier Bay National Park (includes all of District 16 and considerable extent of District 14) were not considered;

### **Summary**

Taking into consideration the qualitative information outlined above, the group discussed and carefully considered the areas listed below. The key points identified, either positive or negative for future enhancement possibilities, are listed for each specific area. Other areas, such as those listed in the first two bullets above, were touched on but not discussed in as much detail because the Department does not believe it would be advisable to pursue new salmon enhancement projects in those locations. Of course, any of the areas listed below would be vetted through the existing process enhancement projects are subject to prior to approval and final permitting. These processes include Management Feasibility Analyses, Northern Regional Plan Team review, Fish Transport permits, public comment for new hatchery permits and other processes and permitting outside the purview of the Department. In addition, projects would ultimately be subject to final approval by the Commissioner of Fish and Game. The Department will continue to review new project proposals, permit alteration requests, and other potential salmon enhancement concepts on a case-by-case basis as has been the case to date.

While obvious, the Department stresses that there may be a host of regulatory issues associated with some or all of these sites taken up by the Alaska Board of Fisheries. The Department specifically has no preconceived allocative intent for any of these locations and makes no assumptions in regards to which user groups may, or may not, realize benefits from potential new salmon production should new projects be permitted.

### Port Lucy

While Port Lucy has been considered during various Northern Regional Plan Team meetings in the past the Department did want to include this site as part of this review. That is because the Department views Port Lucy as a candidate for new enhanced salmon production and Special Harvest/Terminal Harvest Area. This has been conveyed during several NRPT meetings in the past. While this location has primarily been associated with Armstrong Keta Incorporated, for logical reasons, it is not precluded as a release site for new NSRAA production. There are known social/gear group concerns that have been raised which are to some extent outside the Department's purview.

### Sandy Bay

- No subsistence stocks;
- No index streams;
- Steelhead stream at the head of the bay;
- Lies within the troll Chinook high abundance area in regulation. Closed to trolling following the first Chinook retention period. The area could not be closed to trolling due to Chinook salmon considerations and then reopened for intense common property fisheries targeting enhanced salmon;
- No common property seine fisheries in the bay, the closest such is Whale Bay;
- In a wilderness area;
- Scale of common property open area would be very limited, outer THA boundary would not extend outside of the bay proper;
- Previous hatchery was lost to a lot of landslides, and no longer there.

### Snipe Bay

- No subsistence stocks;
- No index streams;
- Lies within the troll Chinook high abundance area in regulation. Closed to trolling following the first Chinook retention period. The area could not be closed to trolling due to Chinook salmon considerations and then reopened for intense common property fisheries targeting enhanced salmon;
- No common property seine fisheries in the bay, the closest such is Whale Bay;
- Scale of common property open area would be very limited, outer THA boundary would not extend outside of the bay proper;
- Known to be a very popular summer troll drag.

### Crawfish Inlet

- No subsistence stocks;
- No index streams and limited wild salmon production;
- Outside of the Chinook high abundance area(s);

- Adjacent to West Crawfish Inlet that has significant wild stock production of pink, chum, and coho salmon and provides for seine fisheries most years;
- In a wilderness area;
- Crawfish Inlet would provide a reasonably good sized terminal harvest area that likely would have minimal impacts on West Crawfish Inlet fisheries or other fisheries.

#### Big Branch Bay

- No subsistence stocks;
- No index streams, some documented salmon production in head stream;
- Outside of the Chinook high abundance area(s);
- Adjacent to Redfish Bay containing a highly productive sockeye system popular with subsistence and sport fishermen. Most years provides for seine fisheries directed at sockeye salmon;
- Big Branch Bay would provide a reasonably good sized terminal harvest area that likely would have minimal impact on Redfish Bay sockeye salmon or other fisheries.

#### Puffin Bay

- No documented salmon observations in database;
- Known to be exposed to southwest swell;
- Trollers go in here to shelter from bad weather.

#### Endicott, Tracy Arm Area

- Few pink index streams;
- Could provide a good area for a terminal harvest area;
- Likely to have negative considerations from fish culture perspective (very cold water, ice bergs).

#### Upper Taiya Inlet

- Limited wild salmon production;
- Existing commercial regulatory closure north of Taiya Point;
- High volume cruise ship traffic;
- History of salmon hatcheries (Burro Creek and Jerry Myers) in area;
- Ongoing small release of Chinook salmon at Pullen Creek in Skagway contributing to common property fisheries in Upper Lynn Canal (Tahini broodstock).

