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BANKS LAKE AND POTHoles RESERVOIR RECREATION

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HEARING BEFORE THE SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

EIGHTY-EIGHTH CONGRESS
SECOND SESSION
ON

S. 2493

A BILL TO AUTHORIZE THE SECRETARY OF THE INTERIOR TO DETERMINE THAT CERTAIN COSTS OF OPERATING AND MAINTAINING BANKS LAKE AND POTHoles RESERVOIR ON THE COLUMBIA BASIN PROJECT FOR RECREATIONAL PURPOSES ARE NONREIMBURSABLE

MARCH 3, 1964

Printed for the use of the
Committee on Interior and Insular Affairs



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HEARING

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SUBCOMMITTEE ON

IRRIGATION AND RECLAMATION

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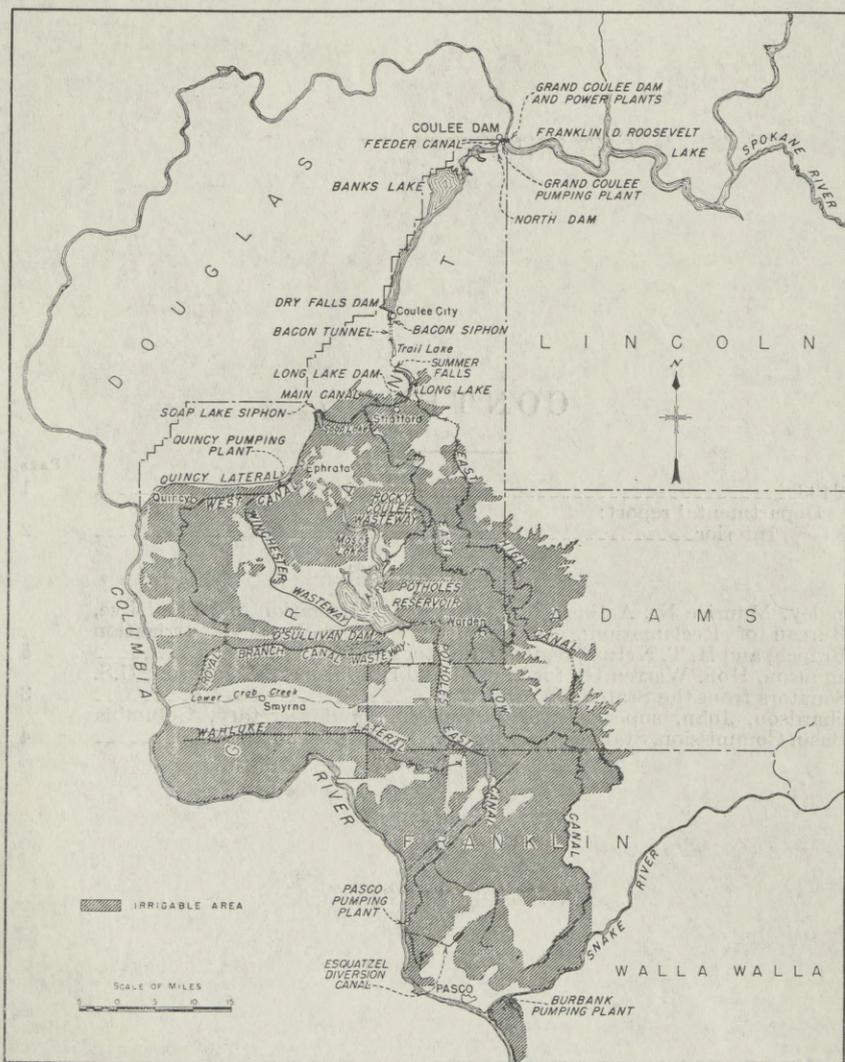


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Columbia Basin project.

BANKS LAKE AND POTHoles RESERVOIR
RECREATION

TUESDAY, MARCH 3, 1964

U.S. SENATE,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION,
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:40 a.m. in room 3110, New Senate Office Building, Senator Frank E. Moss presiding. Present: Senators Moss, Jackson, Church, Burdick, Allott, and Jordan.

