

**2012 Yukon Area Subsistence, Personal Use, and
Commercial Salmon Fisheries Outlook and
Management Strategies**

by

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and

Jeff L. Estensen

May 2012

Alaska Department of Fish and Game

Division of Commercial Fisheries



REGIONAL INFORMATION REPORT NO. 3A12-04

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COMMERCIAL SALMON FISHERIES OUTLOOK AND
MANAGEMENT STRATEGIES**

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May 2012

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This document should be cited as:

Hayes, S. J., and J. L. Estensen. 2012. 2012 Yukon Area subsistence, personal use, and commercial salmon fisheries outlook and management strategies. Alaska Department of Fish and Game, Regional Information Report No. 3A12-04, Anchorage.

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PREFACE

The following information is for fishermen participating in subsistence, personal use and commercial fisheries in the Yukon Area during the 2012 season. Fishermen may contact ADF&G, Division of Commercial Fisheries staff at the office locations listed below.

Emmonak Seasonal Field Office

(June through August)

Alaska Department of Fish and Game

Division of Commercial Fisheries

P.O. Box 127

Emmonak, Alaska 99581

Telephone: (907) 949-1320

Fax: (907) 949-1830

Recorded Information: (907) 949-1731

Fairbanks Office

Alaska Department of Fish and Game

Division of Commercial Fisheries

1300 College Road

Fairbanks, Alaska 99701

Telephone: (907) 459-7274

Fax: (907) 452-7271

Anchorage Office

Alaska Department of Fish and Game

Division of Commercial Fisheries

333 Raspberry Road

Anchorage, Alaska 99518

Telephone: (907) 267-2105

Fax: (907) 267-2442

For a recording of the current subsistence, personal use, and commercial fishing schedules call toll free 1-866-479-7387 or in the Fairbanks area call (907) 459-7387.

For Tanana River subsistence and personal use permit harvest reporting call (907) 459-7388.

NOTICE TO FISHERMEN

Waters subject to ANILCA Title VIII (including waters in which the United States has identified a reserved water right) or “claimed federal subsistence jurisdiction”. Subject to federal restrictions and closures, waters subject to ANILCA Title VIII are open to fishing under state regulations. If you are a federally qualified subsistence user and choose to subsistence fish under federal subsistence regulations in waters under federal jurisdiction, you must comply with federal subsistence regulations. If you are a resident of Alaska (including a federally qualified subsistence user) and you choose to subsistence fish under State of Alaska subsistence fishery regulations in waters under claimed federal subsistence jurisdiction you must comply with State subsistence regulations and state permit conditions. State subsistence regulations may be pre-empted by federal subsistence regulations at times. It is the responsibility of the subsistence user to understand the boundaries of waters claimed under federal subsistence jurisdiction.

To familiarize yourself with the federal subsistence regulations you may consult the *Subsistence Management Regulations for the Harvest of Fish and Shellfish on Federal Public Lands and Waters in Alaska* for details. Copies may be obtained at federal offices and are available on line at <http://alaska.fws.gov/asm/law.cfml>. Calling the federal agencies is also recommended as inseason closures or temporary regulatory changes can occur at anytime and may not be reflected in the annual regulatory publication.

For more information, or a copy of federal regulations, please contact USFWS, Office of Subsistence Management - 1-800-478-1456 or – 907-786-3888 - coordinating the federal subsistence program in Alaska for U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Bureau of Indian Affairs, and the U.S.D.A. Forest Service.

ABSTRACT

This management plan provides an overview of the expected salmon outlooks, management issues, and harvest strategies for Yukon River summer and fall salmon fisheries in 2012. Subsistence, personal use, and commercial fisheries occur throughout the Yukon Area. The Yukon Area includes all waters of the Yukon River drainage in Alaska and all coastal waters of Alaska from Point Romanof south to Naskonat Peninsula. Management strategies may change inseason based upon assessment of salmon runs.

Key words: Yukon, Chinook, summer chum, fall chum, coho, salmon, outlook, strategy, management strategies, commercial fishing, subsistence fishing, ADF&G.

INTRODUCTION

This document provides the 2012 outlook for Yukon Area salmon runs, as well as management strategies for subsistence, personal use, and commercial salmon fisheries managed by Division of Commercial Fisheries. Subsistence fishing in portions of the Yukon Area is under dual management authority of the Alaska Department of Fish & Game (ADF&G) and the U.S. Fish and Wildlife Service (USFWS). Fishermen are reminded that they should consult both State of Alaska fishing regulations and Federal Subsistence Management Regulations for Federal Public Lands before fishing in the Yukon Area.

The Yukon Area includes all waters of Alaska within the Yukon River drainage and coastal waters from Point Romanof, northeast of Kotlik, to the Naskonat Peninsula. For management purposes, the Yukon Area is divided into 7 districts and 10 subdistricts (Figure 1). Commercial fishing may be allowed along the entire 1,224 miles of the mainstem Yukon River in Alaska and along the lower 225 miles of the Tanana River. The Coastal District includes the majority of coastal marine waters within the Yukon Area and is only open to subsistence fishing. The Lower Yukon Area (Districts 1, 2, and 3) includes coastal waters of the Yukon River delta and that portion of the Yukon River drainage downstream of Old Paradise Village (river mile 301). The Upper Yukon Area (Districts 4, 5, and 6) is the Alaskan portion of the Yukon River drainage upstream of Old Paradise Village to the U.S./Canada border.

Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, and coho *O. kisutch* salmon are harvested in commercial, subsistence, personal use, and sport fisheries within the Yukon River drainage. Chum salmon in the Yukon River consist of an earlier, and typically more abundant, summer chum salmon run and a later fall chum salmon run. No directed commercial fishing has occurred for pink *O. gorbuscha* salmon, but sporadic sales of incidental harvests have been documented. Aboriginal, commercial, domestic, and recreational salmon fisheries in Canada are managed by the Canadian Department of Fisheries and Oceans (DFO).

