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2014 Southeast Alaska Drift Gillnet Fishery Management Plan

by

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Alaska Department of Fish and Game **Division of Commercial Fisheries**

Symbols and Abbreviations

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Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat or long
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	*e*
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	*E*
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

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ABSTRACT

This management plan provides an overview of the expected salmon run sizes, regulations, management issues, and harvest strategies for the Southeast Alaska drift gillnet fisheries in 2014. Drift gillnet fisheries are planned at Tree Point and Portland Canal (District 1), Prince of Wales and Stikine (Districts 6 and 8), Taku River/Snettisham (District 11), Lynn Canal (District 15), and in the following terminal hatchery areas: Neets Bay (District 1), Nakat Inlet (District 1), Anita Bay (District 7), Speel Arm (District 11), Deep Inlet (District 13), and Boat Harbor (District 15).

Key words: Southeast Alaska, drift gillnet, management plan, Pacific salmon, *Oncorhynchus*, outlook, forecast, terminal harvest area, hatchery, 2014.

INTRODUCTION

This management plan provides an overview of the expected salmon run sizes, regulations, management issues, and harvest strategies for the Southeast Alaska drift gillnet fisheries in 2014.

For the recent 10-year period 2003 to 2012, an average of 476 Southeast Alaska drift gillnet limited entry permits were issued annually, of which an average of 83% were actively fished each year (Conrad and Gray In Prep.). In 2013, 473 permits were issued, of which 451 (95%) were actively fished. A historical low of 348 permits were fished in 2004. Drift gillnet harvests have averaged approximately 4.3 million salmon annually over the recent 10 years from 2003 to 2012, and 2.9 million salmon since statehood from 1960 to 2012. In the last ten years, the species composition of the drift gillnet harvest has been 56% chum, 24% pink, 12% sockeye, 7% coho, and <1% king salmon. Of the total commercial salmon harvest in Southeast Alaska, the most recent 10-year average drift gillnet fishery harvests have included 40% of the sockeye, 24% of the chum, 13% of the coho, 9% of the king, and 3% of the pink salmon.

The five traditional drift gillnet fishing areas in Southeast Alaska are shown in Figure 1: Tree Point and Portland Canal (District 1); Prince of Wales (District 6); Stikine (District 8); Taku-Snettisham (District 11); and Lynn Canal (District 15). In addition, drift gillnet fisheries occur in several Terminal Harvest Areas (THAs) adjacent to hatchery facilities and at remote release sites throughout the region. Each of these gillnet fisheries are discussed separately in this management plan. A summary of the 2013 season drift gillnet harvest for each species by fishery area and type is presented in Table 1. The most recent 10-year historical harvests and average harvests are presented in Table 2 for Tree Point, Table 3 for Prince of Wales, Table 4 for Stikine River, Table 5 for Taku-Snettisham, and Table 6 for Lynn Canal.

The drift gillnet fishery primarily targets king salmon during the spring season; sockeye, pink, and chum salmon during the summer season; and coho and chum salmon during the fall season. The first commercial fisheries directed at harvesting Stikine and Taku Rivers king salmon since the 1970s took place beginning in 2005. District 8 had four consecutive years of directed Stikine River king salmon fisheries from 2005 through 2008. The 2009 through 2011 Stikine River king salmon run size estimates were not adequate to allow for directed commercial fisheries. The 2012 preseason forecast allowed for limited directed fisheries in District 8. After openings in three consecutive weeks, the inseason forecast fell below the minimal threshold level to allow for directed fishing to continue. The 2013 preseason and inseason forecasts for Stikine River king salmon did not produce a Total Allowable Catch (TAC) large enough for either country to allow directed fisheries. Similar to 2013, the 2014 Stikine River king salmon preseason forecast is not adequate to allow for directed fisheries. In District 11, directed fisheries on Taku River king salmon occurred in 2005 and 2006. In 2009 and 2012, pre-season forecasts allowed for directed

fisheries, but in-season run size estimates were less than forecasted and did not allow directed fisheries throughout the season. In 2012, conservative 12-hour openings were allowed in the first two weeks of the season based on the preseason forecast. The first, and all subsequent, inseason estimates of run size were too small to provide any further directed fishing opportunity. The 2014 preseason Taku River king salmon run forecast will not allow any fisheries.

SALMON RETURN EXPECTATIONS

In Southeast Alaska, the Alaska Department of Fish and Game (ADF&G) issues a region wide preseason harvest forecast for pink salmon. ADF&G also derives preseason forecasts for several specific stocks including Taku and Stikine River king and sockeye salmon. Private non-profit hatchery operators also derive preseason forecasts for salmon returning to many enhancement projects throughout Southeast Alaska. The projected returns of sockeye, chum, and coho salmon presented in this management plan are qualitative and should not be considered official department forecasts. These return projections are calculated primarily from parent-year catch and escapement data and are expressed in terms of probable magnitude of return relative to historic levels.

The forecast generated by the Stikine River king salmon forecast model produced a terminal run size estimate of 37,700 fish; however, the final agreed upon preseason forecast for the Stikine River is 26,050 large king salmon because the model has consistently overestimated the run size in recent years. The preseason forecast was reduced by using the recent five-year percent error of 45%. Similar to 2014, the 2013 forecast of 32,050 was reduced to 22,400 fish using a similar percent error. The final run estimate for 2013 was within 700 fish of this adjustment. Other considerations taken into account for reducing the model's forecast includes a poor confidence in the 2013 age 1.3 king salmon abundance estimate and the general poor performance of many king salmon stocks throughout Alaska in recent years. The preseason forecast of 26,050 large king salmon does not allow for directed fisheries in either the U.S. or Canada on Stikine River king salmon. If reliable inseason abundance estimates indicate the run is adequate to prosecute a manageable directed fishery, the U.S. may have directed king salmon commercial fisheries in District 8 during late May or early June.

The forecast generated by the Taku River king salmon model produced a terminal run size estimate of 37,800 fish. However, the final agreed-upon preseason forecast for the Taku River was reduced to 26,800 large king salmon due to consistent overestimation of run size in recent years. The bias-corrected forecast was calculated by discounting for the five-year average relative error of 42%. Other considerations taken into account for reducing the model's forecast include the general poor performance of many king salmon stocks throughout Alaska in recent years. The preseason forecast of 26,800 large king salmon does not allow for directed fisheries in either the U.S. or Canada on Taku River king salmon. Inseason abundance estimates produced starting around the end of May will determine any directed king salmon fishing possibility.

For 2014, the preliminary terminal run forecast for Stikine River sockeye salmon is 152,300 fish, which constitutes a below average run. For comparison, the recent 10-year average (2004–2013) total Stikine sockeye run size is approximately 196,000 fish. Based on Canadian stock recruit and sibling forecasts, sockeye salmon returns to the Taku River are expected to total 190,000 fish which is below the recent 10-year average terminal run size of approximately 217,000 fish. Chilkoot Lake sockeye returns are expected to be below average, and returns to Chilkat Lake are

expected to be above average. Douglas Island Pink and Chum, Inc. (DIPAC) has forecasted144,000 enhanced sockeye returning to Port Snettisham.

The projected regionwide forecast of hatchery chum salmon returns for 2014 is expected to be 9.9 million. This includes 3.34 million to four DIPAC locations, 2.11 million to two Northern Southeast Regional Aquaculture Association (NSRAA) locations, 3.36 million to four Southern Southeast Regional Aquaculture Association (SSRAA) locations, 0.35 million to Kake Nonprofit Fisheries Corporation, 0.35 million to Armstrong Keta Inc., 0.16 to the Sitka Sound Science Center, and .23 to the Annette Island Reservation. A portion of these returns above broodstock needs and cost recovery harvests may be harvested in traditional drift gillnet fisheries in Districts 1, 6, 8, 11, and 15 as well as in terminal area drift gillnet fisheries in Boat Harbor, Deep Inlet, Anita Bay, Neets Bay, and Nakat Inlet. Chum salmon harvests in regional drift gillnet fisheries have averaged 2.4 million fish per year over the recent 10-year period from 2003 to 2012, and during this period chum salmon have accounted for 56% of salmon harvested.

Returns of wild coho salmon are not forecasted but are expected to be consistent with the recent year averages. Alaska hatchery coho salmon contributions to drift gillnet fisheries in 2013 were estimated by hatchery operators at 159,000 fish (Vercessi 2014), around 36% of total drift gillnet coho salmon harvests. The largest portion of this harvest was from Neets Bay with substantial harvest from Deer Lake.

The Southeast Alaska pink salmon harvest forecast for 2014 is 22 million, with a range of 8 to 36 million fish. The major portion of the pink salmon harvest for the region is generally taken by purse seine gear. Drift gillnet harvests of pink salmon have recently averaged 3% of regional pink salmon harvests.

MANAGEMENT APPROACH

A flexible management approach is required because of the uncertainty of salmon run size to the drift gillnet fishing areas. This management plan presents only a general outlook as to how the season is expected to develop. Some specific management approaches may be altered depending on inseason assessments of salmon run strength. Gillnet fishermen are encouraged to contact ADF&G management staff listed at the end of this plan for more detailed information.

The primary objectives for management of the 2014 drift gillnet fishery are as follows:

1. Obtain overall salmon spawning escapements with the best possible distribution to all systems;
2. Provide for orderly fisheries while harvesting those salmon in excess of escapement objectives;
3. Promote the harvest and processing of good quality salmon within the constraints dictated by run size;
4. Manage for a total Southeast drift gillnet king salmon harvest ceiling of 2.9% of the all-gear quota, 12,743 king salmon, exclusive of Alaskan hatchery-produced fish;
5. Minimize, to the extent possible, the harvest of salmon destined for locations where weak returns are expected;
6. Manage Districts 1, 6, 8, and 11 drift gillnet fisheries consistent with the provisions of the U.S./Canada Pacific Salmon Treaty (PST);
7. Manage hatchery THAs in accordance with provisions in THA management plans adopted by the Alaska Board of Fisheries (BOF);

Achievement of these management objectives will be accomplished by inseason adjustments of time and area to control harvests in specific areas in accordance with salmon run strength and timing. Comparisons of current year fishing performance to historical fishing success (i.e., catch per unit effort [CPUE] analysis) are a major component of inseason run strength assessment. This approach assumes catch rates are an accurate reflection of run strength by time period and can be relied upon as an indication of salmon escapements throughout the fishing area.

Past experience has demonstrated that management of salmon fisheries based only on fishery performance or CPUE, can be misleading, especially for mixed-stock fisheries. Therefore, other available run strength indicators will also be used including spawning escapements, stock composition estimates, test fishing, observed salmon concentrations in closed water areas, catches from other fisheries, and salmon run timing models.

The increasing availability of hatchery-produced salmon has become a major factor in the management of Southeast Alaska drift gillnet fisheries, including coho and summer chum salmon throughout the region and sockeye salmon in District 11. Where inseason management is based on fishery performance, it may be difficult to gauge natural stock run strength if significant numbers of hatchery fish are present in the catch. Where possible, the hatchery component of the catch will be separated when evaluating fishery performance and management decisions outside of terminal areas will be based on wild stocks.

WEEKLY FISHING ANNOUNCEMENTS

Inseason management of the District 1 drift gillnet fishery is conducted by the Ketchikan area management staff; Districts 6 and 8 by the Petersburg and Wrangell area staff; District 11 by the Juneau area staff; and District 15 by the Haines area staff. Because permit holders can move freely among all drift gillnet fisheries, the weekly fishing announcements will be issued to include all areas in the region. These will normally be released simultaneously in all area offices by mid-afternoon each Thursday during the fishing season.

