

KENAI RIVER SOCKEYE SALMON DIP NET FISHERY

FISHERY OBJECTIVE

Regulation and management of this fishery are governed by the Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

The fishery objective is to implement the provisions of this Board adopted management plan.

INSEASON MANAGEMENT APPROACH

Management of this fishery is the joint responsibility of the Commercial Fisheries Division (CFD) and the Division of Sport Fish. The CFD is responsible for operation of the Kenai River sonar counter which enumerates sockeye salmon entering the river. The personal use dip net fishery opens and closes by regulation. Inseason management by the Division of Sport Fish would be required only in the unlikely event the minimum sonar count goal (550,000) could not be projected, and achievement of this goal required restrictions to the dip net fishery.

HISTORICAL PERSPECTIVE

The Cook Inlet Personal Use Salmon Dip Net Fishery Management Plan (5 AAC 77.545) was adopted at the 1981 Board of Fisheries meeting. The plan provided for a personal use dip net fishery targeting sockeye salmon. The fishery could occur on the Kenai River after an escapement of 500,000 sockeye salmon was projected. As with other personal use dip net fisheries, only Alaska residents could participate. A sport fishing license was required, but permits were not required. The daily bag and possession limits were 6 sockeye salmon which were not in addition to other marine and freshwater sport fishing limits. Legal gear was confined to a dip net. Regulations restricted the fishery to the lower section of the river downstream from the Warren Ames Bridge (Figure 17).

Prior to 1987, the Kenai River personal use dip net fishery occurred only in 1982 and 1983. Harvest is unknown in 1982, and only 7,560 sockeye were taken in 1983 (Table 47). The reasons for the harvest were a combination of unperfected angler technique, relatively clear water, and relatively small numbers of fish present.

In 1987 the dip net fishery opened at 12 noon, July 23. The fishery was continuous for 13.5 days, closing August 5. Total sockeye salmon escapement to the Kenai River was a record 1.6 million fish. During the peak of the fishery, dipnetting was successfully conducted 24 hours a day. A harvest of 24,090 sockeye salmon was estimated by Statewide Harvest Survey (Mills 1988).

At the 1988 Board of Fisheries meeting the trigger point for the personal use dip net fishery in the Kenai River was raised to 700,000, the upper end of the new escapement goal. Projected escapement exceeded 700,000 in 1989 so the personal use fishery occurred. In 1990 projected escapement was below 700,000 so there was no personal use fishery.

In 1989 Alaska Supreme Court's McDowell Decision ruled that all Alaska residents are subsistence users. In December of 1990, the Alaska Board of Fisheries adopted the Upper Cook Inlet Subsistence Salmon Management Plan. Under this plan subsistence fishing was allowed in most marine waters of Upper Cook Inlet normally open to commercial gillnet fishing. Set gillnet fishing was also allowed in Knik Arm, as well as dip net fishing in the mouths of the Kenai and Kasilof rivers. Permits were required for these fisheries, but as a subsistence fishery a valid Alaska resident sport fishing license was not required. The annual bag and possession limit was