Also present: Jerry T. Verkler, staff director; Thomas S. Foley, special counsel; Stewart French, chief counsel; Richard W. C. Falknor, professional staff member; Roy W. Whitacre, professional staff member; Richard Andrews, minority counsel; and Robert Bendt, professional staff member.

Senator Moss. The Subcommittee on Irrigation and Reclamation will come to order.

We are hearing witnesses today on S. 2493, sponsored by the two Senators from Washington, Senator Jackson, who is the chairman of the Senate Committee on Interior and Insular Affairs, and Senator Magnuson, a bill to authorize the Secretary of the Interior to determine that certain costs of operating and maintaining Banks Lake and Potholes Reservoir on the Columbia Basin project for recreational purposes are nonreimbursable.

I will print the bill and the report from the Department of the Interior at this point and then we will hear testimony from the sponsors of the bill and other witnesses.

(The bill and report follow:)

[S. 2493, 88th Cong., 2d sess.]

A BILL To authorize the Secretary of the Interior to determine that certain costs of operating and maintaining Banks Lake and Potholes Reservoir on the Columbia Basin project for recreational purposes are nonreimbursable

Be it enacted by the Senate and House of Representatives of the United States of America and Congress assembled, That, pending complete development of the Columbia Basin project, Washington, the Secretary of the Interior is authorized, when estimated benefits will at least equal added costs, to operate and maintain Banks Lake and Potholes Reservoir of said project, for recreational purposes, consistent with authorized project functions, valid contracts, and within limits of pump and canal capacities, and that any increased operation and maintenance costs for filling of the reservoirs and for maintaining water levels for the benefit of recreational purposes, including fishing and hunting, as determined by the Secretary of the Interior shall be nonreimbursable and nonreturnable.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., March 2, 1964.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: This responds to your request for the views of this Department on S. 2493, a bill to authorize the Secretary of the Interior to determine that certain costs of operating and maintaining Banks Lake and Potholes Reservoir on the Columbia Basin project for recreational purposes are non-reimbursable.

We recommend enactment of the bill with an amendment suggested below.

S. 2493 would authorize the Secretary of the Interior, pending completion of the Columbia Basin project, to operate and maintain Banks Lake and Potholes Reservoir in that project for the purpose of recreation as well as presently authorized project purposes. The bill would impose certain qualifications on operation for recreation purposes; these are that the estimated additional benefits from that purpose shall at least equal the added costs attributable to it, and that operation shall be consistent with other authorized project functions, valid contracts, and within limits of pump and canal capacities. The increased operation and maintenance costs incurred in filling the reservoirs and maintaining water levels for recreation, including fishing and hunting, are made nonreimbursable by the bill.

Banks Lake is an equalizing reservoir of the Columbia Basin project. It is at a higher elevation than Franklin D. Roosevelt Lake behind Grand Coulee Dam, and it is filled by pumping from the mainstream reservoir. Potholes Reservoir is a reregulating facility that obtains its water supply from Banks Lake and from project return flows. Recreation is not one of the authorized purposes of the project, and therefore, under existing authority operation of these reservoirs cannot be tailored to serve the recreation needs and desires of the area unless the water users bear the additional costs. As Banks Lake and Potholes Reservoir are now operated for irrigation alone the water level fluctuates rather widely, particularly during the summer season. This is undesirable from the standpoint of recreation use.

If the authority that S. 2493 would grant were extended to the Secretary of the Interior, the pumping schedule into Banks Lake would be altered when conditions permitted to reduce fluctuations there and at Potholes Reservoir, and the additional costs associated with the modified pumping schedule would be non-reimbursable. With this change in operation it is estimated that general recreation use of the reservoirs would increase by about 25 percent, producing additional benefits evaluated at an annual average of \$143,000. Modification of the pumping schedule would involve added costs estimated to average \$59,000 per year. Thus, this would be an economically justified method of operation, as, on an incremental basis, the benefits would exceed the costs in the ratio of 2.42 to 1.