#### Port Malmesbury, South Arm

- Sockeye system in Port Malmesbury proper, though no documented subsistence sockeye harvest;
- Two small index pink systems, one of the systems is lake fed, good fresh water supply;

- Wilderness area;
- Scale of common property open area would be very limited, outer THA boundary would not extend outside of South Arm;
- Swell and ocean conditions present;
- Department has had inquiries from Armstrong Keta about the area as a remote release site;

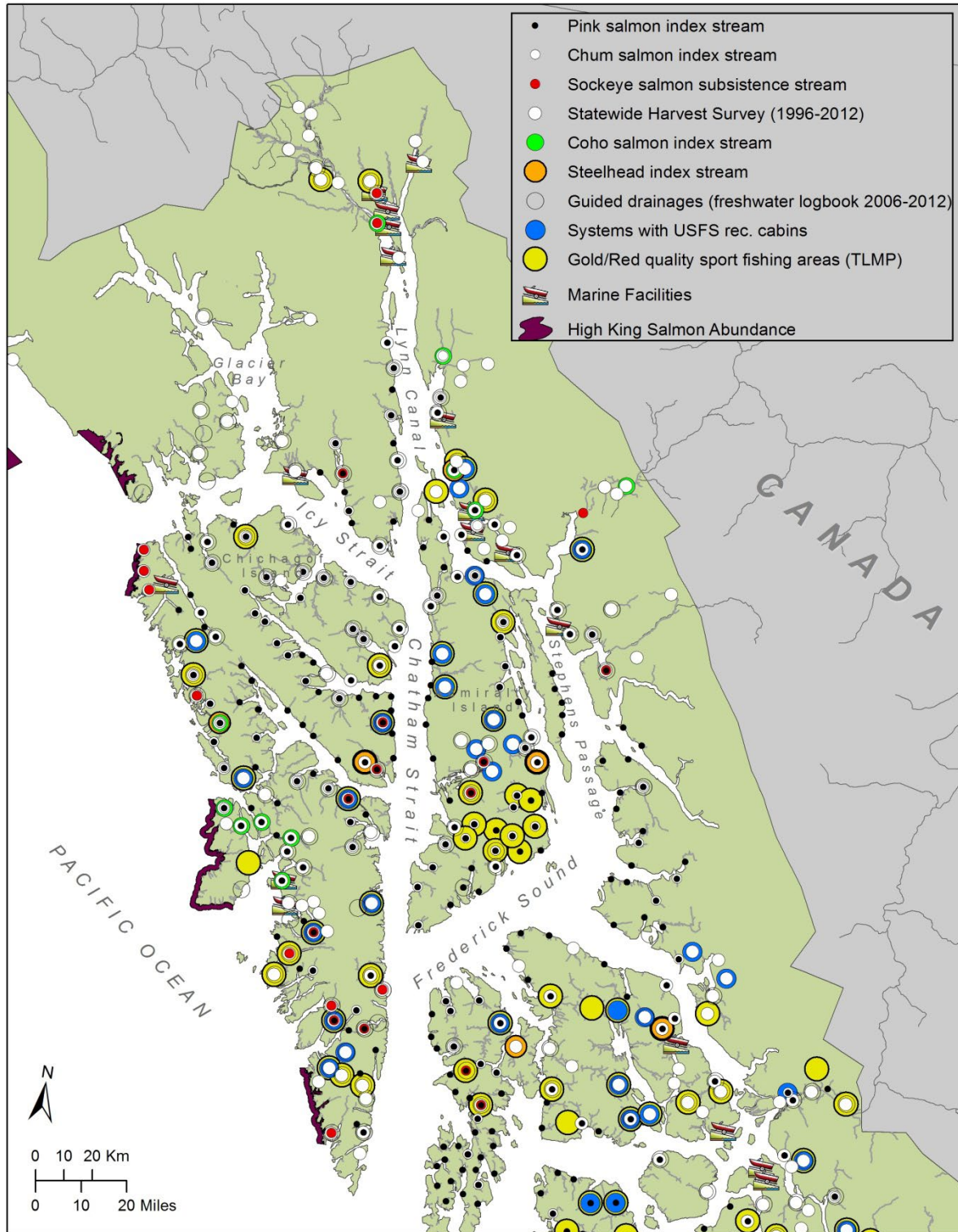
Thomas Bay:

- No subsistence stocks;
- No index streams;
- Three pink salmon streams in the bay;
- Potential Stikine sockeye interception in outer bay;
- Test fisheries may need to be conducted;
- Very popular recreational area;
- Large amount of fresh water may negatively influence imprinting to the release site, other fish culture considerations (very cold water).

