

1040
B17
Jan 8/13
S1114

BAKER RECLAMATION PROJECT, OREGON

Y4
. In 8/13
B 17

GOVERNMENT

Storage

HEARING BEFORE THE SUBCOMMITTEE ON IRRIGATION AND RECLAMATION OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE EIGHTY-SEVENTH CONGRESS

SECOND SESSION

ON

S. 308

A BILL TO AUTHORIZE THE SECRETARY OF THE INTERIOR
TO CONSTRUCT, OPERATE, AND MAINTAIN THE UPPER
DIVISION OF THE BAKER FEDERAL RECLAMATION PROJ-
ECT, OREGON, AND FOR OTHER PURPOSES

APRIL 5, 1962

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



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1962

10/20/81
AY
8/8 at.
718

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS

CLINTON P. ANDERSON, New Mexico, *Chairman*

HENRY M. JACKSON, Washington

HENRY DWORSHAK, Idaho

ALAN BIBLE, Nevada

THOMAS H. KUCHEL, California

JOHN A. CARROLL, Colorado

GORDON ALLOTT, Colorado

FRANK CHURCH, Idaho

JACK R. MILLER, Iowa

ERNEST GRUENING, Alaska

MAURICE J. MURPHY, JR., New Hampshire

FRANK E. MOSS, Utah

JAMES B. PEARSON, Kansas

OREN E. LONG, Hawaii

QUENTIN N. BURDICK, North Dakota

LEE METCALF, Montana

J. J. HICKEY, Wyoming

JERRY T. VERKLER, *Chief Clerk*

STEWART FRENCH, *Chief Counsel*

ROY WHITACRE, *Committee Assistant for Reclamation*

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

CLINTON P. ANDERSON, New Mexico, *Chairman*

HENRY M. JACKSON, Washington

THOMAS H. KUCHEL, California

JOHN A. CARROLL, Colorado

GORDON ALLOTT, Colorado

QUENTIN N. BURDICK, North Dakota

JACK R. MILLER, Iowa

J. J. HICKEY, Wyoming

CONTENTS

	Page
S. 308-----	1
Agency reports on S. 308:	
Budget Bureau-----	5
Interior Department-----	2

STATEMENTS

Baker County court, Oregon, presented by Hon. Lloyd Rea, county judge-----	17
Colton, Charles M., Baker County rancher, Baker, Oreg-----	18
Hesketh, John C., county extension agent, Baker, Oreg-----	20
McBroom, James T., Chief, Division of Technical Services, Bureau of Sport Fisheries and Wildlife, Department of the Interior-----	23
Morse, Hon. Wayne, a U.S. Senator from the State of Oregon-----	12
Neuberger, Hon. Maurine B., a U.S. Senator from the State of Oregon-----	16
Palmer, William I., Assistant Commissioner; accompanied by Donald R. Burnett, Chief, Division of Project Development, and Harold T. Nelson, regional director, Boise, Idaho, Bureau of Reclamation-----	6, 24
Peyron, Henry, Baker County rancher, Baker, Oreg-----	19
Powder River Sportsmen's Club of Baker, Oreg., by Byron C. Brinton, chairman, water resources board-----	22
Ward, Alvin, rancher and chairman, Baker Valley Irrigation District, Baker, Oreg-----	18

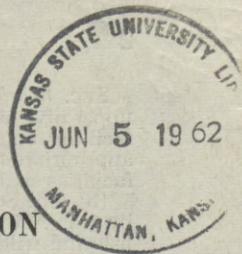
COMMUNICATIONS

Allen, Conrad: Letter, dated February 22, 1961, to Senator Clinton P. Anderson-----	36
Basche, F. C., Basche-Sage Hardware Co., Baker, Oreg.: Letter, dated April 5, 1961, to Senator Clinton P. Anderson-----	38
Boyd, Arthur S.: Letter to Senator Clinton P. Anderson-----	32
Brinton, Byron C., editor-publisher, the Record-Courier, Baker, Oreg.: Letter, dated March 14, 1962, to Senator Clinton P. Anderson-----	31
Britton, Charles H., Britton Equipment Co.: Letter, dated March 14, 1961, to Senator Clinton P. Anderson-----	37
Carr, James K., Under Secretary of the Interior: Letter dated February 23, 1962, to Senator Clinton P. Anderson-----	2
Davis, Carl, president, Pioneer Savings & Loan Association, Baker, Oreg.: Letter, dated April 5, 1961, to Senator Clinton P. Anderson-----	37
Fortner, P. T., president, Fortner Supply Co., Baker, Oreg.: Letter dated August 14, 1961, to Senator Clinton P. Anderson-----	34
Frost, Jack, secretary-treasurer, Commercial Welding Co., Inc.: Letter, dated April 13, 1961, to Senator Clinton P. Anderson-----	36
Gray, L. G., district manager, California-Pacific Utilities Co.: Letter, dated December 13, 1961, to Senator Clinton P. Anderson-----	36
Hansen, Lester D., assistant vice president and manager, Baker branch, U.S. National Bank: Letter, dated August 14, 1961, to Senator Clinton P. Anderson-----	34
Haynes, Dick: Letter, dated August 14, 1961, to Senator Clinton P. Anderson-----	35
Heizer, Earl, secretary-treasurer, Baker Production Credit Association: Letter, dated March 6, 1961, to Senator Clinton P. Anderson-----	30
Henry, T. D., president, Baker Mill & Grain Co.: Letter, dated April 10, 1961, to Senator Clinton P. Anderson-----	30
Hughes, Phillip S., Assistant Director for Legislative Reference, Bureau of the Budget: Letter, dated February 5, 1962, to Senator Clinton P. Anderson-----	5

Hursh, Harold, president, Oregon Reclamation Congress: Letter, dated February 1, 1961, to Senator Clinton P. Anderson-----	Page 29
Jones, Howard H.: Letter, dated April 5, 1961, to Senator Clinton P. Anderson-----	37
Phillips, Wayne, Sr., Baker, Oreg.: Letter, dated March 20, 1961, to Senator Clinton P. Anderson-----	31
Schaan, William: Letter, dated February 14, 1961, to Senator Clinton P. Anderson-----	33
Sheehy, Thomas W., master, Durkee Grange No. 653: Letter, dated March 27, 1961, to Senator Clinton P. Anderson-----	32
Staggs, Ira D., president, Baker Chamber of Commerce, Baker, Oreg.: Letter, dated March 1, 1961, to Senator Clinton P. Anderson-----	29
Steward, Robert J.: Letter, dated March 29, 1961, to Senator Clinton P. Anderson-----	33
Udall, Hon. Stewart L., Secretary of the Interior: Letter dated May 1, 1961, to Senator Clinton P. Anderson-----	2
Waller, Rives: Letter, dated February 9, 1961, to Senator Clinton P. Anderson-----	30
Warner, Fred J.: Letter, dated March 28, 1961, to Senator Clinton P. Anderson-----	35
Widman, William: Letter, dated March 14, 1961, to Senator Clinton P. Anderson-----	35

MISCELLANEOUS INFORMATION

Precedents for acreage limitation based on land class productivity-----	27
---	----



BAKER RECLAMATION PROJECT, OREGON

THURSDAY, APRIL 5, 1962

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

The committee met, pursuant to call, at 10 a.m., in room 3110, New Senate Office Building.

Present: Senators Anderson and Burdick.

Also present: Roy Whitacre, professional staff member; Jerry Verkler, chief clerk, and Stewart French, chief counsel.

Senator BURDICK (presiding). The meeting of the Subcommittee on Irrigation and Reclamation will come to order.

S. 308 authorizes the construction of the Baker project in Oregon at a cost of \$6,168,000. Cost allocations of this multipurpose dam include flood control, fish and wildlife, recreation, and irrigation. As in the Mann Creek project, a substantial share of the costs allocated to irrigation will be repaid from Bonneville power revenues.

Favorable reports have been received from the executive agencies on this measure.

A copy of the bill and reports thereon will be placed in the record at this point.

(The exhibits follow:)

[S. 308, 87TH Cong 1st sess.]

A BILL to authorize the Secretary of the Interior to construct, operate, and maintain the upper division of the Baker Federal reclamation project, Oregon, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purposes of providing irrigation water, controlling floods, conserving and developing fish and wildlife, and providing recreational benefits, the Secretary of the Interior, acting pursuant to the Federal reclamation laws (Act of June 17, 1902; 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), is authorized to construct, operate, and maintain the facilities of the upper division of the Baker Federal reclamation project, Oregon. The principal works of the project shall consist of a dam and reservoir, pumping plants, and related facilities.

SEC. 2. The period provided in subsection (d), section 9, of the Reclamation Project Act of 1939, as amended (43 U.S.C. 485h), for repayment of the construction cost properly chargeable to any block of lands and assigned to be repaid by irrigators, may be extended to fifty years, exclusive of any development period, from the time water is first delivered to that block or to as near that number of years as is consistent with the adoption and operation of a variable repayment plan as is provided therein. Costs allocated to irrigation in excess of the amount determined by the Secretary of the Interior to be within the ability of the irrigators to repay within the repayment period determined under the provisions of this section shall be returned to the reclamation fund from net revenues derived by the Secretary from the disposition of power marketed through the Bonneville Power Administration, which are over and above those required to meet any present obligations assigned for repayment from such net revenues.

SEC. 3. (a) The Secretary of the Interior is authorized, in connection with the upper division of the Baker project, to construct minimum basic public recreation facilities and to arrange for the operation and maintenance of the same by an appropriate State or local agency or organization. The cost of constructing such facilities shall be nonreimbursable and nonreturnable under the reclamation laws.

(b) The Secretary may make such reasonable provision in the works authorized by this Act as he finds to be required for the conservation and development of fish and wildlife in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-666c, inclusive), and the portion of the construction costs allocated to these purposes and to flood control, together with an appropriate share of the operation, maintenance, and replacement costs therefor, shall be nonreimbursable and nonreturnable. Before the works are transferred to an irrigation water user's organization for care, operation and maintenance, the organization shall have agreed to operate them in a manner satisfactory to the Secretary of the Interior with respect to achieving the fish and wildlife benefits, and to return the works to the United States for care, operation, and maintenance in the event of failure to comply with the requirements to achieve such benefits.

(c) The works authorized in this Act shall be operated for flood control in accordance with regulations prescribed by the Secretary of the Army pursuant to section 7 of the Flood Control Act approved December 22, 1944 (58 Stat. 887).

SEC. 4. There are hereby authorized to be appropriated out of any moneys in the Treasury not otherwise appropriated such sums as will be necessary to carry out the purposes of this Act.

U.S. Department of the Interior,
OFFICE OF THE SECRETARY,
Washington, D.C., May 1, 1961.

HON. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR ANDERSON: This responds to your request for the views of this Department on S. 308, a bill to authorize the Secretary of the Interior to construct, operate, and maintain the upper division of the Baker Federal reclamation project, Oregon, and for other purposes.

This Department cannot now recommend that any action be taken with respect to this measure.

A final planning report on the economic and engineering feasibility of the proposed Baker project has not yet been completed. Until a planning report is adopted by the Department, reviewed by the affected States and interested Federal agencies under the provisions of the Flood Control Act of 1944, other applicable laws and interagency agreements, and submitted to the President and to the Congress as required by law, we are unable to make any recommendations with respect to the enactment or provisions of the bill. It is suggested that your committee may wish to defer action on authorizing legislation until a planning report is submitted to the Congress.

The Bureau of the Budget has advised that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

STEWART L. UDALL,
Secretary of the Interior.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., February 23, 1962.

HON. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR ANDERSON: This responds to your request for the views of this Department on S. 308, a bill to authorize the Secretary of the Interior to construct, operate, and maintain the upper division of the Baker Federal reclamation project, Oregon, and for other purposes.

We recommend the enactment of this bill if it is amended as suggested herein-after.

The proposed development of the upper division of the Baker Federal reclamation project, Oregon, would be a multipurpose project, including the functions of irrigation, flood control, fish and wildlife, and recreation. Project works would consist of the earth and rock filled Mason Dam and 100,000 acre-foot reservoir on the Powder River some 18 miles upstream from the city of Baker, the Lilley pumping plant and relift pumping plant, minimum recreation facilities, and a hydrologic network consisting of precipitation gages and snow courses to predict runoff from the drainage basin above the reservoir. The irrigators contemplate rehabilitating and extending the present distribution systems so no new diversion structures, canals, or laterals would be constructed as part of the potential Federal development.

Approximately 13,990 acres of the project lands now receive a partial water supply, primarily by flooding the lands during the spring runoff. After July 1 of most years, there is little natural streamflow and, except for a small amount of pumping from wells, the irrigation season is at an end. The water that would be stored in Mason Reservoir would provide a reasonably firm water supply to the 13,990 acres over the entire irrigation season as well as a full water supply to 4,010 acres that are not now irrigated.

Of the total of 18,000 acres, 3,080 are located in the Lilley pump tracts at the north end of Baker Valley and would be irrigated mainly from return flows getting back into the main stream channel from irrigated lands at higher elevations. Some 1,380 acres of these lands now receive a partial water supply by pumping. However, the present works would be abandoned, and a full water supply would be furnished through new pumping plants which would be constructed as a part of the proposed works of the division, and which would more efficiently serve the existing irrigated lands. Thus, for repayment purposes, these lands are considered to receive the same benefits from the project as the lands not now irrigated. In essence then, the works of the potential development would provide a full water supply to 5,390 acres and a supplemental supply to 12,610 acres.

Each year floodflows during the spring cause some damage in Baker Valley. The channel capacity of the Powder River through the city of Baker is 1,500 cubic feet per second and floods of higher magnitude do considerable damage to residential, municipal, and commercial property. Much of Baker was inundated during the flood of February 1957, which reached a peak flow of 2,350 cubic feet per second. Total damages in the valley were estimated at \$250,000 with \$200,000 of this amount occurring within the city limits of Baker.

