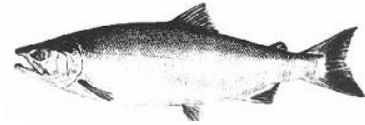


ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES



*Denby S. Lloyd, Commissioner
John Hilsinger, Director*



Contact:

Steve Hayes, Summer Season Area Manager
Stacey Buckelew, Summer Season Assistant Area Manager
Phone: (907) 267-2383
Fax: (907) 267-2442

Anchorage Area Office
333 Raspberry Road
Anchorage, AK 99518
Date Issued: October 18, 2010

2010 Preliminary Yukon River Summer Season Summary

This informational letter provides a preliminary summer season summary of the 2010 Yukon Area Chinook and summer chum salmon fisheries. Subsistence and personal use harvests for 2010 are not available at this time. For management purposes, the Yukon River is divided into several fishing districts/subdistricts (Figure 1).

2010 Preseason Outlook

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 about 50%. Using this method, the expected total Yukon River run size was projected to be 226,200, based on the averaged value for both Sibling and Ricker models. The low end of this estimate, however, was expected to be as low as 155,600 fish based on low productivity since 2007. There is a lot of uncertainty associated with this methodology and, due to apparent reductions in productivity in recent years, environmental factors and other phenomena not incorporated into the models, the upper end of this 155,600 to 226,200 Chinook salmon outlook was deemed unlikely.

Thus, the 2010 Yukon River Chinook salmon run was projected to be below average to average. It was therefore prudent to enter the 2010 season with the prospect that subsistence conservation measures, much less severe than those used in 2009, would be required in an effort to share the available subsistence harvest and meet escapement goals. It was unlikely that there would be a directed Chinook salmon commercial fishery in 2010 on the mainstem river, but there was a potential opportunity to commercially harvest less than 1,000 Chinook salmon on the Tanana River, as the Tanana River is managed independently as a terminal fishery.

Summer Chum Salmon

The strength of the summer chum salmon run in 2010 was dependent on production from the 2006 (age-4 fish) and 2005 (age-5 fish) escapements, as these age classes dominate the run. The total run during 2004 and 2005 was approximately 2.6 and 4.0 million summer chum salmon respectively, though tributary escapements were highly variable.

Yukon River summer chum generally exhibit strong run size correlations among adjacent years, and it was expected that the total run in the Yukon River would be similar to the 2009 run of approximately 1.3 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. Juvenile chum salmon collected in the BASIS study in 2006 and 2007 would correspond to dominant age class returns (age-5 and 4, respectively) in 2010.

The 2010 summer chum salmon run was anticipated to provide for escapements, support 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 7 years (2003–2009). If inseason indicators of run strength developed as anticipated, the commercially harvestable surplus in Alaska was expected to range from 250,000 to 500,000 summer chum salmon. The actual commercial harvest of summer chum salmon in 2010 will likely be affected by a poor Chinook salmon run, as Chinook salmon are incidentally harvested in chum salmon-directed fisheries.

2010 Preseason Management Strategy

Chinook and summer chum salmon management plans guide ADF&G management actions. Because of recent poor Chinook salmon runs, before the 2010 season, the Yukon River Drainage Fisheries Association (YRDFA) facilitated a series of regional teleconferences and an in-person meeting 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 calls and meeting was to work cooperatively to identify options and management strategies for 2010 that would assist in getting adequate numbers of fish to the spawning grounds, particularly to Canada, should the 2010 Chinook salmon run be similar to the unexpected low runs of 2007 and 2008. Based on input from these meetings, a preseason management plan was developed for the Yukon River summer season fishery. The preseason plan included the following key components:

- Initial management would be based on preseason projections and shift to inseason assessment information as runs develop.
- Providing for escapement in both Alaska and Canada would be maintained as the highest management priority. Meeting the one year Canadian Interim Management Escapement Goal (IMEG) of 42,500–55,000 Chinook salmon based on the Eagle sonar program was the highest concern and providing for subsistence fishing would remain as the highest priority use.
- It was unlikely there would be any directed Chinook salmon commercial openings.
- The regulatory subsistence salmon fishing schedule would begin June 7 in District 1 and be implemented chronologically with the upriver migration.
- The Tanana River personal use and sport fisheries would be managed to meet escapement objectives for Chena and Salcha rivers.

- A surplus of summer chum salmon was anticipated above escapement and subsistence needs. However, the extent of a directed chum commercial fishery would be dependent upon the strength of the Chinook salmon run.

If the Chinook salmon run developed below expectations, managers would consider implementing conservation measures, such as no fishing on a portion of the run or a reduction in fishing time, in an effort to meet escapement goals.

Since 2001, the subsistence salmon fishery has operated on a schedule implemented by ADF&G, which is chronologically consistent with migratory timing as the run progresses upstream. 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.

Table 1.–Yukon Area subsistence salmon fishing schedule, 2010.

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

Area	Reduced Regulatory Subsistence Fishing Periods	Approximate Schedule to Begin	Days of the Week
Coastal District	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
District Y-1	Two 36-hour periods/week	June 7	Mon. 8 pm to Wed. 8 am /Thu. 8 pm to Sat. 8 am
District Y-2	Two 36-hour periods/week	June 9	Wed. 8 pm to Fri. 8 am / Sun. 8 pm to Tue. 8 am
District Y-3	Two 36-hour periods/week	June 13	Wed. 8 pm to Fri. 8 am / Sun. 8 pm to Tue. 8 am
Subdistrict Y-4-A	Two 48-hour periods/week	June 16	Sun. 6 pm to Tue. 6 pm / Wed. 6 pm to Fri. 6 pm
Subdistricts Y-4-B, C	Two 48-hour periods/week	June 23	Sun. 6 pm to Tue. 6 pm / Wed. 6 pm to Fri. 6 pm
Koyukuk and Innoko Rivers	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
Subdistricts Y-5-A, B, C	Two 48-hour periods/week	June 29	Tue. 6 pm to Thu. 6 pm /Fri. 6 pm to Sun. 6 pm
Subdistrict Y-5-D	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
District Y-6	Two 42-hour periods/week	All Season	Mon. 6 pm to Wed. Noon /Fri. 6 pm to Sun. Noon
Old Minto Area	5 days/week	All Season	Friday 6 pm to Wednesday 6 pm

Yukon River Drainage Fisheries Association (YRDFA) teleconferences are conducted weekly inseason to gather information from the public, disseminate project information, and to discuss run status and management actions. The YRDFA teleconferences have provided an excellent venue for not only distributing information, but also to provide feedback from public participants on potential management actions. This year and in recent years, management decisions have been made with recommendations from these teleconferences.

2010 Subsistence Fishery

Inseason run strength assessment of Chinook and summer chum salmon was based on the lower river test fisheries (LYTF) at Emmonak and Mountain Village, the Pilot Station sonar, and subsistence fishermen catch reports. In addition, genetic samples collected in the lower river test fishery and at Pilot Station sonar were analyzed inseason to determine stock contribution and to project abundance of the Canadian Chinook salmon stocks. The summer season began with a near average ice breakup in the lower river. However, shorefast sea ice lingering outside the mouth of the river contributed to the late migration of Chinook salmon. The first pulse of Chinook salmon was observed in the LYTF project on June 16–21, a second pulse on June 23–25, and a third on June 27–28. The first quarter point, midpoint, and third quarter point were June 19 (4 days late), June 25 (5 days late), and July 1 (4 days late) respectively. The LYTF finished with a cumulative CPUE of 18.67, approximately 15% below the historical average. The preliminary Pilot Station sonar estimate was approximately 113,400 Chinook salmon as compared to the 1995–2009 average passage of 141,000 fish. The first quarter point, midpoint, and third quarter point were on June 22, June 26, and June 30 respectively.

