Before the

FEDERAL POWER COMMISSION

In the Matter of)
) Project No. 2082
THE CALIFORNIA OREGON POWER COMPANY)

REPLY BRIEF
OF THE SECRETARY OF THE INTERIOR,
AS INTERVENOR

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INDEX

Table of Cases Cited

Table of Statutes Cited

Miscellaneous Materials Cited

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REPLY BRIEF OF THE SECRETARY OF THE INTERIOR, AS INTERVENOR

STATEMENT OF THE CASE

This proceeding, under the Federal Power Act, is concerned with the application for license filed by the California Oregon Power Company (herein sometimes referred to as "Copco" or "Applicant") for a proposed hydroelectric development (Project No. 2082), identified as Big Bend No. 2, to be located in and along the Klamath River in the State of Oregon, approximately 25 miles below Klamath Falls, Oregon. An Order to Show Cause (Docket No. E-6390) was issued by the Federal Power Commission on November 27, 1951, requiring Copco to show cause why the Commission should not find and determine whether licenses are required for the existing Copco plants located on the Klamath River in Oregon and California. These matters were consolidated for hearing by a Commission order dated May 1, 1952. A public hearing was held before William J. Costello, Presiding Examiner, in Klamath Falls, Oregon, commencing on June 30 and concluding July 3, 1952.

The Applicant is a public utility corporation, existing under the laws of the State of California. It is engaged in the utility business in portions of northern California and southern Oregon. The works proposed under Project No. 2082 and their location are fully described in Copco's application and in its principal brief. The proposed project works, in part, would be located on lands of the United States.

The Secretary of the Interior petitioned the Federal Power Commission for permission to intervene in both the above cases on June 19, 1952. Both petitions were granted by order of the Commission dated June 25, 1952. The Commission also granted petitions to intervene filed by the State of Oregon, the State of California, and the Tulelake American Legion Post, et al. At the public hearing, in addition to the Applicant, the Commission's staff, and the intervenors, several interested groups and individuals appeared and gave statements setting forth their views.

The burden of proof with respect to the Order to Show Cause is with the Commission through its staff counsel (Tr. 791, 794, 795, 797). Consequently, Applicant in its principal brief has not discussed this question. Likewise, this intervenor will state its position in a separate reply brief responding to staff counsel's principal brief on Docket E-6390.

ABSTRACT AND DISCUSSION OF EVIDENCE

Upper Klamath Basin

The boundaries of the Upper Klamath Basin are set forth in Exhibit 28. A general description of the area was given by witness Dickinson (Tr. 502, et seq.). The Upper Klamath Basin is located in southern Oregon and northern California and is drained by the Klamath River and its tributaries. The City of Klamath Falls, Oregon, lies approximately in the center of the area. Immediately north of Klamath Falls is a large lake known as Upper Klamath Lake. This lake is fed by two principal rivers, the Williamson and the Sprague, which flow southwesterly through the Klamath Indian Reservation. There is at the southern end of Klamath Lake a short river approximately one mile in length, known as Link River, joining that lake with a much smaller body of water, Ewauna Lake. The Klamath River begins in Ewauna Lake and follows a southwesterly course through southern Oregon and northern California to the sea. The river drops gradually until reaching Keno, Oregon, some 10 miles below Ewauna Lake. Thereafter, for many miles, it drops very rapidly, the decline sometimes exceeding 80 feet per mile (Ex. 46).

Except for the relatively small additional amounts of water available from Lost River and small streams and springs

flowing into the Klamath River, the entire water supply for the Upper Klamath Basin comes from Upper Klamath Lake and its tributaries.

The Upper Klamath Basin includes the Klamath Indian Reservation, established in 1864 as a result of a treaty between the Klamath, Modoc, and Yahooskin bands of the Snake Indians and the United States. It consists of more than a million acres of land located north and east of Upper Klamath Lake.

The Upper Klamath area, because of its unique geographic location, is the most important conservation area in the so-called Pacific Flyway -- route of migratory wild fowl. It is estimated that 60 percent of all migratory birds using the Pacific Flyway pass through this area. The Fish and Wildlife Service of the Department of the Interior carries on extensive activities in this region.

The Upper Klamath Basin includes the Klamath Project of the United States Bureau of Reclamation, lying astride the Oregon-California boundary south and east of Klamath Falls. Within the Basin boundaries there are various other areas now partially under irrigation and containing additional productive lands which can be irrigated if means can be found to make water available at a reasonable cost. In the Klamath Indian Reservation there

are two such areas along the Williamson and Sprague Rivers. Other important irrigable areas lie partially within and partially without the reservation. Sycan Marsh and Wood River Valley are the most important of these. Also, Swan Lake Valley, Pine Flat, and Upper Yonna Valley lying north of the present Klamath Project offer opportunity for new irrigation development. Several irrigable areas lie in California immediately south of the Oregon-California boundary line. These are identified as the Oklahoma District, Butte Valley, Red Rock Valley, Shasta Valley, and Scott Valley.

Existing Power and Irrigation Developments in Upper Klamath Basin

In 1905 the Reclamation Service[1] was authorized to proceed with an irrigation development known as the Klamath Project. This was one of the earliest Reclamation projects in the country and has been one of the most successful. The history, growth, and present status of this project were discussed in detail by witness Stephens (Tr. 339, et seq.). A map showing the general outlines and location of the project and its major operating units appears in the record as Exhibit 15. In 1951 there were approximately 190,000 acres under irrigation.[2] The 1951 crops had an estimated

1/ Predecessor to the Bureau of Reclamation.

2/ Actually, there are 210,000 "irrigated acres" on the project. However, the entire acreage is not irrigated in any one year.

value of 26 million dollars. A graphic presentation of the growth in irrigation acreage and crop values is set out in Exhibit 18. It is anticipated that a total of 233,000 acres can be irrigated within the immediate boundaries of the existing Klamath Project (Tr. 509). These lands can be served through the existing basic facilities.

On the Klamath Indian Reservation, there are four small Indian irrigation projects covering about 5,000 acres. Another 5,000 acres within the exterior boundaries of the Indian reservation are being irrigated by private individuals (Tr. 590, et seq.). In addition to the Klamath Project and Indian reservation developments, there are other scattered irrigated areas in Upper Klamath Basin. All of these lands are shown on Exhibit 28.

With one or two minor exceptions, the only power development in the area is that of the Applicant. It has hydroelectric plants located on Link River at Klamath Falls, and on the Klamath River at Keno, Oregon, and at Copco, California. The nature and extent of these developments are discussed fully in Copco's application and in its principal brief.

Plans for Future Development

In the spring of 1946, the Bureau of Reclamation commenced a preliminary investigation of the water and power

potential of the Upper Klamath Basin. The study was motivated, in part, by a recommendation of a committee of the California Legislature made in 1945 (Tr. 496, 497; Ex. 46). It encompassed land classification, crop surveys, ground-water studies, and preliminary studies of dam, river, canal, and power plant locations. Although handicapped by a lack of adequate maps and other basic data, satisfactory progress was made. On March 27, 1952, a Memorandum of Understanding was entered into by the Bureau of Reclamation, the Fish and Wildlife Service, and the Bureau of Indian Affairs (Ex. 27), providing for a correlated investigation of the water resources of the Upper Klamath Basin. The program was thus broadened into a full-scale Department of the Interior comprehensive investigation. The program calls for the active participation of the three Interior agencies just mentioned. In addition, the Geological Survey, the Bureau of Land Management, the National Park Service, the Bureau of Mines, the Forest Service, the Soil Conservation Service, the Weather Bureau, the Federal Power Commission, certain agencies of the States of California and Oregon, and interested local groups will participate in varying degrees. Scheduled for completion in May 1954, the report will contain extensive data on existing and potential land use throughout the Basin, the water

supply and demand, and recommendations for future developments, including preliminary designs and cost analyses for features recommended for construction. The report will reflect the water needs of all interests. It will constitute a comprehensive plan for the water resource development of the Upper Klamath Basin, including proposals relating to irrigation, power, flood control, fish and wildlife, and recreation.

The investigation has not proceeded sufficiently at this time to enable the Department of the Interior to make any specific recommendations. However, enough is known to indicate that certain areas within the Basin are irrigable (Ex. 28) and that various methods of bringing water to those areas are physically feasible (Tr. 513, et seq.). Estimates have been made of the water demands and anticipated crop acreages in these areas, as well as in the areas presently under irrigation (Ex. 29).

Mr. Frank Parker, engineer employee of the Bureau of Indian Affairs, testified in some detail with respect to plans for future irrigation development within the Klamath Indian Reservation (Tr. 592, et seq.). A survey was initiated on the reservation in 1947. The study indicated the existence of four satisfactory irrigation reservoir sites, one on the Upper Williamson River, one on the Sprague River near the eastern edge of the

reservation, one on the Sycan River, and another in the Upper Klamath Marsh Area. It is estimated that 113,000 acres of land could be irrigated from these four developments. Mr. Wade Crawford, member of the Executive Council, Klamath Indian Tribe, testified that additional irrigation was vital to the future welfare of the tribe (Tr. 600, et seq.).

Mr. Dickinson, Assistant Regional Director for Region 2 of the Bureau of Reclamation, gave a resume of the irrigation and power potentials of the remainder of the Upper Klamath Basin, together with the manner in which the development might be accomplished (Tr. 508, et seq.). The irrigable acres, including those within the Klamath Indian Reservation, are delineated in Exhibit 28. Outside the Klamath Indian Reservation and excluding relatively small parcels of land in the immediate vicinity of the existing Klamath Project, the new areas are identified as: Swan Lake Valley and Pine Flat, Upper Yonna Valley, Butte Valley, Scott Valley, Shasta Valley, Oklahoma District, Red Rock Valley, and Wood River Valley. Should all the areas shown on Exhibit 28, including the present Klamath Project, be brought under irrigation, 1,435,000 acre-feet of water would be required annually (Ex. 29). Mr. Gilmer, a farmer from Butte Valley, supplemented the evidence presented by Mr. Dickinson in respect to the Butte Valley area.

The irrigation developments indicated would require large amounts of power for pumping purposes. The total requirements, exclusive of the present Klamath Project, are estimated at from 100 million to 125 million kilowatt-hours annually. Witness Dickinson stated that, in connection with the power phase of Interior's investigation, preliminary studies pointed toward a proposal for two plants on the Klamath River, one below Keno and a second at the upper end of Copco Lake, both to be fed through long tunnels diverting water from the Klamath River. It is estimated that these two plants would have an installed capacity of from 200,000 to 250,000 kilowatts. If power were developed by the Interior Department, it would be available for pumping, for financial aid to irrigation, and for sales to customers having preference rights under the reclamation laws.

Mr. Woodward, Regional Supervisor of River Basin Studies, from the Portland office of the Fish and Wildlife Service, testified that although the Service presently carries on extensive activities in the Klamath region, additional development will be required in order adequately to care for wild fowl. Also, any new developments will have to give adequate protection to the fish population (Tr. 489, et seq.).

Plan Proposed by Applicant

The Applicant now operates a number of hydroelectric plants, four small diesel plants, and one steam plant, and is presently constructing two additional hydroelectric plants (Tr. 66-67). Six of the company's hydroelectric plants are on the Klamath River or its tributaries (Tr. 65). Two of these six, the "Eastside" and "Westside" plants, are on the Link River within the City of Klamath Falls; one, the Keno plant, lies just below the town of Keno, Oregon; two, Copco No. 1 and Copco No. 2, are downstream in California; and one plant, Fall Creek, is on Fall Creek, a tributary stream flowing into the Klamath River just below Copco No. 2 (Tr. 65 and 66; Ex. 33).

In addition to the power from its own plants, Copco receives some power produced by others. At the present time, it has purchase agreements and interconnections with the Pacific Gas and Electric Company and the Bonneville Power Administration, providing for the interchange of power on an "if, as, and when available" basis (Tr. 71-72). Also, a contract is now being made between the Applicant and the Pacific Gas and Electric Company for the purchase of 15,000 kilowatts of firm power (Tr. 185).

The Applicant believes that the demand for power in its service area will absorb the 50,000 kilowatts of power to be

supplied by Project No. 2082 (Tr. 185, et seq.). Copco considers the Big Bend No. 2 plant to be part of an over-all plan that includes seven projects, all to be built on the Klamath River (Tr. 131). However, the dates when the additional plants might be built are indefinite. The Applicant may decide that three plants, instead of seven, should be built (Tr. 197, 198). If the license is granted, Copco expects Big Bend No. 2 to be in operation within two years.

Although in its application to the Commission and to the Hydroelectric Commission of the State of Oregon (Ex. 14) Copco has stated that it will require the rights to appropriate 2,500 cubic feet of water per second for the operation of Project No. 2082, actually only 1,250 cubic feet per second of continuous flow will be required (Tr. 13, 14, 144, 145). The plant would operate only for twelve hours per day.

In the opinion of the Commission's staff, the design of the structures for Project No. 2082 is satisfactory as to stability and safety (Tr. 684), they conform to good engineering practice (Tr. 702), and, in general, the project is feasible from an engineering viewpoint (Tr. 707).

Water Supply

The supply of water for future resource development in the Upper Klamath Basin must come almost exclusively from

Upper Klamath Lake and its tributaries. The estimated water needs for possible new irrigation developments, and for the present Klamath Project, are 1,435,000 acre-feet (Ex. 29). Exhibits 30, 31, and 32, prepared by the Bureau of Reclamation from its own records and those of the Geological Survey and of the States of California and Oregon, summarize the water supply situation as it relates to the Big Bend No. 2 project. Exhibit 30 shows the mean annual flow of water which would have been available at Keno, Oregon, a short distance above the site for Big Bend No. 2, under natural conditions (without Link River Dam), present conditions (1951 uses), and future conditions (assuming the full irrigation development depicted on Exhibit 28) in each of the years between 1910 and 1949 (Tr. 524, 525).

The record shows that the Applicant will require a continuous flow of 1,250 cubic feet of water per second to operate Big Bend No. 2. Exhibit 30 shows that if the 40-year water cycle (1910 - 1949) should recur, with 1951 irrigation water uses in the Upper Klamath Basin, the average annual flow at Keno would have been less than 1,250 cubic feet per second in at least 20 of the 40 years of record (Tr. 528, 529). Assuming a full irrigation development in the potential areas set out in Exhibit 28, 1,250 cubic feet of water per second would be available in only a few years. Exhibit 32

sets forth the monthly flows at Keno for a maximum water year (1913 - 1914), an average water year (1941 - 1942), and a dry water year (1930 - 1931), assuming, first, present conditions (1951 irrigation uses), and, second, future conditions (full irrigation potential developed) (Tr. 583-585). The exhibit shows that with a continuation of 1951 irrigation uses, less than 1,250 cubic feet per second would be available seven months of the year even in a wet year such as 1913-14. In a dry year such as 1930-31, 1,250 cubic feet per second would not be available in any month. Exhibit 31, based on the run-off in acre-feet during two water years, 1944-45 and 1945-46, which years approach average conditions for the 40-year period, 1910-1949, depicts the supply and demand of flows of the Klamath River under present conditions as compared with potential future conditions (Tr. 532-535).

The Commission's staff made limited studies of the availability of water for Project No. 2082. In these studies, irrigated land in the Klamath Project was assumed to be 207,000 acres (Tr. 711). No provision was made for the future irrigation of any additional land in the Upper Klamath Basin (Tr. 718, 725). On this basis, assuming a recurrence of the dry year 1930-31, the staff made a study which indicated that sufficient water would be available to operate Project No. 2082 at full capacity

from October through March (Ex. 51). The plant would be idle the remaining six months of the year. Cross-examination of the Commission's witness Froggatt brought out the fact that the study assumed that a 35 percent deficiency in the use for irrigation would be taken during the months of April through September in order to allow for the generation of power (Tr. 717-719). No study was made of the water which would be available if further irrigation development were to occur in the Basin (Tr. 725, 726).

In its study of water availability for Project No. 2082, Copco prepared a flow duration curve (attachment to Exhibit I of the Federal Power Commission application). This study took into account only the amounts of irrigation water required by the present Klamath Project. No consideration was given to water which might be required for the irrigation of any other land in the Basin (Tr. 210, 281, 282). In its studies, Applicant used the yearly average of two periods, one 10-year period and one 20-year period, although records for 40 years were available (Tr. 280-287). With a recurrence of the 1930-31 dry year, Copco would plan to utilize Big Bend No. 2 for only six months of the year (Tr. 290-291).

The testimony of Mr. Boyle, Copco Vice-President and General Manager, shows that during part of the years 1931 and 1934, the outlet gates from Link River Dam were closed to

protect the irrigation interests under the 1917 contract between the company and the United States, and in one year Copco found it necessary to purchase all crops in Langell Valley[3/] in order to have sufficient water to operate its plants on the Klamath River (Tr. 251, 252).

Copco filed an application for license for water for Big Bend No. 2 with the Oregon Hydro-Electric Commission on April 16, 1951. Hearings were held June 11, 1951. The Bureau of Reclamation opposed the granting of the license. This protest is attached to the letter of the Secretary of the Interior to the Federal Power Commission (Ex. 47).

1917 Contract between Copco and Interior

Exhibit 1 is a contract, as amended and supplemented, between Copco (and its predecessors in interest) and the Department of the Interior. It is a 50-year contract, expiring in 1967. In essence, it provides for the construction of Link River Dam by Copco and the transfer thereof to the United States, the operation of Link River Dam by Copco to meet certain irrigation requirements of the Klamath Project, the settlement by Copco of claims arising out of the raising of the historical levels of Upper

3/ A part of the Klamath Project.