Mason Reservoir would provide 17,000 acre-feet of space exclusively for flood-water storage and in addition 21,000 acre-feet of space, to be used jointly with irrigation, would be made available on a forecast basis to store floodflows. It is estimated that with this storage capacity, \$40,000 in average annual flood damages would be prevented.

The construction and operation of Mason Reservoir would result in an annual benefit to fishery resources of \$17,700. Of this total amount, \$2,900 in benefits would result from the reservoir, and \$14,800 would result from minimum releases of 10 cubic feet per second to Powder River at Mason Dam under agreements wherein storage would be operated for this purpose in addition to irrigation. No diversions from this flow between Mason Dam and Smith Dam are contemplated in the project plan. Reduction in releases below this desired minimum would be allowed proportional to irrigation shortages.

Development of only basic recreation facilities is proposed at the reservoir. Additional recreation facilities not appropriated for Federal construction will be provided by a State or local agency. The Department has under consideration the acquisition and development of additional lands and improved facilities for recreation development, as proposed in our planning report of July 26, 1961. We suggest that authorization for such additional facilities be delayed pending further study.

The total estimated cost of the potential development is \$6,168,000 based on October 1958 prices, which are substantially the same as at the present time. Of this amount there is tentatively allocated \$4,354,600 for irrigation, \$1,056,400 for flood control, \$632,000 for fish and wildlife, and \$125,000 for recreation facilities. The total annual operation, maintenance, replacement, and pumping power costs allocated to irrigation, flood control, fish and wildlife, and recreation are \$50,450, \$7,000, \$150, and \$8,000, respectively.

The farm budget studies indicate that the irrigators probably could repay \$1,127,500 of the Federal investment allocated to irrigation in a 50-year period following a 10-year development period. During the development period, the water users would meet the annual operating costs of their existing systems and of the development recommended herein, and would incur the necessary expenses

to rehabilitate and extend the existing distribution systems to efficiently utilize the additional water to be made available by the potential Federal development. The remaining \$3,227,100 reimbursable cost in excess of the irrigators' repayment ability during the 50-year repayment period would be returned to the reclamation fund from revenues derived from the disposition of power marketed through the Bonneville Power Administration. These revenues accumulate from individual projects within the Bonneville Power Administration system only after full repayment with interest of the commercial power investment in those projects.

It is recommended that the capital and annual operating costs allocated to flood control and fish and wildlife be nonreimbursable in accordance with existing law. It is further recommended that the capital cost of minimum recreation facilities also be nonreimbursable.

The plan of development was evolved in close cooperation with the local people. It meets their immediate requirements and lends itself for incorporation in a more comprehensive plan of development for Baker Valley as the need might arise at a later date. The persons to benefit from the development have on various occasions expressed their desire for the development and have formed the Baker Valley Irrigation District for the purpose of contracting with the Federal Government.

The proposed plan of development is engineeringly feasible. A comparison of the benefits and costs indicates that the development is economically justified having a favorable benefit-cost ratio of 1.28 to 1. For a 50-year period of analysis, the direct benefits have been recomputed to recognize the effects of modern farm management, and the ratio of direct benefits to annual equivalent costs is estimated to be about 1.2 to 1.

In recognition of the limited payment capacity of the class 3 and class 4P lands on the project, the Secretary should be authorized to permit delivery of project water to units of sufficient size, considering the land classification, to support a family and to provide the necessary payment capacity. This could be accomplished by the addition of a new section 2(b), reading as follows:

"(b) Any lands in the upper division of the Baker project, Oregon, which are held in private ownership by a person whose holdings exceed the equivalent of one hundred and twenty acres of class 1 land shall, to the extent they exceed that acreage, be deemed excess lands. No water shall be furnished to such excess lands from, through, or by means of project works unless (1) the owner's total holdings do not exceed one hundred and sixty irrigable areas or (2) said owner shall have executed a valid recordable contract with respect to the excess in like manner as provided in the third sentence of section 46 of the Act of May 25, 1926 (44 Stat. 636, 649, 43 U.S.C., sec. 423e). In computing 'the equivalent of one hundred and twenty acres of class one land' under the first sentence of this section, each acre of class 2 land shall be counted as seventy-five one-hundredths (.75) of an acre, each acre of class 3 land shall be counted as fifty-five one-hundredths (.55) of an acre, and each acre of class 4 land shall be counted as thirty-eight one-hundredths (.38) of an acre."

In order to clarify the intent of the bill, we recommend that the second sentence of section 2, page 2, lines 11 through 20, be amended to read as follows:

"Costs allocated to irrigation in excess of the amount determined by the Secretary to be within the ability of the irrigators to repay, within the repayment period or periods herein specified, shall be returned to the reclamation fund within such period or periods from revenues derived by the Secretary of the Interior from the disposition of power marketed through the Bonneville Power Administration."

The provisions of subsections 3(b) and 3(c) are unnecessary in that they relate to matters which are adequately covered in reclamation law. However, we would not object to their retention in the bill.

A statement of personnel and other requirements that enactment of this bill may entail is attached in accordance with the provisions of Public Law 801, 84th Congress.

The Bureau of the Budget has advised that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

JAMES K. CARR,
Under Secretary of the Interior.

Enclosure.

ADDITIONAL DATA REQUIRED AUTHORIZATION UNDER PUBLIC LAW 801, 84TH CONG.

Baker project, Oregon, upper division

	1st year ¹	2d year	3d year	4th year	5th year
Executive direction:					
Administrative services and support:					
Administrative officer.....		1	1	1	1
Clerical and stenographic.....		1	1	1	1
Subtotal, administrative.....		2	2	2	2
Substantive (program):					
Engineering aids and technicians.....		7	7	7	7
Engineers.....		5	5	5	5
Inspectors.....		1	5	5	5
Other (field office head and right-of-way agent).....		2	2	2	1
Subtotal, substantive.....		15	19	19	18
Total positions.....		17	21	21	20
Total estimated additional man-years ²		3.3	4.0	4.0	3.0
Expenditure for additional man-years ²		\$13,285	\$16,580	\$17,000	\$13,130
Total estimated man-years of civilian employment.....		13.8	19.5	21.0	14.0
Total estimated expenditures:					
Project personal services.....		\$91,000	\$131,000	\$143,000	\$98,000
All other.....		209,000	1,825,000	3,009,000	319,000
Total estimated expenditure.....		300,000	1,956,000	3,152,000	417,000

¹ 1st year will initiate DPR activity, utilizing GI personnel and details from other offices. Establishment of permanent staff not anticipated until 2d year.

² Experience indicates that, for projects of this size, non-Bureau recruitment is necessary only for the low-grade engineering positions (GS 3 and 4) and occasionally for clerical or stenographic positions.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., February 5, 1962.

HON. CLINTON P. ANDERSON,
*Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in reply to your letter of January 17, 1961, requesting the views of the Bureau of the Budget on S. 308, a bill to authorize the Secretary of the Interior to construct, operate, and maintain the upper division of the Baker Federal reclamation project, Oregon, and for other purposes.

The purpose of this bill is clearly stated in its title.

The project report of the Department of the Interior on the upper division, Baker project, tentatively allocates costs to fish and wildlife in excess of the specific costs of fish and wildlife facilities. We would expect that, prior to a request for funds to initiate work on the Baker project, the costs of the project would be reallocated in accordance with evaluation standards for water resource projects to be established under this administration.

Accordingly, the Bureau of the Budget would have no objection to the enactment of S. 308.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

Senator BURDICK. We will hear from the Bureau of Reclamation first. Mr. Palmer, you may proceed.

**STATEMENT OF WILLIAM I. PALMER, ASSISTANT COMMISSIONER;
ACCOMPANIED BY DONALD R. BURNETT, CHIEF, DIVISION OF
PROJECT DEVELOPMENT; AND HAROLD T. NELSON, REGIONAL
DIRECTOR, BOISE, IDAHO, BUREAU OF RECLAMATION**

Mr. PALMER. I would like also to have Harold Nelson, regional director of region 1, Boise, Idaho, and Donald Burnett, Chief of the Division of Project Development, with me.

Mr. Chairman, again, I have a statement which I would be glad to submit for the record or to read for the record, as you see fit. There are some generalizations that perhaps should be made in addition to the statement. At your pleasure, I will either read it or submit it for the record.

Senator BURDICK. Your statement will be received, but if you can make some generalizations that will be very fine, too.

(The statement referred to follows:)

**STATEMENT OF BUREAU OF RECLAMATION ON UPPER DIVISION, BAKER PROJECT,
OREGON**

Mr. Chairman, we are pleased to appear before you today to recommend the enactment of S. 307 to authorize the construction of the upper division, Baker project, Oregon. Our planning report on this proposed project was transmitted to the Congress on November 30, 1961, and printed as House Document No. 302, 87th Congress. On February 23, 1962, the legislative report of the Department of the Interior on S. 308 was sent to the committee, recommending enactment of the bill with amendments.

The upper division, Baker project, would be a multiple-purpose development, providing benefits to irrigation, flood control, fish and wildlife, and recreation. The lands are in Baker and Bowen Valleys on the Powder River in northeastern Oregon.

The proposed 100,000 acre-foot Mason Dam and Reservoir would regulate the Powder River to provide a full irrigation water supply to 4,010 acres of presently dry lands, and supplemental water would be provided for 13,990 acres now irrigated. Presently irrigated lands now receive only a partial irrigation water supply, primarily by flooding during the heavy spring runoff. After the early part of July, in most years, these lands are without water except for a relatively small supply for some acres obtained by pumping from wells.

The storage capacity of Mason Reservoir would be allocated as follows: 17,000 acre-feet for exclusive flood control use, 21,000 acre-feet for joint use of flood control and irrigation, 57,000 acre-feet for irrigation use and maintenance of flows below the dam for fish, and 5,000 acre-feet for inactive storage for fish and recreation purposes. The proposed project works also include replacing the existing Lilley pumping plant and a relift pumping plant.

The irrigation water users would rehabilitate and extend the diversion and distribution facilities during the development period, using their own funds. Applications for additional water and storage rights will be filed with the State prior to starting construction.

Spring floodflows cause damage in Baker Valley in most years. With Mason Reservoir and the proposed hydrologic network for flood forecasting in operation, it is estimated that the average annual flood control benefits would amount to \$40,000.

Annual benefits to the fishery resources from use of the reservoir and maintenance of a sustained flow in the reach of the river below Mason Dam would total \$17,700.

Mason Reservoir would become a popular recreation area because of its scenic setting, easy access, and shortage of alternative opportunities for the type of recreation it would provide. Minimum basic recreation facilities to cost about \$125,000 are included in the proposed plan of development. Although the acquisition and development of additional lands and improved facilities for recreation were outlined in our planning report of July 26, 1961, we suggest that action be delayed on these additional facilities pending further study.

The total estimated cost of the proposed development is \$6,168,000. The cost is allocated to the various functions as follows: irrigation, \$4,354,600; flood control, \$1,056,400; fish and wildlife, \$632,000; and recreation, \$125,000.

The specific cost for recreation and the capital and annual operating costs allocated to flood control and fish and wildlife are considered as nonreimbursable. The recreation facilities would be constructed only if some qualified agency agrees to operate and maintain them at no cost to the Federal Government. The cost allocated to irrigation would be reimbursable without interest in accordance with reclamation law.

The payment capacity analysis indicates that the irrigators could repay \$1,127,500 of the Federal investment allocated to irrigation over a 50-year period following a 10-year development period. The remaining \$3,227,100 reimbursable costs in excess of the irrigators' repayment ability would be returned to the reclamation fund during the 50-year repayment period from revenues derived by the Secretary of the Interior from the disposition of power marketed through the Bonneville Power Administration.

The presently irrigated lands and surrounding rangelands are devoted predominantly to production of livestock, and the irrigable lands are best suited to livestock feed and forage to support that economy. Alfalfa hay, feed grains, and some row crops are grown on the better lands, while meadow hay and pasture are the predominant uses of the poorer lands.

The project would meet the needs of the area to stabilize and improve the existing cattle economy. The water users and other interests to benefit from the development strongly support this proposed plan and have expressed their desire for early authorization and construction. The Baker Valley Irrigation District has been formed for the purpose of contracting for repayment with the Federal Government.

A comparison of the benefits and costs indicates that the proposed project is economically justified. The basic report, prepared in 1960, reflected a total benefit-cost ratio of 1.28 to 1 for a 100-year period of analysis and a ratio of 0.79 to 1 for direct benefits and a 50-year period of analysis. The direct benefits have been recomputed to recognize the effects of modern farm management, and the ratio of direct benefits to costs over a 50-year period is now estimated to be about 1.2 to 1.0.

We proposed an amendment to clarify the language and intent of section 2 of the bill with regard to use of power revenues derived from Bonneville Power Administration operations. The alternative language suggested has been worked out by our Bureau and the Bonneville Power Administration jointly as the best language to accomplish these purposes.

The farm budget studies demonstrate that farm units which include a sizable percentage of class 3 and 4P lands should be larger than 160 acres if they are to meet the goal of providing an adequate level of living for the farm family. We have suggested a formula for equitable relief from this problem, based on comparative productivity of the several land classes, similar to the formulas adopted for the east bench unit of the Missouri River Basin project in Montana, and the Seedskaades project in Wyoming.

We believe the upper division, Baker project is a worthy proposal under Reclamation law, and we recommend enactment of the legislation with our suggested amendments.

Mr. PALMER. I would like to point out that this project, like the Mann Creek project, has been under investigation for a considerable period of time. It is a project that is now old in the sense of it having been under irrigation or partial irrigation for a long, long time. The water supply there is erratic, seasonally short, and annually short. The project area has been subject to excessive flood damage at times. This is a good project. It complies with all of the standards of economic feasibility and financial feasibility.