A study by the Bureau of Reclamation has indicated that water supplies in the Columbia River will probably be adequate to achieve optimum operation for recreation purposes in 4 years out of the next 7. In other years the limitations of available water supply or other conditions would probably limit pumping for recreation purposes to some degree.

Under the present method of operation these reservoirs now produce sizable recreation benefits. To clarify the limitation in the bill that additional costs that may be incurred for recreational purposes shall be limited in amount to the additional benefits that the proposed pumping operation for recreation would generate, the word "added" should be inserted after the word "estimated" in line 5, page 1.

A comprehensive, long-term study of operations and benefits of the entire Columbia Basin project is now underway. Among other things, this investigation will evaluate the costs and benefits of providing larger, assured water supplies to accomplish fish and wildlife and recreation purposes at various facilities at or on the project, including Banks Lake, Potholes Reservoir, and the Columbia National Wildlife Refuge, which is on Crab Creek below Potholes Reservoir. Enactment of S. 2493 will permit the opportunities for increased recreation at these two reservoirs to be used during the interim period until the projectwide study is completed. A further benefit from interim operation of the reservoirs for recreation purposes would accrue from additional water that would be available from time to time for use on the Columbia National Wildlife Refuge. This additional water, with its attendant benefits, will not be assured in any given year. Therefore, the fish and wildlife benefits were not included in the economic analysis establishing the justification for interim operation for recreation purposes.

The Bureau of the Budget has advised that while there is no objection to presentation of this report it has not been afforded an opportunity to explore a number of questions and problems raised by S. 2493 and the Department's proposed report, and that accordingly the Bureau of the Budget suggests that the committee defer action on the bill until an adequate review can be made and appropriate recommendations submitted for the consideration of the committee.

Sincerely yours,

KENNETH HOLUM,
Assistant Secretary of the Interior.

Senator Moss. Senator Magnuson will now testify on S. 2493.

**STATEMENT OF HON. WARREN G. MAGNUSON, FOR HIMSELF
AND HON. HENRY M. JACKSON, U.S. SENATORS FROM THE
STATE OF WASHINGTON**

Senator MAGNUSON. I will put the statement in the record on behalf of Senator Jackson and myself.

(The joint statement follows:)

**PREPARED STATEMENT OF HON. WARREN G. MAGNUSON, ON BEHALF OF HIMSELF
AND HON. HENRY M. JACKSON, SENATORS FROM THE STATE OF WASHINGTON**

Mr. Chairman, I note that your subcommittee will also consider this morning S. 2493, a bill to authorize the Secretary of the Interior to determine that certain costs of operating and maintaining Banks Lake and Potholes Reservoir on the Columbia Basin project for recreational purposes are nonreimbursable. With your permission, I should like to make the following remarks on behalf of myself and my colleague, the distinguished chairman of the full Interior Committee, to be inserted at the appropriate place in the record.

The development of the strong recreational potential of the whole Columbia Basin is not only a matter of crucial economic significance to the areas involved but also the development is of considerable national and regional significance. It benefits a constantly increasing number of visitors to the Columbia Basin from all parts of the United States.

Banks Lake and Potholes Reservoir are situated, respectively, in the Douglas and Grant County areas of Washington. As an indication of the compelling need for vigorous development of these two counties, it should be emphasized that they both are areas of substantial unemployment already determined eligible under the various Federal programs to help local communities help themselves in strengthening their own economies.

Local organizations, such as the Coulee City Chamber of Commerce, the Joint Fishing Development Committee of the Grand Coulee and Coulee Dam Chambers of Commerce, and the Wilbur Chamber of Commerce, have already done yeoman service toward meeting local responsibility for recreational development.

This proposal will provide the necessary Federal help. It will enable the Bureau of Reclamation to maintain Banks Lake with minimal fluctuations between May 1 and September 1 during at least 4 or 5 of the next 7 years (contingent upon project operations).

It is important to realize that fluctuations on Banks Lake range usually between 8 and 14 feet. These fluctuations are wholly disruptive of sustained and orderly recreational development.