Through the month of June, the Chinook salmon run was assessed to be large enough to provide for escapement and subsistence uses based upon the preseason outlook and late run timing. Most subsistence salmon fishermen delayed their fishing effort due to gas prices and low fish abundance early in the season. The regulatory “windowed” subsistence salmon fishing schedule was initiated on June 7 in District 1 and was implemented chronologically upriver as the run progressed upstream. Persistent wet and cold weather conditions around the Yukon Delta led many subsistence fishermen to abstain from harvesting the first pulse of Chinook salmon due to the poor processing conditions. Throughout the drainage there were episodes of high water events with heavy debris loads which preempted subsistence fishing. As the Chinook salmon migration moved upriver, managers considered reducing fishing time in order to conserve salmon, but found that poor fishing conditions coincided with periods when Chinook salmon were passing through areas. Fishing restrictions would have forced fishermen to take high risks during openings or fish less efficiently when the cost of operating was already high. Therefore, additional subsistence restrictions were not imposed.

In Subdistrict 5-D when it became evident that the Chinook salmon run would fall short of the U.S./Canada Yukon Treaty obligation to pass adequate numbers into Canadian escapements and provide for harvest sharing, fishermen were asked to consider conservation measures such as voluntary harvest reductions, shifting harvest to other species, spreading harvest out over the duration of the run, reducing extended sharing, and keeping fish harvested within the village or local area. It was understood that fishing had been difficult this year due to water conditions and high fuel costs. Imposing fishing restriction at the time would have increased hardships. The hope was to provide fishermen the flexibility to work around their own unique fishing conditions to effectively conserve Chinook salmon where they could.

2010 Commercial Fishery

Chinook Salmon

Due to uncertainty concerning the Chinook salmon run strength and the need to fulfill our Canadian border passage obligation, meet Alaska escapement needs, and provide for subsistence uses, management of the Chinook salmon commercial fishery continued to follow the

conservative preseason management strategy and no commercial periods targeting Chinook salmon were allowed in 2010 in the Yukon River mainstem or in the Tanana River.

Chinook salmon were incidentally caught in the summer chum salmon-directed commercial fishery. Since river wide subsistence fishing restrictions beyond the regulatory fishing schedule were not taken, the sale of incidental caught Chinook salmon was allowed. A total of 9,897 Chinook salmon were incidentally harvested and commercially sold in Districts 1 and 2 (Table 3). This range of commercial catch for Chinook salmon is 64% below the recent 10-year (2000–2009) average of 27,298 Chinook salmon (Table 4).

Summer Chum Salmon

Since 2007, there has been a renewed market interest for summer chum salmon in the lower river Districts 1 and 2. The summer chum salmon run strength of 1.3 million fish passed Pilot Station sonar was below the average of 1.6 million for the project. The first quarter point, midpoint, and third quarter point were on June 23, June 28, and July 1, respectively.

Management decisions regarding summer chum salmon were delayed until the third quarter point in the Chinook salmon run at LYTF. At this point, the summer chum salmon run was peaking and a total run size of 1.4 million fish was projected. A short commercial fishing period was announced for June 26 in District 1, with nets restricted to six-inch maximum mesh size, as a test to determine the chum to Chinook catch ratio. At this late point in the Chinook salmon run, it was expected that incidental harvest of Chinook salmon would be low and any Chinook salmon catches would be small and bound for lower river tributaries. However, test fishery information showed an abrupt drop in the summer chum entering the river, so the Department took an unprecedented action, with the cooperation of the primary fish buyer, to cancel the commercial period on short notice to avoid harvesting a significant number of Chinook salmon. The commercial period was delayed until June 28 which landed a catch of 2,109 Chinook and 30,295 chum salmon. Fishing was again delayed until July 1 when the commercial fishery resumed on a more regular schedule for Districts 1 and 2.

The Department scheduled eight commercial fishing periods targeting summer chum in District 1 and seven in District 2. The preliminary cumulative harvest for Districts 1 and 2 combined is 183,215 summer chum salmon (Table 3). The summer chum salmon harvest was 181% above the 2000–2009 average harvest of 65,143 fish (Table 5).

Additionally, since 2007 there has been renewed market interest for summer chum salmon in Subdistrict 4-A. There were no buyers interested in purchasing salmon from Subdistricts 4-B and 4-C. Management of the summer chum salmon commercial fishery in Subdistrict 4-A was dependent on the available surplus, fishing effort, and buyer input. Based upon preseason contacts with potential buyers, directed commercial fishing for summer chum salmon began July 7. Because of low effort during the first four 12-hour Subdistrict 4-A commercial fishing periods, commercial fishing was allowed to continue for 21 days until the end of the summer fishing season. Subsistence salmon fishing periods were not altered by commercial salmon fishing periods. During concurrent subsistence and commercial openings, Chinook salmon were kept for subsistence use. The preliminary cumulative harvest in 4-A is 44,207 summer chum salmon (Table 3).

District 6 was managed using inseason assessment information provided by projects operated in the Tanana River drainage. Catch information observed at the test fish wheel operated near the

community of Nenana and escapement estimates collected by tower counting projects on the Chena and Salcha rivers were used as indicators of run strength and timing. Based on the available surplus and market interest, the Department scheduled the first commercial fishing period to target chum salmon in District 6 on July 19. The Department scheduled seven commercial fishing periods and the preliminary cumulative harvest was 5,466 summer chum salmon (Table 3).

The total commercial harvest for Districts 1, 2, 6, and Subdistrict 4-A combined was 232,888 summer chum salmon, which is 193% above the 2000-2009 average harvest of 79,438 fish (Table 5).

2010 Fishing Effort and Exvessel Value

A total of 450 permit holders participated in the summer chum salmon fishery, which was approximately 17% below the 2000–2009 average of 544 permit holders (Table 6). The Lower Yukon Area (Districts 1–3) and Upper Yukon Area (Districts 4–6) are separate Commercial Fisheries Entry Commission (CFEC) permit areas. A total of 440 permit holders fished in the Lower Yukon Area in 2010, which was approximately 16% below the 2000–2009 average of 527. In the Upper Yukon Area, 10 permit holders fished, which was approximately 50% below the 2000–2009 average of 20.

Yukon River fishermen in Alaska received an estimated \$1.5 million for their Chinook and summer chum salmon harvest in 2010, approximately 16% below the 2000–2009 average of \$1.8 million (Table 7). One buyer-processor operated in the Lower Yukon Area (Districts 1–3). Lower Yukon River fishermen received an estimated average price per pound of \$5.00 for incidentally harvested Chinook and \$0.70 for summer chum salmon. The average price paid for Chinook salmon in the Lower Yukon Area was approximately 31% above the 2000–2009 average of \$3.81 per pound. The estimated average income for Lower Yukon Area fishermen in 2010 was \$3,325.

Two buyer-processors operated in the Upper Yukon Area (Districts 4–6). Upper Yukon Area fishermen received an estimated average price per pound of \$0.23 for summer chum salmon sold in the round. The average price paid for summer chum salmon sold in the round in the Upper Yukon Area was approximately 9% below the 2000–2009 average of \$0.25 per pound (Table 7). No Chinook salmon were sold in the Upper Yukon Area. The average income for Upper Yukon Area fishermen that participated in the 2010 fishery was \$6,153.

2010 Age and Sex Composition

Test Fisheries

Chinook salmon age composition from the 8.5-inch mesh set gillnets in the LYTF was 4% age-4, 60% age-5, 34% age-6, and 2% age-7 fish. The sample size was 1,322 fish. Age-6 percentage was one-half of average and age-5 was twice the average. Females comprised 48% of the samples; 5 percentage points below average.