There are a number of points that perhaps should be clarified. In the first place, the departmental report on the bill recommended two amendments. The first of these, in lieu of the 160-acre limitation, submits that a man should be allowed to have 120 acres of class 1 equivalent land. Then it provides a formula for determining what class 1 equivalent means; that being an acre of class 1 land is com-

puted as 1 acre, an acre of class 2 land is computed as seventy-five one-hundredths of an acre, an acre of class 3 land is computed as fifty-five one-hundredths of an acre, and an acre of class 4 land is computed as thirty-eight one-hundredths of an acre.

This is a device to recognize the difference in productive potential in the project area. The bottom lands generally in this area through the project in here, the bottom [pointing to map] land with heavier soils, has limited productivity from the standpoint of irrigability and the crops that they can produce. So this would recognize that a man would have to have more acres of land for a family-sized operation if his entire acreage were in the bottom lands of the project.

Senator BURDICK. What did you say that class 4 land was?

Mr. PALMER. Thirty-eight one-hundredths of an acre.

Senator BURDICK. In other words, if a man had all class 4 land, he could have more than 160 acres?

Mr. PALMER. A water supply for upward of 400 acres of land.

Senator BURDICK. What does this do to our 160-acre limitation in the original Reclamation Act?

Mr. PALMER. We believe it is completely consistent with the past actions of the Congress. The 160-acre limitation was adopted because this was provided in the Homestead Act and the concept behind that was to provide a family sized farm. We believe, as we have stated in our report on the bill, that this is consistent because it recognizes it takes more than 160 acres of the heavy bottom soils that are usable primarily for grass, hay, and that type of production, to make the family sized farm unit.

Senator BURDICK. As I recall the 1902 act—I am just using my recollection—the language is “acres.”

Mr. PALMER. That is correct, sir; and it is also reexpressed in various other enunciations of Congress. But bear in mind, also, this particular type of formula has also been accepted by specific act of Congress in the case of the East Bench unit in Montana. And there are others. This is an attempt to recognize that all of the lands do not have equal potential in this kind of a project. The alluvial soils, the better soils that you find around the periphery of the valley, are clearly within the 160-acre limitation and would be so handled.

Senator BURDICK. Do you have any opinions from the Department lawyers or from the Attorney General that this is not in contravention of the law?

Mr. PALMER. This, of course, would be in contravention of the law if we attempted to apply it without a specific authorization of the Congress. This is why it has to be a part of the authorizing act, but there are many precedents. For example, I mentioned the east bench unit where a similar formula was used. In the Seedskadee project, a similar formula was used, and then on the basis of specific acts of Congress on the Kendrick project, the Conejos Division of the San Luis Valley project in Colorado, and several other projects Congress, has recognized that it takes more land in certain areas to produce a family-sized farm than it does in other areas. So this is no attempt to breach the excess land law. It is not an attempt to avoid the family-sized farm provisions of reclamation law. Rather it is an attempt to bring emphasis to this family-sized concept and to recognize that a man would need more of one class of land than he would another.

Bear in mind, also, Senator, that few if any of the farms would be solidly in any one land classification. It would be unlikely that you would have any farms that would be all class 4; but if it did happen, they would need more land than would be the case if a large portion of the farms were of class 1 land or class 2 land.

Senator BURDICK. All I was giving was an example, because I can see where actually the number of acres you can have by many combinations would exceed 160 acres. It would not have to be all class 4.

Mr. PALMER. That is correct. However, it would be computed against 120 acres of class 1 equivalent, not 160 acres of class 1 equivalent. By the provision of the amendment proposed, if a man owned 160 acres of all class 1 land, you would not expect him to reduce his size below 160; but if he owned 160 acres of all class 4 land, this would not be enough to pay the operation and maintenance cost, to pay the price of water, to pay his cost of maintaining his family at what we hope would be a reasonable American standard of family farm life. If he were on the poor class land, he could not meet all these expenses and survive.

Senator BURDICK. I understand the purpose of it very clearly. My only question is, Are we breaking a precedent of any kind?

Mr. PALMER. This is why I indicated to you, Senator, that the Congress, has seen fit on various previous occasions to subscribe to and to enunciate a similar formula in some cases or to spell out a top limit in others. There is considerable legislative history on this.

Senator BURDICK. In other words, this legislation takes the form of an amendment of the 1902 act as it applies to this project?

Mr. PALMER. It would be an amendment to the 1902 act as it applies to this project; that is correct, sir.

Mr. NELSON. If I may add, sir, most of these farms are operated by married couples and they are entitled to 160 acres per ownership, or 320, since Oregon is a community property State. So I do not think there would be too many instances where he would be past 160, but it could happen.

Senator BURDICK. In that case, with a man and wife, 316 times 2 would be 632 acres, would it not?

Mr. NELSON. That is right.

Senator BURDICK. One couple could have nearly a section of land under irrigation.

Mr. NELSON. We estimate there are 150 ownerships now for the 14,000 acres irrigated, and for the 18,000 that would be in the survey project we estimate a few more ownerships, to give you a rough idea of the number of farms.

Senator BURDICK. From the technical aspect, is it feasible to irrigate this, say, class 4 land?

Mr. PALMER. Yes, sir. One of the points I wanted to mention also—I indicated I had two or three that I wanted to make—has to do with this very point. This proposal calls for the construction of Mason Dam and Reservoir, and for the construction of the pumping plant and relief pumping plant. All the existing canals and distribution systems and diversion dams, all of the existing distribution facilities would be used. So there is nothing in this bill that would call for the construction with Federal funds of distribution systems or diversion dams. So actually, in specific answer to your question,

most of the land is being irrigated now. It is within the realm of economic feasibility to irrigate all the lands proposed for irrigation.

Senator BURDICK. And the farmer is paying his cost?

Mr. PALMER. To the extent that he can. The same problem arises here that was described to the committee by the gentlemen from the Mann Creek area. In a short water supply situation it is most difficult to keep lands in a high state of productivity.

Senator BURDICK. I notice that the cost-benefit ratio in this project is 1.28 to 1 over a period of 100 years. What is the ratio on the basis of 50 years, direct benefits?

Mr. PALMER. In my statement, on page 4, the paragraph says:

A comparison of the benefits and costs indicates that the proposed project is economically justified. The basic report, prepared in 1960, reflected a total benefit-cost ratio of 1.28 to 1 for a 100-year period of analysis and a ratio of 0.79 to 1 for direct benefits and a 50-year period of analysis. The direct benefits have been recomputed to recognize the effects of modern farm management, and the ratio of direct benefits to costs over a 50-year period is now estimated to be about 1.2 to 1.

This, Senator, I thought you would find interesting. This was another one of the points I wanted to mention; that after the Garrison reevaluation that we ran through, and that you are thoroughly familiar with, we have now adopted the technique used there as standard Bureau procedure and it has been prescribed on all projects. In applying that procedure to this project, it netted out a more favorable benefit-cost ratio on a 50-year direct benefit basis than under the old standard Bureau procedure.

Senator BURDICK. I am glad to hear you restate the fact that the Garrison project has a favorable cost-benefit ratio.

Mr. PALMER. I would be honored to state that fact anywhere. I think that is a good project.

Senator BURDICK. I can't agree with you more.

Mr. PALMER. There are two or three other minor points that I think you would find interesting. One is, this is a fine project when considered from the point of view of the State and water users and the Federal Government all working together. If you will note the location of the highway above Mason Dam and Reservoir, it has been located by the State where it will not be in conflict with the construction of the dam and reservoir at a later date. Frequently highways are constructed without regard to future development, and the costs of dams and reservoirs are skyrocketed by having to relocate a highway that is built on the bottom of the canyon where it is cheaper to build than on the side where it is more expensive to build. But these people have been working with their State and with their local officials, and they have done many things like this.

The State has located this highway. Part of it is now above the reservoir area. It goes down into the canyon below the damsite here and is on permanent location at the bottom of the canyon. But anticipating that Mason Dam and Reservoir would be built, the people have been instrumental in having the Highway Commission locate the road on the side of the valley at the reservoir site rather than the bottom of the valley.

Senator BURDICK. That is advance planning, is it?

Mr. PALMER. Yes; it is. I call the attention of the committee to it because I think it is a fine example of advance planning. One other thing I think worth noting is the fact that—this at least is my

belief, and I am sure it is shared by Mr. Nelson and all of his people and all the people who know this project—I think this would be a tremendous recreation area. It is a beautiful area, beautiful setting; and with water there, in this section of Oregon it will be a priceless recreation development.

Mr. Nelson would like to tell you something about the project and add some of the details, if you wish.

Senator BURDICK. I believe, Mr. Palmer, that your filed statement includes the details of repayment and manner of repayment, does it not, from the Bonneville revenues?

Mr. PALMER. That is right. That also is, incidentally, one of the other proposed amendments to the bill, simply to clarify that question; and this covers the two major additions to the bill. The water users in this instance would pay back 26 percent of the costs on the basis of direct repayment with the Bonneville revenues being made available for the source of additional revenue.

Senator BURDICK. Is this project entirely reimbursable?

Mr. PALMER. Consistent with the will of Congress, the flood control allocation, of course, would not be reimbursable, nor would the allocations to recreation or fish and wildlife. These three, consonant with the rules and regulations governing, are recommended to be nonreimbursable. The remaining item, the allocation to irrigation, is fully reimbursable under the provisions of the bill with the recommended amendment, with 26 percent paid back by the water users directly, and the remaining to be reimbursed by Bonneville revenues.

In terms of the total cost, the total repayables as compared to the total reimbursement, it is about 70 percent repayable, with recreation, flood control, and fish and wildlife making up the remainder, as non-reimbursable.

Senator BURDICK. Making up 30 percent?

Mr. PALMER. Yes, sir.

The CHAIRMAN. Is there a variation of the acreage limit?

Mr. PALMER. Yes, sir.

The CHAIRMAN. From 160?

Mr. PALMER. Yes, sir.

The CHAIRMAN. In which State is this? What is the variation?

Mr. PALMER. In this instance, Senator, the Department has proposed the application of a formula similar to that which has been adopted by the Congress on the east bench unit of the Missouri Basin project in Montana and on the Seedskaadee project in Wyoming. It is fully consonant with the aims and objectives of maintaining an adequate base for family farming operations.

In calculating the family size farm, it would say that 120 acres of class 1 equivalent equal a family-sized operation and that in the application of the formula 1 acre of class 1 land would be computed as an acre. An acre of class 2 would be computed as three-fourths of an acre.

The CHAIRMAN. Are you going to put that into operation generally?

Mr. PALMER. Wherever the circumstances warrant, as you well know, we have tried for quite a number of years to compute ability to pay consonant with the 1939 act.

The CHAIRMAN. I see that Senator Morse is now with us. I know that he has other commitments this morning so I would like to hear from him now. You may proceed, Senator.

**STATEMENT OF HON. WAYNE MORSE, A U.S. SENATOR FROM THE
STATE OF OREGON**

Senator MORSE. Thank you, Mr. Chairman. My statement will be very brief.

Senator Anderson and Senator Burdick, I want to very quickly read into the record a letter of March 23 because it is a proper introduction of my testimony. The letter addressed to the Honorable Clinton P. Anderson, reads as follows:

Enclosed are several copies of the statement I would have made to the Subcommittee on Irrigation and Reclamation on March 22, had the committee been permitted to hold hearings on that date.

Also enclosed are copies of the statements of the proponents of the project as well as a number of letters expressing local support. I would appreciate your including these items in the hearing record.

I regret very much that the subcommittee was not able to receive the testimony of the Oregon witnesses who were here but I know that this project will be given thorough consideration by your subcommittee and the full committee.

In addition, the Oregon witnesses testified on the House side so you will have the benefit of the House hearings when my bill is scheduled for consideration.

The upper division, Baker Federal reclamation project as envisaged in S. 308 is of great importance to Oregon and to the Baker area. I would be most grateful if the subcommittee and the committee could take prompt and favorable action on this bill.

With best personal regards,

WAYNE MORSE.

Mr. Chairman, I would like to have the record show that this subcommittee was very desirous of having hearings on this bill when these witnesses were here, but we were faced with a situation on the floor of the Senate during the poll tax debate which made it necessary, and proper, for our majority leader to take the position that no committees of the Senate should meet while that parliamentary situation existed, and that is why these witnesses had to go back home, unable to testify, and left their statements with me.

I have a letter, Mr. Chairman, of March 28, from Alvin Ward, president of the Baker Valley Irrigation District.

He states:

We thank you for your wire advising us of Senate committee hearings on your bill, S. 308, on April 5.

Our district would very much like to have local representation at this hearing. To send another delegation to Washington at this time, however, would be extremely difficult. We are, therefore, hopeful that arrangements may be made whereby testimony left with you last week can be made available to committee members, and that personal appearances will not be necessary. We will, however, do everything possible to get done whatever you may deem necessary in this regard.

Those of us who were in Washington last week wish also to convey again our sincere appreciation to you, your gracious wife, and your office staff, for all the help and hospitalities extended us during our visit.

My statement, itself, Mr. Chairman, is very brief.

It is a pleasure to appear before this subcommittee as I have on many occasions, to testify on the importance of authorizations to advance the conservation of our natural resources, particularly in the field of reclamation in the Western United States. This subcommittee has repeatedly demonstrated its understanding of our conservation responsibility and I am deeply appreciative of its cooperation.

This morning I am asking your approval of my bill, S. 308 to authorize the construction of the project designated as "upper division,

Baker Federal reclamation project," otherwise known as the Mason Dam project.

This project has been under study for many years. In recent years I have received convincing evidence of the tremendous local interest and support it enjoys. It is the type of project which will provide benefits for present and future generations of Americans.

The project is located on the Powder River in the vicinity of Baker, Oreg., and is estimated to cost a total of \$6,168,000. According to the latest information available to me, \$4,354,600 would be allocated to irrigation, \$1,056,000 to flood control, \$632,000 to fish and wildlife, and \$125,000 to recreation. It will bring supplemental water to approximately 14,000 acres of land now under irrigation and will provide new irrigation for approximately 4,000 acres.