Klamath Lake, and the providing, by Copco, of certain reduced power rates for pumping on the Klamath Project.

On October 26, 1951, Mr. J. C. Boyle, Vice-President and General Manager of Copco, addressed a letter to the Bureau of Reclamation stating that Applicant would not expect to proceed with the Big Bend No. 2 project unless the 1917 contract could be extended (Ex. 20). This letter states in part as follows:

> "The California Oregon Power Company has advised the Hydroelectric Commission that it would not regard the cost of the project as warranted unless its agreement with the United States relating to the control of the levels of Upper Klamath Lake and the operation of the Link River Dam, including provisions for low cost power for pumping are extended on terms mutually acceptable to the parties for the period of any license issued to the Company respecting the Big Bend Development No. 2".

Govt got tight held over c/co 1967

The position of the Applicant in this respect was reiterated in the testimony of Mr. Boyle given in this proceeding (Tr. 227).

Copco has been informed by Interior Department officials that the question of extension of the 1917 contract would have to be deferred until the comprehensive investigations now under way are completed (Tr. 212).

Testimony of Others

The States of Oregon and California presented a considerable amount of evidence pertaining to the deleterious effects of the Applicant's present plants and the proposed Project No. 2082

upon fish life in the Klamath River (Tr. 319, et seq.; Tr. 357, et seq.).

The Klamath County Farm Bureau opposed the issuance of license to the Applicant because, in its view, it would hinder further irrigation development in the Basin and might jeopardize present irrigation water uses (Tr. 41-42).

The Chamber of Commerce of Klamath County favored the granting of the license, providing that all agriculture in the Basin, present and future, were given prior rights to water (Tr. 47-52).

The Isaac Walton League did not oppose the project provided fish life was protected and agriculture, present and future, was given priority in the use of water (Tr. 53-55).

Nine witnesses representing the Tulelake American Legion Post, the Farm Bureau Federation, the Tulelake Grange, the Tulelake Chamber of Commerce, the Tulelake Water District, and certain other interests opposed the granting of license because of the detrimental effects that Big Bend No. 2 would have on present and future irrigation of the lands upon which their livelihood depends (Tr. 617-667).

ISSUES

I

IS THERE SUFFICIENT UNAPPROPRIATED WATER IN THE KLAMATH RIVER TO SUPPLY THE REQUIREMENTS OF PROJECT NO. 2082?

II

SHOULD THE COMMISSION DENY A LICENSE TO COPCO UNDER SECTIONS 7(b) AND 10(a) OF THE FEDERAL POWER ACT?

III

HAS THE COMMISSION AUTHORITY TO ISSUE A LICENSE TO COPCO FOR PROJECT NO. 2082 WHICH INCLUDES RIGHTS AND PRIVILEGES RELATIVE TO LINK RIVER DAM?

ARGUMENT

I

THERE IS NOT SUFFICIENT UNAPPROPRIATED WATER IN THE KLAMATH RIVER TO SUPPLY THE WATER REQUIREMENTS OF PROJECT NO. 2082

Availability of Water for Project No. 2082 Must Be Determined Under Oregon Law

As stated by the Applicant, the Oregon Hydroelectric Commission is empowered, under Oregon law, to issue licenses to appropriate water within the State for the generation of electricity. In determining whether there is available water for appropriation from a given water source, the Oregon Commission must examine all prior rights to water of that source, including rights for irrigation and municipal uses. The Oregon State Engineer is charged with the responsibility of approving licenses for the appropriation of water for purposes other than power.[4/] The State Engineer is also the Secretary of the Hydroelectric Commission.[5/]

It is Copco's position that insofar as a license from the Federal Power Commission is concerned, the only function of the Oregon Hydroelectric Commission is to give rubber-stamp approval to any application submitted to it. Copco's point of view is summed

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4/ General Laws of Oregon, L. 1909, ch. 216, as amended, Or. Comp. Laws Anno., Sec. 116 - 419, et seq.

5/ General Laws of Oregon, L. 1931, ch. 67, Or. Comp. Laws Anno., Sec. 119 - 105.

up at page 15 of its principal brief:

> "Manifestly, under the Oregon Hydroelectric Code (as contrasted with the prior law of Oregon) an applicant for a license for a hydroelectric project has complied with state law to the farthest practicable extent when it files its application. All that remains to be done even under state law, is for the Hydroelectric Commission to issue the certificate; its function is thus ministerial only, for in all respects in which the Hydroelectric Commission has discretion, the provision of the state statute are superseded by the Federal Power Act." (Emphasis supplied.)

The Department of the Interior does not believe that the State of Oregon and its Commission have been relegated to such an insignificant position by the Federal Power Act. On the contrary, it believes that Copco will be unable to proceed with Project No. 2082 until there shall have been a determination under Oregon State law making available to Copco the necessary water.

In considering this question raised by Copco, two sections of the Federal Power Act are significant. Section 27 provides:

> "That nothing herein contained shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein."

Section 9(b) provides:

> "That each applicant for a license hereunder shall submit to the commission--
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> " * * * * * *

"(b) Satisfactory evidence that the applicant has complied with the requirements of the laws of the State or States within which the proposed project is to be located with respect to bed and banks and to the appropriation, diversion, and use of water for power purposes and with respect to the right to engage in the business of developing, transmitting, and distributing power, and in any other business necessary to effect the purposes of a license under this Act."

Although the Supreme Court held in the case of First Iowa Hydro-Electric Cooperative v. Federal Power Commission[6/] that an applicant need not comply with State law as a condition precedent to the issuance of a license by the Federal Power Commission, the Court made it entirely clear that section 27 of the Federal Power Act requires the Commission to recognize and to observe State law with reference to the use of water for irrigation, municipal, and other purposes, and to observe fully all vested rights. As will be shown later, the United States owns extensive rights to the use of the water of the Klamath River for reclamation purposes. These were acquired from the State of Oregon in 1905 pursuant to the requirements of section 8 of the Reclamation Act of 1902.[7/]

Whether the development of power at the proposed Project No. 2082 will interfere with the rights of the United States granted

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6/ 328 U. S. 152 (1946).

7/ 32 Stat. 388, as amended, 43 U.S.C. §§ 371, et. seq.

by the State of Oregon is not a matter for the determination of the Federal Power Commission. In the final analysis, it is for determination by the courts in accordance with the laws of the State of Oregon. The initial step in any such determination is through the submission of an application for license to the Oregon Hydroelectric Commission. This was recognized by Copco when it filed an application with the State Commission for a license for water for the Big Bend Project. If a determination by the Oregon Commission respecting the availability of water for this proposed project was not essential, no possible purpose was to be served by the filing of the application for water.

It is the position of the Interior Department that regardless of whether a Federal Power Commission license is issued, Copco cannot proceed with the proposed project until there shall have been a determination under Oregon law that ample water is available for the project, and that the Federal Power Commission itself is not empowered to make such determination. It is submitted that the Commission should not accept the mere filing of an application for a license with the Oregon Hydroelectric Commission as "satisfactory evidence" that the Applicant has complied with the

laws of that State with reference to the use of water. 8/

Water Rights of the United States

In order to determine whether the California Oregon Power Company will have the amounts of water required for the operation of Project No. 2082, the rights of others, including the United States, to the water of the Klamath Basin must be evaluated in terms of priority and water use. If such an evaluation indicates that there are substantial prior legal rights to water, and that the present and future use of water under these prior rights will reduce the available water supply in many or most water years to an amount less than that required for the proposed operation of Project No. 2082, then the project will be physically and economically infeasible and the application for a license should be

8/ At the present time there are pending before the United States Court of Appeals, Ninth Circuit, two cases which involve, among other things, an interpretation of sections 27 and 9(b) of the Federal Power Act. The cases are State of Oregon et al. v. Federal Power Commission (No. 13,345), and State of Washington Department of Game et al. v. Federal Power Commission (No. 13,289). Although these actions involve the question of the control of the States over fish, rather than the control of the States over the appropriation of water, it is expected that the decisions rendered in the cases will be extremely helpful in further defining and clarifying the areas of control and jurisdiction of the Federal Power Commission and the individual States.

denied. Legal rights will be discussed first, followed by a discussion of water use under these rights.

The First Iowa case[9/] squarely holds that section 27 of the Federal Power Act does not supersede State laws relating to property rights in the use of water for irrigation and municipal purposes, and that it does not affect vested rights in such water.

It is the position of the Interior Department that the United States holds vested rights to substantially all the water unappropriated as of 1905 in the Upper Klamath Basin. If this position is valid, there is not sufficient water available to support Copco's proposed project. Moreover, even if the rights of the United States are limited to present uses, insufficient water is available for Big Bend No. 2. Regardless of other considerations in this proceeding, it is assumed that the Commission would not perform the empty gesture of granting a license unless water were available for the successful operation of the project.

Almost a year and a half has passed since the hearing was held on Applicant's application to the Oregon Hydroelectric Commission for the appropriation of water for Project No. 2082.

18 Mo

9/ Supra, footnote 6.

The application for appropriation was opposed by the Bureau of Reclamation, claiming prior vested rights to all the unappropriated water in the Klamath Basin, and by some 200 private individuals and organizations interested in seeing that Klamath Basin water is reserved for full irrigation development before being permitted to escape down the Klamath River for power generation. The Hydroelectric Commission has not yet acted upon the application.

The history of the position of the State of Oregon prior to 1950 with respect to Upper Klamath Basin water rights is such that if Copco's application had been made prior to 1950, the Hydroelectric Commission undoubtedly would have denied the application immediately. However, on November 10, 1950, the Attorney General of Oregon issued an opinion (Ex. 2) which cast doubt upon the validity of the claim of the Bureau of Reclamation to the water in the Klamath Basin. This opinion has no doubt caused some concern to the Hydroelectric Commission in its consideration of the application of the California Oregon Power Company.

For reasons to be developed infra, we believe that the Federal Government through the Bureau of Reclamation now has, and has had since 1905, a valid claim to all the unappropriated water in the Klamath Basin as of 1905. The validity of this claim is supported by a decision of the highest court of the State

of Oregon. We believe that the State Attorney General's opinion of 1950 (which is directly contrary to the opinion of a predecessor issued in 1930) is based upon an erroneous interpretation of the law of Oregon.

We also propose to show that even if the 1905 appropriation of the United States did not withdraw from appropriation all the water of the Klamath Basin, a subsequent appropriation pursuant to appropriate Oregon law, made by the Bureau of Reclamation on January 28, 1951, constituted a valid appropriation of 450,000 acre-feet per annum of water in the Upper Klamath Basin, in addition to the amounts previously used.

In addition to the water rights of the United States acquired by the Bureau of Reclamation for the irrigation of land in the Upper Basin, the Department of the Interior is directly concerned with the protection of the water rights of the United States held in trust for the Indians of the Klamath Reservation, which reservation was established by the treaty of October 14, 1864,[10/] between the United States and the Klamath, Modoc, and Yahooskin bands of Snake Indians. By treaty there was reserved to the Indians on the reservation rights to water required to carry out the purposes of the treaty. These water rights have a priority at least as

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10/ 16 Stat. 707.

of the date of the treaty, and they are not subject to the State law unless the Congress makes such water rights subject to State law. Congress has not taken such action.[11] Potential water usage under the rights of the Indians will be discussed subsequently under the subsection, "Correlation of the Supply of Water and Its Use under Vested Rights".

See page 45

In 1905 the Oregon Legislature enacted Chapter 228, General Laws 1905[12] (Ex. 25). Section 2 of that act provides that whenever the United States shall notify the Oregon State Engineer that it intends to utilize certain water, the water so described shall not be subject to further appropriation, but shall be deemed to have been appropriated by the United States, provided that the United States shall file plans for the proposed work within three years, and authorization within four years from the filing of such notice. At the same session of the Oregon Legislature, Chapter 5, General Laws of Oregon, 1905 (Ex. 24), also was enacted authorizing the United States to lower the water level of Upper Klamath Lake and to lower the water level or drain a number of other lakes in the Klamath Basin. All land thus reclaimed was ceded to the United States. The Congress of the United States,

thus it did not do

11/ United States v. Winters, 207 U.S. 564 (1908); United States v. Powers, 305 U.S. 527 (1939); Conrad Investment Company v. United States, 161 Fed. 829 (CCA 9, 1908).

12/ Oreg. Comp. Laws Anno., Sec. 116 - 438.

by the act of February 9, 1905, [13] authorized the Secretary of the Interior to raise or lower the lakes in the Klamath Basin and to dispose of any land ceded to the United States by any State as a result of any such change in water levels.

On May 19, 1905, the United States Reclamation Service, [14] pursuant to Chapter 228 of the General Laws of Oregon, 1905, gave notice of intention to utilize all the waters of the Klamath Basin in Oregon. Subsequently, within the time provided by the act, the Reclamation Service satisfied the procedural provisions of the act requiring the filing of plans for the proposed works and showing authorization for construction.

For 45 years following this appropriation by the United States, the official opinion of the State of Oregon was that an appropriation by the United States pursuant to the 1905 act withdrew the amount of water specified by the notice of utilization from appropriation by others. This was the decision of the Supreme Court of Oregon in the case entitled In re Waters of the Umatilla River. [15] It was also the opinion of the Attorney

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13/ 33 Stat. 714.

14/ Predecessor to the Bureau of Reclamation.

15/ 88 Or. 376, 168 Pac. 922, on rehearing, 172 Pac. 97 (1917-18).

General of Oregon, issued November 14, 1930 (Ex. 26), upon the occasion of Copco making an application for the appropriation of water for power generation.

However, the opinion of the Attorney General of Oregon issued on November 10, 1950 (Ex. 2), concludes:

(1) that the act of 1905 was probably repealed by the provisions of the Water Code, section 73, chapter 216, General Laws of Oregon, 1909;

(2) that under general provisions of the Oregon law and the provisions of section 8 of the Reclamation Act of 1902[16/] any appropriation of water made by the United States is limited to the amount that is put to beneficial use within a reasonable time;

(3) that the appropriation by the United States pursuant to the 1905 act is limited by the terms of the act to the amount of water that can be utilized by the project for which plans are filed pursuant to the provisions of the act; and

(4) that any water in excess of that required under the original project is subject to appropriation by others.

The opinion ends with the advice that if the State Engineer finds

16/ Supra, footnote 7.

from his investigation that there is surplus water over and above that required for the original project, he may honor applications in conformance therewith. It is not apparent to this day whether the State Engineer has made such an investigation or whether he has made a determination of what constitutes the "original project". It is probably sufficient to note that at this writing he has not honored Copco's application filed in April of 1951. It is also significant that in 1930, according to the Attorney General's opinion, the then State Engineer of Oregon, in the words of the opinion, furnished the following information:

> "The estimate of the State Engineer, however, of the amount of water which will ultimately be required by the government after the completion of its reclamation project is considerably higher, or probably 600,000 acre feet, and as I understand him, he estimates that it will probably require practically all of the waters of Upper Klamath Lake and its tributaries, and its outlet through Link River, Ewauna Lake and Klamath River, and that the records in his office indicate that the only other supply entering Klamath River above the proposed power site is about sufficient to replace losses occurring from seepage and other causes, in the Klamath River, between the head of Link River and Keno, which is above this site."

It is the Interior Department's position that each of the conclusions of the Oregon Attorney General in his 1950 opinion is erroneous. They will be discussed in the order set forth above.

1. The act of 1909 did not repeal the act of 1905.

Section 73 of the act of 1909 contains only the usual general repeal clause, e.g., "all laws or parts of laws so far as in conflict or inconsistent with the provisions of this act are hereby repealed." The act of 1905 is neither in conflict with nor inconsistent with the 1909 act. The latter is intended to regulate the appropriation of water by private interests, whereas the 1905 act is special legislation in the form of a privilege or grant of power extended to the United States by the State of Oregon.

Chapter 228, General Laws of Oregon, 1905, and Chapter 5, General Laws of Oregon, 1905, were enacted in pursuance of a plan for the development by the United States of the whole Klamath Basin. Unlimited power was granted to appropriate the water of the Basin, and very extensive powers were granted to regulate or drain all the principal lakes in the Basin. There was included a cession by the State of all land thus reclaimed. A vast undertaking was contemplated, and necessarily it was a long-time undertaking. It is doubtful, to say the least, that the legislature of Oregon intended to wipe out this enterprise with a general repealing clause in subsequent legislation of general application. The law respecting the repeal of special legislation by general legislation is too well known to require the citation of authorities.

It is also significant that in the decision in the case of

In re the Waters of Umatilla River,[17] the Supreme Court of Oregon in 1917 gave no indication that it considered the 1905 act as having been repealed by later legislation. Likewise, the Attorney General of Oregon in 1930 treated the 1905 act as being in full force and effect. Additionally, those who codified Oregon laws believed that it was still effective. The 1905 act appears today in the Oregon code.

2. The general provisions of the Oregon law limiting appropriation of water to an amount that can be put to beneficial use within a reasonable time are not applicable to the United States under the 1905 act. Nor are the provisions of section 8 of the Reclamation Law respecting beneficial use applicable to the United States. Here, again, the provisions of general laws do not override specific special legislation.

The court in the Umatilla River case refutes the argument of the Attorney General in the 1950 opinion concerning this point. In spite of the fact that the same provisions concerning the use of diligence in putting water to beneficial use existed in 1917 as existed in 1950, the court, in speaking of the water appropriated by the United States under the 1905 act, said at 172 Pac. 100:

17/ Supra, footnote 15.

