

ULRICH: BE 4-3361

DEPARTMENT OF THE INTERIOR
DIVISION OF INFORMATION NORTHWEST REGIONAL OFFICE
P. O. BOX 3537
PORTLAND 8, OREGON

FISH AND WILDLIFE SERVICE

FOR IMMEDIATE RELEASE

July 27, 1956

Idaho Fish and Game Department this week signed an agreement with the Fish and Wildlife Service which for the first time brings that upstream state into active participation in the \$25,000,000 Columbia River Fishery development program.

Leo L. Laythe, regional director of FWS, announced today that the first agreement of a scheduled \$200,000 expenditure during fiscal 1957 for Idaho studies on the Snake river and its tributaries was signed this week at Boise by Ross Leonard, director of the Idaho department, and Samuel J. Hutchinson, acting for the regional director.

Funds for the program are provided through the Corps of Engineers under Public Law 502, 75th Congress, as amended. Idaho was a signatory to the agreement of June 30, 1948, which established the original development program, but funds until this time have all been expended downstream from McNary dam.

Under the first agreement Idaho will have \$70,000 to undertake the coordination and administration of a planning project "together with the biological, hydrological, geographical and engineering planning surveys for the development of the anadromous salmon and steelhead resources of the Snake river and its tributaries in the state of Idaho with the objective of determining the need and type of fish facilities and other improvements required."

MORE

Field crews of engineers and biologists will make preliminary investigations and after tentative selections have been made results will be studied and a reconnaissance report prepared during the two years covered by the Idaho FWS agreement.

Primary projects under the general development program being carried out by the states include stream improvements designed to facilitate the free migration of fish in the Columbia river and its tributaries and to improve spawning conditions, and the construction of certain fish hatcheries, fish ladders, and other facilities designed to rehabilitate and to restore the fishery resources of the Columbia river damaged or impaired by the construction of dams and similar facilities by agencies of the Federal government other than the Fish and Wildlife Service of the Department of the Interior.

Primarily the Fish and Wildlife Service of the Department of the Interior is responsible for the coordination of activities contemplated in the general program, the general investigation, research and planning necessary to carry out the functions and duties imposed by P. L. 502 as amended, and for the supervision of the activities of the states.

Since the inception of the program in 1948, \$12,833,000 has been spent. The most recent large-scale operation to be initiated is a \$900,000 fish cultural station being built by the Washington Department of Fisheries, on the Washougal river, for which ground was broken July 4. The station is being constructed by the Teller Construction company, Portland.

Fish and Wildlife Service facilities now under the program include the Spring Creek, Little White Salmon and Carson Fish Cultural Stations in Washington, and a laboratory and a new station at Willard, all in Washington, and the station nearing completion at Eagle Creek in Oregon. The state of Washington has Klickitat, Toutle and Elokomina hatcheries and the newly completed Skamania hatchery. Oregon has hatcheries at Big Creek, Klaskanine, Ox Bow Springs, Bonneville, and Cedar Creek.

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Ericson, FWS, Seattle



DEPARTMENT OF THE INTERIOR

Division of Information Northwest Regional Office
PORTLAND, OREGON

U. S. FISH AND WILDLIFE SERVICE

For Immediate Release

SALMON AND TROUT HAVE 36 FISH NEIGHBORS IN YAKIMA RIVER, RESEARCH SHOWS

Salmon and trout living in the Yakima river system of Washington have some 36 neighbors in other species of fish, some of questionable neighborliness, according to studies being carried on in the river by biologists of the Pacific Salmon Investigations, Bureau of Commercial Fisheries, of the U. S. Fish and Wildlife Service at Seattle.

These biologists headed by Richard B. Thompson, have tabulated the three dozen fish species in making resident fish studies of the Yakima to determine the relationship of other fishes to salmon and trout.

Are other fish preying on young salmon? Are the various fishes competing for food and space? Are scrap fishes affecting the production, growth and survival of the economically valuable salmon and steelhead? Scientists hope to answer these questions, determine the species of fishes in the Yakima river system, and learn their distribution, relative abundance and movements.