Submitted By Kenai River Sportfishing Assoc.
At the request of Member Wood

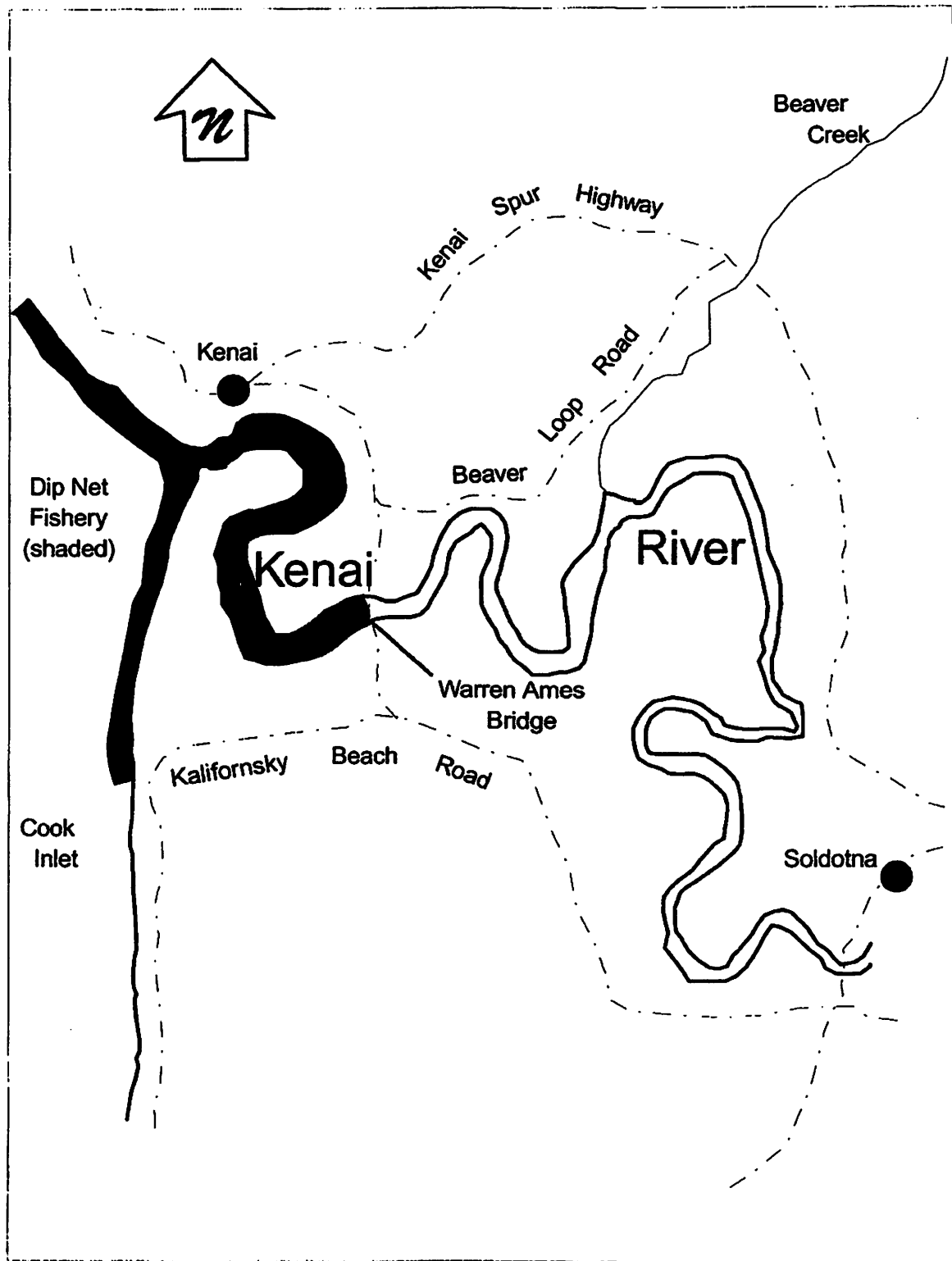


Figure17.-The Kenai River sockeye salmon dip net fishery.

Table 47.-Kenai River personal use sockeye salmon dip net fishery summary, 1981-1997.

Year	Date and Time Opened	Date and Time Closed	Total Days	Sockeye Available		% of Available Fish Harvested	Total Sockeye Salmon Escapement	Percent of Escapement Harvested	% of Escapement Available to Fishery	Participation (Days Fished) ^c
				During Dip Net Fishery ^a	Sockeye Harvest ^b					
1981	No Fishery			No fishery			407,600			
1982	7/26 18:00	8/ 5 24:00	9.25	172,072	Unknown		619,800		27.8	
1983	7/20 18:00	8/ 5 24:00	15.25	251,272	7,562	3.0	630,000	1.2	39.9	3,203
1984	No Fishery									
1985	No Fishery									
1986	No Fishery									
1987	7/23 12:00	8/ 5 24:00	13.50	755,500	24,086	3.2	1,600,000	1.5	47.2	22,550
1988	7/22 18:00	8/ 5 24:00	14.25	260,000	16,880	6.5	1,000,000	1.7	26.0	29,010
1989	7/21 00:01	8/ 5 24:00	15.0	812,800	48,976	6.0	1,598,000	3.1	50.9	31,310
1990	No Fishery									
1991	Subsistence Fishery only									
1992 ^c	7/27 12:00	8/5 24:00	6.5 ^d	144,756	12,189	8.4	994,760	1.2	14.6	10,371
1993	7/17 14:00	7/31 24:00	14.4	392,477	33,467	8.5	813,617	4.1	48.2	14,896
1994	Subsistence Fishery only									
1995	7/25 06:00	7/31 24:00	4.75 ^d	79,300	14,352	18.1	630,447	2.3	12.6	11,122
1996	7/10 00:01	8/5 24:00	27.0	710,441	98,429	13.9	797,847	12.3	89.0	9,948
Mean			13.32	397,624	31,993	9.3	909,210	3.4	39.6	16,551
1997	7/10 00:01	7/31 24:00	22.0	666,928	107,577	16.1	1,064,818	10.1	62.6	10,364

^a Total number of fish passing sonar counters during fishery, plus harvest.