"* * * this claim must be sustained, regardless of the diligence of the government in matters not specified in the statute, and regardless of the amount of water required to irrigate the lands served by the government ditches."

This is a plain holding that the United States is not bound to use diligence in putting the water to beneficial use (there being no provision in the statute requiring diligence in this respect), and that the amount of water appropriated by the United States in relation to the land to be served is immaterial.

The provisions of the Reclamation Law cited by the Attorney General in support of his thesis obviously are applicable to the landowners who purchase water from the United States, rather than to the United States. The provision in question follows:

"* * * Provided, That the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right."18/

This provision refers to the land irrigated. In other words, water acquired by the landowner shall be appurtenant to his land, and the right that he may acquire shall not exceed what he can beneficially use upon such land. The restriction in no respect applies to the United States.

The quotation from the case of Ickes v. Fox, which the Attorney General cites in support of his position, likewise

18/ Sec. 8, Reclamation Act, 1902; supra, footnote 7.

clearly refers to a restriction upon the landowner, rather than upon the United States. It reads as follows:

> "* * * Under the Reclamation Act, supra, as well as under the law of Washington, 'beneficial use' was 'the basis, the measure and the limit of the right'. * * * Appropriation was made not for the use of the government, but, under the Reclamation Act, for the use of the landowners; * * *."[19]

Obviously, the court is speaking of the rights of the landowner.

In virtually every reclamation project, appropriation of water is made by the United States in an amount sufficient to serve an area that usually does not reach full development for many years after the Government is ready to furnish it service. So far as we are aware, this reservation of water for future development has never been challenged. In general, the States evidently have not considered the diligence provisions applicable to the United States, and some have expressly exempted the United States by statute.

3. Appropriation by the United States pursuant to the Oregon act of 1905 is not limited to the amount of water required to serve the area for which plans are filed. The only proviso of the 1905 act requiring diligence is that which provides that the United States shall, within three years of filing its notice of appropriation, file final plans of the proposed works in the office

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19/ 300 U.S. 82, 94 (1937).

of the State Engineer for his information, and shall, within four years, authorize the construction of the proposed work. The Supreme Court of Oregon in the Umatilla case[20/] and the Attorney General who issued the 1930 opinion evidently did not consider the capacity of the works described in such plans to be a limiting factor on the amount of water granted under the preceding provisions of the act. Unquestionably, plans would have to be filed within the time limit, but the act does not indicate that such plans must necessarily comprehend the utilization of all the water appropriated.

Unfortunately, the opinion in the Umatilla case does not discuss in detail the basis for the court's conclusions. However, it is apparent from the court's conclusion (172 Pac. 100) that

> "* * * this claim must be sustained, regardless * * * of the amount of water required to irrigate the lands served by the government ditches"

that the court had under consideration a claim by the Government for an appropriation in an amount greater than could be utilized by the project works. The court, and the Oregon Attorney General who issued the 1930 opinion, evidently concluded, as do we, that it was the intent of the legislature in the 1905 enactment to provide

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20/ Supra, footnote 15.

for a long-time, progressive development of the whole Klamath Basin in Oregon. It was not intended or expected that complete plans for such a large-scale ultimate development could be filed within three years and authorized within four years after filing a notice of intention to utilize the water of the Basin.

It is our position that the opinion of the Attorney General issued in 1950 is in error and that his predecessor correctly stated the law in 1930 (Ex. 26).

An additional claim of the United States to water of the Klamath Basin is based upon the Notice of Utilization filed with the State Engineer of Oregon on January 25, 1951. When the Attorney General's opinion of 1950 was issued, the Bureau of Reclamation was engaged in making investigations with a view to developing further the remaining irrigable area of the Klamath Basin. During the preceding 45 years, the first stages of the project had grown from some 9,000 acres in 1907 to approximately 190,000 acres in 1951 (Ex. 18). The demand for further development led to requests that the Bureau initiate this new investigation. Since the Attorney General's opinion of 1950 cast some doubt upon the validity of the rights of the Government under its old filings, the United States made a new filing, pursuant to the 1905 act, for 450,000 acre-feet of water per annum in addition to the amount of

water then being used for the project. This notice was filed with the State Engineer prior to Copco's application for Project No. 2082. If the Interior Department is correct in its contention that the general repealing clause in the 1909 Oregon act did not repeal the 1905 Oregon act, this new Notice of Intention to Utilize Water withdrew 450,000 acre-feet per annum from appropriation by others.

It is particularly worthy of note that the 1905 Oregon act is not limited in effect to any particular period. It states, in part:

> "Whenever the proper officers of the United States * * * shall file * * * notice that the United States intends to utilize * * * waters, the waters described * * * shall not be subject to further appropriation under the laws of this state * * *." (Emphasis supplied.)

Also, it is noteworthy that appropriation pursuant to the statute is not dependent upon any action by officials of the State of Oregon, or otherwise. The right vests by operation of the statute, subject only to the proviso relating to the filing of plans and the authorization.

It is the Interior Department's position that irrespective of the validity of the Attorney General's opinion of 1950 concerning the questions of diligence in putting water to beneficial use and the limitation of appropriation to the scope of the plans filed, the United States at this time has a priority over Copco for the water presently being used for the Klamath Project, plus 450,000 acre-feet for future development by virtue of its 1951 water filing.

The Contract of 1917 Between the United States and Copco

The Interior Department believes that by entering into the 1917 contract with the Department, Copco acknowledged the prior rights of the United States to the water in the Klamath River, with the exception of a flow of 205 cubic feet per second predating the rights of the Interior Department. In the contract, Copco agreed to construct and convey the Link River Dam to the United States. It agreed to enlarge the Keno canal and to settle all claims of landowners affected by the raising of Upper Klamath Lake. In addition, it agreed to sell power to the Klamath Project of the Bureau of Reclamation at a preferential rate in a prescribed geographical area. Link River Dam enlarged the storage capacity of Upper Klamath Lake, and the contract provides that the additional water is to be used first for irrigation. Copco was permitted to regulate the lake, within specified limits, for power generation, but subject always, however, to the requirements of the Klamath Project for irrigation uses. This contract expires in 1967.

According to Copco (Copco Br. 4), the contract was entered into because of fear on the part of the United States and the irrigators that the natural flow of the river would not "satisfy the /applicant's/ power rights". This is not correct. As is

shown elsewhere herein, Copco's rights, prior to the rights of the United States, consisted of but two small water filings.

Copco contends further that unless the contract is renewed in 1967, "doubt will be cast upon the water rights of project landowners" and that the project landowners "have expressed grave concern" concerning the contract's expiration (Copco Br. 5). This is not the case. On the contrary, the "grave concern" of the project landowners, and others in the Basin, as expressed by some 200 protestants in the hearing before the Oregon Hydroelectric Commission, and many who appeared in this proceeding, is that Copco will impair the present and future use of water for irrigation by obtaining a license for Project No. 2082. This same general concern was expressed in 1923 by officials of the State of Oregon and a number of water users' organizations in the Basin. Their point of view is presented at length in the Joint Hearings before the Committees on Irrigation and Reclamation on S. 3189 and H. R. 9493,[21/] bills to confer jurisdiction on the United States District Court for proceedings to set aside the 1917 contract between the United States and Copco. A portion of these Congressional hearings has been incorporated by reference in the present hearings (Item B, Tr. 257).

21/ 69th Cong., 1st Sess., (1923).

One question in relation to the 1917 contract appears especially pertinent: If in 1917 Copco had rights to the amounts of water required for the operation of its then existing and proposed hydroelectric plants on the Klamath River, why did it agree to a contract under which it was to build a dam, transfer it to the United States, operate it subordinate to all requirements for irrigation, pay out substantial sums of money to settle claims arising from the raising of the level of Upper Klamath Lake, and, in addition, give preferential power rates to the Klamath Project? The conclusion seems inescapable that Copco did not have adequate water rights to operate its hydroelectric plants, and so found it necessary to contract with the entity holding the superior rights to water of the Upper Klamath Basin--namely, the United States.

In this general connection, it is important to observe that regardless of other considerations relative to the respective water rights of the Applicant and the United States, Mr. John Boyle, Vice-President and General Manager of Copco, wrote a letter to the Bureau of Reclamation on October 26, 1951 (Ex. 20), stating that Copco would not want to proceed with Project No. 2082 unless a renewal of the 1917 contract could be obtained. These statements were verified by Mr. Boyle in his testimony in this proceeding. Since we do not understand that the Commission

has authority to compel the Interior Department to renew the contract, it would appear that the feasibility of the project is entirely dependent upon what action the Secretary of the Interior may see fit to take with respect to its renewal. The Interior Department's present position in this respect, as testified by witness Dickinson, is that the Department does not expect to consider renewal until the results of the present comprehensive investigations are known.

Other Copco Contentions Relating to Water Rights

The principal evidence introduced by Copco relating to water rights essential to the operation of Project No. 2082 is its application to the Oregon Hydroelectric Commission for authority to divert 2,500 cubic feet per second of the flow of the Klamath River. Although more than 18 months have passed since hearings were held on this application, no license has been granted. However, in addition to its State application, Copco contends that it has the right to re-use the water now used in its present plants on the Klamath River for the operation of Project No. 2082. In order to support its position, a number of water filings purportedly covering present water usages were introduced into evidence (Exs. 3 to 10 and 12 and 13).

We do not believe there is any validity in Copco's position

in respect to these filings. First, any water rights claimed for its existing plants are entirely irrelevant to this proceeding. The question is whether it has rights for the proposed Big Bend No. 2 project. Second, if Copco has gained any rights under these filings, all but two of them are subject to prior rights of the United States, inasmuch as they were filed subsequent in point of time to the appropriation by the United States (May 19, 1905); and the two earlier filings by Copco are for relatively small amounts of water.

Certain of the filings, introduced into evidence by Copco, were made in California and cover the Applicant's plants located on the Klamath River in California. Copco argues that, since the river is an interstate stream, the State of Oregon must not do anything to prevent the amounts of water covered by such filings from crossing the border (Copco Br. 22, 23). Copco's position seems to be that since certain amounts of water will have to flow past the site proposed for Project No. 2082 to satisfy rights acquired under California law, such water may as well be utilized for Project No. 2082. Apparently, Copco feels that the Federal Power Commission, by granting a license for Project No. 2082, could effect what might otherwise have to be adjusted by an interstate water compact. This argument ignores the fact that Project

No. 2082 will be located in Oregon and that any water rights required for its operation must come from Oregon. If Oregon refuses the application for water, Copco will be without the water rights essential to the Project, irrespective of the fact that the Klamath River is an interstate stream. Moreover, the argument overlooks the fact that reciprocal legislation exists between the States of California and Oregon.[22/] Pursuant to these enactments, the State of California undoubtedly would recognize the water rights of the United States which were acquired in Oregon prior in time to any appropriation of Copco which may have been made under California law.

As to the water rights of the Klamath Indians, Copco states:

> "* * * they are not entitled to make unreasonable uses or uses which are beyond the purposes of an Indian Reservation; nor are they entitled to lay claim to fantastic amounts of water for future purposes * * *. There is no testimony in the record that any usage of water on the Reservation is planned, or even proposed, which would materially affect the downstream supply." (Copco Br. 16)

The Interior Department submits that the use of water for irrigation of crops is not unreasonable, or beyond the purposes of an Indian reservation. There is testimony in the record that future use of water on the reservation is proposed and planned which might

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22/ California Water Code, Secs. 1230-1232; Oregon General Laws, L. 1911, ch. 224, as amended; Or. Comp. Laws Anno., Sec. 116 - 428.

affect the downstream supply materially (Tr. 498-502, 509-512, 592-594, 603, 604; Exs. 27-32).

Correlation of the Supply of Water and Its Use Under Vested Rights

Having examined the legal rights to water in the Upper Klamath Basin, the next step in an analysis of the question of the availability of water for Project No. 2082 is the correlation of the use of water under these legal rights with the supply of water available. If, as the Interior Department contends, the United States has withdrawn from appropriation all water not appropriated prior to 1905, all irrigation uses of the Basin, present and potential, will have priority to the use of water. On this basis, the record shows that the future demands of irrigation in the Upper Basin, coupled with present demands, will not leave a sufficient supply of water for the operation of Project No. 2082.

But even if it is assumed, for the purpose of argument, that the present water rights of the United States are limited to the irrigation of the present Klamath Reclamation Project area and that the water rights of the Indians of the Klamath Reservation are to be confined to the present irrigation on the reservation -- still there will not be sufficient water to operate Project No. 2082 as proposed by the California Oregon Power Company.

Anticipated total future water requirements of land in the

Upper Klamath Basin are set forth in Exhibit 29. The lands presently under irrigation and lands which may be irrigated in the future are delineated on Exhibit 28. Based on the projection of present crop records and current water requirements, the irrigation of these lands would require a net of 1,435,000 acre-feet each year. In the event of the irrigation of the lands indicated on Exhibit 28, the 1,435,000 acre-feet would be utilized upstream from Project No. 2082.

A complete picture of the water supply-demand problem in the Upper Klamath Basin is presented in Exhibit 30. This depicts the mean annual flow of water which would have been available at Keno, Oregon, during the 40-year period between 1910 and 1949 under natural conditions, under present conditions, and under future conditions. "Natural conditions" represent natural flows with no storage facilites. "Present conditions" represent the current irrigation requirements in the Upper Klamath Basin, with present storage facilities. "Future conditions" represent the current irrigation requirements plus all of the future irrigation requirements of the areas set forth on Exhibit 28. Essentially, the operation of Project No. 2082 would be dependent on the available flows of the Klamath River at Keno. Under future conditions, represented by the dotted line on

1250 CFS at Keno in modern of — from upper K Lake / from lost Rives

Exhibit 30, the continuous flow of 1250 cubic feet per second required for the operation of Project No. 2082 would be available in but 6 years of the 50 years of record.

Co/co testimony the off-site

Exhibit 32 is a closer examination of some of the details of the picture presented by Exhibit 30. The mean monthly flows at Keno, as they would exist under present conditions and future conditions, are set out for a year of low water supply (1930-31), for an average year (1940-41), and for the maximum water-yield year of record (1913-14). Under future conditions and assuming a recurrence of the water year of 1930-31, the mean monthly flows at Keno would be far below 1250 cubic feet of water per second in every month of the year. Assuming future conditions and the recurrence of the average water yield year of 1941-42, the monthly flow at Keno would also be below 1250 cubic feet of water per second in all of the months of the year. Even in the highest water-yield year of record, 1913-14, irrigation under future conditions would have left a flow at Keno of 1250 cubic feet of water per second in only four months of the year.

Assuming, for purposes of illustration only, that the water rights held by the United States are to be confined to the water required for the irrigation of the present Klamath Project area, and assuming only the present irrigation on the Klamath Indian

Sprague Williamson

No analysis is provided on feasible storage & drainage of Sycan - for regulation + holding flood waters 6 ms not including

Reservation (which, however, is not the extent of the Indian's water rights), there still would be insufficient water for the operation of Big Bend No. 2. Exhibit 30 depicts by a dashed line the mean annual flows which would have existed at Keno under present conditions of development in the Upper Klamath Basin. It shows that in 24 years of the 40 years of record, the mean annual flows at Keno were below 1250 cubic feet of water per second. By reference to the mean monthly flows at Keno, shown under "present conditions" on Exhibit 32, further conclusions may be drawn. In the event of a recurrence of the dry year 1930-31, in no month of the year would 1250 cubic feet of water per second be flowing at Keno. In an average year, 1941-42, a mean monthly flow of 1250 cubic feet of water per second would have been present at Keno in only four months of the year. In only five months of the wettest year, 1913-14, would a mean monthly flow of 1250 cubic feet of water per second be found in the river at Keno.

Conclusions on Water Rights and Water Supply

The question whether sufficient water is available for the operation of Project No. 2082 after satisfaction of present vested rights is for determination by the courts pursuant to Oregon law. The Federal Power Commission has no jurisdiction to make such determination. The mere filing of an application

with the Oregon Hydroelectric Commission should not be accepted as satisfactory evidence that the necessary water rights will be forthcoming.

From the facts and law discussed herein, it is clear that there will not be a sufficient supply of unappropriated water in the Klamath River to supply the water requirements of Project No. 2082. This conclusion is correct whether the rights of the United States are limited to present irrigation uses or are broad enough to include the future developments discussed herein.

Neither the Applicant nor the Commission's staff presented satisfactory evidence on the vital question of water supply. For example, neither Copco nor the staff, in their studies of water availability, gave any consideration whatsoever to the future development of irrigation in the Upper Klamath Basin. Although the Commission's staff recognized, in part, the water deficiency problem, the solution used was to assume that in a dry year (1930-31) a deficiency would be taken by the irrigators. One study submitted shows that Project No. 2082 would have sufficient water for its operation only if irrigation would take a 35 percent reduction in water during the entire irrigation season. Such a solution would not be tolerated by the irrigators, nor would it be in the public interest.

The Interior Department is convinced that the preservation and expansion of the agricultural economy of the Upper Klamath Basin are of primary importance to the region, and that the proposed Project No. 2082 could be operated successfully only at the expense of present and future agricultural developments. Under the laws of the United States and of the State of Oregon, and on behalf of present and future irrigators of the Basin, the Interior Department asserts the prior rights of the United States to water of the Upper Klamath Basin.

It is the position of the Interior Department that it holds legal rights of sufficient priority to ensure the water requirements of present and future irrigation in the Basin. Irrigation use, present and potential, under these rights will not leave a sufficient amount of water in the Klamath River for the operation of Project No. 2082 as proposed by the California Oregon Power Company. Accordingly, the application for Project No. 2082 should be denied.