In addition to irrigation, the project would also supply 100,000 acre-feet of storage and 10 second-feet of water the year around to assure a streamflow which would be of great benefit to those interested in the fishery of the Powder River.

The construction of Mason Dam will contribute substantially to the reduction of flood losses. Such losses can be very severe in this area, as demonstrated by the flood of 1957.

On that occasion, \$200,000 of flood damage occurred within the city limits of Baker and \$50,000 of damage along the Powder River. The Bureau of Reclamation estimates \$40,000 annual flood control benefits through the construction of the dam.

The recreational facilities of this project are of great importance. We live in an age of automation and tension. Our people are turning to recreational activities to provide the antidote for our speeded up basis of life.

Mr. Chairman, I could deal at length on the merits of this project. However, there are available for the record statements in this field from those who have very valuable information to give to the committee because they are experts. I shall not take additional time because I wish to give our Oregon witnesses the opportunity to supply the full facts.

On behalf of Senator Neuberger and myself, I am pleased to present to the committee the written testimony of several outstanding Oregon residents who will give you the facts in support of this project. They have already testified on the House side.

It is a privilege and a pleasure to introduce the statements of the following witnesses:

The Honorable Lloyd Rea, county judge, Baker County Court, Baker, Oreg.

Mr. Alvin Ward, chairman, Baker Valley Irrigation District, Baker, Oreg.

Mr. Charles M. Colton, director, Baker Valley Irrigation District, Baker, Oreg.

Mr. Henry Peyron, director, Baker Valley Irrigation District, Baker, Oreg.

Mr. John C. Hesketh, county extension agent and representative of the Baker County Chamber of Commerce, Baker, Oreg.

Mr. Chairman, I ask that these statements be included in the record of this hearing.

The CHAIRMAN. Without objection this will be done.

Senator MORSE. Mr. Chairman, I am also in receipt of a statement submitted by Mr. Byron C. Brinton, chairman of the water resources committee of the Powder River Sportsmen's Club, Baker, Oreg., and a series of letters addressed to the committee by local individuals. All of these items strongly support the project and I ask that they be included in the record of the hearings on S. 308.¹

My colleague, Senator Neuberger, is out of the city on official business today and I am pleased to submit here her statement for inclusion in the record and I ask the committee for permission to have her statement included in the record at the conclusion of my testimony.

The CHAIRMAN. Without objection, that will be done.

Senator MORSE. In closing, I wish to thank the subcommittee for scheduling your hearing and for giving so generously of your valuable time to the statements of our Oregon witnesses. I am sure that upon reviewing their testimony and the report of the interested Government agencies, you will feel as I do, that S. 308 has great merit.

However, I would be less than honest and frank, Mr. Chairman, if I did not tell you that there is one part of this record at which I hope the committee will take a good long hard look at. I refer to the proposed amendment which would modify the 160-acre-limitation proposal. All I can say in support of the people of my State who wish to have some modification of the 160-acre limitation proposal in respect to this bill, is the following.

1. They point out that they do fix a definite limit and that this is going to refer only to the so-called high mountain area where the growing season is reduced each year by a good number of days in comparison with the growing season in the lowlands.

They point out, in their view at least, that the purpose of the 160-acre limitation is still retained in that they take into account what a family farm has to be in the high mountain area in order to accomplish the same economic values for the owner thereof that a family farm of 160 acres in the lowland would accomplish.

However, Mr. Chairman, I happen to hold the point of view that if we are going to modify the 160-acre-limitation program it ought to be on a national policy basis. Although it will not be too pleasing to my constituents, I want to say that the senior Senator from Oregon would take the position that, unless we can have a policy statement that would be applicable generally, I would have no objections to this proposed amendment being rejected.

The CHAIRMAN. Any questions?

Senator BURDICK. I am pleased that you touched on that subject because Mr. Palmer of the Department testified that this would amount to amendment of the 1902 act as applied to this project.

Senator MORSE. I think we ought to do it on a general policy basis.

The CHAIRMAN. Yes, I don't agree with the strict interpretation of the 160-acre limitation because we found out in the Riverton project, for example, they put in some class 6 land.

I don't think it should ever have been in the project, if the best you can do for them is have a little poor pasture. A man doesn't make a living on 160 acres of poor pasture.

Furthermore, we have a project in New Mexico where there is a relatively short growing season, at an elevation of about 7,000 feet; 160 acres there is not quite equal to 160 acres in the Salinas Valley,

¹ The statements submitted are printed beginning on p. 17 of this hearing record and the letters are printed in the appendix beginning on p. 29.

not by about 1,000 percent or 10,000 percent, and those things have to be taken into consideration and modified, and I think we might be able to overcome this by some general language which would be useful to the Bureau of Reclamation and other projects.

Senator MORSE. I know the intention of the project's proponents and I know what the Bureau of Reclamation's view is as to the result of an amendment such as this.

As the members of this committee know, I am a very direct fellow. I believe in meeting these things directly and if a 160-acre-limitation problem is involved, I think we ought to face up to it in connection with this bill and we ought to consider it only from the standpoint of establishing a policy in regard to it.

I am not opposed to a policy that determines what a family-sized farm has to be, taking into account the soil that is involved in this particular area.

As the chairman has just said, at times we find low quality land involved in some projects that is good only for pasture. We know 160 acres isn't going to suffice for that type of land, but what I would regret seeing us do is try to modify the 160-acre limitation by a bill in the Senate unless you have a general policy in regard to the modification. In such cases we should use the criterion of a family-sized farm in that particular area, and that means, to me at least, the amount of land that is necessary, in accordance with the findings of the experts, to support a family, in the sense that we have used that concept in relation to a family-sized farm.

My own constituents know my view on this, Mr. Chairman and Senator Burdick. I don't quarrel with the physical fact that they present to me. They simply say, "But, Senator, up in that high mountain area with that short growing season, you can't do the job with 160 acres."

My point is that I think we ought to take a look at this policy question and have a formula which this committee can apply uniformly. That policy should take into consideration the physical acreage facts that are presented to you in each project. Then you are protected, may I say, as far as the policy is concerned.

We are all protected in the Senate where we can't be charged with trying to subvert the 1902 act.

I think the objective of the 1902 act is as sound today as when it was passed. Agriculture has changed since 1902. New land has developed since 1902. Irrigation has gone forward at terrific leaps and bounds since 1902, and all those facts bear on this policy question of how much land in a certain area ought to be considered to be a requirement for a family farm.

Whatever that figure is, I think you could have a policy. Whatever that figure is, the committee would be free, with due notice and the facts supporting it, to recommend that for those special physical situations the 160 acres is modified.

The CHAIRMAN. There is also the fact that the easy and natural dam locations are getting rapidly used up.

Senator MORSE. That is right.

The CHAIRMAN. We go to the second stage instead of the first stage.

I got a hold, some years ago, of the proceedings of one of the National Reclamation Congresses prior to 1910. I can't tell you which one it was. I started reading it and it involved projects that were all

extremely good projects with very good land behind them. They weren't bothering with a lot of the marginal projects, and on that I can understand the 160-acre limitation being universally applied.

Senator MORSE. Yes; I could too.

The CHAIRMAN. Thank you, Senator.

Senator MORSE. I only close with this, if I may again. I know this project. I have worked in support of this project. I know how important it is to the flood control of this part of my statement. If the only value of this project were flood control, I would say we ought to build this dam, but in addition to the flood control come these recreational and irrigation values, and I just think it is a project that I come before you and give you my word, that you will not waste a single cent of the taxpayers' money in support of this project.

Thank you very much.

(The statements and letter submitted by Senator Morse are as follows:)

STATEMENT OF HON. MAURINE B. NEUBERGER, A U.S. SENATOR FROM THE STATE OF OREGON

Mr. Chairman and members of the committee, the Powder River, on which the Mason Dam and Reservoir will be located under S. 308, meanders through saucer-shaped Baker Valley in one of the most scenic plateau areas of eastern Oregon. Timbered and rugged slopes form the south and west borders of the valley and sage-covered hills the east and north boundaries. Construction of the irrigation facilities authorized by the legislation now before you will add to the economic stability of the Baker area without detracting from pastoral physical features.

Because of relatively high elevation, the Baker Valley farmers are faced with a shortened growing season. The average period between killing frosts is 137 days. Also, water shortages normally confront farmers for about half of the growing season. Water stored in Mason Dam reservoir will provide supplemental irrigation water for approximately 13,990 acres now receiving a partial supply and would give a full supply to 4,010 acres not now irrigated. The project would also provide important flood control, fish and wildlife, and recreation benefits.

Principal project works would include Mason Dam, the Lilley pumping plant, and a relief pumping plant. Mason Dam is designed as a 185-foot-high, earth, and rock-fill structure, forming a 100,000 acre foot reservoir on the Powder River in Lower Sumpter Valley, about 18 miles upstream from Baker. Land now irrigated is generally flooded during the spring runoff to make maximum use of natural flows.

Storage in Mason Reservoir will permit more effective use of regulated flows for higher production of hay and other forage crops essential to this cattle-raising area. Thirty-eight thousand acre-feet of the space in Mason Reservoir will be used to store floodflows which periodically damage residential, commercial, and agricultural property in the Baker Valley.

Operation of the project also will preserve and enhance the fishery resources of Powder River by establishing lake fishing in the reservoir and by maintaining a live stream below the dam, through releases of water specifically for this purpose.

The reservoir area would be particularly attractive for recreation purposes, and provision is being made for facilities to accommodate visitors. Studies also are continuing on the possible acquisition of additional land around the reservoir, specifically for recreation, to implement the President's directive to realize maximum recreation benefits for future generations.

The benefit-cost ratio of this project is about 1.28 to 1. Officials of the State of Oregon have strongly endorsed authorization of the project and have recommended appropriation of funds for its construction at an early date. I urge the committee's favorable consideration of S. 308 as a means of furthering the progress of water resource development in our State.

STATEMENT BY THE BAKER COUNTY COURT ON BEHALF OF THE UPPER DIVISION,
BAKER PROJECT, HON. LLOYD REA, COUNTY JUDGE

The Baker County court urges the Congress to authorize the development of the Baker Valley project, upper division, as a necessary facility for the agricultural interests involved and for the general welfare of the public.

The interest of valley farmers and ranchers in the development of supplemental water dates back many years. The present project enthusiasm is the culmination of thorough study and discussion at the grassroots. It was brought to a formal position September 4, 1956, when the court officially declared the Baker Valley Irrigation District organized. This action was taken by Judge Lloyd Rea (myself) and Commissioners R. M. Phipps and Gill C. Wright after public petition by 53 landowners followed by the formal public hearing and election at which the vote on behalf of the districts was 47 yes and 1 no.

The county court feels that there is solid support by the residents of this irrigation district for the project as envisioned in the present Baker Valley report and we are pleased to represent Baker County in support of these people.

The lower Powder division project works at the Thief Valley, providing supplemental water to our lower Powder Valley has been beneficial and the contribution of this area to the stability of the county has been notable. The fine project on Burnt River with a storage facility at Unity likewise has been a major factor through the years in providing a backbone to the great livestock economy around which the entire southern portion of the county is built. We want to commend the ranchers and farmers who had the vision and energy to bring these projects into being, and the Congress and agencies who developed and authorized these beneficial public works.

On behalf of the county court I want to commend, to the Congress, the officers of the Baker Valley Irrigation District who are submitting statements and providing this committee with information in urging authorization of the Baker Valley project. These men are successful ranchers and farmers, representing all phases of valley agriculture. Skilled farmers, vigorous men, with long years of ranching ahead of them, they have been delegated by the fellow residents of the district to see the Baker project through to fruition. Their faith in the project and the authority by which they speak for their neighbors is certainly the most experienced testimony one could wish for that the project will be beneficial to the agriculture of Baker Valley, that the plan is sound, and the water development to implement their operations is necessary.

As a county court we are close to the economy of this area. Throughout a period of years we have seen a change in many phases of this economy that makes it more important than ever to strengthen the agricultural segment upon which so much of the burden of government and our social and community life falls. As you know, historically, even up till several years after the last war, dredge mining for gold in the upper reaches of Sumpter Valley on Powder River gradually reduced farming acres to waste. Much of this tremendous acreage is now in county ownership, foreclosed for taxes. If we can in part make up for this depreciation of our economy it is important that we do so. The Baker project will in fact tend to do this on the same Powder River.

The economy of this county has been further strained by the gradual reduction in the volume of lumber industry activity. The narrow-gage logging railroad that at one time extended from Baker, up Powder River through the very reservoir land of the proposed Mason Dam under this Baker project, was abandoned after the war and its passing is testimony that our economy now must depend upon other things. We as public officials know that much of this dependence is now on agriculture.

We are particularly impressed that under the proposed Baker project the county court will not be burdened with the necessity of building new roads and serving new communities. This project will supplement the existing ranches and the existing lands which are already served by adequate county roads and highways, by existing fine new schools and by present utilities and public services. It will not disrupt the community in any way.

The proposed reservoir area is served by a fine paved State highway, making it possible for its multiple benefits in the way of recreation to be enjoyed without major access problems. The proposed acreages to be served by the supplemental and additional water are already adjacent to a modern system of county roads that network Baker Valley from north to south and from east to west. School buses already serve the entire district affected, as does a mail route. Likewise, the county already assures winter access by snow removal in these areas when weather makes this necessary.

Rather than expanding our problems and those of agriculture, we of the county court are certain that the proposed project will strengthen and stabilize these ranching and farming operations which are so vital in the maintenance of our economy.

STATEMENT OF ALVIN WARD, RANCHER, AND CHAIRMAN, BAKER VALLEY IRRIGATION DISTRICT, BAKER, OREG.