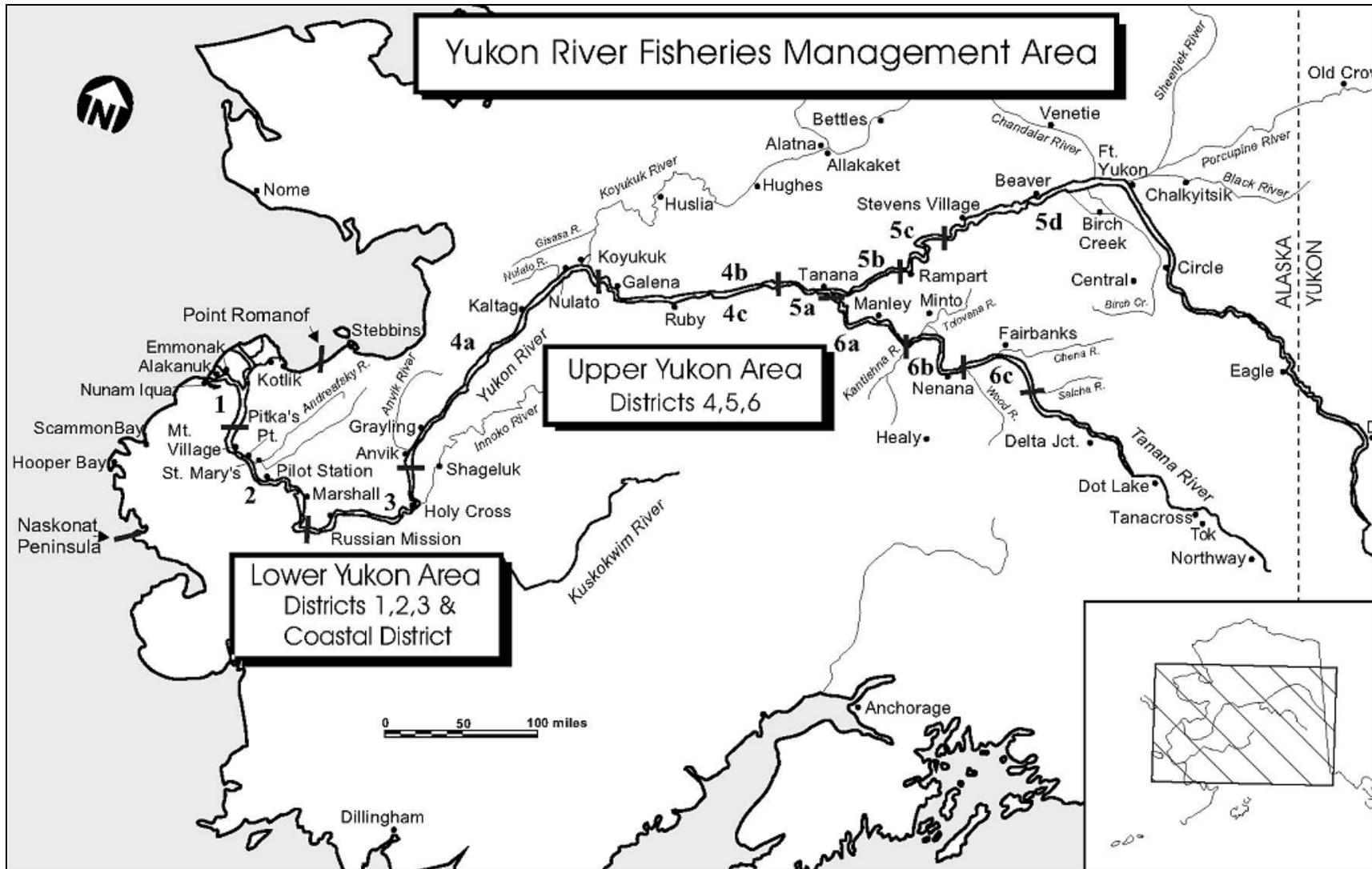


Figure 1.—Yukon Area communities and fishing districts.

OUTLOOK FOR 2012

CHINOOK SALMON

Canadian-origin Upper Yukon Chinook Salmon

The Canadian-origin upper Yukon River Chinook salmon spawning escapements in 2006 and 2007, the brood years producing the age-6 and age-5 fish returning in 2012, were 62,630 and 34,904, respectively. The spawning escapement in 2006 was above average but below average in 2007. The 2012 run of Canadian-origin upper Yukon River Chinook salmon is expected to be poor to below average; the average run size for 2002–2011 was 96,170.

Stock-recruitment (S/R) and sibling models predict the 2012 run size of Canadian-origin Chinook salmon to be as high as 106,090 and 87,160, respectively. However, these models do not include uncertainty associated with lower productivity observed in recent years. Over the past five years, observed returns were approximately 31% lower than preseason outlooks developed with the stock-recruitment (S/R) model, 37% lower than preseason outlooks developed with the sibling model, and 33% lower than preseason outlooks developed by averaging the two models. It is important to note that neither model incorporates environmental variables such as oceanic or freshwater conditions.

To account for some of the uncertainty in the preseason outlook due to lower productivity in recent years, the projection from each of the two models (106,090 and 87,160 for S/R and sibling models, respectively) was adjusted by the recent 5-year model performance. Based on this adjustment, the resulting preseason outlook range is 54,000 to 73,000. In the past five years, it has been observed that even-year returns (2008 and 2010) have been considerably lower than the preseason outlook due to a poor 6 year old return and it is anticipated that this trend will continue with the 2012 return. These outlooks suggest that the 2012 Canadian-origin upper Yukon River Chinook salmon run may be a poor to below average run.

Performance of Stock-Recruitment Models for the Years 2001–2011

The performance of run outlooks developed using S/R and sibling models for the 2000–2011 period is presented in Table 1. Revised historical Canadian run size estimates were used to reconstruct the 2000 and 2001 runs; border passage estimates for 2002–2004 were based on radiotelemetry estimates, while border escapement estimates for 2005–2011 were based on the Eagle sonar project. A review of preseason outlook performance provides an opportunity to document the recent decline in the upper Yukon River Chinook salmon return per spawner values. In Table 1, the average of the preseason outlook is derived using stock-recruitment (S/R) and sibling model projections compared to postseason estimates of run size. Despite good brood year escapements, the observed run sizes were relatively low from 2000 to 2002 and from 2007 to 2010. The causes of low returns are unknown but likely involve a number of factors in the marine and/or freshwater environments. For example, the 2008 outlook of 117,000 overestimated the run size by a factor of 1.77; the preseason outlook was 77% above the actual run. It will be important to determine if the low run sizes and spawning escapements observed in the 2007 to 2011 period develop into a long-term trend.

Table 1.–Preseason upper Yukon River Chinook salmon outlooks for 2001 to 2012 and the observed run sizes for the 2000 to 2011 period.

Year	Expected Run Size S/R (Preseason)	Expected Run Size Sibling (Preseason)	Expected Run Size Average (S/R & Sib.) (Preseason)	Expected Run Size Average Performance S/R (Preseason)	Expected Run Size Average Performance Sib. (Preseason)	Estimated Run Size (Postseason)	Performance of Preseason Outlooks
2000	127,784	85,889	107,000			53,000	2.01
2001	126,641	51,082	89,000			86,000	1.03
2002	113,759	107,496	111,000			82,000	1.35
2003	116,948	109,577	113,000			150,000	0.75
2004	123,469	124,326	124,000			117,000	1.06
2005	121,764	117,860	120,000			124,000	0.97
2006	115,995	123,132	120,000			119,000	1.01
2007	118,557	139,934	129,000			88,000	1.47
2008	111,551	122,435	117,000			66,000	1.77
2009	98,172	103,541	101,000			87,000	1.16
2010	109,797	116,346	113,000			60,000	1.88
2011	102,831	113,323	108,000			72,000	1.50
2012	106,090	87,160	97,000	54,000	73,000		
Avg. (2000–2011)	115,606	109,578	113,000			92,000	1.33

Note: Run sizes incorporated: radiotelemetry data (2002–2004); Eagle Sonar estimates (2005–2011); and the relationship between telemetry/sonar to aerial surveys for 2000 and 2001. The average of the preseason S/R and sibling run sizes, and the postseason run sizes are rounded to nearest thousand.

Example: the 2008 outlook of 117,000 overestimated the run size by a factor of 1.77; the preseason outlook was 77% above the actual run.

Drainagewide Chinook Salmon

The total Yukon River Chinook salmon run can be estimated by applying historical average proportions of Canadian-origin fish in the total run to the outlook estimated for the Canadian component of the run. The average proportion of Canadian origin fish in the total run is approximately 50%. The drainagewide run outlook based on the adjusted Canadian-origin model estimate, which attempts to account for low productivity since 2007, is 109,000–146,000 Chinook salmon. Thus, the 2012 Yukon River Chinook salmon run will likely be poor to below average.

