

LDIR#045

FISHERIES

1955-1957

TECHNICAL NOTES
of the
ALASKA FOREST RESEARCH CENTER
U. S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE

No. 39

JUNEAU, ALASKA

The Effect of Logging on Discharge, Temperature, and
Sedimentation of a Salmon Stream

Logging has been in progress on the Maybeso Creek^{1/} watershed since August 1953, and to date about 60 percent of the merchantable timber has been felled. Enough data have been collected to permit a preliminary analysis of the effect of logging on a few measured factors.

STREAMFLOW

Mean monthly discharge and stream level on Maybeso Creek were almost identical between the prelogging period and the first 3 years of transition from unlogged to a clearcut watershed. As precipitation averaged 10 inches less per season (May through October) during the transition period, there should have been a slight change in discharge and stream level due to this factor. Harris River, totally unlogged and adjacent to the Maybeso Creek watershed, did reflect this reduced precipitation (table 1).

Table 1.--Mean monthly discharge and stream level at gage stations on
Maybeso Creek and Harris River

Month	Pre-logging period				Transition period			
	Discharge*		Stream Level*		Discharge		Stream Level	
	Maybeso Ck.	Harris R.	Maybeso Ck.	Harris R.	Maybeso Ck.	Harris R.	Maybeso Ck.	Harris R.
May	15.4	12.8	2.08	2.49	16.8	13.7	2.10	2.47
June	11.5	9.5	1.84	2.18	11.4	8.7	1.86	2.11
July	6.1	5.3	1.39	1.63	5.4	3.8	1.36	1.42
Aug.	5.3	5.3	1.26	1.52	7.7	6.0	1.41	1.56
Sept.	11.0	10.0	1.64	1.98	6.8	5.8	1.38	1.59
Oct.	18.0	16.0	2.07	2.53	18.6	16.3	2.11	2.52
Average	11.2	9.8	1.71	2.05	11.1	9.0	1.70	1.94

* Discharge - inches per square mile
Stream level - feet and tenths

The slightly higher rate of runoff from Maybeso Creek during July and August is better shown in table 2. It can be seen that in June, with the transpiration rate reduced by cutting of the stand, Maybeso Creek begins to show a slightly greater increase in runoff. Discharge differences increased between the two streams during July and August. In September, as growth ceases, the two streams show little difference.

^{1/} One of 5 streams being studied to determine the effect of logging on salmon streams of Southeast Alaska. (James, G. A. The physical effect of logging on salmon streams of Southeast Alaska. Sta. Paper No. 5, Alaska Forest Research Center, 49 pp., illus., 1956.)

Alaska Department of Fish and Game
229 Alaska Office Building
Juneau, Alaska

January 13, 1958

STATEMENT ON FISHERIES

for the

ALASKA LEGISLATIVE COUNCIL MEETING

January 15-18, 1958

by

C. L. Anderson, Director

Alaska Department of Fish and Game

Since the Council has recognized that the management and enforcement of the fishery regulations of Alaska are a function of the Federal Government, this statement will, of necessity, be limited to those items that can be suggested for consideration by your group.

First, let us consider the long range view of what the Territorial Legislature might do to stimulate the development and full utilization of the fisheries of Alaska. Anyone with even a cursory knowledge of the waters of Alaska knows of its vast potentials. Halibut is, perhaps, the only species that is being harvested on a maximum sustained yield basis. The salmon fishery, our greatest single marine resource, is in deplorable condition, but much can be done to restore it. Herring and sablefish are not being utilized to their optimum in all sections of the Coast; neither are our various shellfish such as crabs, shrimp and clams. Our fresh water commercial species are practically untouched, as are the numerous species of bottom fish (rockfish, cod, flounders); shellfish such as scallops and abalones; marine mammals; kelp and other seaweeds. Our sport fisheries are vast, but they do need careful attention. Rehabilitation programs are now under way by the Alaska Department of Fish and Game in certain lakes near centers of population. As the population increases, more and more attention must be paid to this important segment of our fisheries resources.

Wider utilization of these resources will bring problems of proper management and enforcement of regulations. These will, with the advent of Statehood, become a function of the Alaska Legislature. Presumably, that body will turn over much of the responsibility to a state conservation agency. This will be a continuing and increasingly important assignment. A large well-trained administrative, scientific, and enforcement staff will be required.