^b Harvest not known in 1982; 1983-1995 from Statewide Harvest Survey (Mills 1984-1994, Howe et al. 1995, 1996). 1996-1997 total reported harvest from returned permits.

^c A subsistence dip net fishery also occurred in 1992.

^d Fishery closed on Wednesday and Saturday to avoid conflict with concurrent subsistence permit fishery. Total days reflects this closure.

^e 1981-1995 is individual days fished. 1996-1997 is household days fished. Each household day fished may include fishing effort by more than one household member named on the household's permit.

25 salmon per head of household of which no more than 5 could be chinook salmon. In addition a household was allowed another 10 salmon for each household member, of which no more than 1 could be a chinook salmon.

The Cook Inlet Personal Use Dip Net Fishery Management Plan was still in place, however, fisheries under this management plan in the Kasilof and Kenai rivers could not occur on the same day as the subsistence dip net fishery. The escapement level that triggered the personal use dip net fishery in the Kenai River was set to 700,000 in years when a subsistence dip net fishery occurred, and 400,000 if there was no subsistence fishery.

Escapement in 1991 was less than 700,000 so the personal use dip net fishery in the Kenai River did not occur. Subsistence dip net fishing was open on the Kenai River on May 25 and August 3 only; all other openings in the Kenai River were canceled due to legal challenges and court action. Reported sockeye salmon harvest in the Kenai River subsistence dip net fishery was 10,468, with 75% of permits returned (Brannian and Fox 1996).

Legal challenges did not occur during the 1992 season, so the subsistence dip net fishery was open for a total of 34 days, including 3 days in May, 4 days in June, and every Wednesday and Saturday in July, August, and September (Brannian and Fox 1996). Reported harvest, with 43% of the permits returned, was 16,240 sockeye salmon. The Kenai River personal use dip net fishery allowed under the Cook Inlet Personal Use Salmon Dip Net Fishery Management Plan also took place in 1992 (Table 47). It was restricted to days when the subsistence fishery was not open. It continued to have a possession limit of 6 sockeye salmon and did not require a permit.

The Alaska State Legislature during the 1992 session passed legislation that required the Boards of Fisheries and Game to identify nonsubsistence areas where dependence on subsistence was not a principle characteristic of the economy, culture, and way of life. During their November 1992 meeting the Boards of Fisheries and Game established the Anchorage/Mat-Su/Kenai non-subsistence area. The Board of Fisheries also rescinded the Upper Cook Inlet Subsistence Salmon Management Plan. This ended all subsistence fisheries in Upper Cook Inlet except the Tyonek subsistence fishery. The personal use dip net fishery remained in place. The escapement trigger for the personal use dip net fishery on the Kenai River was now 400,000, and once the fishery opened fishing could be continuous. The 1993 personal use fishery opened on July 17 and closed on July 31, with an estimated harvest of 33,467 sockeye salmon (Table 47).

In October 1993, Superior Court judge Dana Fabe (in *Kenaitze v. Alaska*) found unconstitutional the provision in the 1992 state subsistence law that directed the Boards of Fisheries and Game to designate nonsubsistence areas. This ruling was appealed by the State of Alaska to the Alaska Supreme Court where a stay was granted on March 10, 1994. This stay was vacated by the full court on April 11, 1994. A special meeting of the joint Boards of Fisheries and Game was convened on April 28, 1994 by teleconference. As a result of these meetings the Upper Cook Inlet Subsistence Salmon Management Plan was readopted on April 28, 1994.