WEEKLY FISHING PERIODS

Weekly fishing periods in most traditional areas can generally be expected to begin on Sundays at 12:01 p.m. When they occur, directed king salmon drift gillnet fisheries in District 8 open on Mondays at 8:00 a.m. and District 11 fisheries open on Mondays at 12:01 p.m. except following the Memorial Day Holiday, when these fisheries open on Tuesday. Also, to reduce gear conflicts, the start day in District 8 will be Monday for the first two weeks of the sockeye management period. Districts 6 and 8 are managed together due to their proximity. As a result, the District 6 weekly start day will be Monday for the first two weeks of the sockeye season. Fishing periods in hatchery THAs, including the Northern and Southern Southeast Regional Aquaculture Association's (NSRAA and SSRAA) terminal fisheries in Deep Inlet, Anita Bay, and Neets Bay will be in accordance with rotational harvest management plans for drift gillnet, seine, and troll fisheries adopted by the BOF.

FULL RETENTION

ADF&G will require full retention (5 AAC 39.265) of all salmon harvested in the Deep Inlet THA net fisheries from the onset of the 2014 season. This regulation may be implemented by emergency order in other areas of Southeast Alaska if necessary after consultation with the Alaska Wildlife Troopers (AWT). Further details regarding the implementation of this regulation will be announced at later dates.

U.S./CANADA PACIFIC SALMON TREATY

The Pacific Salmon Treaty (PST) will influence management of Districts 1, 6, 8, and 11 drift gillnet fisheries [5 AAC 33.361]. The management provisions specified by the PST will be considered separately under the specific management plan for each respective fishery. Fishermen are encouraged to contact local ADF&G staff for more detailed information concerning Alaska's PST obligations under the 2009–2018 Transboundary River (TBR) Annex agreement.

KING SALMON

The need for management measures to comply with the drift gillnet harvest quota for king salmon will depend on inseason evaluation of king salmon catch rates relative to the 2.9 % drift gillnet allocation of the Treaty fish harvest ceiling [5 AAC 29.060]. For 2014, the all-gear Treaty king salmon allocation, based on a preseason Abundance Index of 2.57, is 439,400 king salmon. Therefore, the drift gillnet Treaty king salmon allocation is 12,743 fish. If the need arises, nighttime fishing closures may be implemented in certain areas to reduce the incidental catch of immature, "feeder" king salmon. Management measures to limit the drift gillnet harvest of PST king salmon have not been necessary in recent years.

The District 15 drift gillnet fishery will be managed in accordance with provisions in the *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* [5 AAC 33.384].

Drift gillnet fisheries may target king salmon in Districts 8 and 11 if inseason estimates of abundance improve compared with preseason forecasts. Only historic base level catches will be counted towards the PST fish ceiling [5 AAC 29.060 (b)(2)] when directed fisheries occur.

TREE POINT AND PORTLAND CANAL FISHERY

INTRODUCTION

The Tree Point and Portland Canal drift gillnet fishing area consists of regulatory Sections 1-A and 1-B. This fishery targets summer chum and sockeye salmon early in the season, followed by pink salmon, and finally fall chum and coho salmon at the end of the season.

2014 OUTLOOK

Chum Salmon

Runs of summer chum salmon in southern Southeast Alaska were mixed in 2013, with average returns to many larger index streams and poor returns to several of the smaller index streams in the subregion. The index count of 84,000 chum salmon in the Southern Southeast Subregion was the 3rd consecutive year above the current lower bound sustainable escapement goal of 54 thousand index fish, after being below goal from 2008 to 2010. The estimated escapement of 2,250 summer chum salmon at Fish Creek, near Hyder, was only 9% of the recent 10-year average of 24,336 and was the second lowest escapement there since 1970. ADF&G will pay close attention to Portland Canal chum salmon, as well as the other summer chum index streams in the Ketchikan area in 2014. In 2012, ADF&G began conducting helicopter surveys in key chum salmon index streams in the Ketchikan area. These surveys will again be conducted in 2014 and will focus on the peak of the summer chum run timing which occurs in late July to mid-August. This survey method greatly enhances the accuracy of the returning chum salmon counts at a time when large numbers of pink salmon make it difficult to enumerate other species from a fixed wing aircraft.

U. S./Canada Tree Point Fishery Agreement

In the spring of 2009, the United States and Canada re-negotiated a 10-year annex, 2009–2018, for the Tree Point fishery. There was no change to the District 1 gillnet portion of the PST and the agreement still calls for the following:

Manage the Alaskan District 1 drift gillnet fishery to:

1. Achieve an annual catch share of Nass River sockeye salmon of 13.8% of the Annual Allowable Harvest (AAH) of the Nass River sockeye salmon stocks;
2. Carry forward from year to year annual deviations from the prescribed catch share arrangement.

Nass River Sockeye Salmon Annual Allowable Harvest

The AAH each year will be calculated as the total run of adult Nass River sockeye salmon in that year less the escapement target of 200,000 fish. In the event that the actual Nass River spawning escapement for the season is below the target level, the actual spawning escapement will be used in the AAH calculations.

The total run calculation includes the catches of Nass River sockeye salmon in the principal boundary area fisheries and the spawning escapement to the Nass River watershed. This includes the catch of Nass River sockeye salmon in Alaskan Districts 1, 2, 3, 4, and 6 net fisheries, Canadian Areas 1, 3, 4, and 5 net fisheries and Canadian Nass inriver fisheries.

Although the management intent shall be to harvest salmon at the AAH percentage, it is recognized that overages and underages will occur and an accounting mechanism is required. The payback mechanism for the fishery will be based on the number of fish a party is over or under its AAH.

The management intent for the fishery shall be to return any overages to a neutral or negative balance as soon as possible. After 5 years of consecutive overages, a management plan must be provided to the Northern Panel with specific management actions that will eliminate the overage. The accrual of underages is not intended to allow either Alaska or Canada to modify its fishing behavior in any given year, nor to harvest the accrued underage.

During the Pacific Salmon Commission meeting in January and February 2013, the bi-lateral Northern Panel and the Northern Boundary Technical Committee finalized and agreed upon the run reconstruction of the Nass River for 2010 and 2011. The performance of the Tree Point drift gillnet fishery under the 1999 agreement is shown in Table 7.

Preliminary reports indicate that the total sockeye salmon run to the Nass River in 2013 was 494,441 fish. That allowed for a harvest of approximately 40,633 Nass River sockeye salmon at Tree Point in 2013. Total sockeye harvest at Tree Point for 2013 was 54,589 sockeye salmon of these approximately 38,212 were Nass River sockeye.

The Canadian Department of Fisheries and Oceans (DFO) has a preseason expectation for 2014 returns of approximately 642,000 Nass River sockeye salmon. If the forecast is accurate, then the AAH for Tree Point will be approximately 60,996 Nass River sockeye salmon.

Chum and Coho Enhancement

Hatchery returns of summer chum, fall chum, and coho salmon to SSRAA's enhancement projects are expected to again contribute substantially to the Tree Point gillnet fishery in 2014.

Information concerning SSRAA forecast returns is included under the THA Fisheries section of this plan.

Pink Salmon

Pink salmon returns are expected to be average to southern Southeast Alaska in 2014. If the actual returns come back as forecasted, the Tree Point drift gillnet fishery may receive two-, four-, and five-day fishing weeks during periods of the *District 1 Pink Salmon Management Plan* (PSMP; 5 AAC 33.360).

The PSMP establishes drift gillnet fishing time in Section 1-B (Tree Point) in relation to District 1 purse seine fishing time when both gear types are concurrently harvesting the same pink salmon stocks. By regulation, the plan starts on the third Sunday in July (July 20, 2014) with the following fishing time schedule:

1. When the purse seine fishery is open for any portion of one day during a fishing week, the drift gillnet fishery must be open for 48 hours during the same fishing week;
2. When the purse seine fishery is open for any portion of two days during a fishing week, the drift gillnet fishery must be open for 96 hours during the same fishing week;
3. When the purse seine fishery is open for any portion of three or more days during a fishing week, the drift gillnet fishery must be open for 120 hours during the same week.

MANAGEMENT GOALS

Management goals specific for the 2014 Tree Point drift gillnet fishery are as follows:

1. Manage the fishery in accordance within the PSMP (5 AAC 33.360);
2. Manage the fishery consistent with the current provisions of the PST (5 AAC 33.361).

MANAGEMENT PLAN

The Tree Point gillnet fishery will open by regulation in Section 1-B for four days beginning at 12:01 p.m., Sunday, June 15, 2014. The length of subsequent fishing periods up to the start of the PSMP on July 20 will be based on the strength of wild stock sockeye and chum salmon returns to Alaskan and Canadian waters. The effort levels at Tree Point will also influence the amount of time the fishery is given up to the start of the District 1 PSMP.

As in recent years, the catch of hatchery-produced summer chum salmon returning to the Nakat Inlet release site will not be included in the evaluation of natural stock fishery performance. The contribution of Nakat Inlet chum salmon will be estimated by inseason analysis of otolith marked fish. Hatchery chum salmon have contributed as much as 90% of the weekly chum salmon harvest at Tree Point and as much as 70% of the total chum salmon harvest in recent years.

The PST requires that the harvest of natural stocks of chum salmon returning to Portland Canal streams be minimized to ensure adequate escapement of these stocks. As a result, no fishing should be expected in Section 1-A for Portland Canal chum salmon.

The Tree Point drift gillnet fishery will be managed according to the District 1 PSMP starting July 20, 2014. The overall pink salmon return to southern Southeast Alaska is expected to be average in 2014. If the returns come in as predicted, then beginning in mid-July through the end of August, Tree Point drift gillnetters can anticipate fishing periods of two, four, and five days.

Fall management at Tree Point starts after the end of the pink salmon season and varies depending on the strength of the pink salmon run. During the fall season, the Tree Point fishery targets primarily fall chum and coho salmon; little is known about the stock composition of the chum and coho salmon harvest at this time of the year. However, if the estimated exploitation rate of the Hugh Smith Lake coho salmon stock, which has reached 80% in some years, holds true for adjacent areas, then wild coho salmon stocks in the surrounding Tree Point area may benefit from a closing date at Tree Point of approximately September 20. Due to the uncertainties of the escapement levels of the stocks being harvested, the documented high exploitation rate of Hugh Smith Lake coho salmon in some years, and the high preponderance of hatchery fish in the harvest, ADF&G will continue to take a conservative approach to the fall season at Tree Point. However, fishing periods will be allowed after September 20 if fishery performance data indicates above average returns of wild chum and coho salmon. During recent years, approximately 50% of the fall coho salmon and as much as 90% of the fall chum salmon have been hatchery fish. In addition to harvest at Tree Point, Nakat Inlet fish can be harvested in the Nakat Inlet THA, which remains open by regulation to commercial fishing through November 10, 2014.

Hugh Smith Lake Sockeye Salmon

ADF&G will continue to closely monitor Hugh Smith Lake sockeye salmon and if escapement levels are below what is needed to reach the lower bound of the escapement goal range of 8,000 fish, the department may take the following actions:

1. In Statistical Weeks (SW) 29 and 30 the department may close that portion of the District 1 purse seine fishery east of a line from Quadra Point to Slate Island Light to Black Rock Light to a point on the mainland shore at 55°01.40′ N. latitude, 131°00.20′ W. longitude.
2. In SW 31, 32, and 33 the department may close that portion of the District 1 purse seine fishery east of a line from Foggy Point Light to Black Rock Light to the southernmost tip of Black Island and close the northern portion of the Section 1-B drift gillnet fishery to one nautical mile south of the latitude of Foggy Point Light.