Fish of the cyprinid family (minnows, carp and chiselmouths) are the most numerous followed in abundance by bullheads, spiny-ray game fish (such as bass, crappies, and blue-gills), whitefish,, and salmon and trout.

Thirty-five sampling stations five miles apart extend some 178 miles from the mouth of the river at Richland, Wash., to Easton dam, the usual upstream limit of anadromous fish migration.

These studies are being made by research biologist Thompson as project leader, Benjamin G. Patten, Edwin J. Rutledge and William A. Meyer.

Yakima river was chosen as a study site as it is one of the important tributaries of the Columbia river where appreciable natural salmon spawning still occurs.

Biologists observed that some fish take up occupancy in certain limited areas and then stay close to home. The Columbia river trout perch (*Columbia transmontana*), a somewhat rare fish was taken in the river last May, for example, across from the Yakima city dump but in no other part of the river. Every time the biologists repeated their sampling the trout perch were at home in their near-to-the-dump residence.

More

There is some seasonal variation in the appearance of species found. A small dace, abundant in shallow riffles in the summer, has not been found in the winter. More whitefish are caught in the winter as they are moving upstream to spawn.

This is the first winter of a study which began in the spring of 1957. Sampling surveys are taken every two months during the entire year. The next survey will begin the first week in March.

"Fishes are identified to species, measured, weighed, and the sex recorded. Stomach contents are carefully examined to determine the diet of the fish. The degree of sexual maturity is noted and recorded to fix the spawning time of each species," says project leader Thompson.

"Scales are collected to age the fish. Physical observations (temperature, weather, water level, and turbidity) are recorded to study their possible effects on resident fish life. These data are coded and punched on IBM cards for processing and analysis."

Salmon are out-numbered 90 to one by scrap fishes. Warming of the water, slowing down of the flow, and heavy deposits of silt and sand have changed the ecology of the river. These characteristics of the river are to the detriment of the salmon which prefer cold, clear and fast water.

It appears possible that salmon production may be improved through control of the scrapfish population. A given river can support only so many fish and they might be valuable species instead of the scrapfish which have no present value.

Of the 72 species of fishes now catalogued from the Columbia river and its tributaries, only 28 contribute to man's food supply and recreational fishing.

Fishes are taken with a newly-developed electro-fishing device and are captured alive. Desirable fishes, such as trout and adult spawning salmon, are released unharmed after tabulating them. Men operating the electric shocker wear rubber waders and rubber gloves and are careful not to touch anything metallic to avoid becoming part of the 300 volt circuit.

Seeing the biologists at work in the river surprises a number of anglers. And no wonder, for the fish are shocked with a long pole extended into the water (the electrode) and picked up with a dip-net. A DC generator and an electronic device pulses current at from two to 30 pulses per second. Fish are attracted to the positive electrode and become stunned by the electric current.

It isn't only fish that are attracted by the electric shocker--a large beaver estimated as weighing some 45 pounds was pulled from his river bank den by the electric current and hit biologist Ben Patten's leg so hard it almost knocked him down.

The electric shocking gear for collecting fish was developed by electronic scientists Donald L. Thorne and Harry Dale of the Fisheries Instrumentation Laboratory of Pacific Salmon Investigations.

Small fish under eight inches are preserved and brought back to the Seattle lab where measurements, stomach analysis and age determinations are made. In the first collecting trip down the river, more than 5000 fish were taken. They ranged in size from a 3/4 inch minnow to a 15-pound carp. Scrap fishes outnumbered game and food fishes roughly in the ratio of 50 to 1. The most abundant scrapfishes in order of numerical abundance are chiselmouth, chubs, carp, sculpins, sucker, shiners, dace, and squawfish.

Of the 36 species of fish collected in the Yakima river, four are hybrids (offspring of two fish of different species).

Sampling collections will continue on the Yakima river during all seasons for two or more years. Results should indicate the relative abundance and seasonal distribution of all fishes found. Does contact between different species of fish have harmful effects on food and game fishes, such as predation, crowding, and transmission of diseases? It is hoped this research may provide the answers.

Information gained and techniques developed by the studies on the Yakima river will be applied to other salmon spawning grounds in the Columbia river basin.