Since there was not enough time for a formal Board meeting prior to the 1994 season, the Board directed that the Commissioner of Fish and Game should exercise his emergency regulatory authority to adopt regulations for the 1994 fishery. The Board directed that this fishery should mirror the 1992 subsistence fishery. Subsistence fishing periods were again on select Wednesdays and Saturdays from late May to the end of September. The annual bag and possession limit was again 25 salmon per head of household of which no more than 5 could be

chinook salmon. In addition a household was allowed another 10 salmon for each household member, of which no more than 1 could be a chinook salmon. A permit was required to participate, but not a sport fishing license. Reported subsistence dip net harvest, with 48% of the permits returned, was 13,897 sockeye salmon (Brannian and Fox 1996). The personal use dip net fishery remained in place. The escapement trigger for years when a subsistence fishery occurs remained at 700,000 sockeye salmon. The trigger for years without a subsistence fishery was changed to 450,000 to reflect a new minimum escapement goal. In 1994 the sonar count of 700,000 could not be projected prior to July 31 and personal use dip net fishery did not occur despite a final sonar count in excess of 1 million.

In 1995, subsistence fisheries were scheduled to begin on May 20, however, in early May the Alaska Supreme Court overturned the October 1993 Superior Court decision. This ruling reestablished the Anchorage/Mat-Su/Kenai nonsubsistence area. The Board of Fisheries convened an emergency meeting by teleconference on May 24, 1995 to close subsistence fisheries in the now nonsubsistence area. The Board delegated authority to the Commissioner to readopt the Upper Cook Inlet Subsistence Salmon Management Plan as a personal use fishery. The 1995 dip net fishery was therefore prosecuted as a personal use fishery, having the same regulations as the 1994 subsistence fishery, and still requiring a permit. This permitted fishery was open on select Wednesdays and Saturdays from late May to the end of September. To further complicate the situation, the old personal use fishery allowed under the Cook Inlet Personal Use Salmon Dip Net Management Plan was still in place. It still had a possession limit of 6 sockeye salmon and did not require a permit. The nonpermitted personal use fishery triggered by a projected escapement count of 450,000 opened at 6:00 a.m. July 25. The fishery occurred daily except Wednesdays and Saturdays, when the permitted fishery occurred. The nonpermitted fishery closed July 31, with a total fishing time of 4.75 days.

The estimate of permitted Kenai River sockeye salmon personal use dip net harvest was 18,502 (Brannian and Fox 1996). This includes a known harvest of 11,771 from returned permits (Ruesch and Fox 1996) and an estimate of the harvest from those who had permits but did not return them. The Statewide Harvest Survey (Howe et al. 1997) estimated total Kenai River sockeye salmon personal use harvest (both permitted and nonpermitted) to be 14,352.

RECENT BOARD OF FISHERIES ACTIONS

In March 1996 the Board amended the Upper Cook Inlet Personal Use Salmon Management Plan. The old, nonpermitted, personal use fishery with a bag limit of 6 sockeye salmon was eliminated.

The Kenai River personal use dip net fishery opening was no longer triggered by sonar count. A season of July 10 through August 5 was established with fishing permitted 24 hours daily. A permit was required and a seasonal limit established. The seasonal limit was 25 salmon for head of household and 10 for each additional family member. This limit was the combined seasonal limit for the Kasilof River dip net fishery, Kasilof River gillnet fishery, Kenai River dip net fishery and Fish Creek dip net fishery. However, only one chinook salmon could be retained in the dip net fisheries. The area open was identical to prior years (from the commercial fishing regulatory markers in Cook Inlet upstream for 1 mile). Shorebased participants could use the entire area. Those dipnetting from a boat were restricted to that area from a marker immediately upstream from the City Dock to the downstream edge of the Warren Ames Bridge.

Permits were required to be returned to the department. Information required on the permit was where the household fished, the days fished and the harvest by species.

These regulations governed the 1996 fishery. In March 1996 the Board minimized harvest of Kenai River coho salmon (projected to be at reduced levels of abundance), closing the fishery July 31 rather than August 5. With this exception, regulation of the 1997 fishery was identical to the 1996 fishery.

RECENT FISHERY PERFORMANCE

Fisheries data were determined by summing reported harvest on returned permits. In 1996 14,576 permits were issued. This permit was required to participate in the Kenai River dip net fishery, Kasilof River dip net fishery, Fish Creek dip net fishery and Kasilof River gillnet fishery; so not all permits were used on the Kenai River.