Summer chum salmon age composition from the 5.5-inch mesh drift gillnets in the Hooper Bay Test Fishery was 3% age-3, 73% age-4, 23% age-5, and <1% age-6 fish. The sample size was 501 fish. Females were 48%.

The summer chum salmon age composition from the 5.5-inch mesh drift gillnets in the LYTF was 4% age-3, 65% age-4, 30% age-5, and 1% age-6 fish. The sample size was 1,211 fish. The

age-4 percentage was 48% above average and the age-5 percentage was 44% below average. Females were 57%.

Commercial Harvests

Chinook salmon age composition from the District 1 restricted (6 inch or smaller mesh) commercial harvest was <1% age-3, 36% age-4, 47% age-5, 16% age-6, and less than 1% age-7 fish. The sample size was 890 fish and females comprised 30%.

Chinook salmon age composition from the District 2 restricted (6 inch or smaller mesh) commercial harvest was <1% age-3, 31% age-4, 52% age-5, 16% age-6, 1% age-7 fish. The sample size was 474 fish and females comprised 34%.

Summer chum salmon age composition from the District 1 restricted (6 inch or smaller mesh) commercial harvest was 4% age-3, 67% age-4, 28% age-5, and 1% age-6 fish. The sample size was 1,259 fish and females comprised 42%.

Summer chum salmon age composition from the District 2 restricted (6 inch or smaller mesh) commercial harvest was 5% age-3, 71% age-4, 23% age-5, and 1% age-6 fish. The sample size was 625 fish and females comprised 42%.

The summer chum salmon age composition from the District 4 commercial harvest is not available at this time. The sample size was 680 fish and females comprised 58%.

The summer chum salmon age and sex composition from the District 6 commercial harvest are not available at this time.

2010 Assessment and Escapement

Chinook Salmon

The first reported subsistence caught Chinook and summer chum salmon were reported near Emmonak and Alukanuk on June 8. The LYTF recorded the first Chinook salmon catches on June 9.

The LYTF concluded operations on July 15 with a cumulative CPUE of 18.67, which was below the average of 22.76. The first quarter point, midpoint, and third quarter point are June 19 (4 days late), June 25 (5 days late), and July 1 (4 days late) respectively.

The Pilot Station sonar project preliminary cumulative passage estimate from June 1 to August 9 was 113,410 Chinook salmon. The first quarter point, midpoint, and third quarter point were on June 22, June 26, and June 30 respectively.

Inseason management decisions were based on the best available assessment data and the preseason outlook and management plan. The actual 2010 Chinook salmon run was much weaker than the preseason projection and early inseason assessment projects indicated. Consequently, most escapement results were disappointing. Chinook salmon escapement goals for the East Fork Andreafsky, West Fork Andreafsky, and Salcha rivers were achieved. The Anvik and Chena river escapement goals were not achieved. Preliminary Chinook salmon passage at Eagle sonar is 35,128 fish, yielding a border passage of approximately 33,500 fish. These numbers, however, are subject to change. Selected 2010 escapement estimates for tributaries with goals were as follows:

Stream	Current Goal	Type of Goal	2010
East Fork Andreafsky River Weir	2,100–4,900	SEG	2,413
West Fork Andreafsky River Aerial	640–1,600	SEG	858
Anvik River Index Aerial	1,100–1,700	SEG	721
Nulato River Aerial (Forks Combined)	940–1,900	SEG	711
Chena River Tower	2,800–5,700	BEG	2,301
Salcha River Tower	3,300–6,500	BEG	6,048
Canadian Border	42,500–55,000	IMEG ¹	33,500 ²

¹ The US/Canada Yukon River Panel agreed to a 1 year Canadian Interim Management Escapement Goal (IMEG) of 42,500–55,000 Chinook salmon based on the Eagle sonar program. In order to meet this goal, the passage at Eagle sonar must include a minimum of 42,500 fish for escapement, provide for a subsistence harvest in the community of Eagle of approximately 2,000 fish, and incorporate the US/Canada Yukon River Panel allowable catch (20%-26% of the total allowable catch).

² Data are preliminary.

Summer Chum Salmon

The Pilot Station sonar summer chum passage estimate through July 18 was 1,327,581 fish. The first quarter point, midpoint, and third quarter point were on June 23, June 28, and July 1 respectively.

Summer chum salmon escapements were variable, but most tributaries experienced good escapements. East Fork Andreafsky SEG and Anvik BEG were met. Salcha River escapement, however, was approximately 7,000 fish less than expected for this project. Selected 2010 escapement estimates for tributaries were as follows:

Stream	Current Goal	Type of Goal	2010
East Fork Andreafsky River Weir	> 40,000	SEG	72,893
Anvik River Sonar	350,000-750,000	BEG	396,173
Gisasa River Weir			47,667
Henshaw Creek Weir			100,670
Chena River Tower			7,580
Salcha River Tower			23,863

Canadian Fisheries

The preseason outlook was for a run of approximately 77,800–113,100 Canadian-origin Chinook salmon. Canadian fishery managers conducted Chinook salmon fisheries according to available abundance and international harvest sharing provisions. Due to low border passage estimates, Canadian fisheries were restricted to First Nation harvest only, and approximately 1,705 Chinook salmon have been reported as harvested to date.

Future Planning

In the upcoming months, fishery managers and stakeholders will be evaluating the management measures used in 2010 and discuss changes that may be necessary in 2011 to meet Yukon River

Treaty obligations. Management planning will begin at meetings of the U.S. Section of the Yukon Panel and Yukon River Drainage Fisheries Association will again coordinate preseason meetings and teleconferences to gather management strategy input from fishermen and to distribute management information for the 2011 season.

Several avenues were investigated in 2010 to improve the effectiveness of inseason assessment. At Pilot Station sonar, the Department tested the feasibility of using down-looking sonar further offshore during periods of high silt to attempt to accommodate for the interference that silt causes. Longer drift nets were also tested at Pilot Station sonar to investigate the potential of species specific net avoidance under the current project's administration. Additionally, alternative fishing locations were explored. For the Lower Yukon Test Fishery, staff worked with local fishermen to identify better test fishing sites, and relocated some sites to improve the efficiency of the net sites. These investigations will continue in upcoming seasons to provide more clarity. The Department will continue to explore various ways of improving assessment projects, particularly those critical to inseason assessment and management.