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For further information contact:

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DEPARTMENT OF THE INTERIOR
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U. S. FISH AND WILDLIFE SERVICE

For Release to PM's January 1, 1957

STATUS OF COLUMBIA REFUGE CLARIFIED BY PORTLAND FWS OFFICIAL

The regional office of the U. S. Fish and Wildlife Service at Portland today made public a letter to the Joint Boards of the Columbia Basin Irrigation districts clarifying plans for the Columbia National Wildlife Refuge.

Leo L. Laythe, FWS regional director, said he has written to Loen L. Bailie, Joint Boards president, that a resolution passed by the boards at a meeting December 10 opposing FWS plans for the refuge "is a disappointment to us as we were of the opinion an understanding had been reached....relative to the development and management of that area."

The Columbia National Wildlife Refuge plan calls for the eventual acquisition of 32,500 acres of land in the Lower Crab creek area of the Columbia basin. Since the program was initiated with the signing in June, 1951, of a memorandum agreement among the Bureau of Reclamation, the Fish and Wildlife Service and the Washington Department of Game the Service has acquired 19,281 acres. Some of the land has been acquired by withdrawals by either the Bureau of Reclamation or Fish and Wildlife Service, some through lease from private owners and some by purchase with Duck Stamp Act funds.

The joint boards resolution cited "a threat that the entire area will be closed to hunting until after development work is finished" and

resolved "that a reasonable acreage and never less than 25 per cent of the total area be open to hunting annually even though development work has not been completed."

"We have stated that public hunting would be permitted and it is still our plan to see that portions of the area that will provide good public hunting will be made available," Laythe said in the letter.

He continued: "The amended Duck Stamp Act of 1949 (copy of the applicable section 4 attached) provides that portions of refuges acquired with Duck Stamp funds may be open to public hunting when developed. At this time no commitment can be made concerning the opening of non-Duck Stamp land for public shooting during the 1957-58 waterfowl season. We are seeking a decision on this point.

"A refuge could not function as such until it is developed. It requires that the area be made attractive to the waterfowl and provide sufficient food and general marsh habitat to hold the birds. A refuge of that magnitude is not unlike other major projects in the Columbia Basin. It required planning and development work to bring the Basin project into being. After the completion of the dams, pumping plants and canal system it will require development of the individual farm units before the over-all project objective may be attained."

Laythe said today that the Bureau of Reclamation and Fish and Wildlife Service made public in August, 1955, "A Preliminary Report on the Fish and Wildlife Resources and Development Plans Recommended for the Columbia Basin Project." This report, concurred in by the Washington Department of Game and approved by the Secretary of the Interior, outlines the resources and makes recommendations for their conservation and wise use, Laythe said.

"There have been no major changes in our plans or our aims for the Columbia Basin project since that report was issued," Laythe said.

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The full text of Mr. Laythe's letter is attached.

COPY

UNITED STATES
Department of the Interior
Fish and Wildlife Service
Office of the Regional Director
1001 N. E. Lloyd Boulevard
P. O. Box 3737
Portland 8, Oregon

December 28, 1956

Mr. Loen L. Bailie, President, Joint Boards
Columbia Basin Irrigation Districts
City Hall
Ephrata, Washington

Dear Mr. Bailie:

Newspaper clippings recently received indicate that at the December 10 meeting of the Joint Irrigation District Boards, certain opposition to the Columbia National Wildlife Refuge was expressed. This is a disappointment to us as we were of the opinion an understanding had been reached with all interested groups relative to the development and management of the area. The intent of this letter is to clarify any misunderstandings that may have developed.

In order fully to acquaint the public with our plans for the establishment, development and management of the refuge, no less than 13 public meetings have been held throughout the Basin. In addition, an 8-man committee representing various interests and districts in the Basin was appointed October 20, 1953, jointly with the Washington State Department of Game. Meetings with the committee have been held quarterly since that time and matters pertaining to the development and management of the area freely discussed. It was expected that through keeping the committee currently informed as to the planning and progress of the development, it would serve also to keep the people throughout the Basin better informed.

At each of the public meetings questions were raised about the following:

1. Possibility of damage to private crops by waterfowl.
2. Public hunting.
3. Public fishing.
4. Public roads.
5. Policy on grazing.