SUMMER CHUM SALMON

The strength of the summer chum salmon run in 2012 will be dependent on production from the 2008 (age-4 fish) and 2007 (age-5 fish) escapements, as these age classes dominate the run. The total runs during 2007 and 2008 were both approximately 1.9 million summer chum salmon, though tributary escapements were highly variable, however, it is worth noting that poor runs have resulted from large escapements.

Yukon River summer chum salmon generally exhibit strong run size correlations among adjacent years, and it is expected that the total run in the Yukon River will be similar to the 2011 run of approximately 2.0 million fish. The high seas Bering Arctic Subarctic Integrated Surveys (BASIS) study indicated a decline in chum salmon in 2004 and 2005, but 2006 and 2007 results

showed an increase. No BASIS survey was conducted in 2008. A collaborative effort between ADF&G and NOAA is in progress to test the applicability of BASIS juvenile salmon indices for run size forecasting.

The 2012 run is anticipated to provide for escapements, a normal subsistence harvest, and a surplus for commercial harvest. Summer chum salmon runs have provided for a harvestable surplus in each of the last 9 years (2003–2011). If inseason indicators of run strength suggest sufficient abundance exists to allow for a commercial fishery, the commercially harvestable surplus in the Alaskan portion of the drainage could range from 500,000 to 1,000,000 summer chum salmon. Similar to 2011, the actual commercial harvest of summer chum salmon in 2012 will likely be affected by a potentially poor Chinook salmon run, as Chinook salmon are incidentally harvested in chum salmon directed fisheries.

FALL CHUM SALMON

The 2012 forecasted fall chum salmon run size is a point estimate of 1,114,000 fish with a range of 986,000 to 1,200,000 fish (Table 2). This forecasted run size is above average for even-numbered year run.

Table 2.–Forecasted 2012 total run size of fall chum salmon based on parent year escapement for each brood year and predicted return per spawner (R/S) rates, Yukon River, 2006–2009.

Brood Year	Escapement	Estimated Production (R/S)	Estimated Production	Contribution Based on Age	Current Return
2006	880,503	0.89	783,648	1.0%	11,333
2007	910,883	1.44	1,311,672	32.3%	360,160
2008	687,153	1.66	1,141,261	65.2%	725,909
2009	482,411	1.98	957,148	1.5%	16,357
Total expected run (unadjusted)					1,114,000
Total 2012 run size expressed as a range based on the forecasted vs. observed returns from 1987 to 2011 (80% CI):					986,000 to 1,200,000

The contributing parent year escapements from 2006 through 2008 all exceeded the upper end of the drainagewide escapement goal range of 300,000 to 600,000, while 2009 was within the goal. Production from the age-6 parent year (2006) was just below 1.0 return per spawner while production from the remaining parent years appears to be exceeding 1.0 return per spawner. The major contributor to the 2012 fall chum salmon run is anticipated to be age-4 fish returning from the 2008 parent year. If returns remain high, large escapements may benefit from the improved production resulting in above average runs for the next couple years.

Based on the forecast, it is anticipated that escapement goals will be met while providing normal subsistence fishing activities. Commercial harvest, depending on run size, could range from 500,000 to 700,000 fall chum salmon. Commercial harvestable surpluses will have to be determined inseason and opportunity provided where commercial ventures exist.

Management decisions made early in the fall season are based primarily on the preseason projection. The preseason projection, made in early July, refines the preseason forecast. The projection will be based on the 2012 summer chum salmon run size and a historical relationship between summer and fall chum salmon runs. As the fall chum salmon run approaches the first quarter point (late July-early August), management decisions will start incorporating abundance

and run timing information from the Pilot Station sonar project and the drift gillnet test fisheries located at Emmonak and Mountain Village, as well as fishing reports from local fishermen.

COHO SALMON

Although there is little comprehensive escapement information for Yukon River drainage coho salmon, it is known that coho salmon primarily return as age-4 fish and overlap in run timing with fall chum salmon. The major contributor to the 2012 coho salmon run will be 4 year old fish returning from the 2008 parent year. Based on run reconstruction using Pilot Station sonar project estimates, the 2008 passage estimate of 136,000 coho salmon was below average (147,000). The commercial harvest in 2008 was the sixth highest since 1991. Assuming average survival, the 2012 coho salmon run is anticipated to be below average to average based on escapements observed in 2008.

U.S./CANADA YUKON RIVER SALMON PANEL AGREEMENT

Negotiations were initiated in 1985 between the U.S. and Canada regarding a Yukon River salmon treaty. In December 2002, the United States and Canada signed an agreement that set salmon harvest share target ranges based on a postseason assessment of run strength for Chinook and fall chum salmon into the Canadian portion of the Yukon River drainage. The Alaskan and Canadian fisheries will be managed consistent with stock rebuilding and conservation objectives that have been jointly developed.

For the 2012 season, the U.S./Canada Yukon River Panel agreed to a one year Canadian mainstem Interim Management Escapement Goal (IMEG) ranges of 42,500–55,000 Chinook salmon and 70,000–104,000 fall chum salmon based on the Eagle sonar project. In addition to escapement needs, the objective is to share harvestable surpluses of the Canadian run component, with Canada receiving 20% to 26% of the available Total Allowable Catch (TAC) for Canadian bound Chinook salmon and 29% to 35% of the available TAC for Canadian bound fall chum salmon. Based on the current projected run size, it is anticipated that approximately 5,000 Chinook and 10,000 fall chum salmon or more, depending on run strength, would fulfill harvest sharing objectives specified in the Agreement. The IMEG range for the Fishing Branch River is 22,000 to 49,000 fall chum salmon based on the Fishing Branch River weir count.

MANAGEMENT STRATEGY FOR 2012

ADF&G manages Yukon Area salmon according to policies and regulations established by the Alaska Board of Fisheries (BOF). Management of the Yukon Area commercial salmon fishery is complex due to the mixed stock nature of the fishery, increased efficiency of the commercial fleet, allocation issues, and the complication of State/Federal dual management regimes for the subsistence fishery in approximately half the drainage. The *Yukon River Drainage Subsistence Salmon Fishery Management Protocol* provides guidelines for coordinated management with federal agencies concerning subsistence fisheries in waters subject to Federal reserved water rights within the Yukon River drainage. However, some state and federal subsistence fishery regulations differ and managers may not agree on specific management actions, which could result in differing regulations for waters subject to applicable federal subsistence management.

The *Policy for Statewide Salmon Escapement Goals* (Escapement Goal Policy: 5 AAC 39.223) and the *Policy for the Management of Sustainable Salmon Fisheries* (Sustainable Salmon Policy: 5 AAC

39.222) define various levels of escapement in a manner consistent with sustained yield. Escapement objectives that were previously estimated in the absence of a stock specific catch estimate and used as an index, or as an escapement estimate, are now defined as a Sustainable Escapement Goal (SEG). Tables 3, 4, 5, and 6 list Biological or Sustainable Escapement Goals (BEGs or SEGs), as well as any Optimal Escapement Goals (OEGs) that will be used for inseason management and postseason assessment. The Canadian Chinook and fall chum salmon escapement objectives are based on limited scientific information and are not classified as a SEG or a BEG. These objectives are negotiated by the Yukon River Panel annually as stipulated in the agreement and include both an escapement objective and harvest share identified as a portion of the TAC.