PRINCE OF WALES AND STIKINE FISHERIES

INTRODUCTION

The Prince of Wales (District 6) drift gillnet fishery occurs in the waters of northern Clarence Strait and Sumner Strait, in regulatory Sections 6-A, 6-B, 6-C, and portions of Section 6-D. The Stikine fishery encompasses the waters of District 8 surrounding the terminus of the Stikine River. Due to their proximity, management of these fisheries is interrelated, resulting in stocks being subject to harvest in both fisheries. Two distinct management areas exist within each district: the Frederick Sound (Section 8-A) and Wrangell (Section 8-B) portions of District 8, and the Sumner Strait (Section 6-A) and Clarence Strait (Sections 6-B, 6-C, and 6-D) portions of District 6. The harvest of terminal hatchery runs to the Crystal Lake and Anita Bay hatchery facilities will be discussed in the THA fisheries portion of this management plan.

2014 OUTLOOK

King Salmon

The preseason forecast of large Stikine king salmon in 2014 of 26,050 fish is not sufficient to allow directed fisheries in District 8. This forecast is above the midpoint of the escapement goal range of 21,000 large king salmon upon which the preseason harvest allocations are based. An inseason run estimate is produced near the end of May. If the inseason abundance estimate indicates available U.S. Allowable Catch (AC), then directed Stikine king salmon fisheries could occur. Additionally, a run of 15,400 enhanced king salmon returning to the Anita Bay THA are expected to contribute to the District 8 gillnet harvest.

Sockeye Salmon

The 2014 Stikine River sockeye salmon run is expected to be below the previous 10-year average. The preliminary forecast for the total Stikine River run is 152,300 sockeye salmon. The 2014 forecast includes approximately 71,500 Tahltan (47%), 25,000 enhanced Tuya (16%), and 55,800 wild mainstem (37%) sockeye salmon. Due to the near identical run timing of the Tahltan Lake and Tuya Lake stocks, any open fishing periods in District 8, and to a lesser extent in District 6, will be determined by the inseason abundance estimate of the Tahltan Lake run. Typically, the Tahltan Lake and Tuya Lake sockeye salmon run timing peaks in SW 27 (June 29–July 5) through the District 6 and 8 fisheries. During an average Tahltan Lake run substantial numbers of sockeye could be present as early as SW 24 (June 8–14) and as late as SW 31 (July 27–Aug 2).

The returns of local area sockeye salmon stocks are expected to be average in 2014 based on average parent year escapements to most local systems. The sockeye salmon run to McDonald Lake is expected be near average based on parent year escapements. However, the 2013 run was well below expectations.

Pink Salmon

Pink salmon typically begin entering District 6 in substantial numbers by the third or fourth week of July. The 2014 Southeast Alaska pink salmon return is forecasted to have an expected harvest of 22 million fish, below the recent 10-year average. Parent year escapements in both District 6 and 8 were within the target range.

Chum Salmon

In Districts 6 and 8, there is no active management of chum salmon although they are caught incidentally in fisheries targeting sockeye, pink, and coho salmon. Chum salmon returning to Anita Bay, as well as Ketchikan area hatcheries, may result in increased harvests in Districts 6 and 8. Anita Bay is expecting a total run of 501,000 summer chum, similar to the 2013 run of 440,000 chum salmon. The chum salmon run to Anita Bay typically peaks from SW 30 through 32 (July 20–Aug 9). Summer chum salmon production from Ketchikan area hatcheries is expected to be strong. Chum salmon returning to the Ketchikan area hatchery facilities migrate through District 6 and are expected to contribute to the total District 6 harvest.

Coho Salmon

The overall coho salmon runs for 2014 are expected to be above average. The 2014 forecasted returns to Neck Lake and Burnett Inlet are 68,000 and 23,000 coho salmon. The 2014 coho

salmon run to Anita Bay is forecasted to be 15,500 fish, similar to the 2013 run of 15,000 fish. The 2014 total forecasted Ketchikan area enhanced coho salmon run is 343,600 fish. Wild coho salmon returns for 2014 are expected to be near the long-term average. Extended fishing periods in Districts 6 or 8 may occur beginning in SW 35 (August 24–30); however, fishing periods will be determined weekly based on wild coho salmon abundance.

MANAGEMENT GOALS

Management goals for the District 6 and District 8 drift gillnet fisheries for the 2014 season are as follows:

1. Achieve the Stikine River king salmon escapement goal while harvesting the Alaskan share of the king salmon in excess of the goal;
2. Achieve the Stikine River escapement goals, particularly the Tahltan Lake sockeye salmon escapement goal, while harvesting the Alaskan share of the of Stikine River sockeye salmon in excess of the goal;
3. Achieve good spawning escapements of sockeye salmon in local Alaskan systems;
4. Achieve pink salmon spawning escapement objectives in Districts 6 and 8;
5. Manage the District 6 and District 8 drift gillnet fisheries consistent with the provisions of the PST (5 AAC 33.361).

MANAGEMENT PLAN

King Salmon

If inseason run estimates for Stikine River king salmon produced in late May indicate a U.S. AC large enough to allow for directed commercial fisheries, openings would start 8:00 a.m. on Mondays, except during the week of Memorial Day when openings start on Tuesday. The length of openings will be dependent upon expected fishing effort, expected number of king salmon harvested, and current inseason run size estimates from stock assessment projects. Inseason projections are predominantly derived from king salmon caught and tagged near Shakes Slough on the Stikine River and recovered in Canadian fisheries.

The minimum mesh size is seven inches to minimize the incidental harvest of other species. The standard 300-fathom length and 60 meshes deep net restrictions would also apply to this fishery.

The “old Stikine closure line” would likely be utilized for the duration of a directed king salmon fishery in District 8. The line restricts fishing on, or near, the Stikine River flats by closing waters inside a line from Babbler Point to Hour Point along the shore of Wrangell Island to Point Highfield to the southern end of Liesnoi Island to the southern end of Greys Island to the small island near the eastern entrance of Blind Slough to the nearest point of Mitkof Island to the prominent point of Mitkof Island nearest Coney Island to the northern end of Coney Island to a point 500 yards north of Jap Creek on the mainland shore.

The District 8 King Salmon Management Plan designates areas closed to drift gillnetting during a directed king salmon fishery. There are four areas that would be closed for the duration of a directed king fishery: Babbler Point, Wrangell Harbor, Bear Creek, and Point Frederick to Beacon Point. In addition, if the gillnet fishery is open for two or more days, an additional two areas would be closed: Woodpecker Cove and “The Nose” on Woronkofski Island. These closures are designed to provide sport fishermen with exclusive fishing areas without

interference from commercial fishing gear and/or to provide increased protection for steelhead returning to Petersburg Creek and Bear Creek on Mitkof Island. The exact closed waters will be identified by news release prior to each potential opening. The closure from Point Frederick to Beacon Point will continue during the sockeye fishery to protect Petersburg Creek sockeye stocks.

In District 8, for the week before Memorial Day, the potential drift gillnet fishery may be limited to a maximum of two days to prevent conflicts with the king salmon derbies in Petersburg and Wrangell. There will be no openings on weekends or holidays to decrease any potential conflict with other user groups.

Drift gillnet fishermen are asked to notify management biologists, who will be monitoring the fishery, of any incidence of steelhead and any retained steelhead must be recorded on fish tickets.

King salmon less than 28 inches long that are harvested in the commercial drift gillnet fisheries may be retained and sold. King salmon less than 28 inches long, and those of Alaska hatchery origin, will not be counted against the Alaska all gear king salmon allocation. ADF&G will sample the harvest to identify hatchery origin, size composition, and age composition of the harvest.

Canada will not initially prosecute a directed commercial king salmon fishery on the Stikine River in 2014. The preseason forecast of 26,050 king salmon is not large enough to provide a TAC for either country. The harvest sharing agreement in the PST is based on a sliding scale. During large returns of king salmon to the Stikine River, the U.S. has a larger share of the TAC. During smaller returns, Canada has a larger share of the TAC. Since 2005, the U.S. has harvested 77,700 and Canada has harvested 67,500 large Stikine king salmon. The PST allows for 1,400 Stikine king salmon to be harvested in an assessment fishery. The assessment fishery is necessary for king salmon stock assessment. The stock assessment provides inseason and postseason abundance estimates for king salmon. When Canada is prosecuting a directed king salmon fishery, the assessment fishery is typically not necessary. When the inseason forecast results in a small Canadian AC or no AC at all, the assessment fishery is needed in order to obtain the necessary data to accurately assess Stikine River king salmon abundance.

Sockeye Salmon

By regulation, the sockeye season could open as early as SW 24 at 12:00 noon, Monday, June 9. The first directed sockeye fishery in each district is dependent on the preseason forecast for Stikine River sockeye salmon abundance, specifically the Tahltan Lake component of the run. However, due to a lower than average expected run of the Tahltan Lake component, directed sockeye salmon fishing will not occur until SW 25, Monday, June 16. Furthermore, Tahltan sockeye salmon escapement has been below the escapement range for the past two years. As a result, conservative management practices may occur through SW 28. If management actions are taken, they will likely come in the form of limited time in Districts 6 and 8 and area restrictions in District 8. The opening on June 16 will be for an initial 48-hour fishing period in District 6. If the inseason Stikine River king salmon run size estimate is similar to, or greater than the preseason forecast, then District 8 will also open on June 16. Starting June 22, District 6 and 8 will revert to Sunday openings for the remainder of the season. Subsequent openings will be determined based on inseason catches and stock proportion data. If inseason catch and stock data indicate that the Tahltan sockeye salmon run is stronger than forecasted, more liberal fishing periods and/or mid-week openings

may be allowed in District 8. Extended fishing time in District 6 will be based primarily on the abundance of sockeye salmon from local island stocks.

The sockeye salmon fishery in both districts will be managed in accordance with the Transboundary Rivers (TBR) Annex of the Pacific Salmon Treaty. The Annex allows the District 6 fishery to be managed primarily for harvesting local Alaskan sockeye salmon stocks. Management of the District 8 fishery is based on the harvest of sockeye salmon of Stikine River origin, as allowed by the sharing provisions of the TBR Annex, and conservation needs of the resource.

Management actions during the sockeye salmon fishing season will be based on analysis of CPUE and stock specific data to determine the availability of Stikine River fish. These stock abundance indicators, along with fishery performance and stock composition data obtained from U.S. and Canadian fisheries, will be incorporated into the Stikine Sockeye Management Model (SSMM). As the season progresses, this model will be the primary method used to estimate the availability of sockeye salmon for harvest by the Alaskan drift gillnet fishery in District 8 and Canadian inriver fisheries. Any conservation measures required for Stikine River sockeye salmon are implemented first in District 8 followed by Sumner Strait in District 6. Reductions in fishing time, area, or district-wide closures will be used when conservation measures are needed. All openings will be based upon the most recent SSMM update and the current weekly sockeye salmon harvest.

The numbers of Stikine River sockeye generally begin to decrease in mid-July and other stocks, including McDonald Lake sockeye salmon, begin to pass through the fishery. McDonald Lake sockeye salmon escapements were below the escapement goal in five of seven years from 2002 through 2008. Given this history, ADF&G recommended McDonald Lake sockeye salmon as a stock of concern as defined by the Sustainable Salmon Fishery Policy. An Action Plan for this stock was approved by the Alaska Board of Fisheries (BOF) in 2009. This plan limited fishing time to two days per week when McDonald Lake sockeye salmon are transiting through District 6 in SW 29 through 31. The McDonald Lake sockeye salmon stock was removed as a stock of concern by the BOF in 2012 because escapement goals were met the previous two seasons and escapements were on an upward trend. However, the 2013 run was the lowest on record. Consequently, conservative measures may need to be taken during SW 29 through 31 in 2014.

Announcements of fishery extensions, or mid-week openings, will be made on the fishing grounds by 10:00 a.m. the final day of the scheduled fishery opening. Area and time during an extension may not be the same as the general weekly opening.

Pink Salmon

Pink salmon normally begin entering District 6 in substantial numbers by the third or fourth week of July. The 2014 Southeast Alaska pink salmon harvest is forecasted to be 22 million fish, which is below the recent 10-year average. The early portion of the pink salmon fishery will be managed primarily on CPUE and parent year escapement. By mid-August, pink salmon destined for local systems will begin to enter the fishery in greater numbers and management will be based on observed escapements to local area streams. If escapements are not evenly dispersed throughout the district, area and/or time restrictions may occur.