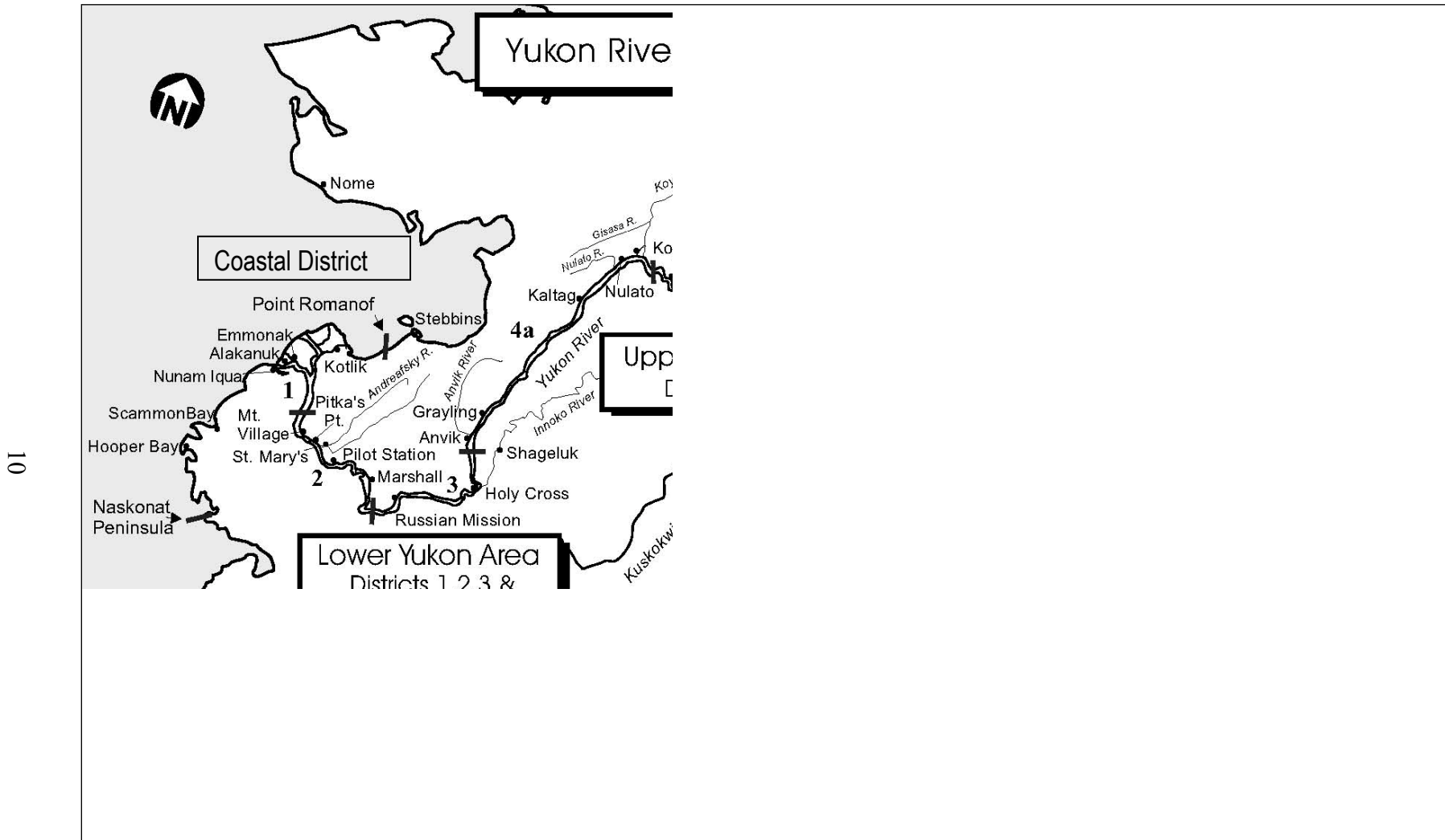


Figure 1.—Yukon Area communities and fishing districts.

Table 2.–2010 Yukon River summer season subsistence fishing schedule.

		Lower Yukon River				Upper Yukon River				Tanana
		Coastal District ^a	District 1	District 2	District 3	Subdistrict 4A	Sub 4B / 4C	Sub 5A/5B / 5C	Sub 5D	District 6
Mon.	1-Jun	Open	Open	Open	Open	Open	Open	Open	Open	Open
	Tue 2-Jun	Open	Open	Open	Open	Open	Open	Open	Open	Open
	Wed 3-Jun	Open	Open	Open	Open	Open	Open	Open	Open	Open
	Thu 4-Jun	Open	Open	Open	Open	Open	Open	Open	Open	Open
	Fri 5-Jun	Open	Open	Open	Open	Open	Open	Open	Open	Open
	Sat 6-Jun	Open	Open	Open	Open	Open	Open	Open	Open	Open
Mon	7-Jun	Open	Open 8 p.m.	Open	Open	Open	Open	Open	Open	Open 6 p.m.
	Tue 8-Jun	Open	36-Hour Period	Open	Open	Open	Open	Open	Open	42-Hour Period
	Wed 9-Jun	Open	Close 8 a.m.	Open 8 p.m.	Open	Open	Open	Open	Open	Close 12 noon
	Thu 10-Jun	Open	Open 8 p.m.	36-Hour Period	Open	Open	Open	Open	Open	Closed
	Fri 11-Jun	Open	36-Hour Period	Close 8 a.m.	Open	Open	Open	Open	Open	Open 6 p.m.
	Sat 12-Jun	Open	Close 8 a.m.	Closed	Open	Open	Open	Open	Open	42-Hour Period
	Sun 13-Jun	Open	Closed	Open 8 p.m.	Open 8 p.m.	Open	Open	Open	Open	Close 12 noon
Mon	14-Jun	Open	Open 8 p.m.	36-Hour Period	36-Hour Period	Open	Open	Open	Open	Open 6 p.m.
	Tue 15-Jun	Open	36-Hour Period	Close 8 a.m.	Close 8 a.m.	Open	Open	Open	Open	42-Hour Period
	Wed 16-Jun	Open	Close 8 a.m.	Open 8 p.m.	Open 8 p.m.	Open 6 p.m.	Open	Open	Open	Close 12 noon
	Thu 17-Jun	Open	Open 8 p.m.	36-Hour Period	36-Hour Period	48-Hour Period	Open	Open	Open	Closed
	Fri 18-Jun	Open	36-Hour Period	Close 8 a.m.	Close 8 a.m.	Close 6 p.m.	Open	Open	Open	Open 6 p.m.
	Sat 19-Jun	Open	Close 8 a.m.	Closed	Closed	Closed	Open	Open	Open	42-Hour Period
	Sun 20-Jun	Open	Closed	Open 8 p.m.	Open 8 p.m.	Open 6 p.m.	Open	Open	Open	Close 12 noon
Mon	21-Jun	Open	Open 8 p.m.	36-Hour Period	36-Hour Period	48-Hour Period	Open	Open	Open	Open 6 p.m.
	Tue 22-Jun	Open	36-Hour Period	Close 8 a.m.	Close 8 a.m.	Close 6 p.m.	Open	Open	Open	42-Hour Period
	Wed 23-Jun	Open	Close 8 a.m.	Open 8 p.m.	Open 8 p.m.	Open 6 p.m.	Open	Open	Open	Close 12 noon
	Thu 24-Jun	Open	Open 8 p.m.	36-Hour Period	36-Hour Period	48-Hour Period	48-Hour Period	Open	Open	Closed
	Fri 25-Jun	Open	Close 12 midnight	Close 8 a.m.	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open	Open	Open 6 p.m.
	Sat 26-Jun	Open	Closed	Closed	Closed	Closed	Open	Open	Open	42-Hour Period
	Sun 27-Jun	Open	Closed	Open 8 p.m.	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	Open	Open	Close 12 noon
Mon	28-Jun	Open	Closed	36-Hour Period	36-Hour Period	48-Hour Period	48-Hour Period	Open	Open	Open 6 p.m.
	Tue 29-Jun	Open	Open 12 noon	Close 8 a.m.	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	42-Hour Period
	Wed 30-Jun	Open	38-Hour Period	Closed	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	48-Hour Period	Open	Close 12 noon
	Thu 1-Jul	Open	Close 2 a.m.	Open 8 p.m.	36-Hour Period	48-Hour Period	48-Hour Period	Close 6 p.m.	Open	Closed
	Fri 2-Jul	Open	Close 14 hours	46-Hour Period	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	Open 6 p.m.
	Sat 3-Jul	Open	Closed	Close 6 p.m.	Closed	Closed	Closed	48-Hour Period	Open	42-Hour Period
	Sun 4-Jul	Open	Open 12 noon	Closed	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	Close 6 p.m.	Open	Close 12 noon
Mon	5-Jul	Open	Close 6 p.m.	Open 6 a.m.	36-Hour Period	48-Hour Period	48-Hour Period	Closed	Open	Open 6 p.m.
	Tue 6-Jul	Open	Closed	Close 6 p.m.	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	42-Hour Period
	Wed 7-Jul	Open	midnight	Closed	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	48-Hour Period	Open	Close 12 noon
	Thu 8-Jul	Open	Closed	Open 6 a.m.	36-Hour Period	48-Hour Period	48-Hour Period	Close 6 p.m.	Open	Closed
	Fri 9-Jul	Open	Open 3 p.m.	Close 12 midnight	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	Open 6 p.m.
	Sat 10-Jul	Open	Close 12 midnight	Closed	Closed	Closed	Closed	48-Hour Period	Open	42-Hour Period
	Sun 11-Jul	Open	Closed	12 midnight	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	Close 6 p.m.	Open	Close 12 noon
Mon	12-Jul	Open	Open 9 a.m./Close 9 p.m.	Closed	36-Hour Period	48-Hour Period	48-Hour Period	Closed	Open	Open 6 p.m.
	Tue 13-Jul	Open	Closed	12 midnight	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	42-Hour Period
	Wed 14-Jul	Open	Open 12 noon/Close 9 p.m.	Closed	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	48-Hour Period	Open	Close 12 noon
	Thu 15-Jul	Open	Closed	12 midnight	36-Hour Period	48-Hour Period	48-Hour Period	Close 6 p.m.	Open	Closed
	Fri 16-Jul	Open	Open 12 noon	Closed	Close 8 a.m.	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	Open 6 p.m.
	Sat 17-Jul	Open	Open	Open 3 p.m.	Closed	Closed	Closed	48-Hour Period	Open	42-Hour Period
	Sun 18-Jul	Open	Open	Open	Open 8 p.m.	Open 6 p.m.	Open 6 p.m.	Close 6 p.m.	Open	Close 12 noon
Mon	19-Jul	Open	Open	Open	Open	48-Hour Period	48-Hour Period	Closed	Open	Open 6 p.m.
	Tue 20-Jul	Open	Open	Open	Open	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	42-Hour Period
	Wed 21-Jul	Open	Open	Open	Open	Open 6 p.m.	Open 6 p.m.	48-Hour Period	Open	Close 12 noon
	Thu 22-Jul	Open	Open	Open	Open	48-Hour Period	48-Hour Period	Close 6 p.m.	Open	Closed
	Fri 23-Jul	Open	Open	Open	Open	Close 6 p.m.	Close 6 p.m.	Open 6 p.m.	Open	Open 6 p.m.
	Sat 24-Jul	Open	Open	Open	Open	Closed	Closed	48-Hour Period	Open	42-Hour Period
	Sun 25-Jul	Open	Open	Open	Open	Open 6 p.m.	Open 5 day Week	Close 6 p.m.	Open	Close 12 noon
Mon	26-Jul	Open	Open	Open	Open	Open	Open	Closed	Open	Open 6 p.m.
	Tue 27-Jul	Open	Open	Open	Open	Open 5 day week	Open	Open 6 p.m.	Open	42-Hour Period