I am chairman of the Baker Valley Irrigation District on the Powder River in Baker, Oreg. My occupation and entire livelihood is derived as a farmer.

Irrigation in this area started around 1870 by simple diversions from Powder River to improve the native wild hay meadows. The Union Pacific Railroad was built through the valley in 1884 and served as an impetus to the expansion of the first and still surviving industries, agriculture, lumbering, and mining. However, the level of settlement and development, except for the variation resulting from the change from the horse to machinery, has remained nearly constant since the turn of the century. One of the greatest factors contributing to this is the complete lack of irrigation water after July 1 and in many years June 15. This is an area with only an average annual precipitation of 11.73 inches. Our county had a population of 16,175 in 1950, a drop of 2,122 from 1940.

Baker Valley Irrigation District was organized in 1956 by water users interested in fulfilling a 32-year vision of providing a full or supplemental water supply to approximately 18,000 acres of land within the district.

Investigations for the present project report were undertaken in 1957 to update the report so as to conform to the needs of the legally formed district and to reflect present conditions. The vote tally for our district election was 47 to 1.

It is not felt that application of this supplemental water after July 1 will result in any additions to our Nation's so-called surpluses. In fact, I feel it will reduce the acreage of cereal grains, and particularly wheat. Wheat is grown now primarily because it is one of the few crops that can be produced with only one irrigation. Our farm income at the present is based almost solely on pastures, livestock, and livestock products. One-half of 1 percent of the district acreage is in row crops and only 10 percent in small grains.

We are capable of irrigating properly as the existing distribution system is established. Some rehabilitation will be necessary. We are prepared to do what is necessary at our own expense.

Mason Dam will enhance the fishing and recreation of this area and has the wholehearted support and endorsement of the Powder River Sportsmens Club of Baker, Oreg. The club has 1,607 members. We expect 50,000 people yearly to visit our reservoir for fishing and boating and picnicking as it is only 16 miles from U.S. highway 30 at Baker, Oreg., with a paved highway the entire distance. The entire reservoir area is surrounded by a beautifully timbered ponderosa pine stand with level benches affording excellent recreation development opportunities. Due to the short distance from Baker, excellent boating, fishing, water skiing, swimming, picnicking, camping, and hunting would all be available, accessible, and popular activities.

Mr. Chairman and members of the committee, I believe we are asking for a project worthy of your consideration.

There is a competent irrigation district organized to contract with the Government. We have the land and we have the water, but the water must be stored to enable full season use. Our farmers and ranchers want, and will pay for, this project in accordance with their ability.

Thank you for your courteous time and attention.

STATEMENT OF CHARLES M. COLTON, BAKER COUNTY RANCHER, BAKER, OREG.

I represent the livestock and farming industries of the Baker Valley Irrigation District. I have lived my entire lifetime on the ranch I now own and operate. It is located in the lower end of the district in an area that is mostly wild meadow hay and pasturelands.

The use of these lands is restricted to such crops because of spring floods which make any tillage of the soil impossible. Any attempts to improve the quality of the existing hay and pasture crops have largely failed because of the almost annual floods which kill the legume plants. The grasses are of poor quality and produce only about 1 ton of hay per acre. During years of worst flooding considerable

damage is done by the washing in of sediment and debris which makes harvesting operations difficult and costly.

Almost without exception the irrigation water is gone by the 1st of July leaving almost 4 months of excellent growing season and inadequate water supply. The rainfall during this period is very little.

This area is very much the same as I first remember it and I can see no way to make much improvement without protection from floods and the usage of stored water. The soils and climate are good and under the right moisture conditions will produce abundantly.

The upper end of the project area is not flooded except by unusually large runoffs.

The usage of this land is more diversified but restricted because of the lack of irrigation water after July 1.

Some grain is grown because such crops do not require late irrigation. With sufficient water available more of this land would be used for hay and pasture as this is an excellent livestock producing area if adequate feed is available.

Restrictions upon the usage of Bureau of Land Management and U.S. Forest Service rangelands are also making irrigated pasture more in demand. I have never seen enough irrigated pasture in Baker Valley during the late summer and fall months to provide adequately for the existing livestock population.

Irrigated pasture would improve the quality of cattle by making possible a program of artificial breeding which is not practical under existing range conditions.

Water would help many people with fewer acres to have gardens and dairy farms.

Almost all of the farms of the district now have buildings, fences and the equipment necessary for farming. The people that live on the land are accustomed to the climate and soils and market conditions. The increased population would create no particular problems for them.

Baker County has lost about 15 percent of its peak population because of the decline in the mining and lumbering industries. A sound agricultural industry can be made by the building of Mason Dam and is needed to stabilize the economy.

I am sure the landowners are willing and able to assume the costs of supplemental irrigation water.

STATEMENT OF HENRY PEYRON, BAKER COUNTY RANCHER, BAKER, OREG.

I am one of the ranchers in the Baker Valley Irrigation District. My father, brother, and I operate a family owned hay, grain, and livestock ranch. We have operated this ranch continually for 44 years during which time water has always been our number one problem. There have been short water years and long water years but regardless of the year, no water is available in the best growing months of July and August.

Under the present flow of Powder River we never know from one water season to the next just what to expect in the way of irrigation water. Some years we are able to get over all our land with one irrigation. There have even been years when two irrigations were possible but then there have also been years when there has been no irrigation water.

Mason Dam will eliminate the possibility of crop failures and add much to the stability of our operation. With a reliable source of water, the quantity and quality of all our production would be greatly improved. Since our principal operation is livestock, this production improvement will be utilized primarily in the livestock phase of our operation. Although farm benefits will be important results of Mason Dam, there are others that may be equally beneficial to the area. Flood control and recreation are important among these.

Floods have been one of the ravages of mankind since the beginning of history and continue so today where rivers go unchecked. Our comparatively small Powder River is no exception. Floodflows in Powder River are caused by a combination of snowmelts and rains. Snowmelt is the principal cause. High flows usually begin in March and in normal years cause inundation of farmlands bordering the river for approximately 5 miles. In abnormal years higher flows cause inundations of farmland for approximately 12 miles. During these high-flow years the city of Baker does receive considerable damage from the river overflowing its banks. This damage is to municipal, commercial, and residential properties. The most recent flood occurred in February 1957. This flood inundated approximately 16,750 acres, most of which was farmland and developed

properties in the city of Baker. During this flood the city of Baker suffered damages of some \$200,000 including cost of \$55,000 from flood-fight activities. In the farmland areas outside the city of Baker, damages amounted to some \$50,000.

Damage to farmland downstream from Baker occurs each year, and in the high-flow years, this damage is more pronounced. This downstream damage includes the loss of use of pasture due to prolonged inundation and silt deposition, damage to farm roads, bridges, fences, and irrigation structures and induced growth of noxious weeds and unpalatable grasses.

Since hay and pasture are basic to our agricultural economy flooded farmland takes away our very existence. Hay meadows are the principal type of land flooded. This flooding causes late growth, lowers the quantity and quality of hay, and results in a reduced recovery rate on pastures. These lands along the river then which have the better soils and should be superior producers, are the ones that are suffering most from flooding. The construction of Mason Dam will prevent the hazards caused by floods and store this much needed water for use through the summer growing season when and where it will do the most good.

This writer feels that the ranchers under the project have the factors necessary, including the ability and willingness to reimburse the Government for the reimbursable costs of the project.

STATEMENT OF JOHN C. HESKETH, COUNTY EXTENSION AGENT, BAKER, OREG.

In the hope that a general understanding of the setting of this project—its location, its geography, its economy, and its people, will be helpful to members of this committee in their deliberations regarding merits of the upper division, Baker project, this statement is presented.

Baker County is located in the northeastern part of the State of Oregon. It is bordered on the north by the Wallowa Mountains, on the west and south by the Blue Mountains, and on the east by the Snake River on the Oregon-Idaho boundary.

Within the county are some 1,972,660 acres of land, more than half of which is publicly owned. Of the total 961,882 acres in private ownership, 807,580 acres are used for pasture and 154,302 acres are devoted to crops. Of this cropland, 142,000 acres are irrigated to some extent. There are 757 farms averaging 1,173.5 acres in size.

Soil, moisture, and climatic conditions vary greatly within the area of Baker County. Land is tilled at elevations ranging from 1,500 to 5,000 feet. Annual precipitation varies from less than 10 inches to some 40 inches at one location. In most cropland areas it averages somewhere between 11 and 15 inches annually. The length of the growing season, too, shows much variation and is closely related to elevation and proximity to the higher mountains. Because of this great diversity in conditions, there are very few crops grown anywhere in Oregon that cannot be produced somewhere within Baker County.

The economy of Baker County is based almost entirely upon production of the land—mining, forestry, and agriculture. Of these, forestry and agriculture are the most important and contribute about equally to the economy. The gross annual sale of lumber amounts to more than \$10 million. Industrial payroll of the lumber industry has been in excess of \$3 million. The estimated gross income from agricultural marketings within the county in 1961 was \$13,410,500. Of this, nearly \$10 million was from the sale of livestock and livestock products.

Cropland of Baker County is located primarily in a number of large fertile valleys surrounded by timbered mountains or sage brush range. In the case of the rangeland, livestock grazing often affords the only possible use. Livestock production is, therefore, the principle agricultural enterprise of the county. Of the 757 operating units, 600 are classified as beef cattle operations. Typically these livestock producers utilize private or public grazing land throughout the summer and use their cropland for the production of winter feed. Since most cattle sales (35,000 to 45,000 head annually) involve weaner calves marketed in the fall or winter, very little fattening is done and the feed needed is principally hay. Very little grain is produced anywhere in the county and this, for the most part, only in forage crop rotation programs or on land where irrigation water supplies are such as to permit only early irrigation and thus only one cutting of hay per season. Grain is produced on these lands because it can be grown with one irrigation and under these conditions is a relatively high return crop.

Agricultural production, even upon the cropland within the various valleys, absolutely depends upon the artificial application of irrigation water. The

difference between native grazing land producing several hundred pounds of forage per acre per season, and cropland producing several tons, on the same basis, is the availability of irrigation water. Often there is nothing more than a barbed wire fence separating one such field from the other. Perhaps as great and important as these differences in volume of production, are differences in quality of production. Laboratory analysis of both types of forage made by Oregon State University show actual differences in crude protein contents of as much as 12.2 percent.

It is estimated that there are 400,000 acre-feet of water originating annually within the boundaries of Baker County. In spite of the very obvious need and active demand for this water, less than 30 percent of the supply is utilized. This is because of the early seasonal runoff which leaves 2 to 3 months of the most productive growing season without adequate supplies for irrigation. The economic consequence of this waste has long been recognized and a great deal of effort and expense have been devoted toward preservation and effective use of this valuable resource. The 16,429 acres below Unity Reservoir on Burnt River and 7,320 acres below Thief Valley Reservoir on Powder River provide vivid proof of what storage for late season use can mean to the development and economic well-being of an area. Efforts have been directed toward construction of similar storage facilities on the Powder River above Baker and Bowen Valleys for nearly 30 years.

The balance and stability of Baker County's economy is evident in its population statistics. In 1960, total population of the county was 17,180. About one-third of this (5,431) was rural. In 1920, total population was 17,929. Over this entire 40-year period these figures have varied by less than 2,500 persons and the balance between urban residents and the rural population these serve, has remained nearly the same. This population stability and the relative isolation of many areas does not, however, imply any degree of backwardness. The general educational level of residents throughout the county is high and their progressiveness is evident in all phases of civic, educational, and vocational endeavor. Baker County was one of the first four Oregon counties to voluntarily achieve complete reorganization and consolidation of its public schools. It is 1 of 8 of Oregon's 36 counties to have yet achieved this objective under the State's most recent reorganization enabling laws. This has resulted in a reduction from 87 school districts in 1930 to 4 districts in 1961.

In the field of agriculture the progressiveness of Baker County farmers and ranchers is also evident. Records show that in the 5-year period, 1956 through 1960, 892 producers participated in the agricultural stabilization and conservation program. During this period vegetative cover was established or improved on more than 15,000 acres, and more than 81,000 acres have benefited from the establishment or improvement of irrigation and drainage facilities. These improvements have all been made on privately owned land.

Baker Valley, the area most immediately affected by the project proposal under consideration, is the most nearly geographically centered of all crop-producing valley areas of the county. More than half of the county's population is also concentrated in this area. The city of Baker, located at the southern end of the valley with a population in excess of 10,000 serves a wholesale trade area approximately 125 miles in radius. About 40 percent of the labor force is employed in the extractive industries of agriculture, forestry, and mining. Trade and service industries employ most of the remaining 60 percent.

Transportation facilities in Baker Valley are excellent. The main line of the Union Pacific Railroad traverses the entire valley from southeast to northwest. U.S. Highway No. 30 follows the Old Oregon Trail throughout the length of the valley and connects with several State highways. West Coast Airlines also serves the area and connects with transcontinental airlines at Boise, Pendleton, and Spokane.

The type of irrigating established in Baker Valley by the first settlers in the 1870's has been continued to the present time. At the turn of the century farmers began to improve the native hay meadows by seeding improved grass and legume varieties on the better drained slopes. Except for this trend toward increased production of forage per acre there has been little change in the general land-use pattern.

The land is irrigated by flooding during the spring runoff through numerous individual and partnership ditches diverting water from Powder River, its west side tributaries, and several sloughs. Distribution of this water is administered by the county water master. Until 1956 there were no organized irrigation districts. Since no adequate storage facilities exist, the amount of water applied

and the length of the irrigation season depend entirely upon the extent of the natural runoff. The season of this natural runoff usually ends by early July. This erratic irrigation water supply pattern has resulted in water use practices which have limited the agricultural development of much of the valley area. Correction of this situation is entirely dependent upon the obtainance of adequate water supplies and distribution control.