Coho Salmon

The transition to coho salmon management typically begins in late August or early September. Management of the District 6 fishery will be based on wild coho stocks. Crystal Lake Hatchery, Burnett Inlet Hatchery, facilities in the Ketchikan area, the Anita Bay remote release site, and the Neck Lake remote release site at Whale Pass all contribute coho salmon to the Districts 6 and 8 fisheries. Inseason estimates from coded-wire-tag recovery data will be used to identify the hatchery component of the harvest.

Screen Island Shore Drift Gillnet

Regulation 5 AAC 33.310(c)(2)(B) allows drift gillnetting along the Screen Island shoreline of Etolin Island in Section 6-D. Specifically, this area encompasses those waters of Section 6-D west of a line from Mariposa Rock Buoy to the northernmost tip of Point Harrington to a point on the shore of Etolin Island at 56°09.60′ N. latitude, 132°42.70′ W. longitude to the southernmost tip of Point Stanhope. Actions by the BOF in 2000, based on an agreement between drift gillnet and purse seine representatives, increased the fishing time for drift gillnetting in this area by one week on each end of the closure. The periods when fishing may be allowed are: from the second Monday in June (June 9) through the first Saturday in August (August 2), and from the first Sunday in September (September 7) until the season is closed. During this time, drift gillnetting is allowed during the same time periods that the adjoining waters of Section 6-C are open.

TAKU/SNETTISHAM GILLNET FISHERY

INTRODUCTION

The Taku/Snettisham (District 11) gillnet area encompasses Section 11-B (Taku Inlet, Port Snettisham, and Stephens Passage north of Midway Island) and Section 11-C (Midway Island south to a line from Point League to Point Hugh). This fishery has historically targeted sockeye salmon from late June to mid-August and fall chum and coho salmon from mid-August to mid-October. In recent decades, the fishery has harvested substantial numbers of hatchery summer chum and sockeye salmon. Directed king salmon fisheries may occur in District 11 when run strength is sufficient.

2014 OUTLOOK

King Salmon

The final 2014 preseason forecast of 26,800 large Taku River king salmon does not provide AC for either the U.S. or Canadian directed fisheries. DIPAC projects a 2014 total run of approximately 4,700 hatchery king salmon from their smolt releases into Gastineau Channel.

Sockeye Salmon

The total run of wild Taku River sockeye salmon in 2014 is expected to be below average. This is based on spawner-recruit analysis, sibling forecast, and recent trends in ocean survivals. The 2009 main parent year escapement of 72,000 fish was just above the lower bound of the 71,000–80,000 fish escapement goal range, and below the 10-year average escapement of approximately 100,500 sockeye salmon. The 2010 parent year had an escapement of 87,000 sockeye salmon which was above the upper bound of the escapement goal range. Adult returns to date from the joint U.S./Canada Taku River sockeye salmon enhancement projects at Tatsamenie and Trapper

Lakes have been low, and numbers of enhanced sockeye salmon returning to these systems are not expected to contribute significantly to harvest in 2014.

Escapement through the Speel Lake weir of the 2009 parent year was 3,689 sockeye salmon, below the lower bound of the 4,000–13,000 fish escapement goal range, while the 5,643 fish escapement in 2010 was within the range. Beginning in 2005, DIPAC operated side scan sonar to monitor salmon escapements into Crescent Lake. Although all species of salmon enter Crescent Lake, the majority are thought to be sockeye. The sonar count in 2008 was 1,903 fish, and in 2009 was 1,256 fish. The 2005 to 2010 average sonar count is approximately 6,400 fish. Due to technical issues, the sonar monitoring program has been discontinued and Crescent Lake escapements will be monitored by aerial surveys in 2014.

The DIPAC forecast for enhanced sockeye salmon returning to Port Snettisham is 144,000 fish, similar to last year's total run estimate of 147,300 fish.

Chum Salmon

In 2014, approximately 767,000 summer chum salmon are forecast to return from DIPAC hatchery releases in Gastineau Channel, and 102,000 chum salmon from Limestone Inlet remote releases. The total estimated DIPAC chum salmon contribution to the Section 11-B drift gillnet fishery is forecast to be 443,000 fish. Returns of fall chum salmon to the Taku River are expected to be similar to recent seasons.

Pink Salmon

Returns of pink salmon to District 11 systems are expected to be below average in 2014. Parent year pink salmon escapements to District 11 did not meet management targets and were below the recent 10-year average. Pink salmon counted through the Taku River Canyon Island fish wheels in 2012 were 44% of the even-year average, indicating below-average escapement to the Taku River.

Coho Salmon

The 2014 total run of Taku River coho salmon is expected to be below average. The total run forecast, based on the relationship between smolt tagging, CPUE, and the total and inriver run estimates, is 170,000 adult fish. This compares to the 10-year average total run of 189,000 adults. DIPAC projects a 2014 return of approximately 42,000 hatchery coho salmon from their smolt releases into Gastineau Channel.

MANAGEMENT GOALS

Management goals for the 2014 Taku/Snettisham drift gillnet fishery are as follows:

1. Provide for sufficient salmon spawning escapements to Taku River, Port Snettisham, and Stephens Passage streams while harvesting those fish in excess of escapement needs;
2. Monitor the incidental harvest of king salmon to stay within the BOF Southeast drift gillnet allocation of 2.9% of treaty king salmon quota;
3. Manage the fishery consistent with current provisions of the PST (5 AAC 33.361);
4. Maximize the harvest of hatchery-produced chum salmon returning to Limestone Inlet while minimizing the incidental harvest of Port Snettisham wild sockeye salmon;
5. Manage the return of enhanced Port Snettisham sockeye salmon consistent with the *District 11: Snettisham Hatchery Salmon Management Plan* (5 AAC 33.378);

6. Manage the Speel Lake sockeye salmon run to achieve an escapement to the lake between 4,000 and 13,000 spawners. This goal is a biological escapement goal based on an analysis completed during the winter of 2002–2003;
7. Manage the District 11 directed king salmon fishery to harvest large adult king salmon in accordance with the PST Treaty and the BOF District 11 king salmon management plan.

MANAGEMENT PLAN

The District 11 gillnet fishery will be managed in accordance with the TBR Annex of the PST. Harvest sharing arrangements for king, sockeye, and coho salmon through the 2014 fishing season are specified in the annex.

King Salmon

The below-average preseason forecast requires a conservative approach to the 2014 Taku River king salmon run. There will initially be no directed king salmon fisheries in District 11 and based on recent trends of king salmon abundance, a directed fishery is unlikely throughout the spring. Mesh size restriction and reduction in area will likely be utilized during the initial week of the traditional sockeye season in order to maximize king salmon escapement. Inseason abundance estimates derived from the inriver mark-recapture data may be available in middle to late May. Should the run size estimate increase substantially providing a fishery opportunity, a news release will be issued announcing any specific fishery details.

Sockeye Salmon

Section 11-B will open for directed sockeye salmon fishing on the third Sunday in June (June 15) for a three-day fishing period. Subsequent openings will be based on inseason fishery performance and stock assessment information.

The District 11 fishery will be managed through mid-August primarily on the basis of sockeye salmon abundance. Run strength will be evaluated using fishery catch and CPUE data, and weekly inriver run size estimates derived from the Taku River fish wheel mark-recapture project operated at Canyon Island. Contribution of enhanced stocks of sockeye salmon will be estimated inseason by analysis of salmon otoliths sampled from the commercial harvests. The age and stock compositions of the harvest of wild sockeye salmon will be estimated after the fishing season by scale pattern and GSI analysis of commercial catch samples.

The returns of enhanced Port Snettisham sockeye salmon will be managed according to the *District 11: Snettisham Hatchery Salmon Management Plan* (5 AAC 33.378). The plan provides basic guidelines for managing enhanced sockeye salmon production from Port Snettisham including the following provisions, in order of priority:

1. Sustainable production of wild sockeye salmon from Crescent and Speel Lakes;
2. Manage enhanced Snettisham sockeye salmon returns in a manner that does not prevent achieving escapement goals or PST harvest sharing agreements for Taku River salmon stocks;
3. Assessment programs shall be conducted to estimate Snettisham wild sockeye salmon stock escapements and contributions of enhanced sockeye salmon to the District 11 commercial fishery;
4. Common property harvests in the Speel Arm SHA shall be conducted by limiting time and area to protect wild sockeye salmon returns.

Management of the fishery in Stephens Passage will focus on conservation of wild Port Snettisham sockeye salmon stocks, particularly in July. The department intends to implement a six-inch minimum gillnet mesh size restriction in Section 11-B south of Circle Point in order to limit harvest rates on wild Snettisham sockeye salmon and yet allow harvest of enhanced chum salmon returning to the Limestone remote release site. The mesh restriction in Section 11-B may be relaxed at the end of July or after the peak migration timing of wild Snettisham sockeye salmon stocks through Stephens Passage.

A personal use fishery will be allowed in Sweetheart Creek to ensure enhanced sockeye returns to this site are fully utilized. Sweetheart Creek is naturally blocked to anadromous fish migration several hundred yards upstream from the mouth. The Sweetheart Creek personal use fishery will be open seven days per week.

In order to avoid conflicts with sport fisheries, the District 11 drift gillnet fishery will not be open concurrent with the 2014 Juneau Golden North Salmon Derby (August 8–10). Consequently, during SW 33, the District 11 gillnet fishery will not open until Monday, August 11.

Pink Salmon

Pink salmon will be harvested in Section 11-B incidental to sockeye and enhanced summer chum salmon fisheries. Fishing time for a directed pink fishery in Section 11-C will depend upon the strength of pink salmon returns to lower Stephens Passage, Seymour Canal, and the northern portions of District 10. Returns will be closely monitored and if surpluses are present, openings could occur in August.

Coho and Fall Chum

Beginning in mid-August, management of the Taku/Snettisham drift gillnet fishery will be based primarily on the run strength of returning Taku River coho, as well as fall chum salmon. The TBR Annex of the PST calls for the U.S. to manage its fisheries to achieve a minimum above-border run size of 38,000 coho salmon. Although a bilateral escapement goal for Taku River coho salmon has not yet been finalized, preliminary analysis suggests this target is too low. District 11 will be managed to provide a minimum above border run of 75,000 coho salmon. Inseason management will be based on evaluation of the fishery catch, effort, and CPUE relative to historical levels, inriver run size estimates from the Taku River mark-recapture project, and recovery of coded-wire-tagged wild Taku River and hatchery coho salmon in marine fisheries.

LYNN CANAL GILLNET FISHERY

INTRODUCTION

The Lynn Canal drift gillnet fishery operates in the waters of District 15. The district is divided into three regulatory sections: 15-A (upper Lynn Canal), 15-B (Berners Bay), and 15-C (lower Lynn Canal). The Lynn Canal drift gillnet fishery targets sockeye, summer chum, pink, coho, and fall chum salmon. King salmon are taken incidentally.

Historically, this fishery targets sockeye, coho, and fall chum salmon from June through late September. In recent decades, the fishery has targeted large returns of hatchery chum salmon originating from remote hatchery release projects at Amalga and Boat Harbor.

Sockeye salmon are targeted from June through early September. The primary stocks originate from Chilkat Lake, Chilkoot Lake, Berners Bay rivers, and mainstem spawning areas of the Chilkat River. Hatchery and wild summer chum salmon are harvested from late June through early August. Fall chum and coho salmon are targeted from September through early October. The primary fall chum salmon stocks originate in the Klehini and Chilkat rivers. Coho salmon stocks originate from the Chilkat and Berners Bay river systems.