^a Koyukuk and Innoko subsistence salmon fishing remained open 7 days per week and Old Minto Area remained open 5 days per week with unrestricted mesh size gillnets.

Table 3.–Preliminary summer season commercial harvest summary, Yukon Area, 2010.

District 1															
Period	Starting Time	Start Date	Ending Time	End Date	Hours Fished	Mesh Size	Number of Fishermen	Chinook Salmon			Summer Chum Salmon				
								Number	Pounds	Average Weight	Number	Pounds	Average Weight		
1	6:00 PM	28-Jun	12:00am	28-Jun	6	r	211	2,122	25,220	11.9	30,282	197,233	6.5		
2	8:00 PM	1-Jul	2:00 AM	2-Jul	6	r	216	863	11,135	12.9	9,394	60,747	6.5		
3	6:00 PM	3-Jul	12:00 AM	3-Jul	6	r	210	865	12,038	13.9	9,560	61,635	6.4		
4	12:00 PM	6-Jul	6:00 PM	6-Jul	6	r	186	688	8,877	12.9	18,408	120,313	6.5		
5	6:00 PM	8-Jul	3:00 AM	9-Jul	9	r	216	476	7,029	14.8	10,275	67,339	6.6		
6	12:00 PM	11-Jul	9:00 PM	11-Jul	9	r	171	434	5,776	13.3	13,530	88,843	6.6		
7	3:00 PM	13-Jul	12:00 AM	13-Jul	9	r	159	228	3,496	15.3	8,688	57,414	6.6		
8	3:00 PM	15-Jul	12:00 AM	15-Jul	9	r	107	68	985	14.5	2,130	14,008	6.6		
No chinook salmon sold in the fall season															
Unrestricted Mesh Subtotal:								-	-	-	-	-	-	-	
Restricted Mesh Subtotal:								60	264	5,744	74,556	13.0	102,267	667,532	6.5
District 1 Subtotals:								60	264	5,744	74,556	13.0	102,267	667,532	6.5

District 2															
Period	Starting Time	Start Date	Ending Time	End Date	Hours Fished	Mesh Size	Number of Fishermen	Chinook Salmon			Summer Chum Salmon				
								Number	Pounds	Average Weight	Number	Pounds	Average Weight		
1	10:00 AM	1-Jul	2:00 PM	1-Jul	4	r	145	1,215	14,183	11.7	18,631	119,658	6.4		
2	12:00 PM	4-Jul	6:00 PM	4-Jul	6	r	132	794	9,710	12.2	10,002	62,480	6.2		
3	12:00 PM	7-Jul	6:00 PM	7-Jul	6	r	136	823	10,346	12.6	14,708	93,322	6.3		
4	6:00 PM	10-Jul	12:00 AM	10-Jul	6	r	144	524	7,062	13.5	13,324	81,328	6.1		
5	6:00 PM	12-Jul	12:00 AM	12-Jul	6	r	128	299	4,361	14.6	6,653	41,238	6.2		
6	6:00 PM	14-Jul	12:00 AM	14-Jul	6	r	129	275	4,163	15.1	10,792	69,368	6.4		
7	6:00 PM	16-Jul	3:00 AM	17-Jul	9	r	105	223	3,465	15.5	6,838	42,170	6.2		
No chinook salmon sold in the fall season															
Unrestricted Mesh Subtotal:								-	-	-	-	-	-	-	
Restricted Mesh Subtotal:								43	181	4,153	53,290	12.8	80,948	509,564	6.3
District 2 Subtotals:								43	181	4,153	53,290	13	80,948	509,564	6.3

District 3													
Period	Starting Time	Start Date	Ending Time	End Date	Hours Fished	Mesh Size	Number of Fishermen	Chinook Salmon			Summer Chum Salmon		
								Number	Pounds	Average Weight	Number	Pounds	Average Weight
NO COMMERCIAL FISHING													

					Hours Fished	Number of Fishermen	Number	Pounds	Average Weight	Number	Pounds	Average Weight
Lower Yukon Area, Summer Season, Districts 1, 2, and 3 Subtotal:					103	440	9,897	127,846	12.9	183,215	1,177,096	6.4
Districts 1 and 2 Combined Guideline Harvest Range: 60,000 to 120,000 Chinook salmon. District 3 Guideline Harvest Range: 1,800-2,200 Chinook salmon.												

-continued-

Table 3.—Page 2 of 2.