We should also suggest that legislative action to cut down fluctuations at the Potholes Reservoir in Grant County merits your prompt and sympathetic consideration. In this connection, we cannot overlook the considerable impact that recreation now has in the Grant County area. Local interests have pointed out that Grant County now has 85,000 acre-feet of surface water that can be used for recreational purposes. Before 1953, Grant County had none.

When irrigation requirements permit, the extra pumped water authorized under this bill's provisions could reduce the fluctuation at Potholes Reservoir in August and September. The fluctuation there now varies from around 10 to 15 feet and will increase to about 25 feet at the time of full project development.

The annual estimated costs of \$21,000 for Banks Lake and \$38,000 for Potholes Reservoir would be classed as nonreimbursable and nonreturnable under this proposal's provisions.

Mr. Chairman, we solicit your support for timely Senate action on S. 2493, whose recreational benefits will outrun these costs by more than 2 to 1.

Senator MAGNUSON. It is difficult to project the values that will come from keeping the water levels proper on the reservoir in the Banks. Last week in my committee upstairs we had long discussions with Fish and Wildlife and other people, the National Wildlife Foundation, all of the people on this problem. This could be one of the key units in the eastern Washington area if we kept it at the proper level for recreation, fish and wildlife development. Senator Jordan, in view of his work on the International Joint Commission, is familiar with that area.

Senator JORDAN. I am.

Senator MAGNUSON. It could be a tremendous thing for everybody in the whole Northwest for these features, and it is so simple to do what Senator Jackson and myself have suggested to the committee.

I don't know what the benefit-to-cost ratio is but it might be even greater if you project it in this project. I would like to state that any questions that you have Mr. Hallauer can answer in detail. Also the two members of the Whitestone project who are here can answer your questions.

Senator JACKSON. I want to express my appreciation to my senior colleague for his very fine statement.

Senator MOSS. Thank you, Senator Magnuson.

The next witness will be John Richardson.

STATEMENT OF JOHN RICHARDSON, SUPERVISOR OF RECLAMATION, AND SECRETARY, COLUMBIA BASIN COMMISSION, STATE OF WASHINGTON

Mr. RICHARDSON. The measure before the committee today, S. 2493, offers a practical solution to resolve a conflict between a primary purpose of the Columbia Basin project, irrigation, and the ever-increasing hunting, fishing, and recreational benefits derived from the project.

These figures I may tell you about now are accurate. They have just been compiled by our game department and they are rather exceptional.

Banks Lake, the project equalizing reservoir, contains 24,000 acres of trout, bass, perch, crappie, and bluegill fishing waters. Our State game department reports that in 1963 fishermen utilized the lake to the extent of 60,000 man-days. They harvested an estimated 175,000 fish.

Picnicking and camping was estimated at 86,000 man-days; waterfowl hunters, 2,000 man-days; and pheasant hunters, 500 man-days.

Potholes Reservoir, 28,200 acres in size, attracted fishermen for 85,000 man-days and they harvested 750,000 fish. Other use of the Potholes included 45,500 man-days for picnicking and camping, 19,500 man-days for waterfowl hunters, and 500 man-days for pheasant hunters.

The Potholes has become the major duck and goose hunting area in the State. A December 1963 count by the game department showed 175,000 ducks at the Potholes. At times this has gone up to as high as 240,000.

S. 2493 provides that additional pumping and related costs required to stabilize these reservoirs for boat access and other recreational benefits be nonreimbursable and nonreturnable when these costs are at least equal to benefits.

I am certain that these hunting and fishing benefits far exceed the cost.

We feel that it is proper that these costs be borne generally, so that maximum public benefits may be derived from these recreational aspects of the Columbia Basin project.

Thank you very much for this opportunity to appear before the committee today.

Senator MOSS. What amount are we talking about? How much is this going to cost additionally to maintain these levels?

Mr. RICHARDSON. I believe, sir, they are approximately \$28,000 annually on Banks and \$39,000 on the Potholes.

Senator MOSS. This would be a nonreimbursable charge for recreation?

Mr. RICHARDSON. Yes, sir.

