OAHE UNIT, MISSOURI RIVER BASIN PROJECT

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HEARINGS

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER RESOURCES

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

NINETIETH CONGRESS

FIRST SESSION

ON

S. 6

A BILL TO AUTHORIZE THE SECRETARY OF THE INTERIOR TO CONSTRUCT, OPERATE, AND MAINTAIN THE FIRST STAGE OF THE OAHE UNIT, JAMES DIVISION, MISSOURI RIVER BASIN PROJECT, SOUTH DAKOTA, AND FOR OTHER PURPOSES

SEPTEMBER 13, 1967—WASHINGTON, D.C.

MAY 22, 1967—REDFIELD, S. DAK.

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OAHE UNIT, MISSOURI RIVER BASIN PROJECT

WEDNESDAY, SEPTEMBER 13, 1967

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER RESOURCES
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to call, at 10 a.m. in room 3110, Senate Office Building, Senator Henry M. Jackson presiding.

Present: Senators Henry M. Jackson (Washington); Frank Church (Idaho); Frank E. Moss (Utah); Quentin N. Burdick (North Dakota); George McGovern (South Dakota); Len B. Jordan (Idaho); and Clifford P. Hansen (Wyoming).

Also present: Jerry T. Verkler, staff director; Roy M. Whitacre, professional staff member; William Van Ness, special assistant; and Darryl Hart, assistant minority counsel.

Senator JACKSON. The subcommittee will come to order.

The hearing today is on Senate bill 6, by Senators George McGovern and Karl Mundt, to authorize construction of the first unit of the Oahe irrigation project in the Missouri River Basin in South Dakota. A copy of the bill and the reports of the Interior Department and the Bureau of the Budget will be printed at this point.

(The data referred to follows:)

[S. 6, 90th Cong., first sess.]

A BILL To authorize the Secretary of the Interior to construct, operate, and maintain the first stage of the Oahe unit, James division, Missouri River Basin project, South Dakota, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is hereby authorized to construct, operate, and maintain in accordance with the Federal reclamation laws (Act of June 17, 1902 (32 Stat. 388), and Acts amendatory thereof or supplementary thereto) the first stage of the Oahe unit, James division, Missouri River Basin project, South Dakota, for the principal purposes of furnishing a surface irrigation water supply for approximately one hundred and ninety thousand acres of land, furnishing water for municipal and industrial uses, controlling floods, enhancing the generation of power, conserving and developing fish and wildlife resources, and enhancing outdoor recreation opportunities, and other purposes. The principal features of the first stage of the Oahe unit shall consist of the Oahe pumping plant to pump water from the Oahe Reservoir, a system of main canals, regulating reservoirs, and the James diversion dam and the James pumping plant on the James River. The remaining works will include appurtenant pumping plants, canals, and laterals for distributing water to the land, and a drainage system.

SEC. 2. The Secretary is authorized, as a part of the project, to construct, operate, and maintain or otherwise provide for public outdoor recreation and fish and wildlife enhancement facilities, to acquire or otherwise make available such adjacent lands or interests therein as are necessary for public outdoor recreation

or fish and wildlife use, and to provide for public use and enjoyment of project lands, facilities, and water areas in a manner coordinated with the other project purposes.

SEC. 3. The Oahe unit shall be integrated physically and financially with the other Federal works constructed or authorized to be constructed under the comprehensive plan approved by section 9 of the Act of December 22, 1944, as amended and supplemented.

SEC. 4. For a period of ten years from the date of enactment of this Act, no water from the project authorized by this Act shall be delivered to any water user for the production on newly irrigated lands of any basic agricultural commodity, as defined in the Agricultural Act of 1949, or any amendment thereof, if the total supply of such commodity for the marketing year in which the bulk of the crop would normally be marketed is in excess of the normal supply as defined in section 301(b)(10) of the Agricultural Adjustment Act of 1938, as amended, unless the Secretary of Agriculture calls for an increase in production of such commodity in the interest of national security.