Continuing in 2014, sockeye salmon escapement to Chilkat Lake will be assessed with a DIDSON (dual frequency identification sonar) system. This equipment has enabled ADF&G crews to monitor Chilkat Lake salmon escapement during flow reversals, weather events, and during periods of high boat traffic.

Sockeye salmon smolt projects will be operated at Chilkoot and Chilkat Lakes in 2014. Incline plane traps will be deployed to capture and monitor the outmigration of sockeye salmon juveniles in each system. This information will assist in forecasting future returns as well as measuring effects of various escapements to each system.

MANAGEMENT GOALS

The overall management goal is to achieve desired spawning escapement levels while harvesting the available surplus for a long-term maximum sustainable yield of all Lynn Canal salmon stocks. Escapement to Chilkoot Lake is monitored by a weir located on the outlet of Chilkoot Lake. Escapements to Chilkat River and Chilkat Lake are monitored using fish wheels operated in the lower Chilkat River and a weir/DIDSON located near the outlet to Chilkat Lake. Other stocks in the general Lynn Canal area are monitored by aerial surveys, foot surveys, or mark-recapture methods. Specific management goals for the 2014 Lynn Canal drift gillnet fishery and formal escapement goals are as follows:

1. Obtain an escapement of between 38,000 and 86,000 (weir count units) sockeye salmon to Chilkoot Lake.
2. Obtain an escapement of between 70,000 and 150,000 sockeye salmon to Chilkat Lake. The escapement will be monitored inseason by the lower Chilkat River fish wheel project and the final escapement will be derived from DIDSON counts at the outlet of Chilkat Lake.
3. Obtain an escapement of between 1,750 and 3,500 three-ocean age and older king salmon to the Chilkat River.
4. Obtain a peak foot escapement count between 4,000 and 9,200 coho salmon to Berners River.
5. Obtain a peak index stream count for Chilkat River drainage coho salmon that corresponds to a total escapement of 30,000 to 70,000 fish.
6. Provide for sufficient chum, coho, and pink salmon spawning escapements to the Chilkat, Chilkoot, and Berners Rivers and other Lynn Canal systems while harvesting those fish in excess of escapement needs.
7. Harvest all DIPAC hatchery-produced chum salmon available in the Boat Harbor Terminal Harvest Area while conserving wild stock summer chum salmon migrating to streams on the western shoreline of Lynn Canal and other wild stocks originating in upper Lynn Canal.

2014 Outlook

Sockeye Salmon

An above average return of Chilkat Lake sockeye salmon is expected in 2014. Escapements during parental years were below and near the lower end of the escapement goal range during 2008 and above the upper goal range in 2009 (72,000 and 153,000 fish respectively). Zooplankton abundance in 2009 and 2010, years when the 2014 sockeye salmon return reared in Chilkat Lake were much improved over previous years. On average, 71% of the Chilkat Lake sockeye salmon escapements are 3-ocean age fish (34% are age-1.3 fish, 37% are age-2.3 fish and 0.5% is age-3.3 fish). Approximately 28% of this run are fish that have spent two years in the marine environment, or 2-ocean age fish (5% are age-1.2 and 22% are age-2.2). The age composition of the 2013 run of 2-ocean age fish was above the previous 10-year average and may indicate an above average return of 3-ocean age fish in 2014.

Sockeye returns for 2014 are not formal forecasts but may be characterized as general expectations based on escapement, age composition, and lake rearing conditions. Due to expected above average returns of Chilkat Lake sockeye salmon, the department will implement management decisions in the commercial drift gillnet salmon fishery to achieve target escapement levels within the escapement goal range for this stock.

The 2014 run size of Chilkat River mainstem sockeye salmon is expected to be near average in run strength. Mark-recapture estimates of the Chilkat River mainstem sockeye salmon escapements in 2009, 2010, and 2011 (the dominant parent-years), were 27,800, 34,200, and 37,800 fish, respectively. Escapement estimates during the parent years for the 2014 run were near the historical average of 33,400 fish for all brood years. The dominant age classes for this run are age-0.2 (25%), age-0.3 (41%), and age-1.3 (20%) fish. The proportion of age-0.2 and age-1.2 fish of the 2013 escapement was near average indicating that the 2014 return of age-0.3 and age-1.3 fish to the mainstem Chilkat River may be near average in run strength. The Lower Chilkat River fish wheel project has been providing inseason stock assessment and post-season escapement estimates of Chilkat River mainstem sockeye salmon since 1994.

Returns of Chilkoot Lake sockeye salmon in 2014 are expected to be below average. The total run of 51,000 Chilkoot Lake sockeye salmon in 2009 (dominant brood year) was well below the historical average of 162,000 fish. The Chilkoot Lake sockeye salmon weir count during the dominant parental brood year (2009) for the 2014 return was 34,000 fish, below the lower bound of the sustainable escapement goal of 38,000 fish. The age composition of the 2013 run of Chilkoot Lake sockeye salmon was mostly age-1.3 fish (51%) and age-1.2, 2.2, 2.3, and 1.4 age fish (49%). The proportion of age-1.2 and 2.2 fish (32%) were above the previous 10-year average of 19%. This information may indicate a robust return of age-1.3 fish in 2014; however, the well below average total run in 2009 is the basis for a below average total run prediction in 2014.

Management decisions will continue to be based on inseason escapement data and site specific sampling results from the District 15 drift gillnet fishery.

An average run of Berners Bay sockeye salmon is expected in 2013 for similar reasons as the Chilkat River mainstem run is expected to be average in run strength. Berners Bay rivers and Chilkat River mainstem sockeye stocks share very similar life histories and both stocks shared similar average age composition and parental year escapements for the dominant brood years for

the 2014 run. Total escapement estimates are not available for Berners Bay sockeye salmon systems as escapements are assessed via aircraft survey. Peak aerial escapements to Berners Bay streams were generally near average for all brood years. The 2010 and 2011 commercial harvests of Berners Bay and Chilkat River mainstem sockeye salmon were estimated at 20,800 and 21,400 fish respectively. These harvests are near the recent 10-year average harvest of 22,700 fish.

Summer Chum Salmon

The majority of the summer chum salmon production in the district is from hatchery releases at Amalga Harbor Special Harvest Area and the Boat Harbor Terminal Harvest Area (BHTHA) by DIPAC. DIPAC has been enhancing the chum salmon returns to Lynn Canal since 1987. The projection for the BHTHA chum salmon run in 2014 is approximately 537,000 fish. This forecast is below the 2013 run but well above the 2004–2013 average of 262,000 fish. The preseason projection for the Amalga Harbor chum salmon run is approximately 1,932,000 fish, well above the historical average for this project. The total projected Lynn Canal hatchery chum salmon run of 2,469,000 fish is near the 2006–2013 average of 2,300,000 fish.

Smaller numbers of wild chum salmon are produced from local area streams such as Sawmill Creek and other Berners Bay rivers on the eastern side of Lynn Canal. The Endicott, Beardslee, and St. James Bay rivers on the western side of Lynn Canal are also important contributors to the wild summer chum harvest in the drift gillnet fishery. These streams are part of the northern southeast inside index stream group.

The northern southeast inside summer chum salmon index counts during the important brood years (2009 and 2010) for the 2014 returns were 107,000 and 77,000 fish, respectively. These index counts were below the lower-bound sustainable escapement goal of 119,000 fish for both years.

Based on parental-year escapement counts, the wild summer chum salmon run in 2014 should be average in run strength and at a much lower scale than the hatchery summer chum salmon run.

Fall Chum Salmon

The 2014 run of Chilkat River drainage fall chum salmon stock is expected to be near average. For the Chilkat River fall chum parent years, the peak aerial survey counts were 30,000 and 8,000 fish during 2009 and 2010. Counts were near the peak aerial escapement count average of 24,000 fish in 2009 and below average in 2010. The total drainage wide estimated escapement in 2009 and 2010 based on mark-recapture index methods was 326,000 and 88,000 chum salmon. These estimates are above average for 2009 and well below average for 2010. A conservative approach will be implemented in 2014 to ensure escapements of Chilkat River drainage fall chum salmon are within the escapement goal range.

The commercial harvest during the dominant parental brood years (2009 and 2010) were both near the recent average. Generally, escapements of Klehini River and Chilkat River fall chum salmon stocks have been trending upward from historical lows during the mid to late 1990s. Fish wheel counts and aerial escapement surveys in recent years have indicated an increasing trend in abundance for this stock. Results of a study conducted from 2002 to 2005 have indicated that the total fish wheel catch is approximately 1.55% of the total number of fall chum salmon returning to the Chilkat River drainage.

Coho Salmon

The Chilkat River drainage coho salmon return is expected to be average during 2014. Coho salmon systems in the district include the Chilkat River, Berners River and Chilkoot River. Parent-year survey counts at the Chilkat River tributaries and Chilkoot River drainage were generally good and above the 10-year average. The 2010 and 2011 escapements to Berners Bay (7,520 and 6,050) were within the escapement goal range of 4,000 to 9,200 fish.

Sport Fish Division has been conducting coho salmon smolt coded-wire tagging (CWT) studies on the Chilkat River to estimate smolt size, age structure, production of coho salmon smolts, and marine survival of adult coho salmon since 1999. The 2010 and 2011 Chilkat River fish wheel catches of 1,150 and 1,600 coho were below the 2004–2013 average for both years. Chilkat River index stream escapements for coho salmon in 2010 and 2011 were 89,100 and 66,600 fish respectively. These escapement counts were above and within the escapement goal range of 30–70 thousand fish. Estimates of harvest were below the previous 10-year average for both brood years. Forecasts for Lynn Canal coho stocks are based on recent marine survival trends, escapement estimates and fish wheel catch.

Coho salmon production from streams in Berners Bay continues to be in recovery from a series of less productive years. Coho salmon smolt production in Berners Bay has been below average since 2005, but has improved in recent years.

King Salmon

The 2014 preseason inriver abundance forecast for large (≥ age 1.3) Chilkat River king salmon is estimated to be near historical averages and just above the inriver abundance goal range of 1,850 to 3,600 fish. Since the preseason forecast is projected to be above the inriver abundance goal range, Chilkat Inlet will be managed for sockeye salmon abundance. The northern line in Chilkat Inlet will remain at Seduction Point or the latitude of the southernmost tip of Talsani Island depending on sockeye and King salmon run strength as indicated by the lower Chilkat River fish wheel and drift gillnet projects. Due to above average projections for Chilkat Lake sockeye salmon, the department will provide opportunity to harvest this stock if the lower Chilkat River fish wheel project indicates good run strength.

Pink Salmon

The department is projecting low returns of pink salmon to Southeast Alaska in 2014. The ADF&G formal forecast of 22 million pink salmon returning to Southeast Alaska in 2014 is well below average. If returns of pink salmon to Lynn Canal streams are higher than expected, the department will consider opening areas within District 15 to harvest excess pink salmon.

MANAGEMENT PLAN

In 2014, ADF&G intends to manage the summer Lynn Canal drift gillnet fishery to obtain escapements within the established escapement goal ranges for all salmon stocks. The department intends to manage the fishery to minimize harvest of wild stock summer chum salmon while harvesting returns of hatchery chum salmon in Section 15-C. The fall Lynn Canal drift gillnet fishery will be managed to conserve Klehini River (early-run) fall chum salmon while providing opportunity to harvest Chilkat River fall chum and coho salmon if run strength

indicates a harvestable surplus. Area, time and gear restrictions will be in place to protect projected poor returns of Chilkoot Lake sockeye salmon during the summer season.