II

THE COMMISSION SHOULD DENY THE LICENSE UNDER SECTIONS 7(b) AND 10(a) OF THE FEDERAL POWER ACT

Section 7(b) of the Federal Power Act provides:

> "Whenever, in the judgment of the Commission, the development of any water resources for public purposes should be undertaken by the United States

(Bureau surrendered and subjugated its legal right to power in the 1917 C/C - U.S. Conflicts) 2/20/53

what has F.P.C. done ?

itself, the Commission shall not approve any application for any project affecting such development, but shall cause to be made such examinations, surveys, reports, plans, and estimates of the cost of the proposed development as it may find necessary, and shall submit its findings to Congress with such recommendations as it may find appropriate concerning such development."

Section 10 of the Federal Power Act provides in part: what effect on

"All licenses issued under this Part shall be on the following conditions:

"(a) That the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, and for other beneficial public uses, including recreational purposes; and if necessary in order to secure such plan the Commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval."

Commerce

to date a joint undertaking C/C & Bureau

When an application for a license is made, section 7(b) requires the Commission to determine whether the development of the water resources should be undertaken by the United States. If the Commission concludes in favor of Federal development, no license is to be granted. Section 10(a) is closely related, and restricts the Commission to the licensing only of those projects that are "best adapted to a comprehensive plan". We believe the judgment of the Commission under section 7(b) should be controlled generally, and certainly in this case, by a consideration of the

Combatting data 1905 ceding 1902 Reclamation Act

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best means of attaining a comprehensive water resource development as required by section 10(a).

Thus, the question arising under both of the quoted provisions of the Federal Power Act is: Does the plan of Copco for the Big Bend No. 2 project constitute, or properly fit into, a comprehensive plan of development?

The word "comprehensive" means "wide", "large", "full", "all-embracing".[23] Section 10(a) speaks in terms of a comprehensive plan "for the improvement and utilization of water-power development, and for other beneficial public uses, including recreational purposes". The Applicant's plan for Project No. 2082 is solely for a single-purpose power development. The plan in no way purports to represent an over-all plan, an "all-embracing" plan, for water resource development, including irrigation, flood control, fish and wild life, and other uses. This is borne out not only by the testimony of Copco witnesses, by its application, and by many of its exhibits, but also by evidence submitted by the Commission's staff. For example, witnesses for both repeatedly stated that water availability studies for Big Bend No. 2 did not contemplate any irrigation uses in the Upper Klamath Basin beyond those of the present (Tr. 210, 281, 282, 718, 725). Copco's plan is designed only to fit the status quo, except as to power.

23/ Webster's New International Dictionary (2d Ed., 1949); Roget's International Thesaurus, Mawson (1940), p. 31.

How can a plan be considered as comprehensive when it gives no consideration to new irrigation development in an area where irrigated farming is basic to the local economy? How can a plan be considered as "wide", "full", and "all-embracing" when it ignores the future needs of the area in respect to fish and wild life preservation, recreation, etc.? We believe a comprehensive plan encompasses basin resource planning -- in this instance, the Upper Klamath Basin. We do not believe that a single-purpose power development on the Klamath River, which does not contribute to an orderly, over-all solution of water problems of the Basin, can be said to be "best adapted to a comprehensive plan". If the Commission grants a license for Big Bend No. 2, and there is set aside for power development a large amount of water, the hope for a successful basin-wide development -- one in which all water needs are satisfied to the fullest practicable extent -- may well be jeopardized.

In connection with the questions raised relating to sections 7(b) and 10(a) of the Federal Power Act, we wish to emphasize that the Secretary of the Interior is now proceeding with a complete survey of the water resources of the Upper Klamath Basin. This is being undertaken pursuant to his general statutory responsibility for resource development and conservation. Three Interior

Department agencies are primarily responsible, the Bureau of Reclamation, the Fish and Wildlife Service, and the Bureau of Indian Affairs. Many other Federal, State, and local agencies are cooperating. This report is to be completed in 1954. It will cover the water needs of all interests. It will make specific proposals as to the manner in which these needs may be satisfied. The report will give due consideration to the need for low-cost power for irrigation pumping and to the well-established Federal policy of using power revenues to help finance irrigation developments. This latter policy has a long legislative history. It was first laid down in the act of April 16, 1906.[24] It was reiterated in the act of September 18, 1922[25] (an act passed for the Salt River Project, Arizona), in subsection I of the Fact Finder's Act,[26] and in numerous other more recent statutes, including, in particular, the Reclamation Project Act of 1939.[27]

The Interior Department's plan may or may not recommend Federal development of the power potential as part of a reclamation program. However, it will propose an integrated development for

24/ 34 Stat. 116.

25/ 42 Stat. 847, 43 U.S.C. § 598.

26/ Sec. 4 Second Deficiency Act, Fiscal Year 1924 (Act of December 5, 1924, ch. 4, 43 Stat. 672).

27/ 53 Stat. 1187, 43 U.S.C. § 485.

both irrigation and power for the entire Basin and the satisfaction of other water needs to the fullest practicable extent.

For the foregoing reasons, we believe that the Commission should deny the application for license for the Big Bend No. 2 project on the ground that it does not constitute a plan "best adapted to a comprehensive plan" for the development of the water resources of the Upper Klamath Basin.

III

THE COMMISSION HAS NO AUTHORITY TO ISSUE A LICENSE TO COPCO FOR PROJECT NO. 2082 WHICH INCLUDES ANY RIGHTS OR PRIVILEGES RELATING TO LINK RIVER DAM

Copco's Application and Brief

The Order to Show Cause in Docket E-6390, among other things, raised the questions whether Copco's existing hydroelectric plants utilize the surplus water or water power from any Government dam, and whether, by virtue of such use, they are being maintained and operated contrary to the provisions of section 23(b) of the Federal Power Act making it unlawful to "utilize the surplus water or water power from any Government dam, except under and in accordance with the terms of a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to this Act."

Copco expressed no position on these matters at the hearing,

and has stated that its principal brief is addressed only to the issues presented in the application for a license for the Big Bend No. 2 project. Although Copco needs a regulated water supply for this proposed development, the Link River Dam is not a part of the project as described in the application, and no rights or privileges in Link River Dam were requested of the Commission.

It is somewhat anomalous, then, that Copco's brief (pp. 24-25) includes an argument that the Commission should issue a license for the Big Bend No. 2 project authorizing and directing it to carry out the terms of paragraph 3 of the contract of February 24, 1917, as amended and supplemented (Ex. 1), and directing that, upon the expiration of this contract in 1967, Copco shall continue in the same manner to maintain and operate Link River Dam for the remaining period of a 50-year license. The contract paragraph provides that Copco "may regulate the water level of Upper Klamath Lake between elevations 4143.3 and 4137," and that it may lower the level of the Lake below 4137 "at such times and upon such conditions as may be satisfactory to the Secretary of the Interior."

We believe that the Federal Power Commission has no authority to include in a license for the Big Bend No. 2 project the provisions relating to Link River Dam suggested by the Applicant. Link River Dam is a key structure in the Klamath

Irrigation Project. Link River Dam is the property of the United States. It is under the administrative control and jurisdiction of the Secretary of the Interior. As indicated above, it was constructed primarily for the purpose of storing water for irrigation purposes in the Klamath Basin. Copco has pointed out that Link River Dam appropriately could be grouped with the structures proposed to be constructed by it as "a unit of development", hence a "project", as defined in section 3(11) of the Federal Power Act, and if that were done the Link River Dam would fall within the definition of "project works" for the Big Bend No. 2 development. Similarly, there may be many instances on rivers of the United States where an already constructed upstream storage reservoir of one agency is vital or contributes significantly to a downstream power plant proposed to be constructed by another under a Commission license. However, this circumstance does not enable the Commission to issue a license to the owner of the downstream project to operate and maintain the upstream reservoir, nor does it enable the Commission to confer a right to receive a regulated water supply from the upstream reservoir. The Commission may require the licensee for the downstream plant to reimburse the owner of the upstream reservoir for benefits pursuant to section 10(f) of the Federal Power Act, but if the

feasibility of the downstream plant requires firm arrangements with respect to the pattern of the storage and release of water from the upstream reservoir, those assurances obviously must be obtained by negotiation with the agency owning and controlling the upstream reservoir and the water rights necessary for the downstream power plant. In the case of the Big Bend No. 2 project, the owner of the upstream reservoir and water rights is the United States, as represented by the Secretary of the Interior.

Ignoring the fact that the Link River Dam is administered by the Secretary of the Interior under Federal reclamation laws, Copco asserts jurisdiction in the Commission to confer the desired rights in Link River Dam and Upper Klamath Lake waters under the language of section 4(e) of the Federal Power Act which authorizes the Commission to issue licenses "for the purpose of constructing, operating, and maintaining * * * reservoirs * * * or other project works necessary or convenient for the development * * * and utilization of power * * * upon any part of the public lands and reservations of the United States * * *." It is true that Link River Dam occupies Government land which is a "reservation" as defined in the Federal Power Act, and the quoted language from section 4(e) would apply to a license for the use of this land. However, the provision clearly speaks in terms

of a license to an applicant to construct, operate, and maintain its own works on Government land. It has no reference to a license to operate another's reservoir, or to have another's reservoir operated in a particular manner for the benefit of an applicant under the Federal Power Act. Furthermore, there is no other language in the Federal Power Act which would authorize the issuance of a license conferring upon anyone the right to operate a reservoir owned by another, including the United States, whether within or without a "reservation", or to have a reservoir operated in a particular manner for its benefit.

Parenthetically, it should be pointed out that if a license to Copco were to be predicated on the use of any land constituting a "reservation" within the meaning of the Federal Power Act, the Commission would be controlled by the first proviso of section 4(e), which provides:

> "* * * That licenses shall be issued within any reservation only after a finding by the Commission that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired, and shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservation * * *."

At the present time, it is clear that there could be no conditions of license which would be satisfactory to the Secretary of the Interior.

License for Use of Surplus Water from Link River Dam

The only provision in the Federal Power Act upon which conceivably there could be predicated Commission jurisdiction to assure a regulated water supply by means of Link River Dam to meet Copco's operation requirements for the Big Bend No. 2 project is that part of section 4(e) which authorizes the Commission to issue licenses for the purpose of "constructing, operating, and maintaining dams, water conduits, reservoirs, power houses, transmission lines, or other project works necessary or convenient * * * for the purpose of utilizing the surplus water or water power from any Government dam * * *." The interpretation of this language is involved in the questions raised in Docket No. E-6390 as to whether Copco is now utilizing the surplus water or water power from any Government dam and is operating contrary to the provisions of section 23(b) of the Federal Power Act.

Since the Commission has the burden of proof on these questions and the Commission's staff counsel will file the principal brief thereon, and since Presiding Examiner Costello gave counsel for the Interior Department the privilege of replying thereto, extensive argument that the Commission has no authority to license the use of any water or water power from Link River Dam for the Big Bend No. 2 project or Copco's existing plants

is omitted from this brief. However, the principal basis for our conclusion that the Commission is without such jurisdiction will be indicated briefly below.

The "surplus water or water power from any Government dam" referred to in sections 4(e) and 23(b) of the Federal Power Act must mean water or water power surplus to the purposes for which the "Government dam" is needed by the Government. In this sense, there is no surplus water or water power from Link River Dam. The water and other privileges committed to Copco until 1967 under the 1917 contract, as amended and supplemented, cannot be considered as "surplus", because the contract secured benefits for the Klamath Project and thereby served its purposes. Whether there will be any surplus water from Link River Dam after 1967 is a matter for determination by the Secretary of the Interior. The language of Mr. Justice Shiras in Green Bay and M. Canal Co. v. Patten Paper Co., [28] a case involving the right of a private corporation to water power incidentally created by the erection and maintenance of navigation structures in the Fox River in Wisconsin, is equally applicable to the present situation:

28/ 172 U.S. 58, 80 (1898).

"The substantial meaning of the transaction was, that the United States granted to the canal company the right to continue in the possession and enjoyment of the water powers and the lots appurtenant thereto, subject to the rights and control of the United States as owning and operating the public works, and that the United States were credited with the appraised value of the water powers and appurtenances and the articles of personal property. The method by which this arrangement was effected, namely, by a reservation in the deed, was an apt one, and quite as efficacious as if the entire property had been conveyed to the United States by one deed and the reserved properties had been reconveyed to the canal company by another.

"So far, therefore, as the water powers and appurtenant lots are regarded as property, it is plain that the title of the canal company thereto cannot be controverted; and we think it is equally plain that the mode and extent of the use and enjoyment of such property by the canal company fall within the sole control of the United States. At what points in the dam and canal the water for power may be withdrawn, and the quantity which can be treated as surplus with due regard to navigation, must be determined by the authority which owns and controls that navigation. In such matters there can be no divided empire." (Emphasis added.)

"There can be no divided empire" between the Secretary of the Interior and the Commission with respect to what water or water power, if any, at a reclamation dam is surplus to the needs of the reclamation program.

At the present time, there has been no determination by the Secretary as to whether there will be any surplus water from

Link River Dam. The Department of the Interior has indicated that it is not yet ready to consider a renewal of the 1917 contract or the negotiation of another contract until after the completion of the Department's pending comprehensive investigation of water resources and requirements in the Klamath River Basin for irrigation, fish and wild life, power, and other beneficial uses. The Interior Department's position is clearly necessary to a conscientious and intelligent discharge of the Secretary's duties and responsibilities under the reclamation laws with respect to making examinations and surveys for the storage, diversion, and development of waters for the reclamation of arid and semi-arid lands; with respect to constructing and operating reclamation projects and Indian irrigation projects, including structures for the production, use, and sale of electric power and energy; and with respect to the administration of the existing Klamath Project.

Conclusion

For the many reasons set forth, we believe that the Commission is without authority to follow the recommendation of the Applicant that a license be granted incorporating the essential provisions of the 1917 contract between Copco and the Department of the Interior covering the operation of Link River Dam, or to assure Copco otherwise of a regulated water supply for Project No. 2082.

CONCLUSIONS

I

THERE IS NOT SUFFICIENT UNAPPROPRIATED WATER IN THE KLAMATH RIVER TO SUPPLY THE REQUIREMENTS OF PROJECT NO. 2082.

II

THE COMMISSION SHOULD DENY A LICENSE TO COPCO UNDER SECTIONS 7(b) AND 10(a) OF THE FEDERAL POWER ACT.

III

THE COMMISSION HAS NO AUTHORITY TO ISSUE A LICENSE TO COPCO FOR PROJECT NO. 2082 WHICH INCLUDES RIGHTS AND PRIVILEGES RELATING TO LINK RIVER DAM.

RECOMMENDED FINDINGS

The Interior Department believes that the Federal Power Commission should find that the application of the California Oregon Power Company for a license for Project No. 2082 should be denied, or, at the very least, should find that action upon it should be suspended until after the comprehensive investigation of the water resources of the Upper Klamath Basin is completed and the application can be evaluated in the light of the data developed as a result of such investigation.

Respectfully submitted,

Oscar L. Chapman
Secretary of the Interior

By

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Solicitor of the Department
of the Interior
Washington 25, D. C.

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P. O. Box 2511
Sacramento, California

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

In the Matter of)
) Project No. 2082
THE CALIFORNIA OREGON POWER COMPANY)

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing Reply Brief of the Secretary of the Interior, as Intervenor, upon all parties of record in this proceeding by mailing a copy thereof, properly addressed, to each of the following persons, to wit:

JOSEPH B. HOBBS, ESQUIRE,
Staff Counsel,
Federal Power Commission,
Washington 25, D.C.

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Assistant Attorney General,
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cc/ cc

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MALCOLM T. DUNGAN, ESQUIRE,
Brobeck, Phleger & Harrison,
Attorneys at Law,
111 Sutter Street,
San Francisco 4, California.

Dated: Sacramento, California, this 7th day of November 1952.

E. K. Davis
Assistant Regional Counsel
Bureau of Reclamation

Of Counsel
for the Secretary of the Interior

Lathrop 1
1952

ADDRESS ALL
COMMUNICATIONS TO:
THE REGIONAL DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
REGIONAL OFFICE, REGION 2
P. O. BOX 2511
SACRAMENTO, CALIFORNIA

IN REPLY REFER TO:

K Basin Studies
River flow data

OCT 22 1952

Hon. Randolph Collier
Senator from 2nd District
551 N. Main Street
Yreka, California

My dear Senator Collier:

I am glad to enclose the water supply data on the Klamath Basin requested in your letter of October 14. This is the identical information which was submitted to the Joint Legislative Committee on Water Problems at its meeting in Eureka on September 29.

One of the tables lists the seasonal runoff of the Klamath River at its mouth as well as the runoff of its four principle tributaries in California--the Shasta, Scott, Salmon and Trinity rivers--for a period of more than half a century. The other table lists the seasonal runoff into Upper Klamath Lake, which includes the flow of the principle tributaries in Oregon, for a slightly shorter period. The average annual runoffs for the entire periods of record are given at the bottom of each column in both tables.

Stream flow diagrams similar to that sent you with our letter of October 9 have not been prepared for the entire Klamath River and tributaries. You may note that the stream flow data and diagram sent to you on October 9 are based on the mean flow during two typical seasons, 1944-45 and 1945-46, and therefore are not strictly comparable to the average runoffs for the greater periods of record used in the enclosed tables. Please let me know if you wish further information.

