

**Status of Brown Bears
and Other Natural Resources in the
McNeil River State Game Sanctuary and Refuge**

Annual Report to the Alaska State Legislature

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Executive Summary

There were no regulatory changes for either the sanctuary or refuge in 1994. A strategic management plan using a public participation process will be developed in 1995 by the Division of Habitat and Restoration.

The department counted 83 brown bears in the sanctuary during 1994. This is slightly above the previous ten-year average of 78.7 bears. These bears spent 1661 days in the sanctuary (bear-use days), the lowest total since 1984. This appears to be related to continued poor chum salmon returns to McNeil River.

Public use in 1994 was comparable to the previous year and represented the second year of a revised system mandating lottery access permits for June as well as July and August.

There was no commercial fishing for the Mikfik Creek sockeye return due to a lack of tender support. The McNeil River chum fishery was closed due to a weak return. The chum salmon return to McNeil River was below the minimum escapement goal for the fifth year in a row. Escapement for Mikfik Creek was above the desired range due to the lack of commercial exploitation.

Approximately 600 red salmon returned to Paint River in 1994. CIAA determined that this was not a large enough return to warrant opening the fish ladder at the mouth of Paint River. Chenik Creek red salmon runs were also weak as only 800 returning salmon passed through the weir.

INTRODUCTION

The Alaska State Legislature passed legislation (AS 16.20.160) in May 1991 which expanded the McNeil River State Game Sanctuary (MRS GS) and created the McNeil River State Game Refuge (MRS GR). The legislation became effective on January 1, 1993, when the Commissioner of Fish and Game certified the Paint River fish ladder as operational.

The sanctuary was established to (1) provide permanent protection for brown bears and other fish and wildlife populations and their habitats so that these resources may be preserved for scientific, aesthetic, and educational purposes; (2) manage human use and activities in a way that is compatible with maintenance and enhancement of the unique bear viewing opportunities within the sanctuary; and (3) provide opportunities compatible with wildlife viewing, fisheries enhancement, commercial fishing, and accommodation of temporary, safe vessel anchorage.

The refuge was established for similar purposes. The differences are that human uses and activities in the refuge are to be managed to maintain and enhance the unique bear viewing opportunities within the sanctuary, that opportunities for brown bear hunting shall be determined by the Board of Game, and that mineral entry is allowed.

The statute requires the Commissioner of Fish and Game to submit an annual report to the Legislature regarding status of brown bears and other fish and wildlife resources within the sanctuary and refuge and the effects of fishing and fishery enhancement activities on these resources. This report is provided in response to that requirement.

LAND STATUS

All land in the new refuge and the sanctuary extensions is state-owned or tentatively approved for selection, except 14 sections that encompass Chenik Lake and Chenik Head. These sections were jointly selected by the state and Seldovia Native Corporation. They are not subject to refuge authority unless they become tentatively approved state land. The Seldovia Native Corporation has filed a suit regarding the ownership of these lands. There have been no new developments in the settlement of litigation over this land selection.

A private citizen successfully applied to BLM for a lease of approximately ten acres of land in the Chenik Head area. The Department of Fish and Game proposed to BLM that the lease application be denied or at least deferred until after the strategic land management plan was completed. The lease was issued for ten years and is nonrenewable and nontransferable.

REGULATORY CHANGES AND MANAGEMENT PLANS

There were no regulatory changes for either the sanctuary or the refuge in 1994.

A strategic sanctuary/refuge management plan will be developed by an interagency team in 1995. The plan will address major land uses, such as land leases and permits, mineral exploration and development, and motorized vehicle use within the area.

BROWN BEAR STATUS

Sanctuary staff record the number and sex of bears observed at Mikfik Creek, McNeil Falls, and other portions of the sanctuary during June, July, and August. The number of recognizable bears, excluding cubs, observed in the sanctuary totaled 83 bears. This total is slightly above the previous ten-year average of 78.7 bears.

Although the 1994 average number of observed bears in sanctuary was above the ten-year average, there was concurrently a record low in bear use, represented by total bear-use days. A total of 1,661 bear-use days were recorded in the sanctuary (only adult/subadult bears in all areas) which represents the lowest use since 1984. This is approximately a 19 percent decline from the 1985-1993 average of 2,041 use days and continues the downward trend in use observed since 1989. The low use in 1994, and the downward trend, may be related to the fifth consecutive poor return of chum salmon to the McNeil River system.