In order to fill this need, it would, therefore, seem appropriate to suggest to this Council that it give very serious consideration to the establishment of a fisheries school, as a branch or extension of the University of Alaska, at some suitable location on the Coast. The schooling of students in the Territory would serve to educate and train men in the problems intimately related to conditions in

UNITED STATES DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service
Bureau of Commercial Fisheries

RECEIVED
JUL 8 1965

ALASKA LEGISLATIVE COUNCIL
JUNEAU, ALASKA

CRUISE REPORT

Alaska Exploratory Cruise 65-1

MV JOHN R. MANNING

April 29 - May 15, 1965

May 20 - June 7, 1965

July 1, 1965

FROM: Exploratory Fishing and Gear Research Base
Juneau, Alaska

During a 6-week period terminating on June 7, 1965, the Bureau of Commercial Fisheries conducted bottomfish explorations in the waters off Southeastern Alaska.

The primary objectives of this cruise were to locate trawlable fishing grounds and to delineate commercial concentrations of bottomfish. Secondary objectives were to collect data on the seasonal distribution and abundance of the bottomfish resources of Southeastern Alaska and to collect preliminary data on the biological and environmental factors effecting their distribution and abundance.

Echo sounding transects were made to locate trawlable fishing grounds and areas which appeared to be reasonably level and of soft consistency were fished with a standard 400-mesh eastern otter trawl. For the most part, sounding effort was concentrated on the Continental Shelf between Coronation and Noyes Islands. Limited sounding transects were also made in the Gulf of Esquibel.

Thirty-two drags of approximately 1-hour duration were made in depths ranging from 32 to 138 fathoms. In the shoal area off Noyes Island, catches of 100-130 pounds of marketable rock sole (Lepidopsetta bilineata) were made in 4 drags. These drags ranged in depth from 45 to 64 fathoms. In one of these drags, 1,600 pounds of 100-percent marketable grey cod (Gadus macrocephalus) were taken.

In the deeper offshore areas, rockfish constituted a large percentage of the catch. The largest catch of the cruise of 23,500 pounds of rockfish was taken in a drag made in 117 fathoms, 35 miles southwest of Noyes Island. This catch was comprised of 20,000 pounds of silver-grey