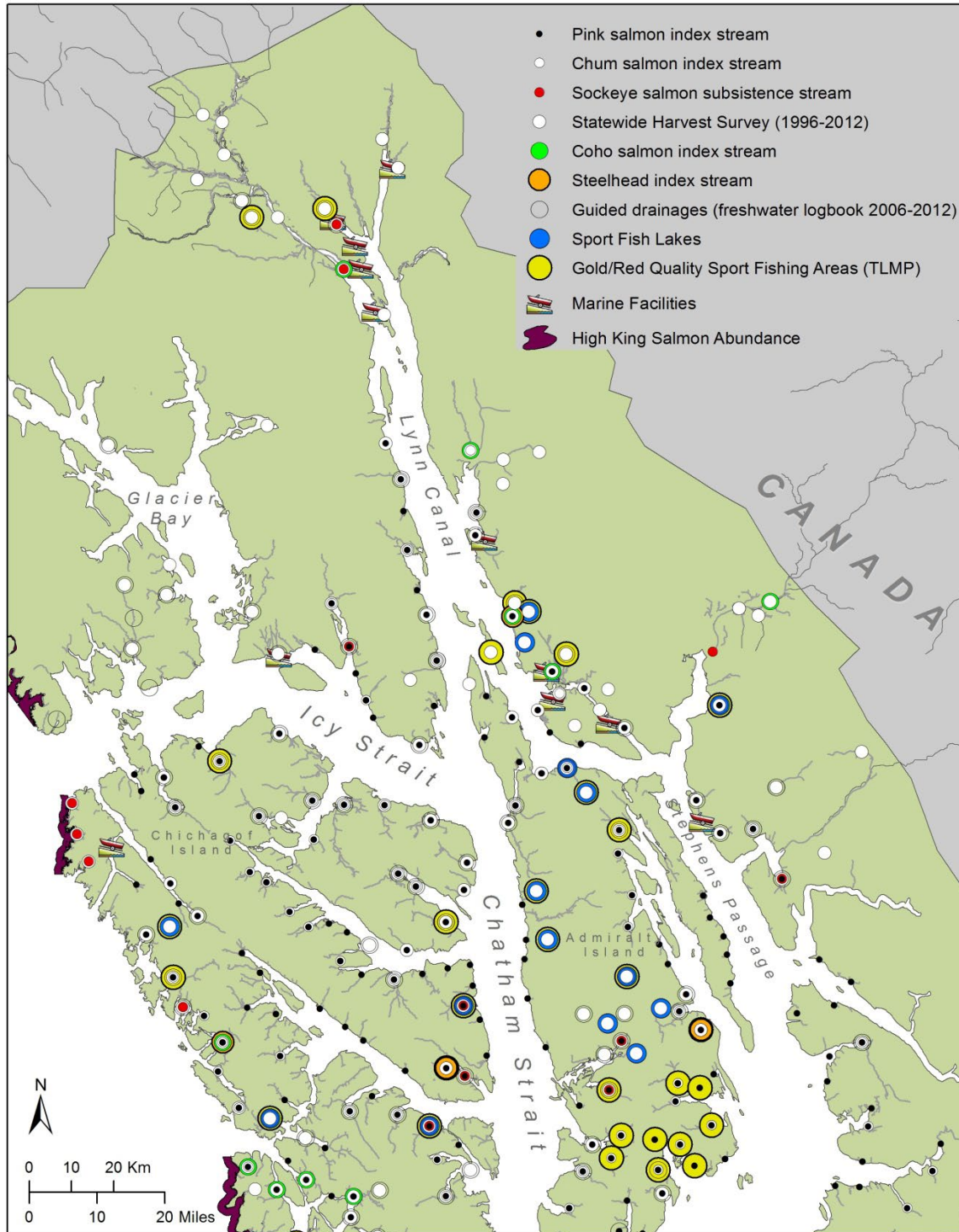
**Table 1. List of sockeye salmon systems with average reported subsistence/personal use harvests greater than 50 fish in Districts 9-15.**

Stat Area	Stream	Average
109-20	Gut Bay Head	429
109-20	Falls Lake	855
109-52	Kutlaku Creek	569
109-62	Alecks Creek	88
111-32	Taku River	1,055
111-35	Sweetheart Creek	3,090
112-12	Kook Lake	460
112-67	Hasselborg River	46
112-67	Kanalku	710
113-13	Redfish Bay Head	797
113-22	Politofski Lk Outlet	57
113-34	Necker Bay Lake	4,511
113-41	Salmon Lake Stream	107
113-41	Redoubt Lake Outlet	3,456
113-52	Hanus Bay	66
113-59	Sitkoh Lake	256
113-61	Leo Lk Fortuna Strts	62
113-72	Fish Camp -Klag Bay	1,887
113-72	Lake Anna Head	56
113-73	Lake Stream Ford Arm	261
113-92	Takanis Bay	81
113-93	Surge Bay	146
113-94	Hokatheen Cove	760
114-80	Neva Creek	246
115-32	Chilkat	4,562
115-34	Chilkoot	1,824