At each meeting the following commitments were made with respect to the above items and are now reaffirmed:

Development of the Columbia Basin Project which will bring a million acres of land into agricultural production will also develop

seep water areas and will attract large numbers of waterfowl with attendant danger of crop damage. We have emphasized the importance of establishing a waterfowl refuge which would provide feeding and resting areas for these birds. We have had considerable success in controlling crop depredations in other areas through such a plan.

We have stated that public hunting would be permitted and it is still our plan to see that portions of the area will be made available for that purpose. The amended Duck Stamp Act of 1949 (copy of the applicable Section 4 attached) provides that portions of refuges acquired with Duck Stamp funds may be open to public hunting when developed. At this time no commitment can be made concerning the opening of non-Duck Stamp land for public shooting during the 1957-58 waterfowl season. We are seeking a decision on this point.

A refuge could not function as such until it is developed. It requires that the area be made attractive to the waterfowl and provide sufficient food and general marsh habitat to hold the birds. A refuge of that magnitude is not unlike other major projects in the Columbia Basin. It required planning and development work to bring the Basin project into being. Following the completion of the dams, pumping plants and canal system, it will require development of the individual farm units before the over-all project objective may be attained.

We reiterate that it is our plan to complete the development at the earliest possible date in order that we may be in position to fulfill our objectives, one of which is to provide public hunting. As you know, the Potholes area to the north of the Refuge, as well as Crab Creek below Corfu and the newly formed water areas in the Basin outside of the Refuge, now provide hunting opportunities. There is presently, however, a lack of waterfowl marsh habitat in the Basin. We hope to provide that with our development.

We have stated that fishing and other public uses would be not only permitted but encouraged to the point that such would not be in conflict with the primary purpose of the refuge - waterfowl. Practically all of the waters on the refuge are now stocked and through arrangements with the Washington Department of Game, seasons have been established to permit maximum fishing use commensurate with waterfowl management requirements. In some lakes it is important that there be no fishing during the nesting season, but winter fishing would offer no conflict. In other lakes considered valuable for use by birds during the fall migration and where fishing would conflict during the fall and winter season, fishing is permitted during the regular summer season. Regulations have been drawn up by the Washington Department of Game accordingly. All of the lakes within the boundaries of the refuge have been used heavily by fishermen the past two years. We see no reason why this cannot continue.

With respect to the construction of public roads through the area, we have stated that this need was recognized and that we would give it our full cooperation. This is still our position.

We had one unfortunate experience in connection with the proposed realignment of the so-called McManamon Roads. The matter was satisfactorily resolved.

Considerable concern was expressed by stockmen in the lower Crab Creek area over the future of grazing on the refuge lands. Questions were raised as to whether individuals holding grazing leases on the lands to be acquired by the Service would be protected. We have stated that in every case former lessees would be given the first opportunity to continue their operations in order that the local economy would not be disrupted. It has been pointed out that a plan would be set up designed toward better range management of these lands with the objective of improving the forage cover and value for grazing. We believe that this policy is fair and sound and hereby confirm that it will be continued.

You will recall it was emphasized at each of the public meetings that the Columbia Refuge would be developed to serve a 3-point program:

1. Provide more adequately for the waterfowl resource.
2. To alleviate crop damage.
3. To provide better public hunting opportunities for the sportsmen.

We are sure you will agree that we would be unable to meet our full commitments under this program until the refuge is brought under development. In its natural raw state, this area lying in lower Crab Creek is not now highly attractive to waterfowl. We do feel that it has a high potential and when brought under development, it will operate to our mutual interest.

We have been delayed in getting our major development work underway because of the time required to process public land orders and other administrative details. It is required that we reach an understanding with the Bureau and the irrigation districts as to the charge to be made for water used in the irrigation of agricultural lands other than the farm units or lands for which we acquired a water right. Following a conference with the Bureau of Reclamation last fall, it was determined that a charge of \$6 per acre would be fair and equitable for such water. We met with each of the districts earlier this month toward obtaining their concurrence in this charge.