PUBLIC USE

Bear Viewing

An access permit is required for entry to the sanctuary. During 1993, a new system was implemented that required both regular and standby viewing permits be issued through a lottery process. This system was established to reduce staff time required in managing the previous standby system, and reduce the potential for members of the public receiving more than one viewing permit per year. The period when permits are required for visits to the bear viewing areas was revised to begin on June 7 (from June 15) to increase viewing opportunity. Lottery permits continue to be required for July and August.

The number of people taken to a bear viewing area is limited to ten per day. In 1994, during the period June 7 to August 25, an average of 8.4 people per day visited the bear viewing areas in the sanctuary. A sanctuary goal is to maximize

the number of bear viewers within this constraint; however, not all time slots are filled, despite the use of standby permits, because occasional periods of stormy weather dampen enthusiasm to view bears. Additionally, bear viewing is less reliable at either end of the season and some vacancies occur as people cancel their visits to the sanctuary.

In 1994, ADF&G received 1,766 applications for a total of 280 permits (185 regular and 95 standby). This represents a decline from the 1993 record number of 2,150 applications. The number of applications has varied over the years, with highs often following the presentation of a media special on the sanctuary.

A total of 228 people visited the sanctuary in 1994. This is 77 percent of the 295 potential visitors. Cancellations occur for a variety of reasons, and the standby system exists to fill these cancellations. In 1994, 22.5 percent of the total visitors were standbys.

Commissioner's permits were issued to 15 people in 1994. These permittees included TV news media, film makers, National Park Service personnel, ADF&G commercial fisheries managers, the Alaskan federal aid coordinator, and two Board of Game members. In addition, for the second year in a row, the outstanding volunteer Hunter Education instructor and the outstanding Wildlife Education volunteer shared a special permit.

Trapping

Very little information is known about trapping activity in the sanctuary and refuge. Some local trapping probably occurs by residents of Kakhonak, although the level of activity is unknown.

Sport Fishing

Since 1979, sport fishing in McNeil Lagoon has been limited by state regulation to the gravel spit area near the campground. Visitors occasionally fish for chum salmon from this location.

There is considerable commercial interest in sport fishing on the Kamishak River, about ten miles south of McNeil River. The lower half mile of the river is in MRS GS. In 1994, of the seven lodges operating on the Kamishak River, six reported that 321 anglers caught over 2,721 salmon and Dolly Varden between July 20 and September 8. This is down somewhat from 1993 when seven lodges reported 698 anglers catching 2500 fish between July 11 and September 20.

Land Use Permitting

During 1994, seven Special Area Permits were issued to recreational fishing guides. The permits provided for construction of seasonal guide camps and overwinter boat storage on the lower Kamishak River. Only two camps were erected during the 1994 season. To avoid damage to the streamside vegetation and erosion of the streambanks, the camps were relocated to a bluff about 300 feet west of the river. The location of the camps provides the onsite guides with excellent views of the river and the anchored boats.

BROWN BEAR HUNTING

The McNeil River State Game Sanctuary is closed to all hunting, including brown bears. At the fall 1993 meeting, the Board of Game authorized a registration hunt for the McNeil River State Game Refuge and adjacent Amakdedori Creek drainage. Beginning in the fall of 1995, a brown bear registration hunt will be conducted in this area with a desired harvest of three bears per year. The registration hunt will continue in the spring of even numbered years and the fall of odd numbered years, similar to the remainder of GMU 9.

COMMERCIAL FISHERIES

Sockeye salmon returns within the MRS GS were below average in 1994. Although there was interest, the sockeye run to Mikfik Creek failed to attract any commercial fishing effort due to the lack of tender support from processing companies. Consequently, the entire run (estimated escapement index of 9,490 fish) entered the system to spawn. Based on aerial surveys, the escapement goal of 5,000-7,000 fish was exceeded by about 2,500 fish.