SEC. 5. The interest rate used for purposes of computing interest during construction and interest on the unpaid balance of the capital costs allocated to interest-bearing features of the project shall be determined by the Secretary of the Treasury, as of the beginning of the fiscal year in which construction is initiated, on the basis of the computed average interest rate payable by the Treasury upon its outstanding marketable public obligations, which are neither due nor callable for redemption for fifteen years from date of issue.

SEC. 6. There is hereby authorized to be appropriated for construction of the Oahe unit as authorized in this Act the sum of $200,684,000 (based upon January 1964 prices), plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering costs indexes applicable to the types of construction involved herein. There are also authorized to be appropriated such additional sums as may be required for operation and maintenance of the unit.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., September 11, 1967.

Hon. HENRY M. JACKSON,
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 16, 1967, requesting the views of the Bureau of the Budget on S. 6, a bill "To authorize the Secretary of the Interior to construct, operate, and maintain the first stage of the Oahe unit, James division, Missouri River Basin project, South Dakota, and for other purposes."

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

The Department of the Interior, in a report being submitted to your Committee, recommends enactment of the bill with amendments.

The Bureau of the Budget would have no objection to the enactment of S. 6, if amended as suggested by the Secretary of the Interior.

Sincerely yours,

JAMES M. FREY,
Acting Assistant Director for Legislative Reference.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., September 11, 1967.

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

DEAR SENATOR JACKSON: This is in response to your request for the views of this Department on S. 6, a bill "To authorize the Secretary of the Interior to construct, operate, and maintain the first stage of the Oahe unit, James division, Missouri River Basin project, South Dakota, and for other purposes."

We recommend that the bill be enacted as amended herein.

The Oahe unit was authorized by the Flood Control Acts of 1944 (58 Stat. 887) and 1946 (60 Stat. 641). The general comprehensive plan for the Missouri River Basin project was presented in Senate Document 191 and House Document 475 (78th Congress) as revised and coordinated by Senate Document 247 (78th Congress). The Secretary's subsequent planning report on the initial stage of the unit was prepared pursuant to the provisions of Public Law 442, 88th Congress, which requires reauthorization by the Congress of any units of the Missouri River Basin project on which construction was not underway as of August 14, 1964. Authority to engage in the feasibility investigations of the Oahe unit was provided by the Act of September 7, 1966 (80 Stat. 707).

The initial stage of the Oahe unit would be a multipurpose water and related land resources development providing an irrigation water supply to 190,000 acres of land and municipal and industrial water supplies to 17 towns and cities in and near the unit. It would also provide for flood control, outdoor recreation opportunities, and fish and wildlife conservation and development. Benefits would accrue to area redevelpment from construction of the unit as well as from the operation and maintenance activities that would follow.

Principal supply works of the unit will consist of the Oahe and James pumping plants, a system of main canals, the three regulating reservoirs formed by the proposed Blunt, Cresbard, and Byron Dams, the existing James Diversion Dam, and channel improvements on the James River. These facilities would be supplemented by distribution canals, laterals, and pumping plants to deliver water to the land, and the necessary drainage facilities. Pumping power would be obtained from the Missouri River Basin Power System.

The 190,000 acres of new land proposed for irrigation development in the initial stage lie in the Lake Plain area adjacent to the James River in Brown and Spink Counties in northeastern South Dakota. Irrigation in the area has been extremely limited because of inadequate surface water supplies during the growing season and the limited groundwater supply. Rainfall is neither timely nor adequate to realize the agricultural potential that the lands would have with a full water supply. The provision of a dependable water supply for irrigation would remove the present high risk associated with dryland farming, improve the agricultural base, and stimulate and stabilize the overall economy of the area to the benefit of the State and the Nation. The present heavy reliance upon small grain farming would, with irrigation, be shifted largely to the production of more diverse crops associated with livestock production and to the production of cash crops such as beets.

Water supply for the unit would be obtained primarily from the Missouri River by diverting water from the existing Oahe Reservoir through the Oahe pumping plant. The total water requirement for the initial stage of the Oahe unit will average 563,900 acre-feet annually. Diversion from Oahe Reservoir would supply about 72 percent of this amount, or 408,400 acre-feet; 104,800 acre-feet would be obtained from return flows carried by the James River in the Lake Plain area; and the remaining 50,700 acre-feet would be obtained from natural flows of the James River.