INTERNATIONAL FISHERIES

ABSTENTION AND AGREEMENTS

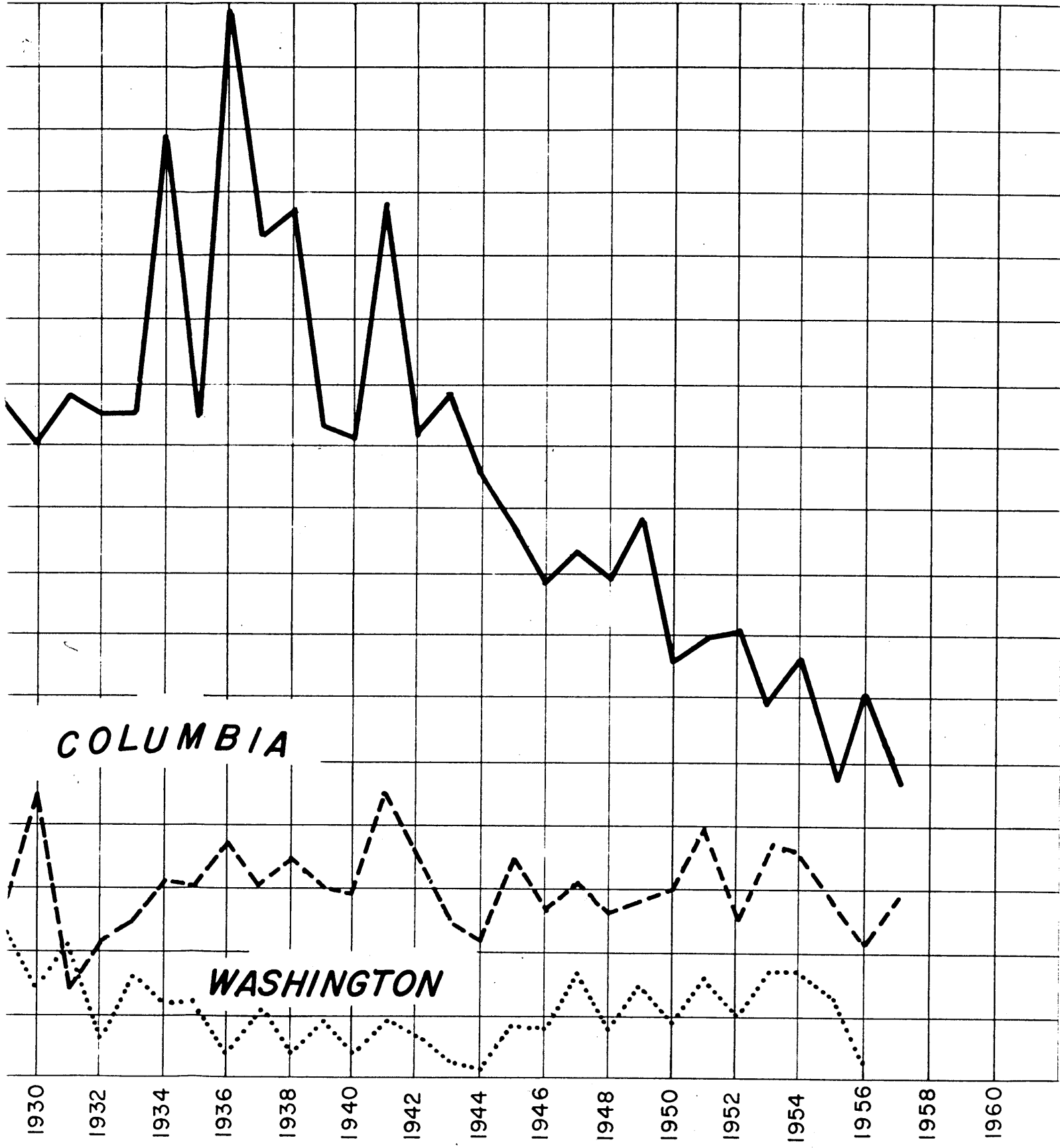


By **MILO MOORE**, Director

State of Washington Department of Fisheries

ALBERT D. ROSELLINI, Governor

SALMON PACK - From 1910



M E M O R A N D U M

TO: The Advisory Committees of the Alaska Fish and Game Commission, Commercial Fishermen Organizations, Sportsmen Clubs, and other interested parties.

FROM: The Alaska Fish and Game Commission.

SUBJECT: A proposed Bill for the Administration of Fish and Game in Alaska which would create a Fish and Game Commission and a Department of Fish and Game.

The attached proposed bill for submission to the coming State Legislature was adopted by unanimous vote of the members of the Commission at its recent meeting held in Juneau. It is based largely on a Model Bill drawn up by the International Association of Game, Fish and Conservation Commissioners. An effort has also been made to incorporate the best features from several state acts, as well as suggestions received from our advisory committees, commercial fishermen, sportsmen and others.

These suggestions were pointed specifically at the general qualifications and organization of the Commission itself, rather than at the other features of the bill. As might be expected, there was no general agreement on the number of commissioners, the range being from 5 to 8, with the latter number receiving the most support. The feeling seemed to be that 8 would give broad representation, without being too unwieldy a group. With a membership of 8, a definite majority vote of 5 would be required to pass all motions. This, it was felt, would amply protect the varied interests involved.

Representation on the commission by area and occupation or special field of interest was given much consideration. In the final analysis, it seemed that since appointment of the commission members was a function of the Governor, he would be expected to give proper recognition to all areas and interests for the general welfare of the entire state.

There was general agreement that terms of the commission members should be staggered and that appointments should not be based on political affiliation. There was also unanimity that the commission should set major policies and promulgate rules and regulations, while the Director should be the administrative head of the Department.

You will also note that the bill provides for continuation of the advisory committees now in effect. The present commission has appreciated greatly the assistance rendered by the Advisory Committees that have been organized and are functioning in several communities. Every effort should be made to expand this program in the future.

The Alaska Fish and Game Commission has made an earnest effort to draw up a bill that will meet the approval of the State Legislature, the commercial and sports interests and one that will be acceptable to the Secretary of the Interior. Upon its adoption by the State Legislature, there is every reason to believe the Secretary will certify that adequate provision for the administration, management, and conservation of Alaska's fish and game resources in the broad national interest has been made.

The Commission requests you give this bill serious consideration. Any suggestions or comments should be forwarded to:

ALASKA DEPARTMENT OF FISH AND GAME

MEMORANDUM

TO: Advisory Committees of the Alaska Fish and Game Commission, Sportsmen Clubs, and other interested parties.