Chum returns to the Lower Cook Inlet (LCI) area were barely strong enough to achieve escapement goals, and many systems fell below desired levels. This continues a regional trend in declining chum populations which started in 1989. The total commercial harvest of chum salmon in the Kamishak Bay District amounted to only 14 fish, the lowest chum catch on record since statehood. There were no directed commercial fisheries on McNeil River chum salmon in 1994. The indexed escapement was about 15,000 fish, 75 percent of the minimum goal of 20,000. This is the fifth straight year that the McNeil River chum salmon run has failed to meet the minimum escapement goal.

The trend of low chum salmon abundance was also observed in the adjacent mainland area (Alaska Peninsula) of the Kodiak Management Area. Since 1985, the total index escapement for the mainland area chum salmon streams has been below the optimum peak escapement goal of 726,000. Four of these

years, including the last three years, chum salmon indices have been below the minimum index escapement goal of 242,000. Since 1988, overall chum salmon harvest also have declined from a high in 1986 of 400,000 fish to the 1993 and 1994 harvests of 84,000 and 91,000, respectively. For the past three years, commercial fishing time directed on these chum salmon stocks has been restricted due to the observed weak runs.

Although not commercially harvested, a significant number of coho salmon returned to McNeil River in 1994. Approximately 4,000 cohos were observed below the falls during a September survey. The presence of cohos and related bear activity was documented well after that date.

Four Department of Fish and Game commercial fisheries biologists and two genetics specialists visited the sanctuary in July to obtain genetic samples for determining population genetic factors. They were assisted by sanctuary staff in obtaining 60 samples from McNeil River chum salmon. Additionally, four radio transmitters were implanted in chum salmon captured near McNeil Spit. The transmitters were implanted to provide chum salmon stream life and movement information in the lagoon and lower McNeil River. Two of the transmitters failed, a third remained in McNeil Cove and was recovered, and a fourth was tracked to the lower McNeil River where it remained for several days and then disappeared. Further research on salmon in the McNeil sanctuary was discussed with Commercial Fisheries Management and Development Division staff.

FISHERIES ENHANCEMENT

Fisheries enhancement has played a major role in LCI salmon production during recent years. Enhancement and rehabilitation projects have made significant contributions to commercial fishing harvests in the Kamishak Bay District. However, sockeye salmon returns to the Paint River enhancement project in 1994 were poor. Although no commercial harvest of this run was allowed, only about 600 fish returned, which was deemed insufficient to warrant opening the ladder to fish passage for a third straight year.

The Paint River Lakes were first stocked with sockeye fry in 1986, in an effort to develop a new sockeye salmon return to the drainage. The Paint River is blocked to upstream salmon migration by a steep waterfall located at tidewater. Although construction of the Paint River fish ladder was completed in 1991, the number of returning adults has only ranged from between 300 and 800 fish. Consequently, the structure has never been opened to allow fish passage upstream through the ladder system. The low returns may be related to the current low productivity potential and high predation within both lake systems. From 1991 to 1993, approximately 750,000 sockeye were annually stocked in

the Paint River Lakes. However, no sockeye were stocked in 1994 as insufficient numbers of fry were available from the hatchery.

Cook Inlet Aquaculture Association is currently evaluating other suitable sockeye salmon broodstocks from the west side of Cook Inlet as potential replacements for the Tustumena sockeye stock that has been repeatedly released into the Paint River Lakes. Pink and chum salmon broodstock development is also being evaluated, but currently is on hold until an adequate funding source is secured.

The Tustumena sockeye stock has also been used to stock Chenik Lake for many years. This sockeye salmon enhancement project has contributed significantly to the LCI commercial seine fishery. For example, in 1988, a new historic high record return to Chenik Lake was documented at 173,000 sockeye salmon, representing over 50 percent of the entire LCI commercial sockeye harvest. However, in recent years this contribution has significantly declined.

Due to expected weak returns to the Chenik Lake enhancement project, the Chenik Subdistrict remained closed to fishing this season. Unfortunately, the closure failed to boost returns as escapement past the Chenik Creek weir totaled only 800 fish. The total 1994 sockeye outmigration at Chenik Lake was approximately 23,000 smolt.

Results of sockeye salmon returns to other enhancement projects in the Kamishak Bay District were more encouraging in 1994. Kirschner Lake produced a harvest totaling 31,000 fish, which was very near the preseason forecast of 30,000 fish. Estimated returns to the new Bruin Lake stocking project compared favorably with the forecasted 5,000 fish although only 600 fish were harvested.