In connection with the use of farm units acquired by the Service lying within the Columbia Refuge, we agreed to pay the construction, O&M and water costs as established. We wish to reaffirm that now. We have plans for getting two farm units into development in 1958.

We cite the above points to reiterate statements made and to indicate our intention and sincerity in carrying out the development and management as outlined. We ask that your Board and others who have

had a part in this project bear with us to the end that this waterfowl area may serve its intended purpose and our mutual interests.

Sincerely yours,

/s/ Leo L. Laythe
Regional Director

Enclosure

cc South Irrigation District
East Irrigation District
Quincy Irrigation District
Members, Columbia Waterfowl Management Committee
Refuge Manager, Columbia Refuge
The Director, Fish and Wild Life Service

COPY

Migratory Bird Hunting Stamp Act

Sec. 4 (a) Not less than 85 per centum shall be available for the location, ascertainment, acquisition, administration, maintenance, and development of suitable areas for inviolate migratory-bird sanctuaries under the provisions of the Migratory Bird Conservation Act, to be expended for such purposes in all respects as moneys appropriated pursuant to the provisions of such act; for the administration, maintenance, and development of other refuges under the administration of the Secretary of the Interior, frequented by migratory game birds; and for such investigations on such refuges and elsewhere in regard to migratory waterfowl as the Secretary of the Interior may deem essential for the highest utilization of the refuges and for the protection and increase of these birds: Provided, That in the discretion of the Secretary of the Interior not to exceed 25 per centum at any one time, of any area acquired in accordance with the provisions of this Act, may be administered primarily as a wildlife management area not subject to the prohibitions against the taking of birds, or nests or the eggs thereof, as contained in section 10 of the Migratory Bird Conservation Act of February 18, 1929 (45 Stat. 1222; 16 U.S.C. 715i), as amended, except that no such area shall be open to the shooting of migratory birds when the population of such birds frequenting the area or in the migrations utilizing such area is on a decline, nor prior to July 1, 1952, or the date upon which the same has been fully developed as a management area, refuge, reservation, or breeding ground, whichever is later.



DEPARTMENT OF THE INTERIOR

Division of Information Northwest Regional Office
PORTLAND, OREGON

U. S. FISH AND WILDLIFE SERVICE

For Immediate Release

RECORD NUMBERS OF CHINOOK SALMON REACH UPPER COLUMBIA RIVER SPAWNING GROUNDS, U. S. FISH AND WILDLIFE SCIENTISTS REPORT

"Chinook salmon are now on the upper Columbia river spawning grounds above Rock Island dam, Washington, in record numbers--actually the highest count in years--according to reports brought in by our field scientists," Clinton E. Atkinson, chief of Pacific Salmon Investigations, U. S. Fish and Wildlife Service in Seattle, said today.

"The total of chinook spawners sighted this season is more than 50% greater than recorded in 1956."

The 50% chinook spawner increase in 1957 has been observed in two ways--by actual counts on the spawning streams this fall by scientific survey crews and by manual tallies by counters as the fish passed Rock Island dam fishways this spring, summer and fall.

At Rock Island dam at Wenatchee, 50,140 chinook salmon had passed this year by September 18, 1957. In 1956, the count was 25,085 chinook salmon. The previous high prior to this 1957 season was in 1954 when 33,283 chinooks "climbed" Rock Island fishways.

Cessation of the Indian fishery at Celilo Falls on the Columbia river and the closing of the commercial fishing season above Bonneville dam on the Columbia river are believed to be major factors for the large increase of chinook spawners on the upper streams this fall.

Report of this substantial escapement of chinook spawners to their "maternity wards" to propagate future salmon runs is welcome news, of course, for both sports and commercial fishermen and the fisheries industries.

Biologists at present are engaged in stream surveys to determine the extent of spawning in creeks and rivers above Rock Island dam and the comparative abundance of the spawners.

"In the Wenatchee river system, comparatively large numbers of spring chinooks have been observed in Nason creek, Chewawa river, White river, and the Little Wenatchee river," says Robert R. French, biologist in charge of investigation of chinook salmon biology in the Columbia river for the Fish and Wildlife Service.