FROM: Alaska Fish and Game Commission.

SUBJECT: A proposed bill to provide for licensing of sport fishing, hunting, trapping, etc., with a suggested fee schedule and anticipated revenue.

For your information and consideration, you are here furnished a copy of a sport fishing and hunting licensing bill proposed by the Alaska Fish and Game Commission. Accompanying the bill you will find an estimate of revenues that are expected to result from the schedule of fees tentatively adopted.

It will be noted that the license fees suggested are somewhat higher in most categories than the public has been paying. The increased fees are dictated by several urgent considerations.

1. The State of Alaska must have the means for supporting the minimum staff that will prove adequate to administer and manage our sport fish, fur, and game resources. Failure to prepare ourselves to accept the responsibility for these resources could either delay transfer or result in a wasteful period of transition.

2. Alaska becomes eligible on July 1, 1959 for Federal matching funds under provisions of the Federal Aid in Fish Restoration Act and Federal Aid in Wildlife Restoration Act. The cost of carrying out approved restoration projects is shared on a State-Federal basis of one dollar to three dollars. Estimated maximum Federal apportionment to Alaska is about \$200,000.00 for fish restoration and \$800,000.00 for wildlife restoration. Unfortunately, such functions as hatchery operation, predator control, and many routine management procedures are not classified under the heading of restoration, and hence do not qualify for Federal aid money. Therefore, it is unlikely that sufficient license revenues can be realized for matching all of the Federal aid money available. Nevertheless, the proposed schedule of fees will provide for a well-rounded sport fish, fur, and game program equal to the challenge that confronts us.

3. There is reason to believe that the Federal Government will rescind its license requirements and withdraw from license selling activities at the end of the current fiscal year, if the State has a realistic licensing program of its own.

By way of additional information, the records show that in the 1957-58 fiscal year (last complete year of record) Federal license revenues totaled \$183,132.50, and Territorial license collections amounted to \$157,248.00. The total of both is \$340,380.50. In comparison, revenues from the proposed bill are expected to total approximately \$569,000.00, or about a 65 per cent increase over the returns from present license sales. This, then, is the cost of preparing to accept transfer of the sport fish, fur, and game resources and outfitting ourselves in a

ALASKA DEPARTMENT OF FISH AND GAME
229 Alaska Office Building
Juneau, Alaska

MEMORANDUM

TO: The Advisory Committees of the Alaska Fish and Game Commission, Commercial Fishermen Organizations, and other interested parties.

FROM: The Alaska Fish and Game Commission.

SUBJECT: A proposed bill to provide for the licensing of commercial fishermen, fishing vessels and fishing gear. A table showing a suggested fee schedule and anticipated revenue is attached.

Enclosed for your information and consideration is a bill to set up a commercial fishing license system in Alaska, said bill to be introduced in the coming legislature. This bill was drawn up and passed by the Commission at their recent December meeting. The Department of Taxation had requested this Department to prepare such a bill to make up for the license revenue that will be lost to the State with the removal of traps - - about \$300,000.00 per year. Former fishing license collections in the Territory amounted to about \$488,000.00 yearly, broken down as follows:

(1) Fisherman license	\$160,000.00
(2) Gill Net license	9,500.00
(3) Seine license	18,500.00
(4) Trap license	<u>300,000.00</u> 488

The bill sent for your perusal has blank spaces where the amounts of the various licenses should go. We would like your opinion on the bill as a whole, and suggestions as to the proper amounts to charge for the various licenses.

Attached for your information is a schedule of the licenses, the approximate number of resident and non-resident fishermen and gear, suggested license fees similar in most cases to those now in existence in the State of Washington, and the total anticipated collections at these rates. The non-resident rate in this schedule has been set at twice the amount charged residents. It is felt that this difference would probably stand up in court if contested, where perhaps a larger difference would not.

The exact amount of resident and non-resident gear is not available in most cases. The approximate amounts were arrived at by using the ratio of resident to non-resident fishermen as shown in the 1957 Department-of Taxation's report - 7900 residents and 5400 non-residents, or 58% resident.

As you will notice gill nets, (drift and set), beach seines, and purse seines have been set up for license fees on a length basis instead of a flat license fee for all. As in other cases in the State of Washington, the Commission felt that due to

