91-131-FB

(Previously Finding #91-5-FB) ~~(DRAFT #2)~~

ALASKA BOARD OF FISHERIES

NUSHAGAK CHINOOK SALMON MANAGEMENT PLAN

The Board of Fisheries created a management plan for Nushagak-Mulchatna River chinook salmon stocks at the request of the Nushagak Advisory Committee. At the Bristol Bay Area meeting, conducted during January 1992 at Dillingham, the board, in close coordination with the Nushagak Advisory Committee, conducted extensive deliberations prior developing the plan. Department staff from the commercial, sport, and subsistence divisions presented comprehensive reports on the chinook salmon stocks of Nushagak-Mulchatna Rivers and the subsistence, commercial, and sport fisheries that utilize these returns.

The board finds that a management plan is necessary for the following reasons:

1. Nushagak-Mulchatna chinook salmon stocks are an important component to the lifestyle and economy of Dillingham and surrounding communities and these runs support important and established local subsistence, directed commercial, and sports fisheries.

2. The Nushagak-Mulchatna chinook salmon returns are experiencing conservation problems and harvest opportunities are being restricted from the harvest levels experienced in earlier years.

3. Competition amongst the users of the Nushagak-Mulchatna chinook salmon resources are increasing and user conflicts are becoming apparent.

4. The board was presented the attached table showing the utilization of Nushagak-Mulchatna chinook salmon stocks since 1966.

Based on these factors, the board concluded that a management plan is needed to:

1. Ensure an adequate spawning escapement into the Nushagak-Mulchatna River systems.

2. Maintain a subsistence priority usage for the Nushagak-Mulchatna chinook salmon stocks.

3. Ensure that the Nushagak-Mulchatna chinook salmon stocks are managed in a conservative manner consistent with sustained yield principles.

4. Continue to harvest Nushagak-Mulchatna chinook salmon runs in the fisheries that have historically harvested them in Nushagak Bay and the Nushagak-Mulchatna drainage.

5. Provide management guidelines to the department in an effort to preclude allocation conflicts between the various users of the resource.

Elements of the management plan include:

1. A biological escapement requirement (BER) is established, by department staff, for the Nushagak-Mulchatna chinook salmon stocks of 65,000 fish. This number of spawners is believed to produce the maximum sustainable number of returning chinook salmon and was based on the best available information available to the department.

2. An inriver goal is est to manage the commercial fishery in such a manner to obtain an annual count of chinook salmon, past the department's Portage Creek sonar site, of 75,000 chinook salmon. The inriver goal was found to provide sufficient fish to provide a reasonable opportunity for subsistence harvest and to maintain a sport harvest of no greater than 5,000 fish.

3. The plan allows the sport harvest to increase to 6,000 fish when the inriver return exceeds 75,000 fish up to a level of 95,000 fish. The board found this restriction was necessary to ensure that the sport fishery allocation would not benefit over time due to management imprecision. However, the board recognized that once the spawning escapement exceeded 95,000 fish, the subsequent return per spawner is significantly decreased, and finds that it is not necessary to limit the take in the sport fishery under these conditions.

4. The board finds it is desirable to allow a targeted commercial fishery for chinook salmon when the inriver goal is projected to be met or exceeded. This meets the board's intent to maintain the historic nature of the Nushagak District fisheries

5. The board finds that when the projected inriver return is projected to be between 40,000 and 75,000 chinook salmon, it was not necessary to restrict the normal prosecution of the sockeye salmon commercial fishery. The board believed that this could be accomplished with plan provisions to limit gill net gear to less than 5 and 1/2 inches mesh and to not permit a directed chinook salmon fishery under the above conditions. The board finds that when the inriver run was projected to be less than 40,000 fish, it is necessary to limit the normal commercial sockeye salmon fishery and established provisions directing the department not to open the sockeye salmon season until at least 10% of the of the Wood river escapement goal is projected to be achieved.

6 As the board finds that the sport fishery represents a directed harvest, the plan restricts the sport fishery when the inriver return is projected to be less than the BER of 65,000 fish. When the inriver return is projected to be below 40,000 fish, the board finds that it is necessary to close the directed sport fishery; further the board does not believe that hook and release

sport fisheries are proper at this time.

7. The board recognized that the department does not have the necessary management tools to regulate the sport fishery to maintain the sport harvest limits within any one year. However, the board expects the department to make yearly adjustments to ensure the sport harvest, over time, does not permanently increase above the specified limits.

8. The board finds that it is not necessary to restrict the subsistence fishery unless the inriver return is projected to be less than 40,000 fish.

Adopted: January 9, 1992

Vote: (Yes/No/Abstain/Absent) (__/__/__/__)

Location: Dillingham

a:nushplan

Table 1. Chinook salmon commercial, subsistence, and sport harvest plus escapement for the Nushagak drainage, 1966 to 1991.

	Harvest							
			Sport[c]					
Year	Commercial[a]	Subsistence[b]	Nush	Mul	Total	Total	Escapement	Total Run
1966	58,184	3,700				61,884	40,000	101,884
1967	96,240	3,700				99,940	65,000	164,940
1968	78,201	6,600				84,801	70,000	154,801
1969	80,803	7,100				87,903	35,000	122,903
1970	87,547	6,300				93,847	50,000	143,847
1971	82,769	4,400				87,169	40,000	127,169
1972	46,045	4,000				50,045	25,000	75,045
1973	30,470	6,600				37,070	35,000	72,070
1974	32,053	7,900				39,953	70,000	109,953
1975	21,454	7,100				28,554	70,000	98,554
1976	60,684	6,900				67,584	100,000	167,584
1977	85,074	5,200	402	521	923	91,197	65,000	156,197
1978	118,548	6,600	151	291	442	125,590	130,000	255,590
1979	157,321	8,900	312	342	654	166,875	95,000	261,875
1980	64,958	11,800	611	146	757	77,515	141,000	218,515
1981	193,461	11,500	929	291	1,220	206,181	150,000	356,181
1982	195,287	12,100	1,436	367	1,803	209,190	147,000	356,190
1983	137,123	11,800	1,615	388	2,003	150,926	161,730	312,656
1984	61,378	9,800	1,534	786	2,320	73,498	80,940	154,438
1985	67,783	7,900	1,517	292	1,809	77,492	115,720	193,212
1986	65,783	12,600	1,780	3,534	5,314	83,697	43,434	127,131
1987	45,983	12,200	1,371	1,860	3,231	61,414	84,309	145,723
1988	16,648	10,079	2,383	403	2,786	29,513	56,905	86,418
1989	17,637	8,097	2,807	754	3,561	29,295	78,302	107,597
1990	14,092	11,932	1,594	1,409	3,003	29,027	63,955	92,982
All Years								
Average	76,621	8,192	1,317	813	2,130	86,944	80,532	167,476
Percent	88%	9%			2%			
1986 to 1990								
5 Year Avg	32,029	10,982	1,987	1,592	3,579	46,589	65,381	111,970
Percent	69%	24%			8%			
1991	22,898	12,884			2,600	38,382	135,054	173,436
Percent	63%	33%			7%			

[a] Commercial catches from 1988-1991 are preliminary.
[b] Subsistence harvest estimate for 1991 is preliminary.
[c] Sport harvest estimate for 1991 is preliminary.

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