Do want flow diagrams like you sent separate for Salmon Trinity

Sincerely yours,

Richard L Boke

Richard L. Boke
Regional Director

Enclosures 2 in dup

ESTIMATED SEASONAL NATURAL RUNOFF, 1894-95 TO 1946-47, FROM MAIN STREAM AND TRIBUTARY BASINS FOR WHICH RECORDS ARE AVAILABLE, NORTH COASTAL AREA
in acre-feet

Season Oct. 1 - Sept. 30	Shasta River near Yreka 1/	Scott River near Fort Jones 2/	Salmon River at Somesbar 3/	Trinity River near Hoopa 4/	Klamath River at Mouth
1894-95	275,000	570,000	1,625,000	5,730,000	18,089,000
95-96	260,000	535,000	1,530,000	5,280,000	16,885,000
96-97	240,000	495,000	1,450,000	4,850,000	15,750,000
97-98	130,000	260,000	800,000	2,240,000	8,336,000
98-99	155,000	315,000	925,000	2,640,000	9,557,000
1899-1900	210,000	435,000	1,275,000	4,000,000	13,486,000
00-01	215,000	450,000	1,300,000	4,150,000	13,816,000
01-02	260,000	535,000	1,540,000	5,310,000	16,952,000
02-03	235,000	480,000	1,400,000	4,640,000	15,186,000
03-04	345,000	725,000	1,990,000	7,525,000	22,721,000
1904-05	250,000	510,000	1,480,000	5,040,000	15,974,000
05-06	260,000	530,000	1,530,000	5,270,000	16,805,000
06-07	305,000	635,000	1,775,000	6,500,000	20,338,000
07-08	195,000	410,000	1,180,000	3,600,000	12,458,000
08-09	320,000	660,000	1,890,000	6,790,000	20,549,000
1909-10	220,000	450,000	1,370,000	4,200,000	14,650,000
10-11	235,000	485,000	1,420,000	4,700,000	16,059,000
11-12	235,000	470,000	1,330,000	3,340,000	12,573,000
12-13	210,000	450,000	1,280,000	3,750,000	13,683,000
13-14	355,000	580,000	1,600,000	5,530,000	17,600,000
1914-15	205,000	460,000	1,300,000	5,050,000	14,717,000
15-16	260,000	520,000	1,450,000	4,710,000	15,501,000
16-17	180,000	350,000	1,050,000	2,701,000	11,191,000
17-18	135,000	200,000	600,000	2,003,000	7,697,000
18-19	185,000	420,000	1,200,000	3,750,000	12,690,000
1919-20	135,000	170,000	500,000	1,410,000	5,981,000
20-21	305,000	625,000	1,700,000	5,400,000	18,087,000
21-22	175,000	320,000	950,000	2,784,000	10,185,000
22-23	135,000	200,000	600,000	2,086,000	7,375,000
23-24	130,000	100,000	300,000	816,000	4,213,000
1924-25	185,000	480,000	1,350,000	4,600,000	14,270,000
25-26	150,000	290,000	875,000	2,660,000	8,955,000
26-27	270,000	540,000	1,500,000	5,130,000	16,022,000
27-28	185,000	370,000	1,090,000	3,635,000	12,041,000
28-29	130,000	200,000	593,000	1,928,000	7,541,000
1929-30	135,000	275,000	825,000	2,465,000	8,585,000
30-31	125,000	160,000	473,000	1,202,000	5,169,000
31-32	125,000	350,000	1,050,000	2,690,000	9,907,000
32-33	125,000	340,000	1,010,000	2,780,000	9,998,000
33-34	120,000	195,000	581,000	1,900,000	6,634,000

Season Oct. 1 - Sept. 30	Shasta River near Yreka 1/	Scott River near Fort Jones 2/	Salmon River at Somesbar 3/	Trinity River near Hoopa 4/	Klamath River at Mouth
1934-35	130,000	390,000	1,134,000	3,438,000	11,130,000
35-36	140,000	395,000	1,144,000	3,625,000	12,067,000
36-37	135,000	330,000	980,000	2,860,000	9,731,000
37-38	270,000	840,000	2,234,000	7,601,000	23,712,000
38-39	140,000	250,000	758,000	2,158,000	7,914,000
1939-40	210,000	450,000	1,277,000	5,137,000	15,020,000
40-41	275,000	445,000	1,265,000	6,689,000	16,020,000
41-42	230,000	535,000	1,320,000	5,085,000	15,009,000
42-43	220,000	640,000	1,735,000	4,467,000	17,024,000
43-44	120,000	205,000	633,000	1,995,000	7,346,000
1944-45	135,000	330,000	1,130,000	3,625,000	11,457,000
45-46	175,000	495,000	1,520,000	4,787,000	15,484,000
1946-47	145,000	255,000	770,000	2,166,000	7,894,000
MEAN	201,000	417,000	1,200,000	3,932,000	12,982,000

1/ Shasta River near Yreka - station located approximately 0.6 miles upstream from mouth and 6 miles north of Yreka, California.

2/ Scott River near Fort Jones - Station located 10.5 miles downstream from Fort Jones, California. Measures the major portion of the flow of the Scott River.

3/ Salmon River at Somesbar - Station located 1.5 miles upstream from mouth.

4/ Trinity River near Hoopa - Station located 0.5 miles downstream from Campbell Creek and 2 miles southeast of Hoopa. The values shown are practically equivalent to the flow at the mouth of the Trinity River.

Season Oct. 1 - Sept. 30	Computed Historical Flow into Upper Klamath Lake Acre-feet
1904-05	1,826,000
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1906-07	2,268,000
1907-08	1,680,000
1908-09	1,767,000
1909-10	2,002,000
1910-11	2,177,000
1911-12	1,755,000
1912-13	1,737,000
1913-14	1,927,000
1914-15	1,480,000
1915-16	1,613,000
1916-17	1,516,000
1917-18	1,313,000
1918-19	1,385,000
1919-20	1,194,000
1920-21	1,755,000
1921-22	1,460,000
1922-23	1,236,000
1923-24	1,037,000
1924-25	1,375,000
1925-26	939,000
1926-27	1,493,000
1927-28	1,299,000
1928-29	1,014,000
1929-30	940,000
1930-31	791,000
1931-32	959,000
1932-33	945,000
1933-34	876,000
1934-35	1,034,000
1935-36	1,132,000
1936-37	985,000
1937-38	1,615,000
1938-39	1,039,000
1939-40	1,246,000
1940-41	1,077,000
1941-42	1,280,000
1942-43	1,813,000
1943-44	1,195,000
1944-45	1,259,000
1945-46	1,532,000
1946-47	1,161,000
1947-48	1,211,000
1948-49	1,301,000
1949-50	1,377,000
1950-51	1,813,000
MEAN	1,397,000

Note: Computed from historical outflow from the lake, historical change in lake storage, and estimated evaporation and precipitation on lake surface. Values were taken from pp. 42-44 of preliminary draft (May 1952) of Appendix B, Water Supply Studies, Part I, Water Resources - Report on Upper Klamath Basin Investigations. The values shown include the flow of Sprague, Williamson, and Wood Rivers, as well as the flow of several minor streams flowing directly into Upper Klamath Lake.

ESTIMATED SEASONAL NATURAL RUNOFF, 1894-95 TO 1946-47, FROM MAIN STREAM AND TRIBUTARY BASINS FOR WHICH RECORDS ARE AVAILABLE, NORTH COASTAL AREA

in acre-feet

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1911-12	1,755,000
1912-13	1,737,000
1913-14	1,927,000
1914-15	1,480,000
1915-16	1,613,000
1916-17	1,516,000
1917-18	1,313,000
1918-19	1,385,000
1919-20	1,194,000
1920-21	1,755,000
1921-22	1,460,000
1922-23	1,236,000
1923-24	1,037,000
1924-25	1,375,000
1925-26	939,000
1926-27	1,493,000
1927-28	1,299,000
1928-29	1,014,000
1929-30	940,000
1930-31	791,000
1931-32	959,000
1932-33	945,000
1933-34	876,000
1934-35	1,034,000
1935-36	1,132,000
1936-37	985,000
1937-38	1,615,000
1938-39	1,039,000
1939-40	1,246,000
1940-41	1,077,000
1941-42	1,280,000
1942-43	1,813,000
1943-44	1,195,000
1944-45	1,259,000
1945-46	1,532,000
1946-47	1,161,000
1947-48	1,211,000
1948-49	1,301,000
1949-50	1,377,000
1950-51	1,813,000
MEAN	1,397,000

Note: Computed from historical outflow from the lake, historical change in lake storage, and estimated evaporation and precipitation on lake surface. Values were taken from pp. 42-44 of preliminary draft (May 1952) of Appendix B, Water Supply Studies, Part I, Water Resources - Report on Upper Klamath Basin Investigations. The values shown include the flow of Sprague, Williamson, and Wood Rivers, as well as the flow of several minor streams flowing directly into Upper Klamath Lake.

Lathrop 1
1952

A. D. EDMONSTON, STATE ENGINEER
CHIEF OF DIVISION

EARL WARREN
GOVERNOR OF CALIFORNIA

FRANK B. DURKEE
DIRECTOR

STATE OF CALIFORNIA
Department of Public Works
SACRAMENTO

ADDRESS REPLY TO
DIVISION OF WATER RESOURCES
PUBLIC WORKS BUILDING
P. O. BOX 1079
SACRAMENTO 5

11/12/52 ✓
RH

November 10, 1952

Honorable Randolph Collier
Senator 2nd District
Yreka, California

Dear Senator Collier:

In response to your request by telephone to T. B. Waddell on last Friday for a report on the Klamath River Basin investigation, there is being sent to you a copy of our work program for the 1952-53 fiscal year. You will note that under most items a statement is given of the work to be accomplished in the period October through December of this year and January through June of next year. It is hoped that this will furnish the information you desire.

I am also advised by Mr. Waddell that you would like to have me call you at Yreka on November 12. I will be away from the office on both November 12 and 13, but will call you upon my return to the office next Friday.

Very truly yours,

A. D. Edmonston
A. D. Edmonston
State Engineer

Enc.

At Rec. room reference
Long Beach

To Senator Collier

from F. L. Lathrop
11/14/52

Referring to Edmonston's letter of November 10, and his detail work program for the fiscal year '52 - '53, I have the following comments to make:

The program seems to follow the accepted standard coverage for comprehensive investigation of any river basin. I have identified the subjects by letter and number so that my comments can be referred to each for ready reference. From a study of this program, however, it is quite clear that the program is set for a 3-year investigation, and not to give us in the 1st year the most essential things that we know are lacking. This is brought home to me quite clearly by the report which this local group made and published in the Yreka paper October 30. It showed the only progress so far made was the installation of four stream gauges. It also brought out the fact that, as of this date, we have not had either the geologists or hydrologists at work on our most important phase, which was the ground water studies. This is a great disappointment, for the reason that, to the extent ground water can be found, it relieves that amount of surface water from the upper Basin that must be provided for our needs and is entirely free from any interstate complications. Edmonston's office had been told last July, and repeatedly since, that field work in connection with ground water studies must be made prior to November 1, or else our weather conditions would preclude any work until the spring of '53. The hydrologist arrived and reported for work November 10, and no geologist. Time is the essence, and so far progress has been slow.

Your and my efforts have, since the beginning, been directed to obtaining a program that would provide the essential material that would aid us in formulating a policy and pattern for setting up legislative machinery for the creation of an interstate compact. This, from our long experience, was the only program that would enable the people of the entire Klamath Basin to accomplish the ultimate objectives, and the only machinery to make such effective. You and I visualized this situation as requiring two major elements: (1) the taking of an inventory of the factual material available; the sources, nature and extent of the material: (2) then a program of intensive study could be directed which produces the lacking material essential to a broad analysis of the problems which confront a basin of this size and character, with mingled waters and juggled geography: ten million acres, two states, seven counties. These, of course, are the primary elements which legislative councils must have before them when enabling acts are drafted.

It is a well-known fact that there is a vast amount of factual material that has been put together by various agencies, federal, state and private, over a very long period of years, and a considerable part of which has never been published. When this material is inventoried each source thereof could indicate that agency's program for continuing such records. We also know that, historically speaking, these various agencies have been sometimes secretive of their findings, or they have been stopped in finishing their studies. We know that, heretofore, there has been considerable friction between Interior and Agricultural agencies. We also know that, since you and I started this investigation of the Klamath Basin, we have found precisely the response which we anticipated -- that is, when all agencies at all levels sit together in friendly round table discussions, all these extraneous matters disappear, and everybody is willing and anxious to proceed together in a cooperative effort to obtain the final objectives and greatest benefits for all the people.

You and I also envisioned the fact that, if we had this sort of factual inventory of the material available, and the sources willing to cooperate, that a program could be set up where each of these agencies would provide a specific part which should be allotted to each of them as their participation in a program such as this, which is a vast, expensive, long and unnecessary undertaking for any single agency to try to do alone. Such a program as I have outlined here could have been prepared, with minimum of time and money, so that you could present to the legislature at the next session a progress report that would justify you in asking for further appropriations to complete and expedite the remaining basic factual material needed to complete the study.

This is the picture as I now view it, and we shall see what part of it we can get the state of Oregon to participate, and at what level and through what agencies that see fit to join us.

B-2

From long and pleasant relations with Copco, Mr. Boyle has offered me full access to Copco's very complete files, engineering studies, maps and statistics on water matters in Upper Klamath Basin. I shall hold myself ready to go with whoever Mr. Edmonston selects, and facilitate the assembly of factual matters desired from this source.

C-1

Neither the State Department of Finance nor the State Engineer has made any filing on any of the waters of the Upper Klamath Basin.

Filings have been made by the United States Reclamation Bureau from the Upper Klamath Lake for its main canal, and from Lost River in California. The Lost River filing was made in Modoc County before the operative date of the present state law requiring filing in Sacramento.

The State of California has apparently relied upon the Bureau to protect its water rights, and 48 years after ceding, we find that they have not. The records will show that California's water, arriving through Clear Lake and Lost River, have changed their status from coming back to use in California, to almost total use in Oregon, and water substituted for California's limited needs, from Upper Klamath Lake. These facts are such that the engineering and physical studies should be set up so as to expose the extent, nature, and time of the substitution, and the quantities involved, the lands irrigated, the lands drained, when the use of water for agriculture and for wildlife refuge, and for any other use not provided in the 1902 Reclamation Code.

C-2

The maps listed under this heading to be provided do not cover one of the most interesting and necessary parts, and I refer to ownership status of the ten million acres within the Basin. This material I have gathered together from original sources since this work was undertaken, and I am sure Siskiyou County Supervisors will be willing to let me complete this phase of the study to be reviewed and embodied in the state report. This will cover all public ownerships and their administrative status will be shown separately on these maps, from which an inventory of the natural resources in that ownership can be made.

On the same basic map the privately owned lands can be shown under their separate broad classifications of virgin timber, cutover lands, grazing lands, cultivated lands, both irrigated and irrigable separately.

I note under this heading in Edmonston's report that his office is preparing maps covering the entire Basin on a scale of one inch.

I have acquired from various sources a complete set of maps of the same scale showing culture and stream systems without contours for the entire Basin. These I have already started to work on, indexing them together, putting on all stream system water sheds, preparing them for reproduction by photostat process to any scale desirable, so that all agencies for all purposes can make use of the same basic map. Such a map has never been available in either state and has been one of the most needed for any comprehensive study, in part or in whole.

I have found from my efforts to put any such group of maps together that neither the states nor the various departments of the Federal government ever make any effort for uniformity in mapping or statistical findings, so, without duplication, I shall try to ascertain what material the Sacramento office is using so that this particular phase may be expedited. I asked both Mr. Bond and Mr. Haley or Mr. Berry if we could have a draftsman, and this map work is what I wanted him to do, as I have these maps all set up on one table which fills completely one large room. The answer was that they had no such men available.

C-2 & 3

Siskiyou County can and will contribute its very complete maps and statistics on this phase of the study.

The other five California counties have only a very limited area in the Basin that falls in this category, and the assessors know where such lands are located. Klamath County has nearly finished its mapping on this phase of the study which has been done by the Indian Service, the Reclamation Service, the irrigation and reclamation districts, the Swan Lake and Yonna Valley ground water study by U.S.G.S., and the county Land Use Committee. These agencies are ready, willing, and able to finish that phase of the study.

C-4

Consumptive Use of Water

Special study should be made of the wildlife areas within the boundaries of the Klamath Project with special emphasis on the source of and quantity of water used for wildlife refuge, whether its source be natural, stored or vagrant, and whether it is delivered by gravity or pumped; also, who provides the water facilities, who paid for them, and who provides the annual maintenance charges.

Under land use facts should be ascertained as to the areas cultivated by private interests under grazing leases to raise grass to be charged to other wildlife refuges. An item of special interest in this regard is the fact that water purchased from the Glenn-Colusa district for wildlife refuge at Willows cost the Federal Government $7.50 per acre foot, and this for Class 4 water.

D-1

I have in my private file a great deal of the legislative history and numerous other authenticated documents necessary to any study and report on the legal and legislative phases of this study, especially as related to the Klamath Project.

In addition I have all the authenticated material I used in my 1932 report (unpublished) on the wildlife refuges. All of this material, and some of my time, I shall be happy to make available to the lawyer that is assigned to this phase of the State report.

This history will show the representations made to each of the two legislatures leading up to the session in 1905. The analysis will show what was ceded of land and water, and the purpose for which they were made, as well as the committments under which they were accepted by the Federal Government and turned over to the Reclamation Bureau for development and settlement.