Several funding increments were passed by the Alaska State Legislature in 2009 and 2010 to assist in managing Yukon salmon fisheries. Since 2009, a test fishing project offshore of Hooper Bay/Dall Point has been funded to assess the feasibility of determining relative abundance and run timing of Chinook and summer chum salmon prior to river entry. This is a cooperative project with Yukon Delta Fisheries Development Association (YDFDA) that may, in the future, be able to provide salmon abundance and timing information several days before salmon enter the river. Funding was also secured to operate a cooperative summer chum drift test fishing project in the lower river with YDFDA. The objective of this project is to identify increasing passage of summer chum salmon near the mouth of the river to allow the possibility of short notice commercial summer chum salmon directed openings when there is a good abundance of chum salmon available.

ADF&G will continue to make adjustments to the Pilot Station sonar project in 2012. In addition to the standard sonar and test fishing operations, new options will be tested to improve the inseason estimates and overcome problems experienced in previous years. During periods of high water, increased silt can limit the ability of sonar to detect fish further offshore. In 2010, new side-scan sonar was deployed from a boat anchored offshore that could extend the effective range of the sonar under poor visibility conditions. During periods of high water and debris, this project will be deployed if needed in 2012. Assessment work for a new acoustic tagging project began in 2010 and will be implemented again in 2012. The use of these tags will test assumptions about the three dimensional distribution of salmon in the river and provide insight into additional options for improving the sonar program.

Table 3.–Escapement goals for Chinook salmon, Yukon Area.

Stream	Goal	Type of Goal
East Fork Andreafsky River Weir	2,100–4,900	SEG
West Fork Andreafsky River Aerial Survey	640–1,600	SEG
Anvik River Aerial Survey	1,100–1,700	SEG
Nulato River Aerial Survey	940–1,900	SEG
Chena River Tower	2,800–5,700	BEG
Salcha River Tower	3,300–6,500	BEG
Canada Mainstem Eagle Sonar Goal	42,500–55,000	IMEG ^a

^a The US-Canada Panel agreed to a 1 year interim management escapement goal (IMEG) of 42,500 to 55,000 based on sonar assessment near Eagle, Alaska for 2012 plus the Agreement stipulation of 20% to 26% of the TAC on the Canadian run component.

Table 4.–Escapement goals for summer chum salmon, Yukon Area.

Stream	Goal	Type of Goal
East Fork Andreafsky River Weir	>40,000	SEG
Anvik River Sonar	350,000–700,000	BEG
Drainagewide Escapement	>600,000	OEG

Table 5.–Escapement goals for fall chum salmon, Yukon Area.

Stream	Goal	Type of Goal
Drainagewide Escapement	300,000–600,000	SEG
Tanana River drainage	61,000–136,000	BEG
Delta River	6,000–13,000	BEG
Upper Yukon Tributaries	152,000–312,000	BEG
Chandalar River	74,000–152,000	BEG
Sheenjek River	50,000–104,000	BEG
Fishing Branch	22,000–49,000	IMEG ^a
Canadian Mainstem	70,000–104,000	IMEG ^b

^a Canadian Interim Management Escapement Goal agreed to by the Yukon River Panel for 2012.

^b The Yukon River Panel agreed to an interim management escapement goal (IMEG) of 70,000 to 104,000 to be determined by the sonar project near Eagle, Alaska for 2012 plus the Agreement stipulation of 29% to 35% of the TAC on the Canadian run component.

Table 6.–Escapement goals for coho salmon, Yukon Area.

Stream	Goal	Type of Goal
Delta Clearwater River	5,200–17,000	SEG

Weekly teleconferences conducted by the Yukon River Drainage Fishermen’s Association (YRDFA) will provide a venue for stakeholders to inform managers of subsistence activities, discuss fisheries issues, and to announce management strategies. In addition, ADF&G and USFWS managers will consult with the Yukon Advisory Group (YAG) to discuss management and fisheries issues. The YAG is an advisory group made up of U.S. Section Yukon River Panel members, their alternates, and advisors. Under the Yukon Treaty Act, these members have the authority to provide input on issues relevant to the Yukon Area fisheries. Inseason meetings with this group, via teleconference organized by YRDFA, provide a more focused discussion with managers regarding key management issues.

ALASKA BOARD OF FISHERIES ACTIONS

To keep Yukon Area salmon fishermen, processors, and other interested individuals informed of current fishing regulations, the department is providing this partial summary of regulatory changes enacted by the BOF at the March 2012 meeting. *The following summary is for informational purposes only and is not intended to detail, reflect, or fully interpret reasons for the BOF actions.*

1. The Summer Chum Salmon Management Plan was amended by adding a new section that ADF&G may use emergency order authority in Subdistrict 4-A, during times when the commissioner determines that it is necessary for conservation of king salmon, the commissioner may, by emergency order, close the commercial set gillnet fishing season and immediately reopen the season during which a fish wheel may be used. The fish wheel shall be attended at all times while it is in operation, and all king salmon caught must be returned to the water alive immediately.
2. **As a reminder, effective since 2011**, the maximum mesh size for gillnets used for subsistence, commercial, and personal use in the Yukon Area is 7.5 inches.

SUBSISTENCE FISHERY

Subsistence fishing occurs throughout most of the Yukon River Area and has the highest priority among all uses of the resource in the State of Alaska. When salmon stocks are abundant and commercial fishing occurs, it is necessary to place some restrictions on the subsistence fishery in order to enforce commercial fishing regulations. In Districts 1, 2, and 3, from June 1 to July 15, a person may not possess Chinook salmon taken for subsistence uses unless both tips (lobes) of the tail fin have been removed. Additionally, subsistence salmon fishing is closed in most areas 24 hours prior to the commercial salmon fishing season to discourage the illegal sale of subsistence caught salmon or salmon roe. Generally, more fishing time is allowed throughout the fishing season for subsistence than for commercial activities.

Since 2001, the subsistence salmon fishery has been based on a schedule implemented chronologically by ADF&G and consistent with migratory timing as the runs progress upstream in most of the drainage. Subsistence fishing is open 7 days per week until the schedule is established. The subsistence salmon fishing schedule is based on current or past fishing schedules and provides reasonable opportunity for subsistence during years of normal to below average runs. The objectives of the schedule are to 1) reduce harvest early in the run when there is a higher level of uncertainty, 2) spread the harvest throughout the run to reduce harvest impacts on any particular component of the run, and 3) provide subsistence fishing opportunity among all users during years of low salmon runs.

The YRDFA facilitated an in person meeting in Anchorage on April 4, 2012 to provide managers, fishermen, tribal council representatives, and other stakeholders the opportunity to share information, provide input, and discuss management options. The purpose of the in person meeting was to work cooperatively to identify options and practical management strategies for 2012 that will assist in getting adequate numbers of fish to the spawning grounds in Alaska and Canada, should the 2012 Chinook salmon run be similar to the unexpected low runs of 2007 through 2011. Based on input from this preseason meeting, several management actions will be taken in the subsistence fishery.

Since 2009, fishermen have requested that the implementation of the window schedule be delayed so fishermen can harvest Chinook salmon prior to the first pulse entering the river. The intent of this action was to provide some additional subsistence fishing opportunity before pulse closures went into effect. Unfortunately, in response to the continued trend of below average to poor runs, it is necessary to conserve this early portion of the Chinook run to meet escapement, spread the harvest, and help rebuild these stocks for the future. Based on input provided by subsistence fisherman at meetings throughout the winter and spring, the schedule will be implemented earlier than recent years but similar to the timeline used prior to 2009. The

subsistence salmon fishing schedule will begin May 31, 2012, in District 1 and will be implemented chronologically with the upriver migration (Table 7) until the salmon run size is projected to be of sufficient strength to warrant relaxing or additional conservation measures appear necessary. Until the regulatory subsistence salmon fishing schedule is implemented, Districts 1-4 and Subdistricts 5-ABC are open to subsistence salmon fishing 7 days per week. The normal schedule for the Coastal District, Koyukuk and Innoko rivers, and Subdistrict 5-D is open 7 days per week all season. District 6 is open for two 42-hour subsistence salmon fishing periods per week all season. Table 7 shows the 2012 subsistence fishing schedule based in regulations 5 AAC 01.210 and 5 AAC 05.360.