It is felt that the multipurpose facility proposed in the Baker project upper division report will materially benefit the population and entire economy in a large area of the Pacific Northwest.

STATEMENT OF THE POWDER RIVER SPORTSMEN'S CLUB OF BAKER, OREG.

Powder River Sportsmen's Club is one of the largest and most active sports, conservation, and wildlife clubs in the Northwest. Its major functions in the areas of big game, fish, public lands, water resources, conservation, and recreation are accomplished by local committees; but it is also affiliated with the Oregon Wildlife Federation.

Local membership in 1961 reached 1,411 and it has been growing at the rate of about 200 to 300 per year.

Interest by the club in Mason Dam project dates back many years but was stimulated following release of the present multiple-use project report by the Bureau. The club's water resources committee was assigned the task of cooperating with landowners and agencies in promoting and supporting this development.

Pressures from all sides in our Nation demand that water resource developments be given high priority wherever a potential development and a feasible plan can be brought together. The yield and flow characteristics of the Powder River dictate a need for water storage upon this stream. Eighty-four percent of the runoff floods away in the few spring months and from the standpoint of the fishery and recreation, Powder River's present value is nil. Under the Mason Dam project these resources would be tremendously valuable. This sportsmen's club believes the evaluations contained in the report are very conservative.

Baker is headquarters for the Wallowa-Whitman National Forest. The report by this forest just released shows recreation use reached 243,000 visitations in 1961, an increase of 30 percent in 1 year alone.

Only by properly preparing for the impact of this rate of increase in recreation can the demands be met and conservation measures be taken. Estimates of recreation values under the Baker Valley project are currently conservative, we feel. By the time the reservoir is a reality under the most expeditious of schedules its recreation use will far surpass all present forecasts.

Features that make the proposed reservoir attractive to recreation are: (1) Its proximity to the county's population center for local patronage; its relative location as a seasonal retreat close to the hotter districts of southeastern Oregon, eastern Washington, and Idaho; (2) its location upon a hard-surfaced State highway; (3) its moderate elevation assuring long-season advantages; (4) its topography and physical setting of great attractiveness, located in sight of the high peaks of the southeastern end of the Elkhorn Range of the Blue Mountains, well sheltered from winds and providing forested cover upon adjacent slopes; (5) its proximity to interesting back country having big game resources and considerable pioneer lore in old gold-mining camps; (6) its location immediately below many thousands of acres of gold-dredged lands, most of it in public title with great wildlife and recreation-use potential; and (7) its size which will provide ideal boating and water skiing conditions.

Fishery people have told this club that the trout potential of Mason Dam pool is such that the fishery will be fabulous. Water temperatures are expected to be ideal for maximum growth of this species and, based upon public expressions by Oregon fishery people, sportsmen look forward to the creation of this pool with great anticipation.

The project report and subsequent negotiations relative to the fishery and recreation have been accomplished with an awareness of this sportsmen's club. The agreement relative to minimum flows in sharing critical-year storage deficiencies between the fishery and the agricultural purposes of the project is an example. Furthermore, recreation and agriculture have worked together in citing in this pending legislation the expectation that long-range recreation policy regarding land acquisitions at the reservoir can be worked out.

It is the opinion of this club that the project is a fine example of a multiple-purpose plan and that the effort behind its authorization and construction exemplifies the close cooperation that can exist between major economic purposes of

such water developments and the essential conservation, fishery, recreation, and flood control purposes which are public responsibilities.

This club hopes that the Congress can authorize the Baker project (upper division) early and that final planning can go forward immediately.

The CHAIRMAN. Mr. McBroom, may I ask you a question?

STATEMENT OF JAMES T. McBROOM, CHIEF, DIVISION OF TECHNICAL SERVICES, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

Mr. McBROOM. Yes, sir.

The CHAIRMAN. On the Mann Creek project there is allocated \$632,000 to fish and wildlife and \$125,000 to recreation.

On the first project there was a total of \$100,000 on the two.

Mr. McBROOM. Yes, sir.

The CHAIRMAN. Why is there eight times as much in this when the acreage is not very much greater?

Mr. McBROOM. You are speaking of the Mann Creek project, sir?

The CHAIRMAN. Yes.

Mr. McBROOM. On the Mann Creek project the total allocation to fish and wildlife consisted of the specific costs only. In that case there is planned to have a fishery at the reservoir and a fishtap below the reservoir. No part of the other costs of the project are allocated to fish and wildlife because the benefits are not sufficient to justify it.

There are certain losses to fish and wildlife in comparison to the present situation which would result from a project and in these the benefits are small.

The CHAIRMAN. What about this one?

Mr. McBROOM. In this one, the benefits are there. In this case the benefits are all to the fishery, not to the wildlife. There is this very small fishery there now, very unimportant, but with the construction of this reservoir and the improvement of conditions in the stream below it, there will be sufficient benefits to justify this kind of an allocation.

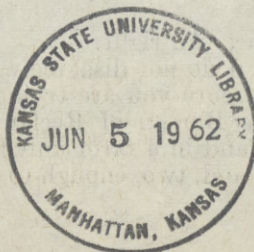
The CHAIRMAN. Is there a large reservoir to be constructed here?

Mr. McBROOM. Yes, sir; it will be about 630 acres, I believe, a minimum average area. Then there will be 12 or 13 miles of stream below.

The CHAIRMAN. How much larger than the one on the Mann Creek project in order of magnitude? Several times as large, four or five times, two or three times?

Mr. McBROOM. I think it is similar, but the difference is that the Mann Creek project now has a good fishery on the reservoir site and where the stream or reservoir will be big on this project the fishery will not be as good. It doesn't amount to as much.

The CHAIRMAN. Now, Mr. Palmer, if we can get you back again, tell us about this formula for the acreage limitation which would vary from 160-acre limitation.



**STATEMENT OF WILLIAM I. PALMER, ASSISTANT COMMISSIONER ;
ACCOMPANIED BY DONALD R. BURNETT, CHIEF, DIVISION OF
PROJECT DEVELOPMENT; AND HAROLD T. NELSON, REGIONAL
DIRECTOR, BOISE, IDAHO, BUREAU OF RECREATION—Resumed**

Mr. PALMER. I mentioned, I believe, while you were out, Mr. Chairman, that this is recommended as a departmental amendment to the Senate bill.

The CHAIRMAN. It is not in the bill.

Mr. PALMER. No. As I recall it comes up as an amendment to the bill.

The CHAIRMAN. It is in your report?

Mr. PALMER. It is in our report. It is on page 4 of the report.

The CHAIRMAN. Just briefly, what do you propose doing?

Mr. PALMER. We propose computing the size of the farm with 120 acres of class 1 equivalent, then adjusting the other land classes by seventy-five hundredths of an acre for class 2, fifty-five hundredths for class 3, and thirty-eight hundredths of an acre for class 4.

The CHAIRMAN. How much class 4 land is in this project?

Mr. PALMER. A good bit of the heavy bottom land is.

The CHAIRMAN. That green?

Mr. PALMER. No, that is the land that is irrigated, but the bottom land along the river in that particular area. It is very heavy soil, Senator, and it is used primarily for grass and hay production.

The CHAIRMAN. So we could have more than twice as much, three times as much?

Mr. PALMER. In terms of acres. Stating it a little bit differently, an acre of class 1 land would be an acre. For an acre of class 2 land, you would have to have 1.33 of surface acres to have the production potential after class 1, 1.82 of class 3, and 2.64 of class 4.

The CHAIRMAN. That is true in a great many irrigation projects, isn't it?

Mr. PALMER. This is correct, sir.

The CHAIRMAN. What are you doing about those? Take the Garrison project of the Senator from North Dakota.

Mr. PALMER. This is one of the things, if it is agreeable, I would like to back into a little bit.

The CHAIRMAN. Let's take his project up there in North Dakota. Isn't there a good deal of land that is other than class 1 land in that?

Mr. PALMER. Yes, sir; there is, and this is why I have to give you this explanation.

The CHAIRMAN. Do you propose that for his project?

Mr. PALMER. We would propose that for his project.

The CHAIRMAN. Did you?

Mr. PALMER. I don't think so.

The CHAIRMAN. The Garrison project is on the Senate Calendar.

Mr. PALMER. May I give you a little explanation? I think we will clarify this.

The CHAIRMAN. All right.

Mr. PALMER. I do not disagree with what Senator Morse said, nor with what I am sure you are trying to get at. The aim and policy objective of the Bureau of Reclamation is to provide four things. One is enough land in a farm unit for a man to pay the cost of producing the crop and, two, enough to pay the cost of retaining the land,

his taxes and reasonable interest on borrowing, and three, to provide a reasonable family living, and then, four, to pay the project operation of maintenance cost and anything that is above that is returned for management.

If he is a better manager he makes it a little better. If this is the long-range objective and if this is the thing for which we live, then the suggestion that you have a general bill that would submit a formula to the Congress that would be applicable everywhere else would not fit, because these figures I just gave you, these percentages, wouldn't fit, for example, in class 3 lands in California, or in class 3 lands in the lower Rio Grande.

The CHAIRMAN. You get five cuttings of alfalfa a year or six?

Mr. PALMER. This is the point exactly. So what we have tried to do as we have come to Congress with these specific recommendations, in each instance we have tried to determine what size of farm made up by what kind of land classes will net out these objectives.

This is not a new procedure. We came to Congress in the Seeds-keedee project in Wyoming with substantially the same formula.

We came to Congress with substantially the same formula on the east bench development in Montana, and then, of course, you are well aware of the other attempts that have been made to set an upper limit.

The CHAIRMAN. Now about the Garrison project; it is on the calendar. Your office gave you support on that. Do we have a similar problem?

Mr. PALMER. No, sir. It is my belief that we have no trouble on the Garrison project because 160 acres of any of the land that is in the project that was termed to be irrigable would be enough land to achieve these objectives.

That was the point, that a formula that would fit on the Riverton project, which you asked about earlier, might not be the formula that we would recommend for Baker or vice versa.

Maybe on the Riverton, if as a result of this analysis and view we were going to have to run this, in all probability we will come back to the Congress with a formula and we will support that formula on the basis of the ability of the operations under the formula to achieve the objectives that I just got through stressing, so the departmental position is that we would like to be able to assure the committees that we are not going to be back up here 10 years from now asking for provision to amend a contract, because we have saddled on these people alone the heaviest lands in the bottom of the valley, and an unconscionable load that they can't bear, if we ask them to pay from a given production basis the same amount you ask the people in the better lands to pay from the same area basis rather than production basis, so these then are the justifications for the amendment that we have proposed.

In terms of specifics, you could take a farm unit, since nearly all of these do not occur in pure class. It has variations on it. You could take 20 acres of class 1 land, and 40 acres of class 2 land, 30 acres of class 3, and 60 acres of class 4 which would add up to 150 surface acres, but it would only net the man under this formula, 118.2 acres of class 1 equivalent land.

In other words, this isn't a frontal attack or any breach of the long time-honored, family-size-farm concept. It is a full, recognition

of the family-size-farm concept in recognizing that you have to have a difference in size of farm by land class to make it possible to achieve these objectives that I have stressed.

Senator BURDICK. Mr. Palmer, do you think a project approach is the best way to handle this?

Mr. PALMER. We have given this matter a great deal of attention, Senator. We have pondered about it a lot.

▶ We have tried all kinds of formulas. We believe that, as Senator Anderson does, as he has expressed himself, that under modern farming conditions the old time-honored, 160-acre limitation in and of itself does not meet all conditions.

If you are going to adhere to the family-size concept, and this is something which I firmly believe, I think you have to allow some flexibility as you move from the high mountain valleys down to the more productive coastal plains and lower valleys and as you move from deep medium texture to alluvial profiles into highly impervious like residuals and things of this nature.

I think you shouldn't be straitjacketed by an arbitrary limit that is only one of the factors that controls productions and income, so we have felt that until we get more experience on this, and until we are a little more secure on its ourselves, we would prefer to come to Congress on a piece-by-piece, project-by-project basis until we can devise some formula that will fit uniformly.

The CHAIRMAN. It is easier, but it isn't quite as satisfactory, is it?

Mr. PALMER. That is correct. We are also aware of the fact that in a sense we are sharing some of our burdens and pushing them off to you.

The CHAIRMAN. What language did you suggest for the bill?

Mr. PALMER. It says on the proposed amendment:

Any lands in the upper division of the Baker project, Oregon, which are held in private ownership by a person whose holdings exceed the equivalent of 120 acres of class 1 land shall, to the extent that he exceed that acreage, be deemed excess lands. No water shall be furnished to such excess lands from, through; or by means of project works unless (1) the owner's total holdings do not exceed 160 irrigable acres or (2) said owner shall have executed a valid recordable contract with respect to the excess in like manner as provided in the third sentence of section 46 of the Act of May 25, 1926. In computing the equivalent of 120 acres of class 1 land under the first sentence of this section, each acre of class 2 land shall be counted as 0.75 of an acre, each acre of class 3 land shall be counted as 0.55 of an acre, and each acre of class 4 land shall be counted as 0.38 of an acre.

I have eliminated the references to the United States Code.

The CHAIRMAN. What is the land ownership pattern in this? How many farms are there?

Mr. NELSON. Sir, there are 148 ownerships now averaging 118 acres and of that there are 27, in 1938, that are in excess of 160 acres. Of that 27 there are 13 that are in excess of 320.

The CHAIRMAN. Is this a community property State?

Mr. NELSON. Yes, it is.

The CHAIRMAN. Then you are only concerned with a few, aren't you?

Mr. PALMER. That is correct. It is not a massive program.

The CHAIRMAN. How many in excess of 320?

Mr. PALMER. Thirteen.

Mr. NELSON. I believe you asked a little earlier about how much of the land was in lower classes. Over half, about 9,700 acres of the

whole project area is class 4. Another 3,400 acres is class 3, so you have about 12,000 out of the 18,000 that are in the lower classes.