Full knowledge of the intent of our two legislatures and of Congress as of 1905 is going to play a very important part in the final analysis of the sovereign water rights and equities surrendered in 1905 when the two states attempt to sit down and, in friendly manner attempt to divide and administer them after forty-eight years under federal control; for they are now mingled waters with many complex problems and many and much land still in need of its rightful apportionment of water.

WORK PROGRAM FOR THE INITIAL YEAR OF THE
KLAMATH RIVER BASIN INVESTIGATION

(A) WATER SUPPLY

(1) Precipitation

Monthly and seasonal records will be utilized in plotting long-time mean, and period of investigation isohyetal maps of the Basin, for correlating runoff, and for water utilization studies. In that historical data are meager, it is important that additional gages be installed.

Oct.-Dec. -- Install 25 new rain gages (contingent upon delivery) in valleys of the upper basin. In the lower basins install rain gages as staff gages for measurement of stream flow are located.
Dec.-June -- Compile historical records, collect unpublished ones from individuals and agencies.
Summer, 1953 -- Install additional gages in lower basin and upper basin. Attempt to locate a few in the higher elevations.

(2) Runoff

It is proposed that some supplementation of continuous records be made for the principal streams flowing into Scott and Shasta Valleys; also, that intermittent measurements he made of many small tributary creeks, both in California and Oregon. It is not planned to add to the records of the main stem of the Klamath or Trinity Rivers. It would be desirable to install a continuous recorder on the upper reaches of the Sprague River if such arrangements could be made.

Oct.-Dec. -- Install continuous recorders at:

(1) East Fork of Scott River)
(2) South Fork of Scott River) Scott Valley
(3) Moffett Creek)
(4) Little Shasta River Shasta Valley

Dec.-June -- Compile hisotrical records, prepare estimates of flow at dam sites, prepare studies of maximum floods of streams entering Shasta, Scott, and Butte Valleys, rate recorders of the above 4 stations and Etna, Shackleford, and Canyon Creek stations, and make intermittent measurements of many small creeks.

Summer, 1953 -- Continue intermittent flow records, noting particularly when creeks fail.

(3) Evaporation

As an aid to operation studies as well as water use studies, it is proposed two pans be installed, one in Scott Valley and one in Shasta Valley. Records are presently available of evaporation from Klamath Lake and a recently installed pan in Butte Valley.

(4) Water Quality

All surface and ground water sampling and analysis to be done by Water Quality Section, Division of Water Resources, unless other specific arrangements are made.

(B) GROUND WATER HYDROLOGY

This reconnaissance study will include all presently utilized and potential ground water basins of the Klamath River Basin in California and Oregon.

(1) Inflow-Outflow

This work is to be correlated with stream flow measurements and precipitation records. It is anticipated a good deal of inflow estimation will be required based on intermittent measurements.

(2) Ground Water

A geologist will be detailed to the area to assist in the geologic interpretation of the ground water basins.

Oct.-Dec. -- Locate all wells of Shasta and Scott Valleys and of basins in Oregon, and make a fall measurement of depths to ground water. Obtain well locations and depth measurements of Butte Valley wells from USBR. Establish elevation of point of measurement by differential leveling.

Dec.-June -- Obtain well logs from local drillers and Division of Water Resources, and prepare stick model of valley basins. Collect historical records,

depth to ground water. Obtain all data from USBR. Contact COPCO, pump testing firm in Klamath Falls, irrigation districts, and individuals, for pumping tests of wells. Obtain agricultural power load for all areas from COPCO.

Summer, 1953 -- Make a spring depth to ground water measurement. Pick out key wells for monthly measurements.

If pressure wells are located, confirmation should be obtained by daily measurements over two-or three-day periods under conditions of draft. An attempt should be made to isolate areas of confinement if such exist.

Difference between summer or use period measurement and fall measurement is indicative of pressure and free water aquifers, gain indicates pressure, loss indicates free ground water.

(C) WATER UTILIZATION

(1) Present Water Supply Development

Applies to all parts of entire basin, including area in Oregon.

Dec.-June -- Obtain from various water distributing agencies maps showing storage works, main canals and distribution system; also records of main canal diversion, farm delivery, capacity of storage works, and canals; historical records of power output in the basin.

(2) Land Use

The object is to obtain for map presentation (one inch equals one mile) the area utilizing water, other than precipitation that is utilized in place, throughout the entire basin (from mouth of Klamath to and including Oregon) during season, 1953; also to obtain tabulations by crop groups to nearest 5 acres, for the same area.

Dec.-June -- Prepare work maps of adequate scale for use in the field or for plotting data obtained from aerial photos. These maps should be so designed that plotted data may be cut and weighed for tabulation. It is suggested the maps be prepared from existing horizontal control, triangulation, or grid mapping, area covered be only irrigated or

irrigable areas, and scale be approximately 2-1/2 or 3 inches equals 1 mile. Maps covering the entire basin at a scale of 1 inch equals 1 mile are being prepared in the Sacramento office. Necessary aerial photos in California and Oregon to be purchased.

Summer, 1953 -- All irrigated area by crop types of entire basin will be mapped and tabulated. This includes Klamath Project. All irrigated land of the basin will be mapped with reference to water supply. Particularly identify those lands lying in Oregon served by water originating in California. Maps and tabulations for the basin will be presented in the interim report, December, 1953.

(3) Land Classification

Dec.-June -- Aerial photos will be purchased.

Summer, 1953 -- Irrigable area of the basin above and in cluding Scott Valley will be mapped and tabulated in 1953. Standards used in Oregon will be the same as those used in California. Areas mapped by USBR will be utilized in the field and adjusted to Division standards. It is anticipated the irrigable areas will be classified intogroups indicating crop adapyability. Also shown for economic analysis will be present land cover, i.e., forest, brush, cultivated. The field work will be accomplished by land classification specialists, but plotting, cutting and weighing and tabulation will be accomplished by Klamath River Basin Investigation personnel. Maps and tabulation of irrigable area, as well as estimates of ultimate use of water, will be presented in interim report, December, 1953.

(4) Unit Use of Water

Field Application. Two methods will be used: (1) review of past diversion records, and (2) field plots.

Consumptive Use. Four methods will be used: (1) inflow-out flow of small isolated valleys, (2) inflow-outflow study of Klamath Project. (3) soil moisture depletion studies, and (4) Blaney-Criddle.

Oct.-Dec. -- Locate and make arrangements with property owners for field plot measurements and soil moisture depletion studies.

Dec.-June -- Obtain past diversion records, and begin a study of unit use. Lack of data may show up measurement points for 1953 records. Begin inflow-outflow

study of Klamath Project. Above comment may also apply here. Make plane table surveys of field plots, construct necessary measuring devices, prepare for an installation before irrigation season. Purchase equipment and learn a procedure for soil moisture depletion studies.

Summer, 1953 -- Measurements will be made throughout the irrigation season. Plots will be restricted, because of transportation difficulties, to Butte, Shasta, and Scott Valleys. It is suggested that about 10 plots be chosen for each valley. Pasture, alfalfa, and irrigated grain in Scott and Shasta, and potatoes and alfalfa in Butte should be crop sample areas. Care should be taken in the selection of the fields so that high water table conditions do not exist, and that the fields are representative of the area. Some records of sprinkler type irrigation should be obtained. It would be desirable if some arrangements with Oregon or USBR personnel could be made to study water use from marsh lands in Oregon.

(D) PLANS FOR WATER DEVELOPMENT

(1) Water Rights

Dec.-June -- Reference A. D. Edmonston's letter of October 13, 1952, to files, Item 5 of the procedure to be effected--Arrange for assignment of lawyer on this work and engineer from Water Rights Section to review and report on water rights situation.

(2) Previous Plan

Dec.-June -- Bureau's and Army's plans for serving Butte Valley and Shasta Valley, as well as expansion of Klamath Project, should be reviewed and a summarizing report prepared.

(3) Surveying

Summer, 1953 -- Surveying will be restricted to dam and reservoir areas in Shasta and Scott Valleys. Possibilities: Little Shasta River, offstream storage near Shasta River, Callahan site on Scott River.

(4) Operation Studies

Dec.-June -- Yield of Dwinnel Reservoir with full utilization of the storage capacity.

(5) Power Potential of Klamath River

Dec.-June -- Initiate a study from available topography

and runoff records determining potential power of the Klamath River.

(b) Water Requirements of Lower Basin

Dec.-June -- Make preliminary studies and give thought to further studies for determining ultimate and stage development of water requirements for fish, mineral, timber, recreational, and other needs of the lower basin.

COPY

Lathrop I
1952

December 8, 1952

Mr. Robert Edmunston
State Engineer
State of California
Sacramento, California

Dear Mr. Edmunston:

This morning I received a call from Mr. Frank Lathrop of Yreka regarding an economic study of the Klamath Basin.

As you may know, the Bureau of Reclamation in Sacramento has been talking to us about such a study, and we have prepared and submitted a proposal to them for a research program. There has been no acceptance of this proposal as yet, and we do not anticipate a definite decision before the first of the year.

Naturally, we cannot undertake research for two separate sponsors on the same subject matter. However, Mr. Lathrop indicated that your interest included the lower Klamath Basin, while the Bureau is interested in studying only the Upper Basin at this time. Perhaps two studies could be made simultaneously.

The proposal we have submitted covers fact finding and analysis. It will not recommend action or program. It will be a broad economic analysis of the area. Our purpose will be to seek information regarding the kinds of industry which might be suitable for the Klamath Basin in the light of the technological trends in agriculture and resource-oriented industries.

Mr. Lathrop stated that you would like to discuss this program. I would be happy to come to Sacramento at your convenience. A general idea as to the purpose of such a meeting would enable me to come better prepared. May I hear from you?

Yours very truly,

Charles L. Hamman
Chairman, Industrial Economic Services

Lathrop I
1952

December 9, 1952

Mr. Frank Jenkins, Publisher
Klamath Herald News
Klamath Falls, Oregon

Dear Frank:

As I promised you I went to the Stanford Research Institute and talked with Mr. Hannun on the purpose and scope of his proposed study and who his sponsor was to be. He informed me that as yet the program consisted of three conversations with high level reclamation men from the Sacramento office.

He seemed quite willing to enlarge the scope of his proposed study to include all of the basin, realizing that it would be incomplete if it was limited to the upper basin; that some of the same timber interests were in both parts of the basin and both Weyerhauser and Simpson lumber were represented on their Board of Directors.

As to the cost of his study as originally proposed, it was estimated to be in the neighborhood of seven thousand dollars, which is cost, and was to be paid for monthly the same as a payroll account. The study he thought should not take more than three or four months because they had a great mass of basic material already in their files.

On Thursday, December 4th, at the State Chamber of Commerce meeting at the Fairmont Hotel, I met Edmonston and discussed this subject with him and he is in accord with the study being made that it include the entire basin and he asked me to have Mr. Hannun come to Sacramento and complete arrangements with him as to the sponsorship, coverage and the cost thereof, for Edmonston is of the opinion that it should be for the most part a State undertaking as part of his studies now in progress and the facts should be embodied in the State's final report.

I have discussed all of this with Collier and he approves of these new changes.

Please don't misunderstand these moves in any way to foreclose what you people in Oregon may wish to do cooperatively. I am quite sure that Edmonston understands that what he does will include whatever you people want to have included therewith and what part as a sponsor you want to take in the matter.

I think we will all agree that the States, Counties and local levels will be best served perhaps if we exclude the Reclamation Service as a sponsor. Further, as Randy and I are away considerable of the time, please feel free to communicate directly with Edmonston at Sacramento on what the Oregon people want on this important subject. I know he will want to adjust his plans until they are in entire conformity with yours.

Kind regards,

F. L. Lathrop

FLL:hf

Lathrop 1952

C
O
P
Y

December 10, 1952

Dr. S. W. Cosby
U. S. Soil Conservation Service
209 Southwest 5th Avenue
Portland 4, Oregon

Dear Doctor:

Siskiyou County is cooperating with our state engineers in making a complete investigation of the entire Klamath River Basin.

One part of this program is a land capability map, showing the areas irrigated and the areas that are irrigable, if and when water can be made available.

In making these maps, Mr. Shannon of the State Engineer's office thinks he can reproduce the classifications he wants to make from our field maps. To accomplish this, Siskiyou County, with your approval, is willing to release our field maps for this purpose.

The State Engineer's office wants to know what scale prints you can make from the 8-inch scale negatives of our finished field maps, and what the cost would be per print.

On the Oregon side, will you be kind enough to inform me as to how much your department has accomplished in Klamath County, and what classifications you are making on such districts.

I would also like information on what soil classifications, if any, have been accomplished on Klamath Indian Reservation, who in the Portland office or the Agency office could give us the results of work which the Indian Agency has already accomplished, regardless of basis of their classification.

Wishing both you and Mr. Christ my best holiday greetings, I remain,

Very sincerely yours,

Frank L. Lathrop

FLL:jh

Lathrop 1
1952

December 10 1952

Mr. Von Segern
U. S. Army Engineer Corps
Sutter Street
San Francisco, California

Dear Sir:

Last Thursday in San Francisco I met Stanley and asked him if the U. S. Engineers had not made some further studies on the Klamath River Basin, particularly the upper Basin storage, that might be in the nature of unfinished and unpublished work. If so, it now becomes extremely useful in whatever stage of development it might be.

Senator Collier and myself together with the two State engineers and other interested parties at the state and county levels are, as you probably know, making an intensive study of the entire Klamath Basin and we are seeking first of all, to ascertain what basic material has already been accomplished and by whom, so that we might expedite our studies by picking up such information and carrying it on, rather than starting from the beginning on our own. We have copies of your published work in the early studies, your flood control studies, and are particularly interested now in any studies on storage sites, reservoir capacities on the Sprague and Williamson, or other upper Basin matters either within or outside the Indian Reservation.

I would therefore appreciate very much your writing me if you have any material that would assist us.

Thanking you for an early reply, I remain

Lathrop 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of the Solicitor
Washington 25, D. C.

M-36157 December 12, 1952

Memorandum

To: The Secretary of the Interior

From: The Solicitor

Subject: Homesteading on lands within the Klamath Lake Reservation and in the Tule Lake Wild Life Refuge.

This responds to the request dated November 21, 1952, as subsequently modified by you orally, for an expression of my opinion concerning the homesteading under the reclamation laws of 9,900 acres of land in the Tule Lake Unit, 5,900 acres of land in the Klamath Straits Unit, 3,660 acres of land in the Sheepy lake West Unit, and 1,440 acres of land in the Sheepy Lake East Unit.

The Tule Lake Unit is situated within the boundaries of the Tule Lake Wild Life Refuge, and the other three units are situated within the boundaries of the Klamath Lake Reservation for the protection of native birds. The Klamath Straits Unit is in Oregon, and the other units are in California.

Information available to me indicates that the lands in the Tule Lake Unit were ceded to the United States by the State of California in the act of February 3, 1905 (California Statutes, 1905, p. 4); that the lands in the Klamath Straits Unit were ceded to the United States by the State of Oregon in the act of January 20, 1905 (General Laws of Oregon, 1905, p. 63); that the lands in the Sheepy Lake West Unit are public lands of the United States; and that the lands in the Sheepy Lake East Unit are in part public lands of the United States and in part lands ceded to the United States by the State of California in the act of February 9, 1905. 1/

HOMESTEADING ON LANDS WITHIN THE KLAMATH LAKE RESERVATION AND IN THE TULE LAKE WILD LIFE REFUGE

Authority of the Secretary--Modification of Executive Order Reservations--Permissive Statutes--Ceded Lands--First--Form Reclamation Withdrawals.

The Secretary of the Interior has the authority to open for homestead entry under the reclamation laws any or all of the lands in the Tule Lake Unit of the Tule Lake Wild Life Refuge, and any or all of the lands in the Klamath Straits Unit, the Sheepy Lake West Unit, and the Sheepy Lake East Unit of the Klamath Lake Reservation.

1/ No precise determinations on these points have been made, since the answers to the legal questions involved in this submission do not, in my opinion, differ with respect to the different types of land.

The Secretary of the Interior is not required by law to open for homestead entry under the provisions of the reclamation laws any of the lands in the Tule Lake Unit, the Klamath Straits Unit, the Sheepy Lake West Unit, or the Sheepy Lake East Unit.

The Secretary of the Interior has the power, as the President's delegate, to modify existing Executive orders respecting the Tule Lake Wild Life Refuge and the Klamath Lake Reservation by eliminating from the respective reservations any lands that he may decide to open for homestead entry under the reclamation laws.

Permissive statutory provisions indicating that the Secretary of the Interior "may" or "is authorized" to dispose of lands under the provisions of the reclamation laws should not be construed administratively as imposing a mandatory duty to effect such disposition.

A statutory provision stating that certain ceded lands shall be subject to the provisions of the reclamation laws concerning entry and patent merely places such lands in the category of lands that are subject to entry and patent under the provisions of the reclamation laws unless withdrawn or reserved for a public purpose, and is not a statutory command that an existing reservation of such lands for a public purpose shall be cancelled and the lands disposed of in the manner indicated.

The cancellation of a first-form reclamation withdrawal respecting an area does not cancel other existing withdrawals or reservations of the same area for different purposes so as necessarily to make the area available for entry.