Table 7.–Yukon Area subsistence salmon fishing schedule, 2012.

Note: this schedule is subject to change depending on run strength.

Area	Regulatory Subsistence Fishing Periods	Date Schedule To Begin	Open Fishing Times
Coastal District	7 days/wk	All Season	M/T/W/TH/F/SA/SU - 24 hours/day
District Y-1	Two 36-hour periods/wk	May 31	Mon. 8 pm to Wed. 8 am / Thu. 8 pm to Sat. 8 am
District Y-2	Two 36-hour periods/wk	June 3	Wed. 8 pm to Fri. 8 am / Sun. 8 pm to Tue. 8 am
District Y-3	Two 36-hour periods/wk	June 6	Wed. 8 pm to Fri. 8 am / Sun. 8 pm to Tue. 8 am
Subdistrict Y- 4A	Two 48-hour periods/wk	June 10	Sun. 6 pm to Tue. 6 pm / Wed. 6 pm to Fri. 6 pm
Subdistrict Y-4B, C	Two 48-hour periods/wk	June 17	Sun. 6 pm to Tue. 6 pm / Wed. 6 pm to Fri. 6 pm
Koyukuk and Innoko Rivers	7 days/wk	All Season	M/T/W/TH/F/SA/SU - 24 hours/day
Subdistrict Y-5A, B, C	Two 48-hour periods/wk	June 22	Tue. 6 pm to Thu. 6 pm / Fri. 6 pm to Sun. 6 pm
Subdistrict Y-5D	7 days/wk	All Season	M/T/W/TH/F/SA/SU - 24 hours/day
Subdistrict Y-6	Two 42-hour periods/wk	All Season	Mon. 6 pm to Wed. Noon / Fri. 6 pm to Sun. Noon
Old Minto Area	5 days/wk	All Season	Friday 6 pm to Wednesday 6 pm

The Coastal District typically has a subsistence fishing schedule of 7 days a week. However, to conserve the greatest number of Chinook salmon and to share the available surplus, there will be reduced fishing on the first pulse of Chinook salmon in portions of the Coastal District. In the southern portion of the Coastal District, from the Naskonat Peninsula north to 62 degrees North latitude, mesh size will be restricted to 6-inch or smaller from June 6 through June 12. This action is intended to conserve Chinook salmon while allowing subsistence fishermen the opportunity to target summer chum salmon. The timeframe corresponds with expectations of when the first pulse of Chinook salmon would likely be migrating through the area which includes the communities of Chevak, Hooper Bay, and Scammon Bay. The remaining northern portion of the Coastal District, from 62 degrees North latitude to Point Romanoff, will have a one period closure with dates and times that will coincide with the first period closure in District 1. Similar period closures will be followed in the mainstem Yukon River districts based on migratory timing to provide pulse protection.

Subsistence fishing in the Koyukuk and Innoko Rivers will not initially be reduced from their standard 7 days a week subsistence fishing schedule because they do not harvest substantial amounts of Chinook salmon, but may see schedule reductions if necessary. The Tanana River District 6 will be managed inseason based on tributary assessment data.

If inseason assessment indicates Chinook salmon run strength continues to be poor to below average after the first pulse closure, additional conservation measures may be necessary. Any

additional measures, such as a second pulse closure, will be announced by short notice news releases, on VHF, radio stations, and YRDFFA teleconferences.

Because of the large size of District 4 and Subdistrict 5-D and the travel time that is associated with fish migrating through these areas, the subdistricts will be divided into smaller management areas. Similar to 2011, Subdistrict 5-D, will be divided into three areas which will allow for more management precision and flexibility when the reduced subsistence fishing schedule is implemented. Maps will be sent to villages in Subdistrict 5-D prior to the fishing season.

All subsistence salmon fishing with gillnets and fish wheels must be stopped during subsistence salmon fishing closures. During closed subsistence salmon fishing periods, subsistence fishing for whitefish, suckers, and species other than salmon will be allowed throughout the drainage 7 days per week. However, gillnets with mesh size greater than 4 inches must be removed from the water and fish wheels may not be operated during closed subsistence salmon fishing periods in an effort to avoid salmon. In addition, gillnets used to take species other than salmon during subsistence salmon closures are limited to 60 feet in length. This opportunity to target non-salmon species, while protecting salmon stocks of concern, may be discontinued if found ineffective at adequately reducing salmon harvest.

The summer and fall chum salmon management plans adopted by the BOF provide guidelines for managing subsistence salmon fisheries based on inseason run size projections. If subsistence harvest reductions are necessary, effort will be made to spread the responsibility for conservation throughout the drainage.

Subsistence fishing permits are required on the Yukon River from the western tip of Garnet Island to Dall River including the community of Rampart and the Haul Road bridge area, and for portions of the Yukon River from 22 Mile Slough to the U.S./Canada border including the communities of Circle and Eagle. Subsistence fishing permits are also required in the entire Tanana River drainage (District 6), except for Subdistrict 6-C surrounding the community of Fairbanks, which is managed under personal use regulations. Subsistence permit holders in that portion of Subdistrict 6-B, from a point 3 miles upstream of the mouth of Totchaket Slough to the upper boundary of Subdistrict 6-B, are required to report to ADF&G the number of salmon harvested each week. Permit holders can report their weekly catch by voicemail at (907) 459-7388. Subsistence fishermen must obtain a permit by contacting the ADF&G office in Fairbanks prior to subsistence fishing. Permits can be issued in person and by mail. Subsistence fishermen in permit areas are reminded that they must have their permit in possession while fishing. All permit holders are required to report harvest information on their permits and return their permits to ADF&G at the end of the fishing season. Subsistence fishermen should be advised that enforcement will be notified if permits have not been returned after reminder letters have been sent. In order to get the salmon harvest numbers before the new fishing season and after the permit return reminder letters have been exhausted, enforcement will be notified which fishermen are not complying with the reporting requirements.

In non-permit areas, ADF&G conducts a postseason harvest survey and encourages fishermen to use catch calendars to keep track of their daily harvest. Non-permitted fishermen who did not receive a subsistence salmon calendar by mail may obtain one by contacting ADF&G in Emmonak or Fairbanks. To boost calendar return rates, additional money has been donated to the calendar lottery fund. This year, winners will be selected for the following prizes: \$500 – one household, \$250 – two households, \$100 – six households. To qualify for the lottery, you must

return your original calendar to ADF&G by December 31, 2012 with the questions on the inside cover filled out. You do not need to fish or harvest salmon in 2012 to be eligible. Households can return their calendar by mail (postage is free) or return calendars to one of the subsistence salmon harvest surveyors.

