

THE PRODUCTION AND VALUE OF THE SALMON AND STEELHEAD FISHERIES OF THE COLUMBIA RIVER AND COASTAL WATERS

The statistics listed in the table give the average production and value of the salmon and steelhead fisheries of the Columbia River and coastal waters for the period 1947 to 1953, inclusive, and for the year 1956. The period from 1947 to 1953 was selected to determine the average production of these fisheries because it represents a transition period during which the number of salmon and steelhead produced by the river changed from a high to a lower level of production.

From 1938 to 1948, inclusive, the catches of salmon and steelhead by the commercial fishermen alone in the river and nearby coastal waters averaged 22,500,000 pounds. In 1947 and 1948, the last two years of this period, the catches of these fishermen approximated 24,000,000 pounds in each year. In 1949, 1950 and 1951, however, the commercial catches of salmon and steelhead dropped to a lower level and varied from 14,500,000 to 15,500,000 pounds. In 1952 and 1953 the commercial catches declined again to a lower level of approximately 13,000,000 and 11,500,000 pounds respectively. From 1954 through 1956 the commercial catches of these fish averaged less than 12,000,000 pounds. In other words, this period from 1947 to 1953 included 2 years of high production by the river, 3 years of intermediate production and 2 years of relatively low production which also continued through 1956.

The average production of salmon and steelhead by the commercial

ALL FISH	
Pounds	Dollars
680,704	\$ 6,202,222
926,073	3,463,036
725,000	5,175,000
746,000	311,740
5,077,777	\$15,151,998
820,019	\$ 4,889,868
5,252,680	2,731,394
725,000	5,382,000
746,000	324,210
1,543,689	\$13,327,472

fisheries listed in the table were determined from the fisheries statistics published by the Oregon Fish Commission and the Washington State Department of Fisheries.

The average production of salmon and steelhead by the sport fishery given in the table was estimated by the federal and state fish and game agencies and is discussed in an excellent report they prepared for Senator Styles Bridges on the Columbia River fisheries.

The average production of the Indian subsistence fishery given in the table covers the period from 1947 to 1952, inclusive, and was determined by the Oregon Fish Commission and the Fish and Wildlife Service. The Fish and Wildlife Service prepared a report on this fishery that was published by the Corps of Engineers, U. S. Army.

The chinook salmon of the Columbia River feed in the coastal waters from California to southeast Alaska during their sojourn in the ocean. A large percentage of the chinooks caught by the commercial troll fishery in these waters come from the Columbia River. The federal and state fishery agencies have estimated that the coastal troll fishery catches about one-half as many chinooks as does the commercial fishery in the river. This estimate is based in part upon the returns of chinooks tagged in the coastal waters at various locations from California to southeast Alaska. The Washington State Department of Fisheries is now preparing a report on this fishery.

The silver salmon do not migrate as far from the Columbia River as do the chinooks during their sojourn in the ocean and the landings of coastal

caught silvers at Columbia River ports is fairly representative of the Columbia River silvers caught in the coastal waters.

The value of the average production of salmon and steelhead by the fisheries from 1947 to 1953 was based upon the 1950 fish price scale used by the federal and state fish and game agencies in their report to Senator Styles Bridges. This price scale is representative for the period and is based in part on an economic study of the salmon and steelhead in Oregon waters.

The average production of the salmon and steelhead fisheries of the Columbia River and coastal waters from 1947 to 1953 of 24,077,777 pounds and its corresponding value of \$15,151,998 is representative of the production and value of these fisheries in recent years. This production and value of the fisheries seem rather low in view of their greater level of production and value in past years. However, when compared to the production and value of these fisheries in 1956 they appear to be very appropriate at the present time.

The production of salmon and steelhead by the commercial fisheries in 1956 was determined from the fishery statistics published by the Oregon and Washington fishery agencies. The production of the sport fishery and Indian subsistence fishery for 1956 had to be based on the average production of these fisheries for the period 1947 to 1953. There was no information available regarding the production of these fisheries for 1956. The catches of the sport fishery no doubt increased somewhat in 1956 but very few of the Indians' catches were used for subsistence in 1956. Most of them were sold to the commercial buyers who listed them as commercial catches in the river.

The value of the salmon and steelhead production by the fisheries in 1956 was based upon the 1950 price scale increased by 4 percent to compensate for the general commodity price increase following 1950. This method of evaluating the production of the fisheries for 1956 is not too conservative.

The 1956 production of salmon and steelhead by the fisheries of 17,543,699 pounds and its corresponding value of \$13,327,472 is below the average production and value of these fisheries from 1947 to 1953. There is a probability that both the production and value of these fisheries will be greater in the years to come but it is doubtful if they will greatly exceed the average production and value of the fisheries from 1947 to 1953.

From a comparison of the cost and production statistics presented in these two tables it is obvious that the power and irrigation industries are doing their share in an effort to maintain the production of salmon and steelhead in the Columbia River. It is not improbable that within the next fifteen years the power and irrigation industries contribution to the protection of the salmon and steelhead in the river will equal the monetary value of this fishery resource.

THE PRODUCTION AND VALUE OF THE SALMON AND STEELHEAD
FISHERIES IN THE COLUMBIA RIVER AND COASTAL WATERS
I. AVERAGE PRODUCTION AND VALUE OF FISHERIES FROM 1947 TO 1953, INCLUSIVE

FISHERY	CHINOOK SALMON		BLUEBACK SALMON		SILVER SALMON		CHUM SALMON		STEELHEAD		ALL FISH	
	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
Commercial Fishery in the Columbia River	11,466,125	\$ 4,827,109	275,852	\$ 195,855	1,016,870	\$ 386,411	553,760	\$ 177,203	1,368,097	\$ 615,644	14,680,704	\$ 6,202,222
Commercial Fishery in the Coastal Waters (Troll)	5,733,067 ^{1/}	2,866,533			1,193,006 ^{2/}	596,503					6,926,073	3,463,036
Sport Fishery in the Columbia River and Tributaries	1,159,000	3,477,000			156,000	468,000			410,000	1,230,000	1,725,000	5,175,000
Indian Subsistence Fishery in the Columbia River ^{3/}	587,000	241,840	21,000	14,700	10,000	4,000			128,000	51,200	746,000	311,740
TOTAL											24,077,777	\$15,151,998

II. PRODUCTION AND VALUE OF FISHERIES IN 1956

Commercial Fishery in the Columbia River	8,214,780	\$ 4,100,403	290,000	\$ 214,136	468,287	\$ 185,067	45,204	\$ 15,044	801,748	\$ 375,218	9,820,019	\$ 4,889,868
Commercial Fishery in the Coastal Waters (Troll)	4,107,390 ^{1/}	2,135,843			1,145,290 ^{2/}	595,551					5,252,680	2,731,394
Sport Fishery in the Columbia River and Tributaries ^{4/}	1,159,000	3,616,080			156,000	486,720			410,000	1,279,200	1,725,000	5,382,000
Indian Subsistence Fishery in the Columbia River ^{5/}	587,000	251,514	21,000	15,288	10,000	4,160			128,000	53,248	746,000	324,210
TOTAL											17,543,699	\$13,327,472

^{1/} Calculated on basis of 50% of commercial catch in the river

^{2/} Troll caught fish landed at Columbia River ports

^{3/} Average production from 1947 to 1952, inclusive

^{4/} Average production from 1947 to 1953, inclusive, with 1956 evaluation

^{5/} Average production from 1947 to 1952, inclusive, with 1956 evaluation