Senator JACKSON. In other words, when the project is authorized, they didn't take into consideration the recreational possibilities of it, and this, Mr. Chairman, is an effort to recognize this development that has occurred in the last few years.

The overall project of course when completed will run about \$800 million, so this is a very small item in the total aggregate of multipurpose development.

Senator MOSS. Thank you, Mr. Richardson.

Mr. RICHARDSON. Thank you.

Senator MOSS. We appreciate it very much.

Now Mr. Langley, the Acting Chief, Division of Irrigation and Land Use of the Bureau of Reclamation and also Mr. Boyd of the Irrigation Branch are here.

We will ask you gentlemen to come forward. You have prepared statements. They will be placed in the record in full as though read and we will ask you to comment on them as you see fit.

Mr. Langley.

STATEMENT OF MAURICE N. LANGLEY, ACTING CHIEF, DIVISION OF IRRIGATION AND LAND USE, BUREAU OF RECLAMATION; ROY H. BOYD, IRRIGATION BRANCH, BUREAU OF RECLAMATION; AND H. T. NELSON, REGIONAL DIRECTOR AT BOISE, IDAHO

Mr. LANGLEY. Thank you, Mr. Chairman. In view of the excellent statements that have already been made and the familiarity of the committee with this area, I will only hit a few highlights.

I am Maurice Langley, Acting Chief of the Division of Irrigation and Land Use. I have with me Regional Director Nelson and Roy H. Boyd, hydraulic engineer in our division.

The bill before you, S. 2493, would authorize the Secretary of the Interior to determine that certain costs of operating and maintaining Banks Lake and Potholes Reservoir for recreation purposes are nonreimbursable. Qualifications imposed by the bill are that the estimated additional benefits shall, at least, equal the added costs and

that the operation shall be consistent with authorized project functions, valid contracts, and within limits of pump and canal capacities. This bill is intended as an interim arrangement pending complete development of the Columbia Basin project. A comprehensive long-range study of total project operations and benefits is now underway. It indicates that there may be justification for reauthorizing legislation which would consider additional benefits such as recreation and fish and wildlife, and the reallocation of project costs and benefits.

Most of you are familiar with the details of the Columbia Basin project. To save the committee's time, we will furnish for the files a reprint from our project data book which describes the project purposes and benefits, and includes a small map showing Banks Lake and Potholes Reservoir.

PRESENT OPERATIONS

As a normal operation, irrigation withdrawals from Banks Lake begin in late March and the reservoir recedes until pumping begins. Pumping to Banks Lake begins about mid-April, but is at a reduced rate because of limited available power (power requirements are coordinated with Bonneville Power Administration), and/or low water level in Franklin D. Roosevelt Lake. It usually is not until some time in May that the pumping rate exceeds the withdrawal rate. Then, with the pumping rate in excess of irrigation demands, the reservoir level rises until late September, when it is at the maximum level of 1,570. After pumping to Banks Lake is discontinued about October 1 (again correlated with other power requirements), the reservoir storage gradually declines because of irrigation withdrawals until the end of the irrigation season. The reservoir level then remains nearly constant at about 1,565 elevation during the nonirrigation season.

Under the present irrigation operations, both Banks Lake and Potholes Reservoir fluctuate considerably during the year. These fluctuations are normal for such equalizing and reregulating reservoirs in an irrigation system, but they have a very detrimental effect upon recreational uses of the reservoirs. There are years when the available water supply and other conditions would permit pumping additional water to reduce reservoir fluctuations, but this would involve additional pumping costs. Under the present project authorization such operating costs are reimbursable. We do not believe it is appropriate or consistent with longstanding policy to include such costs in the water charges of the irrigation districts.

BENEFITS FROM MODIFIED OPERATIONS

Studies indicate that during the next 7-year period there will probably be, at least, 4 years when operating conditions (water supply, power requirements, and canal capacities), will be such that it would be economical to modify reservoir operations to benefit recreation.

You asked about costs during these years the average benefits resulting from the reduction of reservoir fluctuations would provide recreational benefits estimated to be \$60,000 for Banks Lake and \$83,000 for Potholes Reservoir, for a total annual benefit of \$143,000.