In Subdistrict 4-A, regulations allow concurrent subsistence and commercial fishing periods. If the commercial salmon fishing season is opened in Subdistricts 4-B and 4-C or District 5, managers will attempt to coincide allowable commercial salmon fishing periods with the subsistence salmon fishing schedule. When ADF&G announces a commercial fishing closure that will last longer than 5 days during the commercial salmon season in District 4 and Subdistricts 5-A, 5-B, and 5-C, subsistence salmon fishing will be allowed 5 days per week, unless modified by emergency order.

From November 1 through June 31, subsistence fishing in the Koyukuk River drainage is allowed in the Middle Fork of the Koyukuk River upstream of its confluence with the North Fork and South Fork of the Koyukuk River upstream from the mouth of the Jim River. A household subsistence fishing permit is required as a condition of this increased fishing opportunity to harvest non-salmon species. Only gillnet gear is allowed and the mesh size may not exceed 3½ inches. These stipulations are in place to protect salmon species in known spawning areas that have road access.

PERSONAL USE FISHERY

Subdistrict 6-C falls entirely within the Fairbanks Nonsubsistence Area and is managed under personal use regulations. Personal use salmon fishing permits are required in Subdistrict 6-C and can be obtained from ADF&G's office in Fairbanks. Personal use fishermen must possess a valid State of Alaska resident sport fishing license and report their harvests to ADF&G each week on a message recording at (907) 459-7388. Only one personal use salmon permit per household is allowed annually. The annual possession limit per permit holder is 10 Chinook salmon, 75 chum salmon for periods through August 15, and 75 chum and coho salmon in combination for the time period after August 15. Subdistrict 6-C fishery harvest limits are 750 Chinook, 5,000 summer chum, and 5,200 fall chum and coho salmon combined. If a harvest limit is reached inseason, the Subdistrict 6-C personal use fishery may be closed.

The personal use fishing schedule is two 42-hour periods per week by regulation and fishing is open from 6:00 p.m. Mondays until 12:00 noon Wednesdays and from 6:00 p.m. Fridays until 12:00 noon Sundays. Whitefish and suckers may also be taken under personal use fishing regulations and a separate personal use whitefish/sucker permit is required.

COMMERCIAL FISHERY AND REPORTING REQUIREMENTS

All processors, buyers, and catcher/sellers of salmon are required to register with ADF&G before operating in the Yukon Area. Registrations in Districts 1, 2, and 3 must be submitted to the ADF&G office in Emmonak. In Districts 4, 5, and 6, registrations can be submitted to the ADF&G office in Fairbanks. Registered salmon buyers are required to provide a verbal report of their salmon purchases within 18 hours following the closure of a commercial fishing period. Buyers may verbally report harvest information in the Upper Yukon Area (Districts 4, 5, and 6) after office hours by calling a 24-hour message recording at (907) 459-7388. Buyers are also required to mail fish tickets to ADF&G within 24 hours or deliver fish tickets within 48 hours following the closure of each commercial fishing period in the Lower Yukon Area (Districts 1, 2, and 3). In the Upper

Yukon Area, buyers are required to mail fish tickets to ADF&G within 36 hours or deliver fish tickets within 36 hours following the closure of each commercial fishing period. If there is incomplete reporting, ADF&G may delay additional commercial fishing periods until the needed harvest reports are received. In addition, it is very important for buyers to accurately report on each fish ticket the statistical area where salmon were harvested. Maps of statistical areas and example fish tickets will be provided to registered buyers.

All salmon caught by CFEC permit holders during commercial fishing periods must be reported on fish tickets. This includes salmon that are not sold but are taken home for personal use. In fisheries directed at the harvest of roe, the number of salmon from which the roe was extracted, the pounds of roe produced, and the number of male chum and Chinook salmon harvested or released alive must be reported on the fish ticket. Buyers are required to ensure this information is reported on fish tickets even though a portion of the commercial harvest may have been used for subsistence.

CHINOOK AND SUMMER CHUM SALMON COMMERCIAL SEASON

Chinook and summer chum salmon management plans guide ADF&G management actions. The 2012 Yukon River Chinook salmon run will likely be poor to below average and subsistence fishing restrictions to conserve Chinook salmon will be implemented. Therefore, it is unlikely that there will be a directed Chinook salmon commercial fishery in 2012 on the mainstem Yukon River during the summer fishing season. However, if a harvestable surplus of Chinook salmon beyond escapement and subsistence needs is identified, it is anticipated the Chinook salmon directed commercial fishery would open after the midpoint of the run. This management strategy provides for passage of a portion of the early run segment through the lower river districts before commercial fishing starts.

Inseason Chinook salmon run assessment will be based on lower river test fisheries, subsistence catch reports, age and sex composition, sonar passage estimates, and escapement monitoring information. In addition, genetic samples collected in the lower river test fishery and at the Pilot Station sonar project will be analyzed inseason to determine stock contribution and to project abundance of the Canadian Chinook salmon stock. As in years past, ADF&G will participate in YRDFFA teleconferences inseason to gather information from the public, disseminate project information, and to discuss run status and management actions. The YRDFFA teleconferences provide a venue for not only distributing information, but also to provide feedback from the public on potential management actions. In recent years, management decisions have been made with recommendations from these teleconferences.

In managing the 2012 summer chum salmon run, ADF&G will follow the guidelines provided by the BOF in 5 AAC 05.362 *Yukon River Summer Chum Salmon Management Plan* (Table 8). In accordance with the management plan, directed summer chum salmon commercial fishing may be allowed when the run size projection is greater than 900,000 summer chum salmon for the entire Yukon River drainage. The 2012 summer chum salmon run is expected to be average. Although the Pilot Station sonar project is the primary run assessment tool for management, all available run assessment projects are utilized for inseason management.

Table 8.–Summary of the summer chum salmon management plan, 5AAC 05.362.

<i>Summer Chum Salmon Management Plan Overview</i>					
Projected Run Size ^a	RECOMMENDED MANAGEMENT ACTION				Targeted Drainagewide Escapement
	Commercial	Personal Use	Sport	Subsistence	
600,000 or less	Closure	Closure	Closure	Closure ^b	>600,000
600,001 to 700,000	Closure	Closure	Closure	Possible Restrictions ^b	
700,001 to 900,000	Restrictions ^b	Restrictions ^b	Restrictions ^b	Normal Fishing Schedules	
900,000-1,000,000	0-50,000 ^c	Open	Open	Normal Fishing Schedules	
>1,000,000	Open ^c	Open	Open	Normal Fishing Schedules	≥1,000,000 ^d

^a Projected Run Size: Mainstem river sonar passage estimate plus the estimated harvests below the sonar site and the Andraefsky River escapement.

^b The fishery may be opened or less restrictive in areas that indicator(s) suggest the escapement goal(s) in that area will be achieved.

^c Drainagewide Commercial Fisheries: The harvestable surplus will be distributed by district or subdistrict in proportion to the guidelines harvest levels established in 5AAC 05.362 (f) and (g) and 5 AAC 05.365 if buying capacity allows.

^d Inriver run goal: This is a specific management objective for salmon stocks that are subject to harvest upstream of the point where escapement is estimated.

Districts 1, 2, and 3

If a surplus of summer chum salmon is identified above escapement and subsistence needs, there may be directed chum commercial fishing with gillnets restricted to 6-inch maximum mesh size in Districts 1 and 2. It is unlikely there will be a buyer in District 3. It is likely that the extent of a summer chum salmon directed commercial fishery will be negatively impacted by the need to conserve Chinook salmon. The department has emergency order authority to prohibit the sale of Chinook salmon during chum salmon directed commercial fishing periods during times of Chinook salmon conservation. It is anticipated that the sale of incidentally harvested Chinook salmon during summer chum directed commercial fishing periods will be prohibited.