**Figure 1. Comprehensive map of NSRAA area showing locations of information used to assess potential enhancement sites, 2013.**

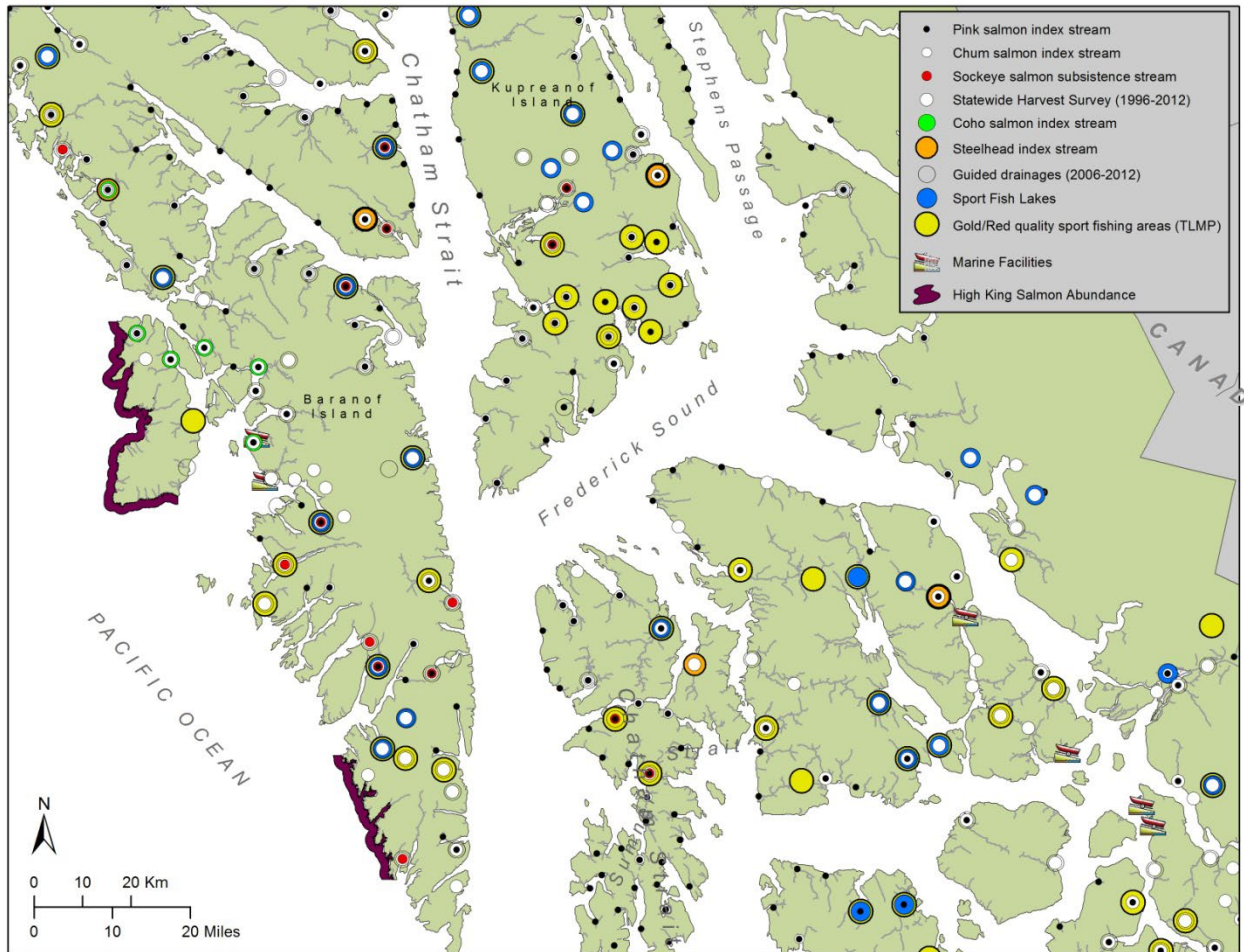


**Figure 2. Northern zone of NSRAA area showing locations of information used to assess potential enhancement sites, 2013.**





**Figure 3. Southern zone of NSRAA area showing locations of information used to assess potential enhancement sites, 2013.**



**Figure 4. Waters of frequent high king salmon abundance (5 AC 29.025).**