The California act of cession mentioned above provided in pertinent part as follows:

> "Section 1. That for the purpose of aiding in the the operations of irrigation and reclamation conducted by the Reclamation Service of the United States * * *, the United States is hereby authorized to lower the water levels of any or all of the following lakes: Lower or Little Klamath Lake, Tule or Rhett Lake,*** and to use any part or all of the beds of said lakes for the storage of water in connection with such operations.
>
> "Sec. 2. And there is hereby ceded to the United States all the right, title interest, or claim of this State to any lands uncovered by the lowering of the water levels of any or all of said lakes ***; and the lands hereby ceded may be disposed of by the United States free of any claim on the part of this State in any manner that may be deemed advisable by the authorized agencies of the United States in pursuance of the provisions of the Reclamation Act of 1902 (43 U.S.C., 1940 e., sec. 371 et seq.)***."

The Oregon act of cession used language virtually identical with that in the California act of cession quoted above.

In order to implement the California and Oregon statutes referred to above, Congress enacted the act of February 9, 1905

(33 Stat. 714), which provided in pertinent part as follows:

> "That the Secretary of the Interior is hereby authorized in carrying out any irrigation project that may be undertaken by him under the terms and conditions of the national reclamation act which may involve the changing of the levels of Lower or Little Klamath Lake, Tule or Rhett Lake, * * * to * * * lower the level of said lakes as may be necessary and to dispose of any lands which may come into possession of the United States as a result thereof by cession of any State * * * under the terms and conditions of the national reclamation act."

Thereafter, President Theodore Roosevelt issued Executive Order 924 of August 8, 1908, establishing the Klamath Lake Reservation as a "preserve and breeding ground for native birds". This reservation, as subsequently reduced in size by Executive Orders 2200 (May 14, 1913) and 3422 (March 20, 1921), includes, inter alia, the ceded lands in the Klamath Straits Unit, the public lands in the Sheepy Lake West Unit, and the lands, whether ceded or public, in the Sheepy Lake East Unit. Executive Order 924, as modified by Executive Order 2200, declares that:

> "It is unlawful for any person to hunt, trap, capture, willfully disturb, or kill any birds of any kind whatever, or take the eggs of such birds, within the limits of this reservation, except under such rules and regulations as may be prescribed by the (Secretary of the Interior 2*) * * *."

It is expressly provided, however, in Executive Order 924 that:

> "* * * This order is made subject to and is not intended to interfere with the use of any part of the reserved area by the Reclamation Service acting under the provisions of the (reclamation laws) * * *."

The Tule Lake Wild Life Refuge--the boundaries of which include, inter alia, the ceded lands in the Tule Lake Unit--was originally established by Executive Order 4975 (October 4, 1928). That order was subsequently superseded by Executive Order 5345 (November 3, 1932), and the refuge was thereafter enlarged by Executive Order 7341 (April 10, 1936). Executive Order 5345 declares that it is unlawful, among other things,

> "* * * To hunt, trap, capture, willfully disturb, or kill

2* This function was originally vested in the Secretary of Agriculture, but it was transferred to the Secretary of the Interior by paragraph (F) of section 4 of Reorganization Plan No. II (4F.R.2731)

any wild animal or bird of any kind whatever, to take or destroy the nests or eggs of any wild bird, to occupy or use any part of the reservation, or to enter thereon for any purpose, except under such rules and regulations as may be prescribed by the (Secretary of the Interior. 3/) * * *."

It is expressly stated in both Executive Order 5345 and Executive Order 7341 that the reservation of the lands as a wildlife refuge is subject to the use of such lands by the Department of the Interior for reclamation purposes.

An agreement between the Bureau of Reclamation and the Fish and Wildlife Service, approved by the First Assistant Secretary of the Interior on January 8, 1942, provides for the administration of the lands within the Tule Lake Wild Life Refuge and the Klamath Lake Reservation.

With regard to the lands within the Tule Lake Wild Life Refuge, the agreement of January 8, 1942, provides that the Fish and Wildlife Service

> "*** shall have immediate jurisdiction over, and administration and control of, the Tule Lake Restricted Sump, the Service areas, and the buffer areas,"

(except that the transfer to the Fish and Wildlife Service of a certain specified portion of the Tule Lake Restricted Sump is to be deferred until the Secretary of the Interior determines that such portion "is needed for sump purposes or has become unsuitable for agricultural purposes"). The lands of the Tule Lake Wild Life Refuge not placed by the agreement under the jurisdiction, administration, and control of the Fish and Wildlife Service are to "continue under the immediate jurisdiction, administration, and control" of the Bureau of Reclamation. The agreement provides, however, that "all leases of such lands entered into by the Bureau shall contain provisions prohibiting the lessee, except with the approval of the Bureau, from burning stubble fields, and making hunting and shooting thereon subject to regulation by the Service * * *."

The lands of the Tule Lake Unit are outside the "Tule Lake Restricted Sump, the Service areas, and the buffer areas, "as defined in the agreement of January 8, 1942.

In so far as the Klamath Lake Reservation is concerned, the agreement of January 8, 1942 provides that the Fish and Wildlife Service shall have "the immediate jurisdiction over and administration and control of all the lands "comprising the area defined in

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3/ See fn. 2, supra.

the agreement as the "Service's Lower Klamath area". This area is wholly within the California portion of the Klamath Lake Reservation. The agreement states that the other lands within the California portion of the Klamath Lake Reservation shall "continue under the immediate jurisdiction, administration, and control" of the Bureau of Reclamation; but that all leases entered into by the Bureau respecting such lands shall contain provisions prohibiting the lessees, except with the approval of the Bureau, from burning stubble fields, and making hunting and shooting thereon subject to regulation by the Service * * *".

The lands of the Sheepy Lake East Unit and of the Sheepy Lake West Unit are located in California and are outside the area defined in the agreement of January 8, 1942 as the "Service's Lower Klamath area". The lands of the Klamath Straits Unit are situated in Oregon and, consequently, are not expressly affected by the provisions of the agreement. It is understood, however, that the Bureau of Reclamation has actually been administering the lands of the Klamath Straits Unit.

The agreement of January 8, 1942 was subsequently given statutory recognition by subsection (b) of section 2 of the act of January 17, 1944 (58 Stat. 879; 43 U.S.C., 1946 ed. sec. 612). Subsection (b) provides in part that:

> "Lands owned by the United States, ceded by the States of California and Oregon * * *, lying in Klamath County, Oregon, west of range 11 east, Willamette meridian, and in Siskiyou County, California, west of range 4 east, Mount Diablo meridian, shall be subject to all applicable provisions of the Federal reclamation laws concerning entry and patent, except that any part of these lands administered by the Fish and Wildlife Service pursuant to the existing agreement with the Bureau of Reclamation, as this may be amended from time to time with the approval of the Secretary, shall not be opened to entry."

The ceded lands comprising the Klamath Straits Unit and partially comprising the Sheepy Lake East Unit are situated west of the respective Oregon and California lines mentioned in the statutory provision quoted above. The ceded lands of the Tule Lake Unit are situated east of the California line prescribed in the quoted provision.

One question that has been propounded to me is whether the lands in the four units previously mentioned may be opened to entry for homesteading under the reclamation laws.

It seems clear to me that an affirmative answer should be given to this question.

With regard to the ceded lands that are involved in this problem, the opening of such lands to entry for homesteading under the reclamation laws would be within the scope of the authorizations contained in the respective California and Oregon acts of cession and in the implementing Federal act of February 9, 1905. The State statutes plainly authorize the United States to dispose of the ceded lands under the reclamation laws in any manner that may be

deemed advisable by the appropriate agencies of the United States; and the Federal statute vests this power of disposition in the Secretary of the Interior.

Moreover, in so far as ceded lands in the Klamath Straits Unit and in the Sheepy Lake East Unit are concerned, the authority of the Secretary of the Interior to make such lands available for homestead entry under the reclamation laws was reaffirmed by subsection (b) of section 2 of the act of January 17, 1944. It will be recalled that subsection (b) expressly makes ceded lands lying west of certain lines in Oregon and California subject to the provisions of the reclamation laws concerning entry and patent, with the exception of "any part of these lands administered by the Fish and Wildlife Service pursuant to the existing agreement with the Bureau of Reclamation". In construing the meaning of the quoted exception, it is pertinent to note that the agreement between the Fish and Wildlife Service and the Bureau of Reclamation states that the Fish and Wildlife Service shall have the immediate jurisdiction over, and administration and control of, certain specified areas in the Tule Lake Wild Life Refuge and a certain specified area in the Klamath Lake Reservation; and that other lands within the two reservations shall continue under the immediate jurisdiction, administration, and control of the Bureau of Reclamation. It seems obvious that the phrase, "any part of these lands administered by the Fish and Wildlife Service pursuant to the existing agreement with the Bureau of Reclamation", in the 1944 act is intended to refer to those areas, and only to those areas, which are placed by the agreement of January 8, 1942 under the jurisdiction, administration, and control of the Fish and Wildlife Service. As previously indicated, these are "the Tule Lake Restricted Sump, the Service areas, and the buffer areas" in the Tule Lake Wild Life Refuge, and "the Service's Lower Klamath area" in the Klamath Lake Reservation. None of these areas includes any of the lands involved in the present discussion. Accordingly, the exception stated in subsection (b) of section 2 of the 1944 act must be regarded as inapplicable to any of the lands with which we are concerned at the present time.

Of course, the opening to homestead entry of the ceded or public lands in the four units previously mentioned would be incompatible with their continued inclusion in the respective wildlife reservations pursuant to the existing Executive orders. The opening of the lands to homestead entry would look forward to the ultimate patenting of the lands, and there is no authority in the Secretary of the Interior to include privately owned lands as parts of wildlife refuges. However, the Secretary of the Interior clearly has the authority to modify the existing Executive orders respecting the Tule Lake Wild Life Refuge and the Klamath Lake Reservation by eliminating from the respective reservations any of these lands, ceded or public, that he may decide to make available for homestead entry under the reclamation laws. The Secretary's

authority in this regard is found in paragraph (a) of section 1 of Executive Order 10355 (17 F. R. 4831), in which the President expressly confers upon the Secretary "the authority to modify or revoke withdrawals and reservations" heretofore made of public lands or other lands owned or controlled by the United States.

The discussion in the preceding paragraph of the Secretary's power to modify the existing executive orders respecting the Tule Lake Wild Life Refuge and the Klamath Lake Reservation so as to make reservation lands available for homesteading under the reclamation laws disposes of the only legal question that requires consideration in connection with the Secretary's authority to open the public lands comprising the Sheepy Lake West Unit and partially comprising the Sheepy Lake East Unit to entry for homesteading under the reclamation laws.

It is my opinion, therefore, that the Secretary of the Interior has the legal authority to make any or all of the lands in the Tule Lake Unit, in the Klamath Straits Unit, in the Sheepy Lake West Unit, and in the Sheepy Lake East Unit available for homestead entry under the reclamation laws.

The next question which requires attention is whether the Secretary of the Interior is required by law to open any of the lands within the four units previously mentioned to homestead entry under the reclamation laws.

It is clear at the outset of this part of the discussion that the Secretary is not under any such mandatory legal duty with regard to the public lands comprising the Sheepy Lake West Unit and partially comprising the Sheepy Lake East Unit. The President has discretionary authority under the Constitution (see United States v. Midwest Oil Company, 236 U. S. 459 (1915) and under section 1 of the act of June 25, 1910 (43 U.S.C., 1946 ed., sec. 141) to withdraw and reserve public lands for uses deemed by the executive to be in the public interest. The withdrawal and reservation of public lands for use as a wildlife refuge certainly falls within the constitutional and statutory power of the executive in this regard. The President has delegated to the Secretary of the Interior, in paragraph (a) of section of Executive Order 10355, the executive power "to withdraw or reserve lands of the public domain * * * for public purposes, including the authority to modify or revoke withdrawals or reservations of such lands heretofore * * * made." This delegation of authority clearly vests in the Secretary of the Interior the discretionary power to decide whether reservations of public lands heretofore made by the President for public purposes, including wildlife refuge purposes, shall be continued or rescinded.

Turning now to a consideration of the ceded lands comprising the Tule Lake Unit and the Klamath Straits Unit, and partially comprising the Sheepy Lake East Unit, it seems to be plain that the respective cession laws of California and Oregon, and the implementing Federal statute of February 9, 1905, do not impose upon

the Secretary of the Interior any mandatory duty to open the ceded lands to homestead entry under the reclamation laws. The cession laws use the permissive "may" in authorizing the disposition of ceded lands under the provisions of the reclamation laws; and the Federal act of February 9, 1905 also uses the permissive "is authorized" in indicating that the Secretary may dispose of ceded lands under the provisions of the reclamation laws. As these statutory provisions, which have been enacted for the purpose of furnishing guides for administrative action, use language that is plainly permissive in character, this Department would not be justified in modifying them, through the process of interpretation or construction, by substituting mandatory terminology for that actually used by the respective legislatures.

This brings us to a consideration of the Federal statute of June 17, 1944, which (in so far as it is pertinent to the point now under consideration) declares, in effect, that the ceded lands comprising the Klamath Straits Unit and partially comprising the Sheepy Lake East Unit "shall be subject to all applicable provisions of the Federal reclamation laws concerning entry and patent." The problem is whether the Congress, in using the quoted phrase, intended to command the Secretary of the Interior to dispose of such lands under the provisions of the reclamation laws concerning entry and patent.

The 1944 act was enacted pursuant to a recommendation from the Department of the Interior. The Department's recommendation was accompanied by a draft of a proposed bill, which contained the provision mentioned in the preceding paragraph. The Department's explanation of the proposed bill 4/ merely stated, with respect to this provision, that "* * * it would be desirable to provide expressly that certain government-owned lands in the Lower Klamath Lake area shall be subject to entry and patent under the general provisions of the Federal Reclamation Laws."

It would be unreasonable to suppose that the Secretary of the Interior was asking the Congress to compel him to dispose of these lands under the provisions of the reclamation laws as to entry and patent. Consequently, it seems reasonable to conclude that the phrase, "shall be subject to all applicable provisions of the Federal reclamation laws concerning entry and patent", as proposed by the Department and as enacted by the Congress, was merely intended to place these ceded lands in the category of lands that are subject to entry and patent under the provisions of the reclamation laws. Such legislative action was apparently thought

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4/ See the letter dated October 4, 1943 from the Secretary of the Interior to the Speaker of the House of Representatives, which is contained in the Department's legislative file on H. R. 3476, 78th Congress.

to be necessary because of the circumstance that, generally speaking, only public lands are subject to entry and patent under the reclamation laws, 5/ and lands ceded by Oregon and California to the United States under the 1905 cession laws would not be subject to such disposition in the absence of enabling legislation passed by the Congress. (The Department, when it made this proposal in 1943, apparently overlooked the fact that the Congress had already, in the act of February 9, 1905, authorized the Secretary to dispose of these ceded lands "under the terms and conditions of the national reclamation act".)

Accordingly, I construe the phrase, "shall be subject to all applicable provisions of the Federal reclamation laws concerning entry and patent", in the 1944 act as meaning merely that the ceded lands to which the Secretary of the Interior may make available for disposition under the provisions of the reclamation laws concerning entry and patent, if he deems it advisable to do so from the policy standpoint.

If the Congress had intended, in the 1944 act, to require the Secretary of the Interior to dispose of ceded lands under the provisions of the reclamation laws, it would undoubtedly have employed language similar to that which was used in the act of May 27, 1920 (41 Stat. 627). That statute, among other things, stated in section 7 that:

> "the Secretary of the Interior shall determine which of the lands now within the boundaries of the Klamath Lake Bird Reserve are chiefly valuable for agricultural purposes and which for the purpose of said reservation, and shall open to homestead entry those lands which are chiefly valuable for agricultural purposes * * *." (Emphasis supplied.)

This mandatory instruction from the Congress was apparently ignored by successive Secretaries of the Interior, and it was finally repealed by subsection (a) of section 2 of the act of June 17, 1944. However, there is a distinct difference between Congress' plain command in the 1920 act that "the Secretary of the Interior * * * shall open to homestead entry those lands which are chiefly valuable for agricultural purposes", and the declaration in the 1944 act that certain of the ceded lands "shall be subject to all applicable provisions of the Federal reclamation laws concerning entry and patent."

Perhaps it should be mentioned that the current contract 6/ of April 28, 1943 between the United States and the Klamath Drainage

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5/ See, e.g., 43 U.S.C., 1946 ed., secs. 161, 416, 433.
6/ This contract superseded earlier contracts, and was approved by Congress in section 1 of the act of June 17, 1944.

District (the exterior boundaries of which include the Klamath Straits Unit) contains in paragraph 27 provisions indicating what shall be done when "public lands" within the boundaries of the district are opened to entry, and that the term "public lands" is specially defined in the contract to include lands ceded to the United States by Oregon in the act of January 29, 1905. The United States does not make any commitment in the contract, however, that the lands in the Klamath Straits Unit will actually be opened to entry. Consequently, the provisions in paragraph 27 to which reference is made must be regarded as having been inserted in the contract to provide for the contingency that the Secretary might, in his discretion, decide at some future time to open such lands to entry.

There is one further point which may merit attention. The file indicates that the lands previously discussed are, in addition to being reserved by Executive order for wildlife refuge purposes, also subject to first-form reclamation withdrawals made under section 3 of the Reclamation Act of June 17, 1902 (43 U.S.C., 1940 ed., sec. 416) 7/. That section, inter alia, authorizes the withdrawal from public entry of lands "required for any irrigation works", and then provides that the Secretary of the Interior "shall restore to public entry any of the lands so withdrawn when, in his judgment, such lands are not required" for the purpose mentioned. The directive to the effect that land "shall" be restored to public entry upon the cancellation of a first-form reclamation withdrawal is merely part of the great mass of law (statutory and constitutional) relating to the administration and disposition of the Government's lands, and there is no indication that it is intended to be pre-eminent.