Section 15-A

Section 15-A will open for two days south of the latitude of Seduction Point beginning at 12:01 P.M., Sunday, June 15 (SW 25), with no mesh restriction. If the Chilkoot River weir count through June 12 is less than 2,500 sockeye salmon, the eastern side of Section 15-A will be closed. If the weir count is 2,500 sockeye salmon or greater on June 12, the eastern portion of 15-A may be opened in the area south of Seduction Point. During the first two weeks of the season, Chilkat Inlet will be closed north of the latitude of Seduction Point. If inseason projections for Chilkoot and Chilkat Lake sockeye salmon early in the season are poor, Chilkat and Chilkoot Inlets may remain closed until escapements are on track to meet escapement objectives. In SW 27, Chilkat Inlet may be open south of the latitude of the Glacier Point-Twin Coves line or at the latitude of the northernmost tip of Kochu Island, if sockeye escapements are within goals as measured by the Chilkat River fish wheel project. Chilkat Lake sockeye salmon run strength as measured by the lower Chilkat River fish wheel project will dictate commercial fishery openings in Chilkat Inlet in 2014. If escapements of sockeye salmon to Chilkat Lake are poor, the northern boundary line may be moved to the southernmost tip of Talsani Island for most of the summer season to boost escapement to Chilkat Lake. ADF&G is forecasting an above average run of sockeye salmon to Chilkat Lake, below average run to Chilkoot Lake, and average Chilkat River mainstem sockeye salmon run in 2014. Decisions will be dictated by the results of various inseason stock assessment programs operating on the Chilkat and Chilkoot River drainages. Fishing opportunity is expected to be limited in Chilkoot and Lutak Inlets in eastern Lynn Canal in 2014 to conserve Chilkoot Lake sockeye salmon. If the inseason information system indicates that the Chilkoot Lake sockeye salmon run is not forecasted to meet minimum escapement goals, restrictions in time and area of eastern and northern Section 15-A will be implemented until the department can project sockeye escapement within desired goal ranges. Six-inch minimum mesh size gear restrictions may be in place to reduce the harvest rate on Chilkoot Lake sockeye salmon during the summer and early fall season if necessary. Data from the Chilkoot River weir program and from the commercial fishery will be used to judge run strength inseason for Chilkoot River sockeye salmon stocks.

The Chilkat mainstem sockeye salmon run overlaps with Chilkat Lake sockeye salmon and peaks in early to mid-July followed by late run Chilkat Lake sockeye salmon, which typically dominates the sockeye run during mid to late August. Run timing is tied to freshwater age: mainstem sockeye salmon are predominantly age-0, Chilkat Lake early run fish are predominantly age-1, and Chilkat Lake late run fish are predominantly age-2.

Fall fishery management in Section 15-A will begin in SW 34 until the end of the season. As done in recent years, the northern boundary line in Section 15-A will move northward in stages as the coho and fall chum stocks begin to migrate back to parental streams. Depending on effort levels, and coho and fall chum salmon run strength, fishing opportunity in Section 15-A may be similar to openings in 2013. Fisherman are reminded that any extensions in fishing time during the fall season could be announced with little advanced notice as requested by industry at the drift gillnet task force meetings. Extensions in fishing opportunity will be based on results of inriver stock assessment and projected escapement in comparison to escapement goals.

Section 15-B

During years of high coho salmon abundance, openings in Section 15-B (south of the latitude of Cove Point) occurred for two or three days from SW 38 through the end of the season. Inseason information collected from coded-wire-tag recoveries and commercial harvest from various gear types will provide the data to manage fishing opportunity in Section 15-B. Since the preseason forecast is for an average return of coho salmon for Berners Bay streams, it is unlikely that openings within Berners Bay will occur in 2014.

Section 15-C

Section 15-C will open for two days beginning at 12:01 p.m., Sunday, June 15, south of the latitude of Point Bridget on the eastern shoreline and south of Danger Point on the western shoreline. A 6-inch minimum mesh size restriction may be implemented if Chilkoot Lake sockeye salmon weir counts are well below average.

Due to the below average expected returns of Chilkoot Lake sockeye salmon, open fishing time in Section 15-C will be limited to 2 or 3 days (except for the BHTHA). If inseason projections for the Chilkat or Chilkoot Lake sockeye salmon runs are below the escapement goal range, it is possible that additional time, area, and gear restrictions will be placed in Section 15-C during the summer season to boost escapement of sockeye salmon to desired levels.

To provide adequate escapements for northbound wild salmon stocks while providing opportunity to harvest enhanced chum salmon, some openings may be limited to the small area in eastern Section 15-C (known as the "postage stamp area") and defined as:

> the waters of Section 15-C from the eastern shoreline of Lynn Canal at the latitude of Vanderbilt Reef Light to Vanderbilt Reef Light and east of a line from Vanderbilt Reef Light to Little Island Light.

Depending on effort and escapement levels, this area could open on the 3rd and/or 4th day during peak weeks (SW 27–31) of the hatchery chum salmon run. This strategy will be used to provide opportunity to harvest summer chum salmon while reducing the harvest of northbound wild salmon stocks migrating through eastern section 15-C. The decision to use this strategy will be considered inseason based on Chilkat River fish wheel counts, Chilkoot Lake weir counts, aerial survey results and results from site-specific sampling of the commercial fishery. Since the Chilkoot Lake sockeye salmon run is expected to be poor, openings in eastern Section 15-C could be limited to just the postage stamp area if this stock is very weak.

The BHTHA will be opened for extended periods beginning in SW 27, (June 29). Management of this THA is described under the heading **DOUGLAS ISLAND PINK AND CHUM, INC. TERMINAL AREA FISHERIES**.

Fall season management will begin in SW 34 (August 17) in Section 15-C. Management of Section 15-C during the fall season will be based on overall coho and fall chum salmon run strength and fishing effort levels. Commercial fishing effort will be directed at harvesting coho and fall chum salmon in Section 15-C in excess of escapement needs. Fishing time will more likely be limited from two to three days each week in the fall season. Any extensions to area or fishing time in the fall season will depend on the results of various stock assessment projects in the Chilkat and Chilkoot watersheds. Extensions could be announced without advance notice during the fall season if salmon run strength warrants.

In order to avoid conflicts with sport fisheries, the District 15 drift gillnet fishery will not be open concurrent with the 2014 Juneau Golden North Salmon Derby (August 8–10). Consequently, during SW 33, the District 15 gillnet fishery will not open until Monday, August 11.

As in previous years, ADF&G management crews, as part of the marine fishery performance project, will be on the fishing grounds during commercial fishing periods to sample sockeye and king salmon and to monitor the fishery during each opening. ADF&G respectfully requests that commercially caught sockeye and king salmon are retained in separate fish holds or totes so department staff can collect scale and length data from salmon while on the grounds monitoring the fishery. The sockeye salmon scale samples that are collected from the commercial gillnet fishery form the basis of our stock separation analysis which is very important for the management of this fishery. ADF&G vessels stand by on channel 10 VHF when on the fishing grounds.

TERMINAL HARVEST AREA FISHERIES

During the 2014 season, drift gillnet terminal area fisheries can be expected in Deep Inlet, Neets Bay, Nakat Inlet, Anita Bay, Speel Arm, and Boat Harbor to harvest salmon returning to DIPAC, NSRAA, and SSRAA enhancement facilities.

NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION TERMINAL AREA FISHERIES

The terminal hatchery fishery at Deep Inlet will be managed jointly with NSRAA and according to BOF management plan. The open gillnet fishing times and any modifications of the terminal fishing area will be announced by ADF&G news release prior to and during the fishing season.

Deep Inlet Terminal Harvest Area—[5 AAC 33.376]

NSRAA expects runs of 1,170,000 chum, 36,200 king, and 10,000 coho salmon to the Deep Inlet remote release site and the Medvejie Hatchery in 2014. This season 70,000 chum salmon are needed for broodstock and no cost recovery is expected to occur. The majority of the common property harvest can be expected to take place in the Deep Inlet THA by drift gillnet and purse seine gear, but some harvest is likely to occur outside the THA by troll and purse seine gear as well.

The Deep Inlet THA fishery will be managed jointly with NSRAA, and in accordance with the *District 13: Deep Inlet Terminal Harvest Area Salmon Management Plan* (5 AAC 33.376). The plan provides for distributing the harvest of hatchery-produced salmon between the purse seine and drift gillnet fleets. The BOF, during its February 2012 meeting, continued the regulation requiring a time ratio of 1:1 of gillnet fishing to purse seine fishing time beginning the third Sunday in June. This regulation will sunset after the 2014 season. The time ratio of gillnet fishing time to purse seine fishing time during king salmon management (prior to the third Sunday in June) will remain 2:1. The Board also closed the waters of the Deep Inlet THA west of 135°20.75′ W. longitude to purse seine and drift gillnet gear beginning with the first emergency order of the season through the third Saturday in June. This closure allows trollers access to a historically used area. Additionally, the BOF has allowed trolling to occur when net fisheries are closed. During king management (June 1 to June 21), gillnet fishing is scheduled on Mondays, Tuesdays, Thursdays, and Fridays, and seine fishing is scheduled on Sundays and Wednesdays. During the first portion of chum management (June 22 thru July 26) gillnet fishing

is scheduled on Mondays, Tuesdays, and Wednesdays, and seine fishing is scheduled on Sundays, Thursdays, and Fridays. During the second portion of chum management (July 27 thru September 27), gillnet fishing is scheduled on Mondays, Tuesdays, and Saturdays, and seine fishing is scheduled on Sundays and Thursdays. Details of the rotational fishery schedule for Deep Inlet were announced in an ADF&G News Release on March 12, 2014.

The NSRAA board has requested that the common property rotational fishery begin June 1 in order to provide for common property harvest of king salmon returning to the Medvejie Hatchery. NSRAA expects a return of 36,200 king salmon to Medvejie Hatchery this season. THA rotational gear fisheries with four days of gillnet and two days of seine per week are scheduled to begin for gillnet gear on Monday, June 2, and continue through Friday, June 20.

Regulations allow ADF&G to require that commercial gillnets fished in the Deep Inlet THA prior to July 1 have a minimum mesh size of six inches. In 2014, drift gillnet fishermen will be required to fish with a minimum mesh size of six inches prior to June 21. The purpose of the minimum mesh restriction is to reduce the harvest of local wild sockeye salmon returning to Silver Bay that are passing through the Deep Inlet THA.

NSRAA does not anticipate closing the Deep Inlet rotational fisheries this season.

The Deep Inlet THA is described as follows:

> **Deep Inlet THA**: Deep Inlet, Aleutkina Bay, and contiguous waters south of a line from a point west of Pirates Cove at 135°22.63′ W. longitude, 56°59.35′ N. latitude to the westernmost tip of Long Island to the easternmost tip of Long Island to the westernmost tip of Emgeten Island to the westernmost tip of Error Island to the westernmost tip of Berry Island to the southernmost tip of Berry Island to the westernmost tip of the southernmost island in the Kutchuma Island group to the easternmost tip of the southernmost island in the Kutchuma Island group to the westernmost tip of an unnamed island at 135°17.67′ W. longitude, 57°00.30′ N. latitude to a point on the southern side of the unnamed island at 135°16.78′ W. longitude, 57°00.08′ N. latitude and then to a point on the Baranof Island Shore at 135°16.53′ W. longitude 56°59.93′ N. latitude with the following restrictions: all waters of Sandy Cove and Leesofskaia Bay will be closed. The Deep Inlet THA west of 135°20.75′ W. longitude will be closed to purse seine and drift gillnet gear beginning with the first emergency order of the season through the third Saturday in June.

In order to promote full utilization of salmon, to prevent waste of salmon, to determine harvest patterns of incidentally harvested coho and sockeye salmon, and to allow full and accurate reporting of returns, the Deep Inlet THA fishery will be managed in 2014 by emergency order under authority of 5 AAC 39.325, *Full Retention and Utilization of Salmon*. This requires that all salmon harvested in net fisheries are retained, utilized, and reported on fish tickets whether they are sold or retained for personal use.