The CHAIRMAN. If a man could own 320 acres and still stay within the normal limit by taking class 4 land, he would get up to a thousand acres or more, couldn't he?

Mr. PALMER. 632, sir.

Senator BURDICK. 632.

Mr. NELSON. Correct.

The CHAIRMAN. What was that statement—38 percent, isn't it?

Senator BURDICK. A limit of 120 acres, though.

The CHAIRMAN. 632. I would be happy if you would try to come in with some general language that would make it possible for all these things to be approved, including Garrison.

Senator BURDICK. Mr. Chairman, we reduced the acreage so much in Garrison that we now just have the better land left.

Mr. PALMER. That is correct.

The CHAIRMAN. You don't anticipate that is going to be a permanent situation?

Senator BURDICK. In my lifetime, I guess.

The CHAIRMAN. All right. Are there additional questions? Have you any additional witnesses?

Thank you very much.

Mr. PALMER. Senator, if you would like, here is the similar language.

The CHAIRMAN. Before we close the record, I will just say, in order that there may be complete information available to the committee members, two precedents for acreage limitations, based on land class productivity detailing with the east bench unit of the Missouri River Basin and the Seedskadee project in Wyoming will be put in the record at this point.

(The exhibit follows:)

PRECEDENTS FOR ACREAGE LIMITATION BASED ON LAND CLASS PRODUCTIVITY

EAST BENCH UNIT, MRBP

SEC. 2. Any lands of the East Bench unit which are held in private ownership by a person whose holdings of bench lands alone or of bench and valley lands combined exceed the equivalent of one hundred and thirty acres of class 1 lands shall, to the extent they exceed that acreage, be deemed excess lands. No water shall be furnished to such excess lands from, through, or by means of East Bench unit works unless (1) the owner's total holdings do not exceed one hundred and sixty irrigable acres or (2) said owner shall have executed a valid recordable contract with respect to the excess in like manner as provided in the third sentence of section 46 of the Act of May 25, 1926 (44 Stat. 636, 649, 43 U.S.C., sec. 423e). In computing "the equivalent of one hundred and thirty acres of class 1 land" under the first sentence of this section, each acre of class 2 land shall be counted as thirteen-fourteenths of an acre if in the valley and as thirteen-sixteenths of an acre if on the bench, each acre of class 3 land shall be counted as thirteen-seventenths of an acre if in the valley and as thirteen twenty-seconds of an acre if on the bench, and each acre of class 4-P land shall be counted as thirteen forty-fourths of an acre (S. 977 (H.R. 4410, H. Rept. 783), Public Law 112, 85th Cong., 1st sess.).

SEEDSKADEE PROJECT, WYOMING

SEC. 4. Irrigation water.—No water shall be furnished from, through, or by means of project works to lands which are held in private ownership by any one owner in excess of the equivalent of one hundred and sixty acres of class 1 lands unless the owner thereof shall have executed a valid recordable contract

with respect to the excess in like manner as is provided in the third sentence of section 46 of the Act of May 25, 1926 (44 Stat. 636, 649) [43 U.S.C. 423e]. In computing "the equivalent of one hundred and sixty acres of class 1 lands" under this section, each acre of class 2 land shall be counted as eighty-eight one hundredths of an acre, each acre of class 3 land shall be counted as seventy-one one-hundredths of an acre, and each acre of class 4 land shall be counted as forty-three one-hundredths of an acre (S. 3448, Public Law 797, 85th Cong., 2d sess.).

The CHAIRMAN. The subcommittee will adjourn.
(Whereupon, at 11:30 a.m., the subcommittee was adjourned, subject to call.)

APPENDIX

(The following communications were ordered printed in this hearing record:)

BAKER COUNTY CHAMBER OF COMMERCE,
Baker, Oreg., March 1, 1961.

HON. CLINTON P. ANDERSON,
*Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.*

DEAR SENATOR ANDERSON: We would like to bring to your attention the recreational potential that could be developed at the proposed Mason Dam site, located 16 miles southwest of Baker on State Highway No. 220.

This dam would be built across Powder River where there is now good trout fishing early in the spring and until late summer, at which time the water gets too low for good fishing.

The State game commission has made traffic counts of from 300 to 500 fishermen using this water from the city limits of Baker to the proposed site.

If this project is approved it will greatly improve the fishing in this area as there would be a constant level flow of water in the river below the dam. In addition to backing up water into a pool which would be $4\frac{1}{2}$ miles in length and $\frac{1}{2}$ to 1 mile wide, this pool would make an excellent recreational spot for many types of fishing, boating, water skiing, swimming, and other water sports.

Due to the paved highway and the short time that it requires for people from Baker to reach this area, many business men and women are already inquiring into possible locations for weekend and summer homesites.

As this dam would be located in a beautiful, undeveloped area with pine and fir timber surrounding it, we feel it would be the most desirable family recreational area in eastern Oregon.

Sincerely,

IRA D. STAGGS, *President.*

OREGON RECLAMATION CONGRESS,
Huntington, Oreg., February 1, 1961.

HON. CLINTON ANDERSON,
*Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.*

DEAR SENATOR: The Baker Valley Irrigation District embraces an area in a mountain valley adjoining the city of Baker. The agricultural economy of the area is in process of a transitory change from wild meadow hay and feed grain crops to potato, beef, and tame grass pasture and hay production.

Restrictions of public domain and private range in the area have created interest in crops that will provide year around forage for the large livestock industry of the valley. Favorable cost-to-benefit ratio shown in the investigation firmly support the urgent need for the proposed Mason Dam project.

Oregon Reclamation Congress unanimously approves authorization of its construction.

Respectfully submitted.

HAROLD HURSH, *President.*

FEBRUARY 9, 1961.

Hon. CLINTON P. ANDERSON,
Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR MR. ANDERSON: I sincerely hope that your committee will give favorable consideration to the proposed Mason Dam on Powder River. It is generally conceded in this section that such a dam would be of material benefit and will bring into production considerable land that should be in production and will give late water rights to farms that are handicapped by the lack of moisture in the last months of summer and the first months of fall.

Yours very truly,

RIVES WALLER.

BAKER PRODUCTION CREDIT ASSOCIATION,
Baker, Oreg., March 6, 1961.

Hon. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: We endorse the construction of Mason Dam as being a very worthwhile project to store 100,000 acre-feet of water from Powder River, and control floods and furnish supplemental water for 18,000 acres of land under the Baker Valley Irrigation District.

During spring and early summer the flood water covers large portions of the project land from 1 to 3 feet deep for a period of 2 to 4 weeks. The cold snow water shortens the growing season, and does great damage to the lands, killing all legumes in the meadows.

The dam will recover the most valuable national resources in our area, as this water cannot be used elsewhere. The floodwaters flow into the Snake and on into the Columbia and then into the ocean and are wasted.

By July 1 each year water in Powder River is all gone leaving 70 days of our best growing season without water for irrigation. Construction of this project would add 40 percent to production of the valley and would add greatly to the economy of the landowners, as well as to the county as a whole.

The reservoir created by the dam would make a beautiful recreational area, the best in all eastern Oregon, being entirely surrounded by pine and fir forests, on a paved highway only 18 miles from Baker and the Old Oregon Trail Highway.

We have financed a large percentage of farmers and livestock operators in Baker County on a year-round basis for the past 27 years, ever since we were organized under the Farm Credit Act. For the last few years the financing has amounted to several million dollars annually without a loss or foreclosure.

If this project is constructed the water users will be amply able to pay all charges as we understand will be specified in the contract between the water users and the Government.

Thanking you in advance for your early consideration of the project, I am,

Yours very truly,

EARL HEIZER, *Manager.*

BAKER MILL & GRAIN Co.,
Baker, Oreg., April 10, 1961.

Re Mason Dam project.

Hon. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate,
Senate Office Building, Washington, D.C.

DEAR SENATOR: For more than 40 years our firm has been doing business with Baker County farmers and ranchers and we naturally maintain a keen interest in their problems and welfare. Therefore, we are most pleased to learn that the Mason Dam proposal is coming before your committee for consideration.

Aside from the flood control and recreational benefits, we feel that the irrigational water from this project is the key to general prosperity in this valley. A longer, more dependable supply of irrigational water is the difference between success and failure for our cattleman, hay producer, grain grower, and row-crop men, operating on marginal land.

We sincerely hope that your committee will endorse this project as proposed.

Very truly yours,

T. D. HENRY, *President.*

WAYNE PHILLIPS & SONS,
Baker, Oreg., March 20, 1961.

HON. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: Being a landowner under both the Baker Valley project and the Thief Valley Irrigation District, I hope you will look with favor toward the Baker project as it is a district which produces hay and pasture for the growing of beef cattle which is the principal source of income of the county.

We do not grow crops which are in surplus, such as wheat and corn.

The runoff of spring waters which would be stored is very valuable for the middle and late summer for irrigation purposes. Our streamflow is diminished by late June or early July, leaving the best part of our growing season without irrigation water, causing our crops and pastures to dry up in the early fall. Also, the spring runoff causes excessive damage to the lands, both in the Baker Valley and downstream in what is known as the Lower Powder Valley. By storing the spring flow it would alleviate great damage which causes crop failures of the meadows and hay grown in the lower Powder Valley.

Thanking you for your favorable report on the project, I am,

Very truly yours,

WAYNE PHILLIPS, Sr.

THE RECORD-COURIER,
Baker, Oreg., March 14, 1962.

To the Honorable Committee:

This newspaper, the local paper to the county and area concerned in the Baker project, favors authorization of this reclamation facility.

The editor has served as a member of the Oregon Water Resources Board and feels that the Baker Valley development proposed to fully utilized the waters of the upper reaches of Powder River would be one of the stronger links in the whole reclamation picture of our State.

Baker Valley agriculture is predominantly livestock, and always will be. The changing livestock production picture is placing increased emphasis upon the interrelationship of valley ranches and the high wild ranges and upon overall efficiency. The stability that full water supplies can render irrigated agriculture is vital to our local livestock economy, to the full utilization of the higher lands and to our whole economic community.

Our experience shows that the project is economically sound, based upon costs and benefits as determined in the amended report. After working a number of years with landowners in developing a supplemental water plan and the district organization, I feel the landowners are wholeheartedly behind the program in the district. Experience of the last few short-water years has more than ever convinced them it is futile to continually face the exigencies of critically deficient natural-flow water supplies. The project will be a great boon to the district landowners and I can foresee no detrimental effect upon any other, whose water rights naturally will not be affected. The taking area of the reservoir is a very minor factor, indeed, in the overall picture.

From the standpoint of flood control and recreation, it is certain that the project report is very conservative. The Mason Dam facility will be real flood insurance. It will provide one of the area's best trout fisheries and some of the finest recreation water. Project operation is such that it will be compatible with all these values and maximum water utilization.

Presently, the community, because of depressed lumber industry tendencies, needs the stimulus of such a project as Mason Dam. We look forward to early authorization and prompt planning and fulfillment of the Baker Valley district's project.

Respectfully submitted.

BYRON C. BRINTON,
Editor-Publisher.

A. S. BOYD & Co.,
Baker, Oreg.

HON. CLINTON P. ANDERSON,
Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SIR: For years many of we stockmen have been interested in the building of the Mason Dam, for the purpose of reservoiring the early run of high waters of Powder River which often floods a large portion of our Baker Valley rendering much of this fertile area unfit for the production of anything but a poor quality of wild hay or slough grass.

In recent years much of our national forest has been closed to the grazing of livestock, other areas closed to grazing for military purposes, hydroelectric projects on Snake River, recreation parks, and watersheds for city water supplies. This all results in quite a shortage of grazing land and pasture and leaves us with an overproduction of hay. If it were possible to reservoir this early run of water, preventing this early flooding of our valley, and the water made available later in the summer, much of this land growing wild hay could be developed to produce good long-season pasture.

We have been in the livestock business in Baker Valley for over 40 years and have never seen or heard tell of a surplus of irrigated pasture.

It has been my observation that all good irrigated pasture countries such as the Long Valley or McCall Districts of Idaho and most of the Ladino clover areas of California are prosperous districts with cheap production costs.

Beef or lamb can be produced on such pastures for a cost not to exceed 12 cents per pound; in the feedlots it costs 18 cents or more to put on a pound, with the average above 20 cents per pound. Nearly all cattle and lambs raised in our Western States are in the feeder class and are sold to be finished in the various feeding areas or States. Beef, lamb, and wool are being imported so we evidently have room to expand in the production of these commodities.

It is my understanding that our committee from Baker Valley will be in Washington soon. Your careful consideration of this project will be appreciated by me and almost all the citizens of this area.

Thank you for this consideration.

Yours truly,

ARTHUR T. BOYD, *President.*

DURKEE, OREG., *March 27, 1961.*

HON. CLINTON ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SIR: This letter is written to bring to your attention the necessity of the proposed Mason Dam, and the Baker Valley Irrigation District on the Powder River.

Most of my life has been spent in the ranching business in Durkee Valley on the Burnt River, a sister stream to the Powder River on which the Mason Dam is proposed to be built.

Let me take you back to the days before our storage reservoir was built, when the Burnt River went on a rampage every spring. The spring runoff went by in a week or two of turbulent muddy water washing out roads and fences and carrying down trees, dead cows, and other debris to deposit on our fields in exchange for an acre or two of good land that it gouged out at every bend.

We watched the river closely and as soon as it subsided to its regular channel, we put in our dams and started irrigating as we must "get wet" while there was water in the river for it would soon be dry. By the end of June it was down to a trickle and later in the summer only a series of stagnant, moss-covered pools too foul for a horse to drink.

How much better it is now with the stored water. No need now to irrigate too early when the ground is still cold or to irrigate too heavily hoping to store precious water in the soil against the day when there would be no more water.

No more floods followed by drought but a steady, dependable, controlled flow of clear, clean water.