Consequently, I do not believe that it would be reasonable to construe this directive in section 3 of the Reclamation Act as superseding the President's power (which he has delegated to the Secretary of the Interior in Executive Order 10355) under the Constitution and section 1 of the act of June 25, 1910 to withdraw or reserve lands for public purposes other than the construction of irrigation works. I construe this provision in section 3 of the reclamation Act concerning the restoration of lands to public entry upon the cancellation of a first-form reclamation withdrawal as meaning that such lands shall be restored to entry unless they are validly withdrawn or reserved for some other public purpose under another provision of law or under the Constitution. Hence, the existence of the first-form reclamation withdrawals respecting the lands under consideration here does not, in my judgment, legally compel the Secretary to open such lands to entry if he should determine that they are not required for irrigation works. In other words, the cancellation of the first-form reclamation withdrawals would still leave these lands subject to the provisions of the outstanding Executive orders reserving them for wildlife refuge purposes.

7/ The effectiveness of the first-form reclamation withdrawals of the ceded lands is beyond the scope of this memorandum.

For the reasons indicated above, it is my opinion that the Secretary of the Interior is not required by law to open any of the lands within the four units previously mentioned to homesteading under the provisions of the reclamation laws.

In view of your oral request that my opinion on the main questions discussed above be expedited as much as possible, consideration of other subsidiary questions will be deferred pending a determination on the policy question whether it would be in the public interest to open some or all of these lands to entry for homesteading under the reclamation laws.

(Sgd) Mastin G. White
Solicitor

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MEMO

REFLOODING OF LOWER KLAMATH LAKE

PHYSICAL FEATURES:

Situate in a broken volcanic region, Lower Klamath is a shallow basin partly filled from the circumference towards the center with alluvium, 88,000 acres in extent, lying about one-third in Oregon and two-thirds in California. Under natural conditions it consisted of an encircling marsh of 58,000 acres carrying a heavy aquatic growth, largely tules, and an irregular central open-water area of about 30,000 acres, varying in depth from 3 to 11 feet at low water. Drainage reveals that closely following the outer contour of the former open water, there is a well defined drop-off in the lake bed of two to three feet, thus forming the inner sump or basin. Its soil is spongy peat and carries too much alkali for agricultural reclamation. As now dried out, underground fires burn in it from one year's end to another.

Prior to interference with its water-supply, Lower Klamath was unusual if not unique in its instrumentality as a balancing reservoir designed by nature. One and the same channel Klamath Strait - functioned as both its inlet and its outlet, the direction of water-flow being seasonally reversed. This resulted from stream-bed conditions of Klamath River which heads

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at the outlet of Upper Klamath Lake, distant ten miles to the north. First pitching down a sharp rapid at the town of Klamath Falls, it runs almost level for 15 miles to Keno, where a hard rocky formation constricts the channel.

At high river stages, the Keno ledge causes a backwater many miles upstream and this naturally forced surplus water to flow southward through Klamath Strait into Lower Klamath basin. Such inflow normally recurred in the later winter and early spring months, raising the level of Lower Klamath an average of three feet - creating a storage of probably 250,000 acre feet annually.

As Klamath River fell to normal level, a reversal of current in Klamath Strait ensued and the impounded accumulation re-emptied into the river - not in its entirety however, as evaporation took a heavy toll. Although averaging only three feet in height this annual rise was sufficient to inundate the 58,000 acres of marsh, surrounding the lake, so level is the soil. The partial back-flow into Klamath River was also a valuable function, in retarding accumulation of alkali, which would have been more rapid had all surplus water been removed by evaporation.

To avoid confusion in names, the river channel from Upper Klamath Lake to Lower, including Klamath Strait, was originally called and on early maps is designated as "Link River" and the town of Klamath Falls as Linkville. Navigation by steamboat was regularly carried on in early days through Link River and Lower Klamath to its southerly point, Laird's Landing.

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About 1905 the Southern Pacific railroad built into Klamath Falls from the south. The line crossed the Lower Klamath marsh area near its northerly end, necessarily on a heavy embankment, which acted as a levee or dike. At the crossing of Klamath Strait the railroad was required to construct water-control gates, which however, were not permanently closed until 1917 by the United States Reclamation Service. By 1920 Lower Klamath was practically dry through evaporation and no inflow.

The natural factors which made Lower Klamath an outstanding breeding and resting ground for wild-fowl remain unchanged. It is necessary only to open the control gates at Ady and the basin will refill at the rate of 500 cubic feet per second whenever the Klamath is high.

LAND OWNERSHIP.

Lower Klamath being navigable, title to the lake bed automatically vested in the States of California and Oregon upon their admission to the Union. By operation of another law, the adjacent swamp and overflow land also passed to the respective States, subject to settlement and sale when surveyed and segregated. Owing to uncertainties as to where lake ended and marsh began, only a few outlying areas on the California side were sold into private ownership. Of the 27,000 acres in Oregon, 20,000 acres were alienated to individuals, the balance lying in the lake bed, remaining public only because obviously unfit for cultivation.

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In 1905, after great promotion activity, both Oregon and California ceded their land and water rights in Lower Klamath (not to mention Tule and Goose Lakes), to the United States for purposes of agricultural reclamation. In Oregon this condition has, technically at least, been met. In California, as regards Lower Klamath it has not, and in 1920 the Reclamation Service abandoned that unit of the project. California therefore has good grounds, if it cares to make the claim, to assert that the title has reverted to the State for non-fulfilment of the condition of cession to the United States.

To summarize, land holdings are as follows:

20,000 acres in Oregon in forty or fifty individuals, all being comprised in the Klamath Drainage District organized under the laws of Oregon.

7,000 acres in Oregon (also embraced in the District) in the United States, subject to question by Oregon if used for purposes other than agricultural reclamation.

60,000 acres approximately in California in the United States, subject to claim of reversion by California for failure to reclaim. Private landholdings in this area are probably not of consequence as against reflooding.

Approximately the entire area is included in the Lower Klamath Bird Refuge proclaimed by President Theodore Roosevelt in 1908, but subject to the requirements of the Reclamation Service-

WATER SUPPLY:

This is the crux of reflooding Lower Klamath. Evaporation amounts to 3.5 feet per year, average rainfall to 12 inches.

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Consequently even to maintain water in the inner basin of 29,000 acres, there should be available from Klamath River 100,000 acre feet per annum.

To flood the entire 88,000 acres would require yearly in the neighborhood of 300,000 acre feet. This, however, would probably be not advantageous as an annual affair. An intermediate flooded area of 60,000 to 70,000 acres would be preferable as providing dry marginal areas and cover for nesting. High flooding would be desirable at intervals for the freshening of the water.

Water already appropriated to irrigation cannot be taken away from the farmers. The next claimant for water is the California-Oregon Power Company, which has some prior rights not large in extent, but with which company the Reclamation Service has made some further contracts likely to prove troublesome.

Oregon has granted to the United States full rights to unappropriated waters of the Klamath River for agricultural reclamation purposes. Consequently a diversion for other purposes should have legislative sanction by Oregon.

I have not attempted as yet to make an exhaustive study of this complicated water situation. Meteorological data on rainfall and runoff has not until recently been fully compiled covering a period of approximately ten years past, and these have been in a cycle of low precipitation, such as will be crucial to reflooding. The conclusions in the Lathrop report as to water cannot for this reason be taken as final.

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Engineering data on the Klamath watershed has I believe now been brought down to date in a report by Lieut. Col. H. A. Finch, U.S. Army, on file, No. 308 in the office of the Chief of Engineers. A copy of this report will doubtless be available to another governmental agency and one should be obtained and studied. If possible I desire to have an extra copy and to submit it with other data to Dr. C. E. Grunsky, one of the most distinguished water engineers in the country! He is president of the California Academy of Sciences and ex-officio a member of our Advisory Committee on Game Refuges. He has offered to review this water problem when the data is available, and his conclusions would be of the greatest weight.

Only when availability of water is known with some degree of certainty can the legal priorities and contractual rights be worked out with any reliability.

PREREQUISITES TO RESTORATION:

1927 Jessup

Recurrently since 1920 reports have been issued on the feasibility of reflooding Lower Klamath. The most elaborate was made in 1927 by L. T. Jessup, a drainage engineer either then or formerly in government employ. Sportsmen of California subscribed about $6000 to pay for it. It discourages restoration and suggests reflooding only 9000 acres of the lakebed area, with a system of dykes and pumps, installation of which would run into hundreds of thousands of dollars, with an annual maintenance of $15,000 to $20,000. Such a scheme would have minimum value for

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breeding purposes.

Logically the only basis of restoration is to buy back all private land-holdings in the Klamath Drainage District, and reflood the whole basin to the extent that water supply will permit. An additional reason for purchase is that Reclamation Service has entered into a contract with the District to keep the gates at Ady closed and ultimately to turn the gates over to the District. This contract may be voidable, but it is far preferable to annul it without a contest.

To verify my own conclusions as to legislation necessary or desirable in connection with this project, in 1932 I addressed an inquiry to then Secretary of the Interior Wilbur, who transmitted in reply a letter from Dr. Elwood Mead, Commissioner of Reclamation, copy of which is attached. Its recommendations agree in general with my prior opinion.

The legislation recommended for California and Oregon I believe will be easily obtained - next sessions January 1935. The sentiment for it will be strong in California and I believe the same in Oregon. Senator McNary I understand is much interested and his opinion would be of value.

Of the federal legislation I think the most important is that relative to the Reclamation Service, which will probably refuse to move without it. Item (2), repeal of Act of Mar. 3, 1923, 42 Stat. 1438 granting California the right to sue for recovery of her ceded lands, I would not be hasty about. Should the power company resist [illegible] on the basis of its water appro-

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priations made on the Klamath after it leaves Oregon and enters California, this might be a means of asserting prior rights appurtenant to state claimed lands in Lower Klamath Lake.

The sub-marginal quality of the lands in Klamath Drainage District is hardly debatable. After elaborate and very costly experiments by the largest landowners - 7000 acres - they have succeeded in growing with fair success some areas to rye. For the most part the land has reverted to sheep pasture at $1. per acre per year rental.

The basic cost per acre of lands in the District is as follows:

	Cost	Paid	Outstanding
S. & O. title	$2.50	$2.50	$
Bonded debt	4.30	2.675	1.625
U.S. Recl. obligations	7.75	3.55	4.20
Total	14.55	8.725	5.825

Note should be taken of Dr. Mead's mention of reimbursement of the reclamation fund for its expenditures. This refers to a sum of $253,225. laid out by the Reclamation Service in investigation and preliminary work on Lower Klamath. Of the total $74,898 was allocated to and assumed by the Klamath Drainage District and only partly paid. The balance stands as a charge against the devastated area in California. Certainly the reclamation fund should not be reimbursed out of marginal land or game restoration funds for this ruinous expenditure, when the Service persisted in going ahead with this branch of the project

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after being warned for years by the most competent experts that it was foredoomed to failure. On the contrary it appears that any balance of this charge now owing by owners in the District should be remitted and deducted from any price paid for the lands.

Two maps are attached, which may assist to understanding the lay of the land at Lower Klamath.

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APPENDIX A

C O P Y

MEMORANDUM

To: Henry Holsinger

Date: December 30, 1952

From: H. W. Ferrier

Subject: Klamath River Investigation. Summary of hearings in the matter of Application of the California-Oregon Power Company before the Federal Power Commission. (Big Bend No. 2 Project) Docket No. E - 6390.

The scope of this memorandum is confined to those issues and matters covered in the hearings before the Federal Power Commission at Klamath Falls, Oregon, June 30 to July 3, 1952, which have bearing upon the Klamath River Basin Investigation presently being conducted by the Division of Water Resources. The transcript comprises 800 pages and covers many matters irrelevant to the instant study.

Two matters were involved at the hearing: (1) Application for license to construct power plant, Big Bend No. 2, on the Klamath River in Oregon near the California boundary; and (2) Order to show cause why a license should not be required for the existing Copco Nos. 1 and 2 power plants downstream on the same river in California.

Interests represented at the hearings included: (1) the applicant power company; (2) the State of Oregon (Game Commission); (3) Secretary of the Interior (Bureau of Reclamation); (4) State of California, represented by Ralph W. Scott, Assistant Attorney General; (5) Tulelake Farm Center, Chamber of Commerce of Tulelake, Tulelake Irrigation District, etc.; (6) A. F. of L. Unions of Klamath Falls; (7) Klamath Tribal Committee, Klamath Reservation;

(8) Isaac Walton League, Oregon Division; (9) Klamath County Farm Bureau; (10) Klamath River Watershed Development Association; and (11) Staff of the Federal Power Commission.

The power company, herein referred to as COPCO, presently operates two major power plants on the Upper Klamath River in the canyon of the Klamath. These are known as Copco No. 1, and Copco No. 2. They are located about 25 miles below the location of the proposed plant, Big Bend No. 2. For peak operation they require a flow of 2500 second-feet on a 12-hour basis, thus requiring a stream flow above their storage reservoir of 1250 second-feet. This flow is maintained largely by the dam at the outlet of Upper Klamath Lake (Link River Dam). This dam was constructed and is operated by COPCO under a contract with the Bureau of Reclamation dated February 24, 1917, and expiring February 24, 1967. The contract permits regulation of the level of the lake between 4,137 feet and 4,143.3 feet, a difference of 6.3 feet. The storage capacity thus created is in excess of 400,000 acre-feet. By virtue of this storage in Klamath Lake, COPCO has been able to maintain a dependable flow at the Copco No. 1 intake dam of 1250 second-feet except for one or two exceptionally dry years (1931, for example). COPCO contends that the proposed new plant at Big Bend will involve substantially the same water use as that presently being made and will not prejudice the rights of irrigation users in the Upper Klamath Basin. The Bureau of Reclamation, the irrigation users and the Klamath Indian tribes take a contrary position. In particular they oppose any license which would extend beyond 1967, the contract expiration date. One of the main

issues appears to be the water rights of COPCO apart from the contract.

Another issue is the extent of the water rights of the Bureau on the Klamath River in Oregon. The Bureau contends that it has the right to all of the water of the river in Oregon pursuant to a filing dated May 19, 1905, following a special act of the Oregon Legislature (General laws of Oregon, Chapter 288, Section 2). The Attorney General of Oregon has rendered an opinion to the State Engineer dated November 19, 1950, in which he disagrees with the Bureau's position. In his opinion the rights acquired by the Bureau are limited to the requirements of the original project, and any surplus water not now being put to beneficial use under the project is available for appropriation by others. The Attorney General's opinion appears to be sound in point of law.

Principal witnesses for the Bureau were E. L. Stephens, Project Manager and Philip P. Dickinson, Assistant Project Manager. Stephens testified concerning the existing project. At present, 210,000 acres can be served, of which 190,000 were actually served in 1951. Another 20,000 acres could be added to the project by enlargement of the existing irrigation system. The consumptive use is about 2 acre-feet per acre per annum. The Bureau concedes only 355 second-feet of the floor of the Upper Klamath as prior in right to the project requirements.

Dickinson testified concerning the plans for ultimate water development in the Upper Klamath Basin. It is anticipated that the Upper Klamath Basin Regional Report will be completed in 1954.

This will cover certain areas in Oregon and Oklahoma District, Red Rock Valley, Shasta Valley, Butte Valley and Scott Valley in California. Ultimate development of the upper basin would include 717,000 irrigable acres in Oregon and California and would require about 1,435,000 acre-feet of water. The Bureau is deferring decision on extension of the contract with COPCO until the investigation is completed. The investigation includes future power development.

Witnesses for the State of California testified concerning fluctuations in the flow of the river resulting from the operations of Copco Nos. 1 and 2. Testimony was given concerning the hazard to human life due to such fluctuations. Estimates were given as to number of fish lost each year by stranding - nearly 2 million salmon and steelhead, mostly fingerlings.

Witnesses for the Klamath Indians testified concerning irrigation needs of the tribal lands. They sided with the Bureau in opposing a license.

Various irrigators from the upper basin (Tulelake, Butte Valley, etc.) testified concerning present and future water needs. Their testimony was to the effect that more irrigation water was needed for agriculture in this region. Their position was substantially that of the Bureau. They insist on the first right to water, allowing only the surplus to be used downstream for power development.

Included in the presentation by the Commission staff were stream flow studies to determine availability of water at Keno (below Link River Dam). The dry year study (1930-31) showed no water available for power at Big Bend during the months of May to

September. In the months of February, March and April, the available flow was 187, 221 and 36 second-feet, respectively. The average year available flows in second-feet were: October, 1632; November 1535; December, 1079; January, 1048; February, 1691; March, 1410; April, 1517; May, 1764; June, 791; July, 592; August, 1214; and September, 1631. The study assumed irrigation requirements for the upper basin for the year 1951. The flow available at Keno would be the surplus after deduction of the water required for irrigation.

The State of Oregon was mainly concerned with insuring an adequate minimum flow for preservation of game fish. COPCO proposed a minimum release of 50 second-feet. The State asked for 300. The Commission Staff used 200 in their feasibility report. This would probably satisfy Oregon and adequately preserve the game fish. A minimum flow of 200 second-feet would also appear to remove some of the objections of the California Department of Fish and Game and the California Sportsmen in the Klamath region to the existing extreme fluctuations in the flow of the river below the power plants.

To date the Commission has not rendered its decision in the matter.

/s/ H. W. Ferrier
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Associate Attorney