In early September the Deep Inlet THA boundaries may be adjusted by ADF&G to reduce interception of wild coho salmon returning to Salmon Lake or hatchery coho salmon returning to Medvejie Hatchery needed for broodstock. THA boundary adjustments to protect coho salmon will be based on historic run timing and inseason observations of abundance. Since voluntary compliance with reporting of coho salmon in the Deep Inlet Terminal Harvest Area fishery has, in the past, been poor, and the department needs detailed information on coho and sockeye

salmon harvest patterns, personnel from ADF&G or AWT may board some vessels and conduct hold inspections to ensure compliance or department staff may board some vessels in order to sample marked coho for coded wire tags.

Fishermen are reminded to be respectful of the rights of property owners who reside in the vicinity of the Deep Inlet THA. If complaints occur and are substantiated during the 2014 season, then the department, after consultation with NSRAA, may respond to complaints by changing scheduled fishing times or fishing boundaries of the Deep Inlet THA.

Deep Inlet Cost Recovery

Cost recovery management is planned such that NSRAA may conduct cost recovery in the Deep Inlet Special Harvest Area (SHA) and in the Silver Bay SHA. The Silver Bay SHA is expanded to include the waters of Eastern Channel and Silver Bay enclosed by a line from Entry Point Light to the southernmost tip of Harris Island to the southernmost tip of Galankin Island to Simpson Rock Light to the southernmost tip of Makhnati Island to Sentinel Rock to the westernmost tip of Cape Burunof to a point west of Pirates Cove at 135°59.35′ N. latitude, to the westernmost tip of Long Island to the westernmost tip of Emgeten Island to the westernmost tip of Error Island to the northernmost tip of Luce Island and to the westernmost tip of Silver Point; through July 22 and after 12:01 a.m. the day before the troll coho salmon fishery is reopened in August. The Silver Bay SHA, from July 22 to 12:01 a.m. the day before the end of August coho salmon fishery closure includes the waters of Eastern Channel and Silver Bay south of a line from Entry Point Light to the southernmost tip of Harris Island to the southernmost tip of Galankin Island and east of a line from Galankin Island to the northernmost point of Silver Point; and the waters of Sitka Sound enclosed by a line from the southernmost tip of Galankin Island to Simpson Rock light to the Makhnati Island buy to Black Rock to the southernmost tip of Neva Island to the northernmost tip of Sasendi Island from the southernmost tip of Volga Island to the northernmost tip of Galankin Island. In addition, the Deep Inlet SHA is expanded to include the waters east of a line from the westernmost end of cape Burunof at 56°59.04′ N. latitude, 135°23.23′ W. longitude to a point west of Cape Burunof at 56° 59.11′ N. latitude, 135°23.59′ W. longitude to 57°00.17′ N. latitude, 135° 22.69′ W. longitude to the westernmost tip of Long Island.

SOUTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION TERMINAL AREA FISHERIES

The terminal hatchery fisheries at Neets Bay, Nakat Inlet, and Anita Bay will be managed jointly with SSRAA in accordance with management plans adopted by the BOF. The open drift gillnet fishing times will be announced via news releases prior to, and during, the fishing season. These openings are subject to change during the season by emergency order if necessary.

Neets Bay Terminal Harvest Area—[5 AAC 33.370]

ADF&G in consultation with SSRAA, shall manage Neets Bay to include those waters of Neets Bay east of the longitude of the easternmost point of Bug Island to the closed waters at the head of the bay. From the second Sunday in June (June 8) through August 1, the Neets Bay THA shall include those waters of Neets Bay east of the longitude of Chin Point to the closed waters at the head of the bay.

In 2014, SSRAA is expecting a total run of 1,800,000 summer chum, 140,000 fall chum, 296,000 coho, and 18,100 king salmon to return to Neets Bay.

The Neets Bay fishery will open to all gear beginning at 12:01 a.m., Thursday, May 1 and ending at 12:00 noon, Tuesday, June 10. During this time the fishery will be open concurrently to drift gillnet, purse seine, and troll gear unless closed by emergency order. Beginning at 12:00 noon June 11 through 12:00 noon, July 2, a rotational fishery according to 5 AAC 33.370 will be conducted for the drift gillnet and purse seine fleet. Details of the 2014 season fishing schedule at Neets Bay will be available in a separate department news release and can also be found on the SSRAA web page.

It is anticipated that SSRAA will be conducting cost recovery operations throughout the summer in the Neets Bay THA and additional rotational fisheries will not occur until cost recovery and broodstock needs have been met. Additional fisheries in Neets Bay will be opened by ADF&G via emergency order in consultation with SSRAA.

Nakat Inlet Terminal Harvest Area—[5 AAC 33.372]

The Nakat Inlet THA includes the waters of Nakat Inlet north of Surprise Point at 54°49.10′ N. latitude and west of 130°42.75′ W. longitude. For 2014, approximately 280,000 summer chum, 10,000 fall chum, and 24,000 coho salmon are expected to return to Nakat Inlet. Peak chum salmon catches from these releases are expected between early July and early August for summer chum and between late August to mid-September for fall chum and coho salmon.

The Nakat Inlet THA will be open from June 1 to November 10 concurrently to gillnet and troll gear. The 500 yard stream closure regulation [5 AAC 39.290 (1)] will remain in effect.

Crystal Lake Terminal Harvest Area—[5 AAC 33.381]

The projected Crystal Lake king salmon total run is 3,300 adults. In the Wrangell Narrows (District 6) terminal area, around 1,650 fish are expected. Under provisions of the Wrangell Narrows-Blind Slough THA Management Plan, the commercial fishery will be open to harvest 50% of the projected terminal run over 4,000 fish. Based on the forecast, there is not likely to be surplus fish designated for commercial troll or gillnet harvest in the terminal area in 2014.

The total Crystal Lake Hatchery coho salmon run is expected to be 8,900 fish; of that, an estimated 3,600 fish will be available for sport and commercial harvest in the Wrangell Narrows-Blind Slough area. No commercial gillnet fishery is expected on Crystal Lake Hatchery origin fish in 2014.

Anita Bay Terminal Harvest Area— [5 AAC 33.383]

The Anita Bay THA consists of the waters of Anita Bay west of a line from Anita Point to 56° 14.26′ N. latitude, 132°23.92′ W. longitude.

In 2014, approximately 501,000 summer chum, 15,400 king, and 15,500 coho salmon are expected to return. The Anita Bay THA will be open to the harvest of salmon by troll, drift gillnet, and purse seine from 12:01 a.m., Thursday, May 1, through 12:00 noon, Monday, November 10. A rotational fishing schedule between seine and gillnet will begin in mid-June and will continue through the end of August. This schedule will be similar to last year with the gillnet openings/seine openings occurring on a 1:1 basis. Details of this schedule will be developed by SSRAA and will be announced by the department in a News Release issued in mid-April.

DOUGLAS ISLAND PINK AND CHUM INC. TERMINAL AREA FISHERIES

Boat Harbor Terminal Harvest Area

The projection for the Boat Harbor Terminal Harvest Area (BHTHA) chum salmon run in 2014 is approximately 537,000 fish. This forecast run is below the 2013 run but above the 1991–2013 average of 235,000 fish. The preseason projection for the Amalga Harbor chum salmon run is approximately 1.93 million fish, well above the historical average for this project. The total projected Lynn Canal hatchery chum salmon run of 2,450,000 fish is well above the 1996-2013 historical average of 1,900,000 fish.

The BHTHA will be opened for extended periods beginning in SW 27, (June 29). The BHTHA is defined as: those waters within two nautical miles of the western shoreline of Lynn Canal south of the latitude of Danger Point at 58°41.73′ N. latitude and north of a point 2.4 miles north of Point Whidbey at 58°37.05′ N. latitude. The northern line of the Boat Harbor area will remain at the latitude of Danger Point through week 31. The purpose of this strategy is to decrease the harvest rate on Endicott River and other western Lynn Canal wild chum salmon stocks that migrate through this area during the summer season when large returns of hatchery chum salmon are present. Escapements of wild chum salmon to the Endicott River have improved because of this action.

Speel Arm Special Harvest Area

The forecast total run of Snettisham Hatchery sockeye salmon in 2014 is 144,000 fish. This is similar to last year's total run of approximately 147,300 fish. This run will be principally harvested in the traditional District 11 commercial gillnet fishery. Common property fishery openings may occur during August in DIPAC's Speel Arm SHA, which is located in the waters of Speel Arm north of 58°03.42′ N. latitude. Timing of openings in the SHA will depend on DIPAC's progress toward broodstock and cost recovery goals and the sockeye salmon escapement to Speel Lake. DIPAC cost recovery efforts in the SHA during July will be limited to waters in the immediate vicinity of the hatchery where wild and hatchery stocks are well segregated. Fishery management decisions for the Speel Arm SHA will be made jointly by ADF&G and DIPAC. ADF&G and industry formalized the notification procedure for any extended fishery openings in Speel Arm.

The Southeast Alaska Drift Gillnet Task Force agreement specified:

1. That ADF&G include notice in the *Southeast Alaska Drift Gillnet Fishery Management Plan* that extended openings in Speel Arm could be expected on short notice once Speel Lake escapement goals are met;
2. That ADF&G include notice in the region-wide news release on or near the end of July that extended openings in Speel Arm could be expected on short notice once Speel Lake escapement goals are met;
3. If an announcement is made for extended fishing time in Speel Arm, ADF&G shall provide a minimum of **6 hours notice** from the time of the news release to the time the fishery opens.

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The following is a list of telephone numbers that may be called during the gillnet fishing season to obtain recorded announcements concerning areas open to gillnet fishing:

Ketchikan:	(907) 225-6870
Petersburg:	(907) 772-3700
Juneau:	(907) 465-8905
Haines:	(907) 766-2830

TABLES AND FIGURES

Table 1.–Southeast Alaska commercial drift gillnet salmon harvest, in numbers, by area, harvest type and species, 2013.

Fishery	King[a]	Sockeye	Coho	Pink	Chum	Total
District 1						
Traditional (Tree Point)	2,061	54,578	105,611	693,272	231,985	1,087,507
Terminal Harvest Area	2,422	1,370	5,522	70,162	97,695	177,171
Annette Island	1,151	7,269	40,881	440,104	144,619	634,024
District 6						
Traditional (Prince of Wales)	2,202	49,223	160,659	474,551	94,260	780,895
District 7						
Terminal Harvest Area	8,433	235	4,212	1,929	58,456	73,265
District 8						
Traditional (Stikine)	10,817	20,609	43,669	116,026	103,365	294,486
District 11						
Traditional (Taku/Snettisham)	1,211	138,474	51,022	123,283	725,604	1,039,594
Terminal Harvest Area	13	68,757	419	4,060	1,245	74,494
District 13						
Terminal Harvest Area	6,217	665	2,429	53,059	600,377	662,747
District 15						
Traditional (Lynn Canal)	1,092	113,521	67,858	66,834	1,247,763	1,497,068
Terminal Harvest Area	57	8,576	151	60,869	261,738	331,391
Subtotals						
Traditional	17,383	376,405	428,819	1,473,966	2,402,977	4,669,550
Terminal Harvest Areas	17,142	79,603	12,733	190,079	1,019,511	1,319,068
Common Property Total	34,525	456,008	441,552	1,664,045	3,422,488	6,018,618
Hatchery Cost Recovery*	0	0	0	0	0	0
Annette Island Reserve	1,151	7,269	40,881	440,104	144,619	634,024
Miscellaneous**	0	0	0	0	0	0
Total	**35,676**	**463,277**	**482,433**	**2,104,149**	**3,567,107**	**6,652,642**

[a] King salmon harvest includes jacks.

* No cost recovery using gillnet gear.

** Confiscated fish or fish harvested in test fisheries.

Table 2.–Southeast Alaska annual Portland Canal/Tree Point (District 1) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 2003 to 2013.