Harvest in the 1996 Kenai River dip net fishery was 98,429 sockeye, 282 chinook, 1,849 coho, 2,315 pink and 163 chum salmon. Participation on the Kenai River was 9,948 days fished by 6,175 households. There was an average of three household members per fished permit. Average harvest was 17 salmon per permit, 5 salmon per individual.

In 1997, 14,919 permits were issued. Harvest was 107,577 sockeye, 339 chinook, 520 coho, 578 pink, and 53 chum salmon. Participation was 10,364 days fished.

OUTLOOK

The Board will next review this fishery at its February 1999 meeting. Harvest in 1998 is expected to approximate 1997 harvest. Participation is expected to display small, incremental growth.

CURRENT ISSUES

This fishery now opens and closes on dates specified in regulation. Opening the fishery by date rather than at a given sonar count has given the fishery a measure of predictability which heretofore was lacking. This notwithstanding, allocation of the harvestable surplus remains an issue between commercial and personal use participants. Success rates in the personal use fishery generally decline during or immediately after commercial fishing periods in the East Side Setnet (ESSN) fishery. Consecutive fishing periods may mean consecutive days of low success rates in the dip net fishery. Low success rates attributed to consecutive commercial fishing periods therefore is an issue in the management of the fishery.

Most shorebased participants fish on the north bank at the river's mouth with a lesser number dipnetting from the south bank. The area on the north bank is owned by City of Kenai. Litter, fish waste and parking are problems here. The Division of Sport Fish is working with the city to resolve these issues.

A small number of participants rappelled from the bluffs on the north side of the river in 1997 to access the fishery. Rappelling exacerbates erosion in this area. Erosion is currently threatening both property and structures here. The City of Kenai with department support successfully requested an agenda change from the Board. The Board will review this issue in February 1998. A proposal has been submitted by the City of Kenai to prohibit dipnetting from the Coast Guard marker on the north bank at the mouth of the River upstream to a marker near the City Dock. If adopted, this regulation would close approximately a mile of bank to dip net participants. Only

those rappelling from the bluff would be affected, as there is no other reasonable access to this area.

RECOMMENDED RESEARCH & MANAGEMENT

No research or revised management strategies are recommended.

KASILOF RIVER PERSONAL USE DIP NET FISHERY

FISHERY OBJECTIVE

Regulation and management of this fishery are governed by the Upper Cook Inlet Personal Use Salmon Fishery Management Plan.

The fishery objective is therefore to implement the provisions of the Board adopted management plan.

INSEASON MANAGEMENT APPROACH

Management of this fishery is the joint responsibility of the Commercial Fisheries Division (CFD) and the Division of Sport Fish. The CFD is responsible for operation of the Kasilof River sonar counter which enumerates sockeye salmon entering the river. The personal use dip net fishery opens and closes by regulation. Inseason management by the Division of Sport Fish would be required only in the unlikely event the minimum sonar count and biological escapement goal (both are 150,000) could not be projected and achievement of these goals required restrictions to the dip net fishery.

HISTORICAL PERSPECTIVE

In the spring of 1981, the Alaska Board of Fisheries adopted a Cook Inlet Personal Use Salmon Dip Net Fishery Management Plan. It was the intent of the Board to provide for salmon dip net fisheries in the waters of Cook Inlet, allowing Alaska residents an opportunity to harvest sockeye salmon for their personal consumptive needs. The board intent was not to disrupt existing fisheries. Personal use dip net fisheries did not initially open until the department determined that specific escapement goals were met and/or subsistence, commercial, and other sport users have had, or will have, reasonable opportunity to harvest fish in excess of spawning requirements. In recent years this criteria has been relaxed.

Participants in the fishery include local residents as well as residents from other areas in Southcentral Alaska. While sockeye salmon are the target species in the fishery, small numbers of silver and pink salmon are also caught and retained. Fishing takes place from both banks of the Kasilof River as well as from small boats. The majority of the effort occurs along the north bank of the river where there is good road access, parking spaces and, prior to 1988, a public boat launch.

Typically, catch rates are highest during the period approximately 2.5 hours before and after high tide; however, during the peak of large runs, sockeye salmon are harvested at virtually all tide levels.

In 1981 and 1982 harvest and angler participation were determined by creel census. Because dip net fishermen harvest sockeye salmon which are surplus to the spawning escapement and the fishery is managed by the numbers of salmon enumerated by sonar counter, the creel census was discontinued. Harvest and estimates of angler participation were determined by the Statewide