And so it will be in the Baker Valley when the Mason Dam is built.

Please give this project every consideration.

Your truly,

THOS. W. SHEEHY,
Master, Durkee Grange No. 653.

STEWARD & MORRISSEY,
Baker, Oreg., March 29, 1961.

HON. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs, U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: We appreciate the interest of your committee in the authorization of and the eventual development of the Mason Dam by the Bureau of Reclamation on the upper reaches of the Powder River in Baker County, Oreg.

There is no single development on the Powder River watershed which will yield such meaningful returns to the entire county where 80 percent of our yearly income derives from the basic livestock industry.

While our own operation, situated near Keating some 20 miles downstream, does not embrace land under the Baker Valley project, we and our neighbors expect tangible benefits from the Mason project on at least three fronts.

1. The Mason Dam will eliminate the yearly flood hazards and demonstrable damage. Several years ago with the Army Engineers from Walla Walla, Wash., we arrived at a \$1,000 yearly damage figure on our home ranch through which the river flows for about 1 mile. Aside from soil losses, along the river channel, it is impossible to hold a stand of palatable meadow grass and legume species in our bottom lands. The elimination of flood threat could lead to farming up to the riverbanks.

2. Irrigation of some 18,000 acres above us would stretch out our present supplemental supply of irrigation water from the Thief Valley reclamation dam. This will mean improved soil practices, crop-rotation potentials, and heavier weight on our stocker and feeder animals each fall.

3. We are plagued with animal diseases which derive from spores which accompany river bottom pastures. If we could institute proper tillage, crop rotation, and other approved soil practices we should be able to achieve more effectual animal husbandry through reduction of disease losses. I refer to such ailments as blackleg, foot rot, lumpy jaw, liver fluke, and red water disease. True, we vaccinate for most of these diseases and attain some protection but we can never eradicate the threat of disease eruption and severe economic losses until our land control circumstances improve.

There are other fringe benefits to a project of this sort. More forage means, for example, a better crop of game birds. Clear water on a steady, reasonable flow basis means an opportunity for expanded fish culture.

I hope your committee will not be dissuaded by the shopworn thesis advanced by some that since we have problems of surpluses in some crops, we should not compound those problems by developing the productive capacity of more lands. This is a fine argument for those communities and those producers who have it made. We know that you know that the livestock-based industry does not have burdensome surpluses. Our commodity is not in Government-financed storage. We are on a current production-demand basis and want to keep it that way. We believe, however, that each community must advance through taking advantage of our natural resources and improving our potential, or, through inaction, we will surely slip backward, while other more favored areas will progress.

Prudent water development is the key to achieving our economic and social potential, locally and nationally.

Thank you for favorable consideration of the Mason Dam project in Baker County.

Sincerely yours,

ROBERT J. STEWARD.

BAKER, OREG., February 14, 1961.

HON. CLINTON P. ANDERSON,
Committee on Interior and Insular Affairs,
U.S. Senate,
Senate Office Building, Washington, D.C.

HON. CLINTON P. ANDERSON: I am merely writing this letter to express my opinion on the irrigation project here in Baker County.

I have a farm of 380 acres that is very well located and has some of the best soil in the country. However, it has developed into black alkali for only one reason—we do not get enough water to irrigate and wash it down. Therefore, I can raise only first-class alkali weeds which are of absolutely no value and cannot be utilized in any manner. Consequently, I would say that it is high

time that we get down to business and encourage this Mason Dam to get it developed as soon as humanly possible. Baker Valley could be the spot of the Northwest, if proper irrigation could be arranged. I am sure it could be done with the installation of Mason Dam. It would induce industries to this area, and permit us to raise more extensive and varied crops. There is no need for water to go down the drain when we have plenty of moisture in the spring of the year and then in July, August, and September when we really need water there isn't any. Therefore, I feel it is very urgent that we work hard to restore surplus water to Baker Valley.

I am not just encouraging this for my own benefit, but everyone concerned.
Sincerely yours,

WM. SCHAAN.

BAKER BRANCH,
THE U.S. NATIONAL BANK OF PORTLAND, OREG.,
Baker, Oreg., August 14, 1961.

HON. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: For many, many years this bank has been interested in the Baker Valley irrigation development project commonly known as the Mason Dam project wherein a dam is proposed to be erected in the Sumpter area between Sumpter and Baker, its main use being for irrigation purposes for the Baker Valley. We have always felt that the construction of this project is of the utmost importance to the welfare of this county, and accordingly to the entire State of Oregon. We believe the present waste of this valuable natural resource is inexcusable and that the benefits that will be realized from the project will far outstrip the cost of construction.

The officers and employees of this bank all join with me in recommending the construction of this project.

Sincerely,

LESTER D. HANSEN,
Assistant Vice President and Manager.

FORTNER SUPPLY CO.,
Baker, Oreg., August 14, 1961.

HON. CLINTON P. ANDERSON,
Committee on Interior and Insular Affairs, U.S. Senate,
Senate Office Building, Washington, D.C.

DEAR SIR: As a 30-year resident of Baker County, Oreg., during half of which time I served as Baker County agricultural agent, I am writing to urge your support of the proposed Mason Dam project for this locality.

There is no question but that the agricultural economy of Baker County has been held down for many years due to the lack of late season irrigation water. This is particularly true of the Baker Valley area and other sections of the county not served by water-impounding dams such as have been provided in the Burnt River and Lower Powder valleys of the county.

Adequate irrigation water, such as the Mason Dam would provide to the established irrigated ranches and some new lands under it, would allow for desirable diversification and boost yields of hay and pasture in this basic livestock area. Late pastures are particularly important in view of the limitations now placed on range operators. The beef, dairy, and sheep producers all need the added forage that stored late water would make possible.

Plentiful water would permit diversification on the smaller farm units and the acreage of such crops as sugarbeets and potatoes, which do well in this area, could be increased with benefit to all.

Yes, we need the benefits that would come to Baker County with the building of Mason Dam. As an early advocate and worker for this project I urge you and your committee to give a favorable report on the Mason Dam project.

Very truly yours,

P. T. FORTNER, *President.*

BAKER, OREG., August 14, 1961.

HON. CLINTON P. ANDERSON,
Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building,
Washington, D.C.

DEAR SIR: I wish to express my hope that you will do everything in your power to expedite any legislation that would make possible the construction of Mason Dam on Powder River in Baker County, Ore. This construction would certainly improve the agricultural picture in this valley and I'm certain that in the near future that we are apt to need all of the agricultural production that we can muster.

This project is needed because at the present time there is seldom water for irrigation after July 4. This dam would enable floodwaters to be held back and would lessen the downstream damage from high waters.

Very truly yours,

DICK HAYNES.

MARCH 28, 1961.

HON. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SIR: In the near future, you will have before your committee for consideration, the authorization for the Mason Dam project on the Upper Powder River division. As a rancher of this area, I would like to acquaint you with my thinking about this project.

The committee, in reviewing the proposed project, will note that there is considerable acreage in the valley which is classed as No. 3 and No. 4 land. This is the type of land which we farm in our livestock operation. I liev and farm the land on the ranch where I was born, and over the years, I have seen this land reclaimed from alkali by washing it with river water. Production on parts of this land has been increased by 100 percent or more, and it is an indisputable fact, I'm sure, that if we had water for late irrigation it could be increased even more.

A problem which is always with us on our lower lands is flooding early in the spring. Much of the land stands under water for from 4 to 12 weeks each year. There is no way to use good farming practice unless the runoff water can be conserved for later irrigation by constructing Mason Dam.

We have neighbors who pump water from deep wells for later use and the contrast in production is obvious. The costs of pumping is prohibitive, however, for our operation.

It is my opinion that in asking for this project we are not asking Congress for money to further aggravate the farm problem. This water will be used on our lands only as a supplement. The products we grow are cattle, sheep, hay, and pasture. Supplemental water would increase the efficiency of our operation, controlling floodwater would conserve our resources, and the two together would benefit all our valley, our State, and logically the Nation.

I hope your committee will take a good look (approving) at our request—we think it is sound and worthy of authorization.

Yours truly,

FRED J. WARNER.

BAKER, OREG., March 14, 1961.

HON. CLINTON P. ANDERSON,
Chairman of Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SIR: As a livestock producer of Baker Valley I urge you to do everything possible to gain authorization of our Mason Dam project.

I believe irrigation will greatly stabilize the livestock industry and general economy of this area.

Yours truly,

WILLIAM E. WIDMAN.

CALIFORNIA-PACIFIC UTILITIES Co.,
Baker, Oreg., December 13, 1961.

Hon. CLINTON ANDERSON,
Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SIR: We urge that you do everything possible for the passing of the bill authorizing construction of the proposed Mason Dam in this session of Congress.

This irrigation project is of grave importance to the economy of our entire area. The waste of a natural resource so vital to our area could be eliminated by the construction of this dam.

L. G. GRAY, *District Manager.*

BAKER, OREG., February 22, 1961.

Hon. CLINTON P. ANDERSON,
Committee on Interior and Insular Affairs,
U.S. Senate,
Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: I'm writing this letter in behalf of the proposed Mason Dam in Baker Valley. I feel it would be of great benefit to the ranchers and farmers of this valley. We have floodwater from Powder River which lasts until the first of July, then the ranchers are left with no irrigation water.

If this water could be stored in the proposed Mason Dam, it would store enough water for a full supply of water to irrigate all the land that has now only one-half enough water to grow the crops that could be grown with a full supply of water.

One could grow 50 to 60 percent more hay and grass, which this valley surely needs to meet the demands for pasture and winter feed for the fine beef and dairy cattle grown in this valley, as well as other crops that could be grown suitable to the soil and climate conditions of Baker Valley.

I have drilled two irrigation wells on my ranch and with the wells as a supplemental water source, I have grown good crops of potatoes and sugarbeets and when the alfalfa hay is irrigated from wells, I get one extra good cutting of hay and a good pasture.

The proposed dam would benefit the whole valley, the city of Baker would benefit from the extra population that would naturally occur when the large farms would be sold in smaller units and would be farmed in a diversified manner.

The growing of sugarbeets in Baker Valley would by their byproducts, increase the feeding and finishing our beef cattle instead of shipping the cattle as feeders to California and other States to be fattened and then shipped back to Oregon as finished products.

Another reason I feel the Mason Dam, as proposed in the Powder River, should be built is the conservation of water, something all of us are becoming conscious of today, and at this time if we of the Baker Valley don't protect our rights to the water of Powder River, we might lose those rights. As others also know, the great value of the water that is running to waste down Powder River, therefore, we ranchers and the city people need the dam on Powder River, the proposed Mason Dam, to protect our rights to this water.

Yours truly,

CONRAD ALLEN.

COMMERCIAL WELDING Co., INC.,
Baker, Oreg., April 13, 1961.

Hon. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.

DEAR SENATOR: As we are steel fabricators of ranch equipment in this area, I am writing to ask if you would do all possible to help us in this area get the OK for the construction of the Mason Dam here in Baker County.

We work from 25 to 30 people and we feel that building the Mason Dam would naturally increase our work and possibly more could be employed. Also, I would like to point out that more than 90 percent of our employees have expressed

a high degree of enthusiasm regarding the recreational facilities which will be made available to them as well as to all the other people of eastern Oregon and surrounding communities.

In closing, we want you to know that we would sincerely appreciate any effort that you would put forth to help us on the Mason Dam project.

Very truly yours,

JACK FROST, *Secretary-Treasurer.*

BRITTON EQUIPMENT CO.,
Baker, Oreg., March 14, 1961.

HON. CLINTON P. ANDERSON,
*Chairman Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.*

DEAR MR. ANDERSON: As a dealer in farm equipment and irrigation supplies, I have very close association with the farmers and ranchers in Baker Valley.

It is a pathetic situation to see the crops dry out and burn. The alfalfa producing a spotted, skimpy, one-third yield on the second cutting and no third cutting, due to the fact that our water goes flooding down the river in May and the early part of June. There is no water in July, August, and September which are our best growing months. This is a yearly disaster which must be stopped to bolster our failing economy in Baker Valley.

Mr. Anderson, I sincerely urge you to help us gain authorization of Mason Dam project to help us remedy this deplorable situation.

Sincerely yours,

CHARLES H. BRITTON.

PIONEER FEDERAL SAVINGS & LOAN ASSOCIATION,
Baker, Oreg., April 5, 1961.

HON. CLINTON P. ANDERSON,
*Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.*

DEAR SENATOR ANDERSON: It is my understanding that the Mason Dam project on the Powder River in Baker County, Oreg., will come up very soon before your committee. I would like to urge you on behalf of our association and on behalf of the city of Baker and Baker County, to take affirmative action on this measure, as we feel that it will be of great value to the economy of this area.

Yours very truly,

CARL DAVIS, *President.*

JONES & SON,
Baker, Oreg., April 5, 1961.

HON. CLINTON P. ANDERSON,
*Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.*

DEAR SENATOR: We wish to give our support to the proposed Mason Dam. We feel that it is needed now for our present acreage and to insure the future economy of our valley. The steady decrease in annual rainfall along with our ever-present need for more water makes this dam of vital concern to all Baker County folks. We give our wholehearted endorsement to this project.

Yours very truly,

HOWARD H. JONES.

BASCHE-SAGE HARDWARE CO.,
Baker, Oreg., April 5, 1961.

Hon. CLINTON P. ANDERSON,
*Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Senate Office Building, Washington, D.C.*

DEAR SENATOR ANDERSON: We understand that a hearing will be held concerning the building of the Mason Dam. We feel that this is a very worthy project which will certainly strengthen the economy of our community. Both in an economic way and through recreation areas it will obtain.

Other factors to consider would be flood control and storage of badly needed irrigation waters. The last few years show how badly we need an additional supply of water when we encounter an under average snow or rainfall.

We hope you will be able to help our community obtain this worthy project.

Very truly yours,

F. C. BASCHE.