District 4													
Period	Starting Time	Start Date	Ending Time	End Date	Hours Fished		Number of Fishermen	Chinook Salmon			Summer Chum Salmon		
					4-A	4-BC		Number	Pounds	Average Weight	Number	Pounds	Average Weight
1	6:00 PM	7-Jul	6:00 AM	8-Jul	12	0	2	-	-	-	1,390	7,784	5.6
2	6:00 PM	8-Jul	6:00 AM	9-Jul	12	0	3	-	-	-	2,305	12,908	5.6
3	6:00 PM	9-Jul	6:00 AM	10-Jul	12	0	2	-	-	-	1,733	9,705	5.6
4	6:00 PM	10-Jul	6:00 AM	11-Jul	12	0	2	-	-	-	1,290	7,224	5.6
5	6:00 PM	11-Jul	6:00 PM	16-Jul	120	0	4	-	-	-	9,998	53,003	5.3
6	6:00 PM	16-Jul	6:00 PM	21-Jul	120	0	4	-	-	-	16,706	86,821	5.2
7	6:00 PM	21-Jul	6:00 PM	26-Jul	120	0	5	-	-	-	6,958	36,181	5.2
8	6:00 PM	26-Jul	6:00 PM	31-Jul	120	0	4	-	-	-	3,827	19,901	5.2
District 4 Subtotals:					528	0	5	-	-	-	44,207	233,527	5.3

District 5													
Period	Starting Time	Start Date	Ending Time	End Date	Hours Fished		Number of Fishermen	Chinook Salmon			Summer Chum Salmon		
					4-A	4-BC		Number	Pounds	Average Weight	Number	Pounds	Average Weight
NO COMMERCIAL FISHING													

Subdistricts 6-A, 6-B, and 6-C													
Period	Starting Time	Start Date	Ending Time	End Date	Hours Fished		Number of Fishermen	Chinook Salmon			Summer Chum Salmon		
					6-A	6-BC		Number	Pounds	Average Weight	Number	Pounds	Average Weight
1	6:00 PM	19-Jul	12:00 PM	21-Jul	42	42	3	-	-	-	625	3,750	6.0
2	6:00 PM	23-Jul	12:00 PM	25-Jul	42	42	5	-	-	-	1,695	9,324	5.5
3	6:00 PM	26-Jul	12:00 PM	28-Jul	42	42	4	-	-	-	894	4,918	5.5
4	6:00 PM	30-Jul	12:00 PM	1-Aug	42	42	5	-	-	-	1,200	6,604	5.5
5	6:00 PM	2-Aug	12:00 PM	4-Aug	42	42	4	-	-	-	1,052	5,260	5.0
6	6:00 PM	6-Aug	12:00 PM	8-Aug	42	42	0	-	-	-	0	0	-
7	6:00 PM	9-Aug	12:00 PM	11-Aug	42	42	0	-	-	-	0	0	-
District 6 Subtotals:					294	0	5	-	-	-	5,466	29,856	5.5

Upper Yukon Area, Summer Season, Districts 4, 5, and 6 Subtotals:													
					Hours Fished	Number of Fishermen	Number	Pounds	Average Weight	Number	Pounds	Average Weight	
					822	10	0	0	-	49,673	263,383	5.3	
District 4 Guideline Harvest Range: 2,250-2,850 Chinook salmon. Subdistricts 6-A, 6-B, and 6-C Guideline Harvest Range: 600-800 Chinook salmon.													

Yukon Area, Summer Season, Districts 1 Through 6 Total:													
					Hours Fished	Number of Fishermen	Number	Pounds	Average Weight	Number	Pounds	Average Weight	
					925	450	9,897	127,846	12.9	232,888	1,440,479	6.2	

Table 4.–Chinook salmon commercial harvest and escapement comparisons, Yukon River, 2000–2010.

Chinook Salmon Commercial Harvest a														
District/Subdistrict	Guideline Harvest Range	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Comparison of 2010 to 10-Yr. Average	Recent 10-Year Average (2000-2009)
1		4,735		11,087	22,709	28,403	16,694	23,748	18,615	2,530	90	5,744	-60%	14,290
2		3,783		11,434	14,220	24,145	13,413	19,843	13,302	2,111	226	4,153	-64%	11,386
<i>Subtotal 1 & 2</i>	60,000-120,000	8,518		22,521	36,929	52,548	30,107	43,591	31,917	4,641	316	9,897	-61%	25,676
3	1,800-2,200							315	190					
4A														
4BC					562									
<i>Subtotal 4</i>	2,250-2,850				562									
5ABC	2,400-2,800			564	908	1,546	1,469	1,839	1,241					1,261
5D	300-500			207	226									217
<i>Subtotal 5</i>				771	1,134	1,546	1,469	1,839	1,241					1,333
6	600-800			836	1,813	2,057	453	84	281					921
<i>Total Alaska</i>	67,350-129,150	8,518		24,128	40,438	56,151	32,029	45,829	33,629	4,641	316	9,897	-64%	27,298
Canada b		4,829	9,769	9,069	9,443	10,946	10,977	8,758	4,794	3,399	4,297	1,705 ^m	-78%	7,628

Chinook Salmon Escapement														
Project	Escapement Goal	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Comparison of 2010 to 5-Yr. Average	Recent 5-Year Average (2005-2009)
East Fork Andreafsky River Weir		1,609	ⁿ	4,123	4,336	8,045	2,239	6,463	4,504	4,242	3,004	2,413 ^m	-53%	5,099
East Fork Andreafsky River Aerial c	960-1,700 SEG ^j	1,018	1,065 ^r	1,447	1,116 ^g	2,879	1,715	590 ^g	1,758	278 ^g	80 ^g	537		1,444
West Fork Andreafsky River Aerial c	640-1,600 SEG ^j	427	570 ^r	917	1,578	1,317	1,492	824	976	262 ^g	1,664	858	-12%	974
Pilot Station Sonar		44,428	99,403	123,213	268,537	156,606	159,441	169,403	125,553	130,643 ^w	122,990	113,410 ^m	-24%	148,329
Anvik River Index Aerial c	1,100-1,700 SEG ^j	1,394	1,172 ^r	1,329	973 ^g	3,475	2,421	1,776	1,580	992 ^g	590	721	-65%	2,049
Henshaw Creek Weir		244 ^x	1,103	649	763	1,246	1,059	^o	569	779	1,157	793 ^m	-13%	913
Nulato River Tower		908	^o	2,696	1,716	^p	^p	^p	^p	^p	^p	^p		
Nulato River Aerial c	940-1,900 SEG ^j	^g	1,884 ^s	1,584	^g	1,321	553	1,292	2,583	922	2,251	711	-47%	1,334
Gisasa River Weir		2,089	3,052	2,025	1,901	1,774	3,111	3,030	1,425	1,735	1,955	1,516 ^m	-32%	2,215
Gisasa River Aerial c		^g	1,298 ^r	506	^g	731	958	843	593	487	515	264	-63%	722
Chena River Tower/MR Tagging	2,800-5,700 BEG ^k	4,694 ^f	9,696 ^f	6,967 ^f	8,739 ^f	9,645	^o	2,936	3,806	3,208	5,250	2,301 ^m	-53%	4,899
Salcha River Tower/MR Tagging	3,300-6,500 BEG ^k	4,595	13,328	4,644 ^f	15,500 ^f	15,761	5,988	10,679	6,425 ^t	2,731 ^t	12,786	6,048 ^m	-27%	8,317
Eagle Sonar							81,528	73,691	41,697	38,097	69,957	35,128 ^m	-40%	58,753
Canadian Estimated Escapement	IMEG 42,500-55,000 ^u	25,870	52,564	42,359	80,594	48,469	68,551	62,933	34,903	33,630	65,278	31,823 ^m	-36%	49,697
ESCAPEMENT INDEX h		39,765	78,640	62,814	112,786	83,694	79,889	86,041	51,063	45,546	88,273	44,101 ^m	-36%	69,247

-continued-

Table 4.–Page 2 of 2.