The average added annual operating costs are estimated to be \$21,000 for Banks Lake and \$38,000 for Potholes Reservoir, for a total added cost of \$59,000. The overall benefit-cost ratio would be 2.42 to 1.

In an estimate 3 years out of 7, when conditions would not permit pumping for recreation because of interference with commitments for power production and delivery of water for irrigation, little or no added costs for recreation would be incurred.

As I mentioned earlier, a comprehensive, long-term study of operations and benefits of the entire Columbia Basin project is now underway. Among other things, this investigation will evaluate the costs and benefits of providing larger assured water supplies to accomplish fish and wildlife and recreation purposes at various facilities at or on the project, including Banks Lake, Potholes Reservoir, and the Columbia National Wildlife Refuge, which is on Crab Creek below Potholes Reservoir. Enactment of S. 2493 will permit the opportunities for increased recreation at these two reservoirs to be used during the interim period until the projectwide study is completed.

A further benefit from interim operation of the reservoirs for recreational purposes would accrue from additional water that would be available from time to time for use on the Columbia National Wildlife Refuge. This additional water, with its attendant benefits, will not be assured in any given year. Therefore, the fish and wildlife benefits were not included in the economic analysis establishing the justification for interim operation for recreation purposes.

Since it is not a permanent arrangement we have not computed those additional benefits but these are typical of the added benefits that would accrue.

Among the potential enlargements and modifications of the project now under study are the third powerplant at Grand Coulee Dam, the possibility of use of Banks Lake for pump storage for peaking power generation, and the 367,000 acres to be irrigated under the proposed East High Canal. Operation of the reservoirs in the event any or all of these plans materialize may be substantially different than we have assumed in computing the feasibility of interim recreation use of the reservoirs. Under long-range conditions, it may be found necessary to modify operations for recreation purposes because these additional developments could result in fluctuation in Banks Lake and Potholes Reservoir as great, or greater, than existed in the past.

Therefore, we believe that enactment of S. 2493 would provide a practical and financially sound basis on which to operate Banks Lake and Potholes Reservoir during the interim period while these long-range studies and project development are proceeding.

The word "added" should be inserted after the word "estimated" in line 5, page 1. We believe that would clarify the bill.

Senator Moss. What we believe this would amount to is the additional cost for pumping water at various times to keep the level of the reservoir up rather than draw it down as has been done before.

Mr. LANGLEY. This is the largest single added cost. The additional pumping results from several things. There will be some added evaporation from lakes at the higher levels. There will be some pumping against slightly added head at certain seasons of the year. There will be a few other miscellaneous costs such as operation of canals to move the water down to Potholes Lake and some riprapping perhaps.

Senator CHURCH. If, when this project was originally authorized, the present formula for allocating a certain portion of the cost to recreation on a nonreimbursable basis had been used, would that formula have provided as much as is here asked for in this bill?

Mr. LANGLEY. I would assume it would have and it probably would have covered other recreational aspects of the project which would be much greater and these are some of the things that are now underway.

Senator CHURCH. What you are asking us now to do is modest in comparison with the formula we have now accepted for nonreimbursable costs allocated to recreational benefits?

Mr. LANGLEY. That is correct. A small interim measure while making a long-range study of the project.

Senator JACKSON. As a matter of fact if you went back retroactively and used the present formula when the Columbia Basin project was authorized there would be much more money in here that could be justified for recreation, is that correct?

Mr. LANGLEY. That is correct.

Senator JACKSON. Compared with other projects the amount here that we are talking about is insignificant in relation to the total investment of almost \$800 million. This is the largest project in the country except for some new ones that are being considered.

Senator Moss. Thank you very much, Mr. Langley. Senator Jordan, do you have any questions?

Senator JORDAN. No questions.

Senator Moss. Thank you, and I thank you other gentlemen for coming.

We appreciate the very direct and succinct testimony.

If there are no further witnesses that will conclude the hearing on S. 2493.

(Whereupon the committee turned to other business.)