"Similarly in the Methow river system the largest run of spring chinooks in four seasons of observations has been observed in the Twisp, Chewack, and Upper Methow rivers. It is expected that the summer chinook spawning streams such as the Wenatchee, Methow, and Okanogan rivers will show this same increase in the spring populations."

Assisting French in the spawning stream surveys are Roy Wahle and Richard Foust, biologists, and James Davis, a fishery aide, all of the U. S. Fish and Wildlife Service, Seattle. Biologists of the Washington State Department of Fisheries are participating in some of the surveys.

How do scientists conduct a spawning survey? By walking the entire length of the smaller streams such as Chewack creek some 30 miles in length--or by floating the rivers in rubber rafts, when sufficient water permits, an exact count is made of the individual salmon spawning in the shallow water. (The rubber rafts on the rivers scatter the salmon temporarily but they come directly back to their redds.)

Survey crews will walk and float some 250 miles of chinook streams above Rock Island dam and on the Yakima river system this fall in observing salmon on the spawning grounds. The survey for spawning salmon began in mid-August and will continue until the 20th of October.

Each year the same streams are covered for comparison. Biologists wish to determine the extent and success of spawning, the distribution of spawners, and adaptability of salmon to changing river conditions.

Another important phase of the stream surveys is to recover tagged fish. By recovery of the tags, biologists determine the distribution of the fish, the time of spawning, the areas the fish choose, and travel time.

The salmon die after spawning, and the scientists take the dead tagged fish for study. On each one they make length measurements, take scale samples for age determination, and cultures from the liver for later examination for possible diseases.

Salmon carrying numerous white disc tags of the Oregon Fish Commission are being spotted. These were attached to the fish this summer at Bonneville dam at the exit of the Washington fish ladder in making a study financed by the Corps of Army engineers. Scientists are seeking more data to determine the delay, if any, in salmon travel between Bonneville and McNary dams.

In addition to the valuable fact-revealing tags, biologists note some of the fish have outsmarted the sports fishermen--a few salmon have lures and hooks fastened to their mouths.

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DEPARTMENT OF THE INTERIOR

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PORTLAND, OREGON

U. S. FISH & WILDLIFE SERVICE

For Immediate Release

LARGEST RECORDED RUN OF SALMON CURRENTLY USING FISHWAY OF THE HIRAM M. CHITTENDEN LOCKS

The largest run of salmon ever recorded at the Hiram M. Chittenden locks in Seattle is now passing up the fishway, reports the U. S. Fish and Wildlife Service of the Department of the Interior.

Since September 18, when the fall run of salmon started, 3239 fish have been recorded through October 29. On October 11, a peak day, 256 fish passed up the fish ladder and were tallied by the electronic counter at the top of the fishway. In a single hour on this day (between 1 and 2 p.m.) 95 fish passed.

"These figures do not represent the entire run as many fish by-pass the fishway by going through the locks and thus pass uncounted," says Dr. Julius Rockwell, Jr., research biologist and project leader of the electronic fish counting unit, Pacific Salmon Investigations. "This is by far the largest number of fish ever counted electrically at the locks."

Rockwell attributes this, in part, to the fact that the large lock is being operated as little as possible this year to conserve water--thus the majority of fish are directed up the ladder.

The majority of the fish pass in a span of only a few hours each day--the sharp, daily peak is generally near the high tide.

More

"Visitors best chance to see the fish climbing the ladder is just prior to high tide but there is no guarantee of what the fish will do tomorrow," Rockwell commented. There is usually a large school of fish below the dam. They are brighter in color than last week and are jumping and making a good show. Salmon turn red before spawning.

The majority of fish passing are fall chinook salmon and silver salmon; not many steelheads have passed as yet. Steelhead migration comes later in the season.

The electronic fish counter at the top of the fishway which automatically records fish passage is new in the field of fisheries research. It is being developed by a team of research biologists and electronic scientists at the fish counting laboratory of the Pacific Salmon Investigations of the U. S. Fish and Wildlife Service in Seattle.

Detailed records on fish passage at the locks are kept at the Fish Counting Laboratory of the U. S. Fish and Wildlife Service at the Hiram M. Chittenden Locks where George M. Lucich, electronic scientist, is in charge.

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