-
- ^a Commercial harvest includes the estimated harvest of females to produce roe sold.
- ^b Total harvest for all fisheries in Canadian mainstem Yukon River.
- ^c Aerial surveys rated good to fair unless noted otherwise.
- ^f Mark and recapture tagging estimate; tower counts were minimum/incomplete due to late installation and/or early removal of project, or high water events/weather conditions.
- ^g Aerial surveys rated as incomplete and/or poor survey conditions; data not comparable to other years.
- ^h The escapement index is the summed escapements for East Fork Andreafsky weir, Nulato tower, Gisasa weir, Chena and Salcha towers, and Canada mainstem border passage minus the Canadian catch.
- ^j SEG = "Sustainable escapement goal", as defined by the Sustainable Fisheries Policy.
- ^k BEG = "Biological escapement goal", as defined by the Sustainable Fisheries Policy. Range established in 2001.
- ^m Data are preliminary.
- ⁿ Weir counts incomplete due to late start-up. On average, missed approximately 75% of chinook passage. Total counts for 2001 were 1,148 Chinook salmon.
- ^o No data due to incomplete operations.
- ^p Did not operate.
- ^r In 2001, the escapement goals were revised.
- ^s In 2001, the Nulato River escapement goal was established for both forks combined.
- ^t Tower counts were minimum due to high water events/weather conditions.
- ^u In 2008, the escapement goal was revised to an Interim Management Escapement Goal (IMEG) and continued in 2009. In 2010 the escapement goal was revised again.
- ^w Due to the large run of pink salmon observed in 2008, species apportionment issues were encountered. After more thorough analysis, sonar estimates have been adjusted post season.
- ^y Inseason run assessment was hampered by high water that affected Pilot Station sonar.
- ^x Project counts not comparable to other years; incomplete counts due to late start.

Table 5.—Summer chum salmon commercial harvest and escapement comparisons, Yukon River, 2000–2010.

District/Subdistrict	Guideline Harvest Range	Summer Chum Salmon Commercial Harvest ^a											Comparison of 2010 to 10-Yr. Average	Recent 10-Year Average (2000-2009)	
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010			
1		3,315		6,327	3,579	13,993	23,965	21,816	106,790	67,459	75,346	102,267		185%	35,843
2		3,309		4,027	2,583	5,782	8,313	25,543	69,432	58,139	86,571	80,948		176%	29,300
Subtotal 1 & 2	251,000-755,000	6,624		10,354	6,162	19,775	32,278	47,359	176,222	125,598	161,917	183,215		181%	65,143
3	6,000-19,000							116		1					
Anvik River															
	Est. Fish lbs. Roe	100,000													
4A	Est. Fish lbs. Roe	113,000-338,000							7,304	24,346	4,589	44,207			12,080
	Est. Fish lbs. Roe	61,000-183,000							5,938	21,575	3,906				10,473
4BC	Est. Fish lbs. Roe	16,000-47,000			62										62
Subtotal 4					62										62
5ABC				6		25		20							17
5D															
Subtotal 5	1,000-3,000			6		25		20							17
6	Est. Fish lbs. Roe	13,000-38,000		3,217	4,461	6,610	8,986	44,621	14,674	1,842	7,777	5,466		-53%	11,524
Total	400,000-1,200,000	6,624		13,577	10,685	26,410	41,264	92,116	198,201	151,786	174,283	232,888		193%	79,438

-continued-

Table 5.–Page 2 of 2.

Summer Chum Salmon Escapement														
Project	Escapement												Comparison	
	Goal	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	5-Yr. Average	Average (2005-2009)
East Fork Andreafsky R. Weir	>40,000 BEG ^k	22,918	ⁿ	45,019	22,603	62,730	20,127	101,465	69,642	57,259	8,770	72,893 ^m	17%	62,245
Pilot Station Sonar		456,271	441,450	1,088,463	1,168,518	1,357,826	2,439,616	3,767,044	1,726,885	1,665,667 ^s	1,285,437	1,327,581 ^m	-39%	2,191,408
Anvik River Sonar	350,000-700,000 BEG ^k	196,349	224,058	462,101	251,358	365,691	525,391	992,378 ^t	459,038	374,929 ^s	193,099	396,173 ^m	-27%	543,485
Henshaw Creek Weir		27,271	35,031	25,249	22,556	85,966	237,481	^c	31,442	97,281	156,201	100,670 ^m	-11%	113,043
Nulato River Tower		24,308	^c	72,230	17,814	^r	^r	^r	^r	^r	^r	^r		
Gisasa River Weir		14,410	17,936	32,943	24,379	37,851	172,259	225,225	46,257	36,758	25,833	47,667 ^m	-54%	103,670
Clear Creek Tower		19,376	3,674	13,150	5,230	15,661	26,420	29,166 ^u	^r	^r	^r	^r		23,749
Chena River Tower		3,515 ^c	4,773 ^c	1,021 ^c	573 ^c	15,162	16,875 ^c	35,109	4,705 ^c	1,333 ^c	16,516	7,580 ^m	-48%	14,637
Salcha River Tower		20,516	14,900	20,837 ^c	890 ^c	47,861	193,085	111,869	11,196 ^c	1,251 ^c	30,490	23,863 ^m	-67%	73,052
ESCAPEMENT INDEX ^g		309,287	296,698	659,400	340,173	615,261	1,165,218	1,466,046	622,280	568,811	430,909	648,846	-27%	887,523

^a Commercial harvest includes the estimated harvest of females to produce roe sold, except for Districts 3 and 4, which also includes the estimated number of males harvested to produce roe sold.

^c Project counts not comparable to other years; incomplete counts due to early removal of project or high water events/weather conditions.

^g The escapement index is the summed escapements for East Fork Andreafsky weir, Anvik sonar, Gisasa weir, Kaltag, Nulato, and Salcha towers.

^k BEG = "Biological escapement goal", as defined by the Sustainable Fisheries Policy. Range established in 2001.

^m Data are preliminary.

ⁿ Weir counts incomplete due to late start-up. On average, missed approximately 75% of Chinook passage. Total counts for 2001 were 2,086 summer chum salmon.

^p Escapement goal revised in 2001.

^r Did not operate.

^s Due to the large run of pink salmon observed in 2008, species apportionment issues were encountered. After more thorough analysis, sonar estimates have been adjusted post season.

^t HTI and DIDSON sonar equipment used in 2006. Estimates reported is DIDSON derived.

^u Videography count.

17

Table 6.—Number of commercial salmon fishing gear permit holders who delivered fish, listed by district and season, Yukon Area, 1971–2010.

Year	Chinook and Summer Chum Salmon Season								Total
	Lower Yukon Area				Upper Yukon Area				
	District 1	District 2	District 3	Subtotal ^a	District 4	District 5	District 6	Subtotal	
1971	405	154	33	592	-	-	-	-	592
1972	426	153	35	614	-	-	-	-	614
1973	438	167	38	643	-	-	-	-	643
1974	396	154	42	592	27	31	20	78	670
1975	441	149	37	627	93	52	36	181	808
1976	453	189	42	684	80	46	29	155	839
1977	392	188	46	626	87	41	18	146	772
1978	429	204	22	655	80	45	35	160	815
1979	425	210	22	657	87	34	30	151	808
1980	407	229	21	657	79	35	33	147	804
1981	448	225	23	696	80	43	26	149	845
1982	450	225	21	696	74	44	20	138	834
1983	455	225	20	700	77	34	25	136	836
1984	444	217	20	613	54	31	27	112	725
1985	425	223	18	666	74	32	27	133	799
1986	441	239	7	672	75	21	27	123	795
1987	440	239	13	659	87	30	24	141	800
1988	456	250	22	678	95	28	33	156	834
1989	445	243	16	687	98	32	29	159	846
1990	453	242	15	679	92	27	23	142	821
1991	489	253	27	678	85	32	22	139	817
1992	438	263	19	679	90	28	19	137	816
1993	448	238	6	682	75	30	18	123	805
1994	414	250	7	659	55	28	20	103	762
1995	439	233	0	661	87	28	21	136	797
1996	448	189	9	627	87	23	15	125	752
1997	457	188	0	639	39	29	15	83	722
1998	434	231	0	643	0	18	10	28	671
1999	412	217	5	631	5	26	6	37	668
2000	350	214	-	562	-	-	-	-	562
2001 ^b	-	-	-	-	-	-	-	-	-
2002	323	223	^c	540	^c	14	6	20	560
2003	352	217	^c	556	3	16	7	26	582
2004	396	213	^c	550	^c	14	6	20	570
2005	370	228	^c	578	^c	12	5	17	595
2006	379	214	6	569	^c	15	10	25	594
2007	359	220	3	564	5	12	10	27	591
2008	266	181	^c	444	8	^c	5	13	457
2009	213	166	^c	376	6	^c	5	11	387
2010	264	181	^c	440	5	^c	5	10	450
2000-2009 Avg.	334	208	5	527	6	14	7	20	544
2010 vs. Avg.	-21.0%	-13.2%		-16.4%	-9.1%		-25.9%	-49.7%	-17.3%