Typically, in Districts 1–3 during the summer commercial salmon fishing season, subsistence salmon fishing closes by regulation 18 hours before, during, and 12 hours following a commercial salmon fishing period, however, subsistence fishing time may be changed by emergency order. Commercial and subsistence fishing time may be concurrent to allow for commercial fishing directed at summer chum salmon while allowing Chinook salmon to be taken home for subsistence use. If fishermen use their incidental Chinook salmon harvest for subsistence rather than commercial use, it is expected that there would be a reduction in the overall harvest of Chinook salmon. It is anticipated that incidental harvest of Canadian-origin Chinook salmon should be minimized after the third quarter point of the run. Normally, after July 4, fewer Canadian bound Chinook salmon are present in the lower Yukon River.

If the requirements to allow directed summer chum salmon commercial fishing are met, fishing periods would likely be 4 to 12 hours in duration. Limited fishing area openings and shorter directed fishing periods might be scheduled based on run assessment and efforts to reduce incidental harvest of Chinook salmon.

Regulations require identification of any vessel used by commercial salmon fishermen in Districts 1, 2, and 3. A vessel must display either the ADF&G vessel license number or the fisherman's 5-digit Commercial Fisheries Entry Commission (CFEC) permit serial number and the letter that follows. Symbols must be at least 12 inches high and 1 inch wide and displayed on both sides of the hull or cabin of the boat.

Gillnet depth regulations for commercial fishing in Districts 1, 2, and 3 require that gillnets greater than 6-inch mesh size may not be more than 45 meshes in depth and gillnets with mesh size of 6 inches or less may not be more than 50 meshes in depth.

District 4

A market for summer chum salmon is expected in Subdistrict 4-A. By regulation, sale of Chinook salmon roe is prohibited in Subdistrict 4-A. At this time no buyer has registered for Subdistricts 4-B and 4-C.

Management of summer chum salmon will be dependent on available surplus, fishing effort, buyer input regarding market quality and processing capacity, and monitoring of the fishery inseason. In Subdistrict 4-A, ADF&G is planning to use emergency order authority to close the commercial set gillnet fishing season and immediately reopen the season during which a fish wheel may be used. The fish wheel shall be attended at all times while it is in operations, and all Chinook salmon caught must be returned to the water alive immediately. This new regulatory authority could allow commercial fishing for summer chum salmon to be opened as early as June 22–24.

After a majority of the Chinook salmon run has passed, gillnet gear will be allowed and king salmon will not have to be released alive during concurrent subsistence and commercial fishing periods in July. During concurrent subsistence and commercial openings, Chinook salmon may be kept for subsistence use. ADF&G staff will be present on the grounds to observe the fishery.

Anvik River Management Area

The Anvik River may be opened to summer chum salmon commercial fishing if the escapement is anticipated to exceed 500,000 fish (5AAC 05.368). Fishing periods in the Anvik River will be based upon size of the surplus available for commercial harvest and the availability of a commercial market. The intent is to allow a harvest of Anvik River summer chum salmon stock that is in excess of the spawning escapement goal and to decrease harvest pressure on non-Anvik River summer chum salmon stocks. Permit holders are reminded that all Chinook salmon caught during Anvik River commercial fishing periods must be released alive.

District 5

It is unlikely that there will be a directed Chinook salmon commercial fishery in 2012 on the mainstem Yukon River. However, assessment of run abundance and timing from downstream districts, along with subsistence catch reports, will be used to determine if commercial fishing is warranted in portions of District 5. By regulation, no commercial fishing will be allowed in Subdistrict 5-A during the Chinook and summer chum salmon fishing season.

District 6

District 6 is managed under the *Tanana River Salmon Management Plan* (5AAC 05.367) and inseason salmon run strength and timing indicators in the Tanana River drainage. Assessment includes escapement information regarding Chinook and summer chum salmon collected at counting tower projects operated on the Chena and Salcha rivers. ADF&G can exceed the upper end of the commercial guideline harvest ranges in years when it has been determined that escapement goals and subsistence needs will be met.

Directed summer chum salmon commercial fishing opportunity will depend on inseason run assessment. If a harvestable surplus is identified commercial fishing would likely occur later in July and extend into August. The length and duration of commercial fishing periods will depend on run strength and buyer capacity.

FALL CHUM AND COHO SALMON COMMERCIAL SEASON

Yukon River fall chum salmon run is managed following the guidelines in 5 AAC 01.249 *Yukon River Drainage Fall Chum Salmon Management Plan* (Table 9). The plan stipulates that directed fall chum salmon commercial fisheries may only be allowed on the projected surplus of the run above 500,000 fall chum salmon for the entire Yukon River drainage. Tanana River drainage stocks will be managed following the guidelines in 5 AAC 05.367 *Tanana River Salmon Management Plan* to meet Tanana and Delta river escapement goals and for subsistence needs.

Table 9.–The Yukon River drainage fall chum salmon management plan, 5AAC 01.249.

<i>Fall Chum Salmon Management Plan Overview</i>					
RECOMMENDED MANAGEMENT ACTION ^a					
Projected Run Size ^b	Commercial	Personal Use	Sport	Subsistence	Targeted Drainage wide Escapement
300,000 or less	Closure	Closure	Closure	Closure ^c	
300,000 to 500,000	Closure	Closure ^c	Closure ^c	Possible Restrictions ^{c, d}	300,000 to 600,000
Greater than 500,000	Open ^e	Open	Open	Pre-2001 Fishing Schedules	

^a Considerations for the Canadian mainstem rebuilding plan may require more restrictive management actions.

^b ADF&G will use the best available data, including preseason projections, mainstem river sonar passage estimates, test fisheries indices, subsistence and commercial fishing reports, and passage estimates from escapement monitoring projects to project run size inseason.

^c The fisheries may be opened or less restrictive in areas where indicator(s) suggest the escapement goal(s) in that area will be achieved.

^d Subsistence fishing will be managed to achieve a minimum drainagewide escapement goal of 300,000 fall chum salmon.

^e Fall chum salmon will be commercially harvested following the guidelines harvest levels established in 5 AAC 05.365 and 5 AAC 05.367).

Management of directed coho salmon fishing during the fall season is complicated by an overlapping run of more abundant fall chum salmon stocks. The 2012 coho salmon fishery will be managed consistent with regulation 5 AAC 05.369 *Yukon River Coho Salmon Management Plan*. The plan allows a directed coho salmon commercial fishery when there is a harvestable surplus of coho salmon and the fall chum salmon run is above the 500,000 fish threshold necessary to allow a directed

fall chum salmon fishery. In addition, the plan allows for late season harvest of coho salmon if the department determines there is a harvestable surplus of coho salmon and that a directed coho salmon commercial fishery will not have a significant impact on escapement or allocation of fall chum salmon.

The commercial harvest of coho salmon will likely be dependent upon the abundance of fall chum salmon and accompanying management strategies used to harvest fall chum salmon. In 2012, it is possible that commercial fishing for both fall chum and coho salmon will occur simultaneously if abundance and run timing permit. A coho salmon directed commercial fishery could occur late in the season.