Year	King[a]	Sockeye	Coho	Pink	Chum	Total
2003	829	105,878	97,538	626,916	322,608	1,153,769
2004	2,069	142,763	50,820	409,429	327,439	932,520
2005	1,711	80,027	65,353	559,296	252,630	959,017
2006	2,271	63,368	31,271	216,779	297,660	611,349
2007	2,057	68,170	29,890	360,986	389,744	850,847
2008	4,059	34,915	97,599	275,654	319,718	731,945
2009	4,922	70,607	68,522	174,052	339,159	657,262
2010	3,302	64,747	99,081	597,138	458,622	1,222,890
2011	4,461	91,825	36,183	357,811	566,508	1,056,988
2012	4,024	64,394	73,576	217,281	757,675	1,116,952
2013	**4,483**	**55,948**	**111,133**	**763,434**	**329,680**	**1,264,678**
Average 2003–2012	2,971	78,669	64,983	379,346	403,176	929,354

[a] King salmon harvest includes jacks.

Table 3.–Southeast Alaska annual Prince of Wales (District 6) traditional drift gillnet salmon harvest, in numbers, by species, 2003 to 2013.

Year	King[a]	Sockeye	Coho	Pink	Chum	Total
2003	422	116,904	212,057	470,697	300,253	1,100,333
2004	2,735	116,259	138,631	245,237	110,574	613,436
2005	1,572	110,192	114,440	461,187	198,564	885,955
2006	1,948	91,980	69,015	149,907	268,436	581,286
2007	2,144	92,481	80,573	383,355	297,998	856,551
2008	1,619	30,533	116,074	90,217	102,156	340,599
2009	2,138	111,984	144,569	143,589	287,707	689,987
2010	2,473	112,450	225,550	309,795	97,948	748,216
2011	3,008	146,069	117,860	337,169	158,096	762,202
2012	1,853	45,466	121,418	129,646	104,307	402,690
2013	**2,202**	**49,223**	**160,659**	**474,551**	**94,260**	**780,895**
Average 2003–2012	1,991	97,432	134,019	272,080	192,604	698,126

[a] King salmon harvest includes jacks.

Table 4.–Southeast Alaska annual Stikine River (District 8) traditional drift gillnet salmon harvest, in numbers, by species, 2003 to 2013.

Year	King[a]	Sockeye	Coho	Pink	Chum	Total
2003	312	42,158	38,795	76,113	51,701	209,079
2004	7,410	103,392	26,617	20,439	37,996	195,854
2005	26,970	99,465	42,203	106,395	150,121	425,154
2006	30,033	61,298	34,430	56,810	343,827	526,398
2007	17,463	70,580	19,880	39,872	177,573	325,368
2008	14,599	35,679	34,479	18,105	81,876	184,738
2009	2,951	36,680	30,860	27,010	190,800	288,301
2010	2,359	32,737	42,772	58,610	51,005	187,483
2011	5,321	51,478	20,720	65,022	142,526	285,067
2012	8,027	21,997	20,100	16,374	240,569	307,067
2013	**10,817**	**20,609**	**43,669**	**116,026**	**103,365**	**294,486**
Average 2003–2012	11,545	55,546	31,086	48,475	146,799	293,451

[a] King salmon harvest includes jacks.

Table 5.–Southeast Alaska annual Taku/Snettisham (District 11) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 2003 to 2013.

Year	King[a]	Sockeye	Coho	Pink	Chum	Total
2003	1,467	238,160	24,338	114,166	170,874	549,005
2004	2,345	283,756	45,769	154,640	131,757	618,267
2005	23,301	106,048	21,289	182,778	93,700	427,116
2006	11,261	262,527	60,145	191,992	382,952	908,877
2007	1,452	112,241	22,394	100,375	590,169	826,631
2008	2,193	116,693	37,349	90,162	774,095	1,020,492
2009	6,800	62,070	36,615	56,801	918,350	1,080,636
2010	1,685	76,607	62,241	132,785	488,898	762,216
2011	2,510	163,896	28,574	344,766	667,929	1,207,675
2012	1,286	140,898	24,115	193,969	566,741	927,009
2013	**1,224**	**207,231**	**51,441**	**127,343**	**726,849**	**1,114,088**
Average 2003–2012	5,430	156,290	36,283	156,243	478,547	832,792

[a] King salmon harvest includes jacks.

Table 6.–Southeast Alaska annual Lynn Canal (District 15) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 2003 to 2012.

Year	King[a]	Sockeye	Coho	Pink	Chum	Total
2003	663	95,111	59,742	53,621	394,250	603,387
2004	805	151,245	51,960	98,341	745,450	1,047,801
2005	710	65,469	27,947	209,833	326,895	630,854
2006	344	145,579	55,133	94,700	1,094,212	1,390,002
2007	1,063	156,798	18,137	89,782	823,158	1,089,957
2008	659	46,655	46,932	26,034	1,072,135	1,192,415
2009	681	126,594	35,820	163,057	845,710	1,171,862
2010	871	100,973	65,870	171,054	764,629	1,103,397
2011	1,177	63,788	33,761	508,930	1,115,821	1,723,477
2012	2,736	224,643	23,321	353,271	1,567,227	2,171,198
2013	**1,149**	**122,097**	**68,009**	**127,703**	**1,509,501**	**1,828,459**
Average 2003–2012	971	117,686	41,862	176,862	874,949	1,212,435

[a] King salmon harvest includes jacks.

Table 7.–Performance of the Tree Point drift gillnet fishery sockeye salmon harvest under the 1999 PST agreement.

Year	Nass River Total Return	Nass River Escapement	Allowable Nass River AAH	Allowable Alaska Harvest (13.8%)	Actual Nass River Alaska Harvest	Cumulative: +overage / *(-underage)*
1999	842,806	200,000	642,806	88,707	129,794	41,087
2000	625,983	200,000	425,983	58,786	46,305	28,606
2001	580,616	167,258	413,358	57,043	55,096	26,659
2002	1,403,976	200,000	1,203,976	166,149	90,553	*-48,937*
2003	1,177,472	200,000	997,472	131,891	72,942	*-110,886*
2004	986,098	200,000	786,098	108,482	110,340	*-109,028*
2005	666,880	200,000	466,880	64,429	55,319	*-118,138*
2006	775,110	200,000	575,110	79,365	47,948	*-149,555*
2007	602,208	164,745	437,463	60,370	46,369	*-163,556*
2008	380,397	200,000	180,397	24,895	24,359	*-164,092*
2009	575,336	200,000	375,336	51,796	55,270	*-160,618*
2010	438,941	200,000	238,941	32,974	26,613	*-166,979*
2011	556,710	200,000	356,710	49,226	55,122	*-161,083*
2012	476,821	200,000	276,821	38,201	38,983	*-160,302*
2013[a]	452,000	200,000	252,000	34,776	38,212	*-162,722*
2014[b]	642,000	200,000	442,000	60,996		

[a] Preliminary Information
[b] DFO (Department of Fisheries and Oceans) forecast

Table 8.–Biological and sustainable escapement goals for Lynn Canal salmon stocks by species and location.

Species	Stock	Escapement Goal Type	Escapement Goal Range	Escapement Method
Sockeye[a]	Chilkoot Lake Total	Sustainable	38,000 to 86,000	Weir Count
Sockeye[a]	Chilkat Lake Total	Biological	70,000 to 150,000	DIDSON Count
Coho[b]	Berners River	Biological	4,000 to 9,200	Peak Foot Count
Coho[c]	Chilkat River Combined	Biological	30,000 to 70,000	Sum of Peak Foot Index Counts
King[d]	Chilkat River Combined	Biological	1,750 to 3,500	Mark-Recapture Estimate
Fall Chum[e]	Chilkat River Total	Sustainable	75,000 to 170,000	Fish wheel index

[a] Eggers et al. 2009
[b] Shaul and Crabtree 2005
[c] Ericksen and Fleischman 2006
[d] Ericksen and McPherson 2004
[e] Eggers and Heinl 2008

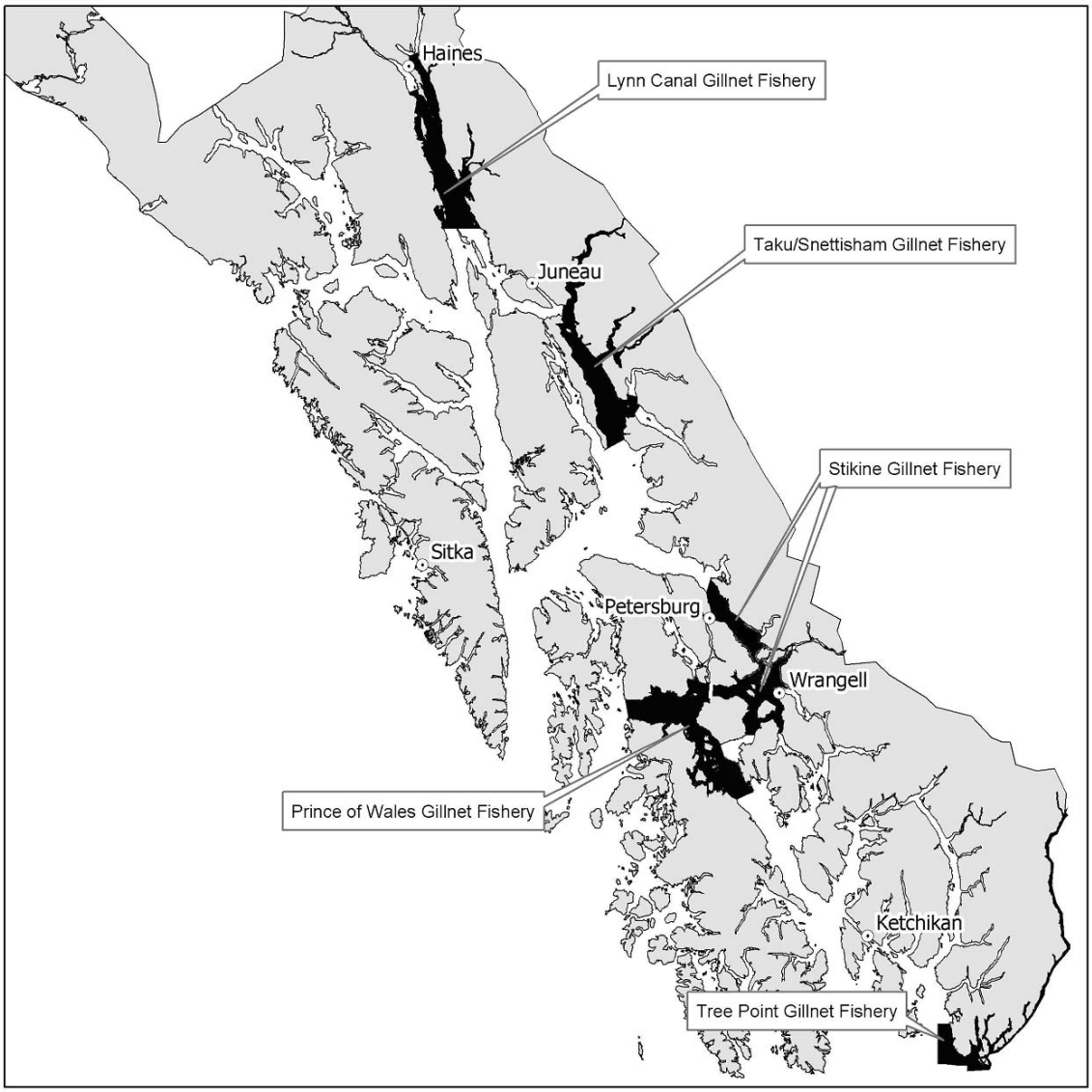

Figure 1.–Traditional drift gillnet fishing areas in Southeast Alaska.