^a Since 1984 the subtotal for the Lower Yukon Area was the unique number of permits fished. Prior to 1984, the subtotals are additive for District 1, 2, and 3. Some individual fishermen in the Lower Yukon Area may have operated in more than one district during the season.

^b No commercial fishing occurred in 2001.

^c No commercial fishing periods in portions or all of Districts 3, 4, and 5.

Table 7.–Value of commercial salmon fishery to Yukon Area fishermen, 1977–2010.

Year	Chinook					Summer Chum					Value by Species		Value by Area			
	Lower Yukon		Upper Yukon			Lower Yukon			Upper Yukon		Chinook	Summer Chum	Lower	Upper	Total	
	\$/lb	Value	\$/lb	\$/Roe	Value	\$/lb	\$/Roe	Value	\$/lb	\$/Roe						Value
1977	0.85	1,841,033	1.37		148,766	0.40		1,007,280	0.27	2.66	306,481	1,989,799	1,313,761	2,848,313	455,247	3,303,560
1978	0.90	2,048,674	0.87		66,472	0.45		2,071,434	0.24	N/A	655,738	2,115,146	2,727,172	4,120,108	722,210	4,842,318
1979	1.09	2,763,433	1.00		124,230	0.52		2,242,564	0.25	3.00	444,924	2,887,663	2,687,488	5,005,997	569,154	5,575,151
1980	1.04	3,409,105	0.85		113,662	0.20		1,027,738	0.23	2.50	627,249	3,522,767	1,654,987	4,436,843	740,911	5,177,754
1981	1.20	4,420,669	1.00		206,380	0.40		2,741,178	0.20	3.00	699,876	4,627,049	3,441,054	7,161,847	906,256	8,068,103
1982	1.41	3,768,107	1.02		162,699	0.40		1,237,735	0.18	2.75	452,837	3,930,806	1,690,572	5,005,842	615,536	5,621,378
1983	1.40	4,093,562	1.08		105,584	0.34		1,734,270	0.16	1.66	281,883	4,199,146	2,016,153	5,827,832	387,467	6,215,299
1984	1.50	3,510,923	0.95		102,354	0.26		926,922	0.23	1.78	382,776	3,613,277	1,309,698	4,437,845	485,130	4,922,975
1985	1.50	4,294,432	0.86		82,644	0.35		1,032,700	0.23	1.94	593,801	4,377,076	1,626,501	5,327,132	676,445	6,003,577
1986	1.63	3,165,078	0.89		73,363	0.38		1,746,455	0.22	2.08	634,091	3,238,441	2,380,546	4,911,533	707,454	5,618,987
1987	1.98	5,428,933	0.79		136,196	0.48		1,313,618	0.19	2.22	323,611	5,565,129	1,637,229	6,742,551	459,807	7,202,358
1988	2.97	5,463,800	1.04		142,284	0.66		5,001,100	0.23	4.33	1,213,991	5,606,084	6,215,091	10,464,900	1,356,275	11,821,175
1989	2.77	5,181,700	0.84		108,178	0.34		2,217,700	0.24	4.41	1,377,117	5,289,878	3,594,817	7,399,400	1,485,295	8,884,695
1990	2.84	4,820,859	0.72		105,295	0.24		497,571	0.11	4.41	506,611	4,926,154	1,004,182	5,318,430	611,906	5,930,336
1991	3.70	7,128,300	0.70	2.92	97,140	0.36		782,300	0.18	4.21	627,177	7,225,440	1,409,477	7,910,600	724,317	8,634,917
1992	4.12	9,957,002	0.91	2.82	168,999	0.27		606,976	0.30	4.53	525,204	10,126,001	1,132,180	10,563,978	694,203	11,258,181
1993	2.70	4,884,044	1.06	5.52	113,217	0.37		226,772	0.35	8.53	203,762	4,997,261	430,534	5,110,815	316,979	5,427,794
1994	2.07	4,169,270	0.92	3.11	124,270	0.21		79,206	0.20	3.77	396,685	4,293,540	475,891	4,248,476	520,955	4,769,431
1995	2.09	5,317,508	0.77	2.64	87,059	0.16		241,598	0.13	3.57	1,060,322	5,404,567	1,301,920	5,559,106	1,147,381	6,706,487
1996	1.95	3,491,582	0.95	2.57	47,282	0.09	2.96	89,020	0.07	3.05	966,277	3,538,864	1,055,297	3,580,602	1,013,559	4,594,161
1997	2.46	5,450,433	0.97	1.62	110,713	0.10		56,535	0.07	1.08	96,806	5,561,146	153,341	5,506,968	207,519	5,714,487
1998	2.51	1,911,370	0.91	2.00	17,285	0.14		26,415	0.18	1.90	821	1,928,655	27,236	1,937,785	18,106	1,955,891
1999	3.80	4,950,522	1.10	2.11	74,475	0.10		19,687	0.18	2.25	1,719	5,024,997	21,406	4,970,209	76,194	5,046,403
2000	4.57	725,606				0.17		8,633				725,606	8,633	734,239		734,239
2001																
2002	3.77	1,691,105	0.75	1.75	20,744	0.06		4,342	0.32	2.25	6,176	1,711,849	10,518	1,695,447	26,920	1,722,367
2003	2.37	1,871,202	0.80		40,957	0.05		1,585	0.27		6,879	1,912,159	8,464	1,872,787	47,836	1,920,623
2004	2.80	3,063,667	0.77		38,290	0.05		8,884	0.27		9,645	3,101,957	18,529	3,072,551	47,935	3,120,486
2005	3.43	1,952,109	0.87		24,415	0.05		11,004	0.25		13,479	1,976,524	24,483	1,963,113	37,894	2,001,007
2006	3.94	3,290,367	1.30		32,631	0.05		23,862	0.16		42,988	3,322,998	66,850	3,314,229	75,619	3,389,848
2007	3.73	1,939,114	1.33		27,190	0.19		220,715	0.25	2.36	34,421	1,966,304	255,136	2,159,829	61,611	2,221,440
2008	4.64	325,470				0.40		326,930	0.25	3.00	65,840	325,470	392,770	656,606 ^a	65,840	718,240
2009	5.00	20,970				0.50		514,856	0.26	3.00	20,430	20,970	535,286	535,826	20,430	556,256
2010	5.00	639,230				0.70		823,967	0.23		61,534	639,230	885,501	1,463,197	61,534	1,524,731
2000-2009 Avg.	3.81	1,653,290	0.97	1.75	30,705	0.17		124,535	0.25	2.65	24,982	1,673,760	146,741	1,778,292	48,011	1,820,501

^a Includes \$4,656 in sales of pink salmon in Districts 1 and 2.