The majority of fall chum salmon enter Yukon River from mid-July through early September in erratic pulses usually lasting 2 to 3 days. Typically, 4 to 5 pulses occur each season. These pulses are often associated with onshore wind events and/or high tides. This entry pattern makes it difficult to project run strength inseason at the mouth of the river. ADF&G will monitor the fall salmon runs using information from passage at Pilot Station sonar project, lower Yukon River drift gillnet test fishery near Emmonak, the Mountain Village drift gillnet test fishery, subsistence catch reports, and, if available, commercial harvest and effort statistics. Also, information from genetic stock proportion estimates from Pilot Station sonar project test fishing samples will be considered. This information, in concert with the preseason forecasts and the performance of the summer chum salmon run, will be the basis for initial management decisions.

Districts 1, 2, and 3

Initial commercial fishing period length and frequency will primarily be based on the fall chum salmon run size projection established by the relationship between summer chum salmon run size and fall chum salmon run size. Maintaining good salmon flesh quality will be the principal objective. Managers will work with buyers to harvest good quality fish, to maximize available processing capacities and transportation opportunities, and to spread harvest throughout the fall salmon run.

Regulations require District 1 commercial fishermen to register for the coastal *Set Net Only Area* prior to opening of the fall commercial season. Registration “sign-in” sheets will be available at District 1 village post offices and at the ADF&G field office in Emmonak. There are provisions that allow fishermen to transfer into and out of the *Set Net Only Area*. After initial registration for the *Set Net Only Area*, a permit holder may not commercially fish for salmon in the remainder of District 1, or in another district, until 72 hours after re-registration with ADF&G. After the first fall season commercial fishing period, a permit holder not registered for the *Set Net Only Area* may transfer to the *Set Net Only Area* after re-registration with ADF&G. The re-registration and 72-hour waiting period begins at the time the notification is received and documented by ADF&G.

District 4

A market for fall chum salmon is expected in Subdistrict 4-A. At this time it is unlikely there will be a buyer in Subdistricts 4-B and 4-C.

In years with average run timing and a commercially harvestable surplus, the first District 4 fall chum salmon directed commercial fishing period typically occurs in early to mid-August.

Subdistricts 5-B, 5-C, and 5-D

In years with average fall chum salmon run timing and a commercially harvestable surplus, the first fall season commercial fishing period in Subdistricts 5-B and 5-C typically occurs in mid-August with Subdistrict 5-D starting later in August or early September. Few coho salmon are typically harvested in these areas as they primarily migrate into the Tanana River drainage. Market interest has been weak in recent years and will likely dictate commercial fishing opportunity. Commercial fishing periods are usually scheduled concurrent with subsistence periods but may be shifted to accommodate market limitations.

Subdistrict 5-A and District 6

Management of Subdistrict 5-A and District 6 is outlined in regulation 5 AAC 05.367 *Tanana River Salmon Management Plan*. This plan directs ADF&G to manage Subdistrict 5-A and District 6 based on the stock status and timing of salmon bound for, and into, the Tanana River. Based on tagging studies conducted in 1979 and 1980 and differences in stock timing through the Subdistrict 5-A test fish wheel, it is believed that the majority of fall chum and coho salmon harvested in Subdistrict 5-A are bound for the Tanana River (District 6).

ADF&G will initially manage the fall season in Subdistrict 5-A and District 6 based on the run strength and timing of the overall Yukon River fall chum salmon run as assessed by the Pilot Station sonar project. Genetic apportionment will provide information of when Tanana River stocks begin entering the Yukon River. As the run progresses into the Tanana River, test fishery projects will be used to assess the run timing and relative run size of the Tanana River portion of the drainage along with subsistence and commercial harvest information.

The Tanana River management plan allows Subdistrict 5-A commercial activities only during the fall season. In most years, the Subdistrict 5-A commercial fishery would be managed for a guideline harvest range of 0 to 4,000 pounds of fall chum salmon roe. No waste of carcasses will be permitted and they are typically absorbed in the local subsistence harvest.

Depending on the inseason assessment of fall chum salmon run strength and timing indicators of Tanana River stocks, ADF&G does have the authority to manage Subdistrict 5-A and District 6 for a different harvest level within the guideline harvest range or to exceed the guideline harvest range. The first fall season commercial salmon fishing period normally occurs in early to mid-September. Managers will work with commercial buyers and fishermen in coordinating fishing periods to utilize available markets efficiently. Commercial and subsistence fishing periods are typically opened concurrently.

GUIDELINE HARVEST RANGES

Table 10 shows a summary of the guideline harvest ranges for all districts in the Yukon Area for the commercial harvest of Chinook, summer chum, and fall chum salmon.

Table 10.—Guideline harvest ranges and midpoints for commercial harvest of Yukon River Chinook, summer, and fall chum salmon.

Chinook Salmon						
District or Subdistrict	Guideline Harvest Range ^a					
	Lower		Midpoint		Upper	
	Numbers	Percent	Numbers	Percent	Numbers	Percent
1 and 2	0 to 60,000	89.1	90,000	91.6	120,000	92.9
3	0 to 1,800	2.7	2,000	2.0	2,200	1.7
4	0 to 2,250	3.3	2,550	2.6	2,850	2.2
5-B & 5-C	0 to 2,400	3.6	2,600	2.6	2,800	2.2
5-D	0 to 300	0.4	400	0.4	500	0.4
6	0 to 600	0.9	700	0.7	800	0.6
Total	67,350	100.0	98,250	100.0	129,150	100.0

Summer Chum Salmon						
District or Subdistrict	Guideline Harvest Range ^b					
	Lower		Midpoint		Upper	
	Numbers	Percent	Numbers	Percent	Numbers	Percent
1 and 2	0 to 251,000	62.8	503,000	62.9	755,000	62.9
3	0 to 6,000	1.5	12,500	1.6	19,000	1.6
4-A ^c	0 to 113,000	28.3	225,500	28.2	338,000	28.2
4-B & 4-C	0 to 16,000	4.0	31,500	3.9	47,000	3.9
5-B, -C, -D	0 to 1,000	0.3	2,000	0.3	3,000	0.3
6	0 to 13,000	3.3	25,500	3.2	38,000	3.2
Total	400,000	100.0	800,000	100.0	1,200,000	100.0

Anvik River Management Area roe cap of 100,000 pounds. ^d

Fall Chum Salmon						
District or Subdistrict	Guideline Harvest Range ^e					
	Lower		Midpoint		Upper	
	Numbers	Percent	Numbers	Percent	Numbers	Percent
1, 2, and 3	0 to 60,000	82.5	140,000	71.2	220,000	68.6
4	0 to 5,000	6.9	22,500	11.4	40,000	12.5
5-B and 5-C	0 to 4,000	5.5	20,000	10.2	36,000	11.2
5-D	0 to 1,000	1.4	2,500	1.3	4,000	1.2
6	0 to 2,750	3.8	11,625	5.9	20,500	6.4
Total	0 to 72,750	100.0	196,625	100.0	320,500	100.0

Subdistrict 5A range of 0 to 4,000 pounds of roe. ^f

^a The Chinook salmon guideline harvest ranges have been in effect since 1981.

^b Summer chum salmon guideline harvest ranges were established in February 1990 based on the average harvest shares from 1975–1989.

^c Or the equivalent roe poundage of 61,000 to 183,000 pounds or some combination of fish and pounds of roe.

^d The current Anvik River Management Area roe cap was established in March 1996.

^e The current fall chum salmon guideline harvest ranges were established in 1990.

^f Subdistrict 5-A was removed from the guideline harvest ranges for Chinook and summer chum and a separate guideline harvest range of 0–4,000 pounds of fall chum salmon roe was established in November 1998.