Subsequent further studies made of the plan presented in the planning report indicate that investments required to enhance commercial power production at the existing Oahe powerplant would be infeasible. Therefore, the report has been modified to eliminate the power enhancement function and the benefits attributable to this purpose and to reduce the cost estimates of the unit by the amount that would have been needed to include that function. Subsequent consideration of the plan also led to the decision not to include the additional capacity which was proposed in some of the principal supply works for ultimate development of the unit. This also reduced the cost estimate originally presented in the planning report.

The total project and assigned cost for the initial stage of the Oahe unit as shown in the original report was reduced from $246,230,000 to $234,038,000 (January 1964 prices) for this modified plan. A comparison of the allocation of such

costs in the September 29, 1965, proposed report with that of the August 1967 modified plan follows:

Purpose	Allocation of project and assigned cost	
	September 1965 proposed report	August 1967 modification
Irrigation	$205,790,000	$205,790,000
Municipal and industrial water supply	11,324,000	11,324,000
Fish and wildlife	11,066,000	11,066,000
Flood control	1,234,000	1,234,000
Recreation	2,624,000	2,624,000
Power	2,775,000	----------
Highway betterment	----------	2,000,000
Total allocated	234,813,000	234,038,000
Deferred cost (future capacity)	11,417,000	----------
Total cost	246,230,000	234,038,000

A tabular comparison of the annual benefits from the project follows:

Purpose	Annual benefits	
	September 1965 proposed report	August 1967 modification
Irrigation:		
Direct	$11,507,700	$11,507,700
Total	19,618,300	19,618,300
Municipal-industrial water supply	465,600	465,600
Fish and wildlife enhancement	435,900	435,900
Flood control	46,700	46,700
Recreation	108,400	108,400
Area redevelopment	218,600	218,600
Power	97,900	----------
Uncompensated adverse effects	−483,900	−483,900
Net benefits:		
Direct	12,880,800	12,782,900
Total	20,507,500	20,409,600
Benefit-cost ratio:		
Total	2.5	2.5
Direct	1.6	1.6

The elimination of the power benefits and reduction in the estimated costs would have no appreciable effect on the computed benefit-cost ratio for the unit (2.5 to 1.00 for total benefits and 1.6 to 1.00 for direct benefits only).

Operation, maintenance, and replacement costs would total $1,486,400. This cost includes $30,500 associated with specific recreation and fish and wildlife enhancement features that would be a local agency responsibility, and $92,100 that would be a Federal nonreimbursable expenditure for recreation, fish and wildlife, and flood control. The remaining $1,363,800 would be reimbursable.

All of the project and assigned costs allocated to irrigation would be reimbursable. Average annual payment capacity of irrigable lands in the initial stage of the Oahe unit has been estimated at $11.40 per acre. Deduction of a contingency and incentive allowance of $1.40 per acre results in a recommended average annual water charge of $10.00 per acre. Further deduction of operation, maintenance, and replacement costs, estimated at $6.80, leaves $3.20 per acre for amortization of a part of the project and assigned costs allocated to irrigation. The remaining reimbursable costs allocated to irrigation would be repaid from power revenues of the Missouri River Basin project.

Water users and the conservancy subdistrict would repay $33,440,000 or about 16 percent of the costs allocated to irrigation, in a 50-year period following a 10-year development period. The remaining reimbursable obligation of $172,350,000 would be returned from revenues from commercial power sales accruing to the Missouri River Basin project. The sufficiency of Missouri River Basin project power revenues to meet the reimbursement and financial assistance obligations of the overall Missouri River Basin project was dealt with most recently

in our "Report on Financial Position, Missouri River Basin Project, December 1963," which was transmitted to the Congress on December 17, 1963. That report illustrated that with an increase of 0.25 mills per kilowatt-hour in the sale price of firm commercial power marketed in the Eastern division of the project and adoption of proposed interest rate criteria, adequate revenues are in prospect to retire all reimbursable investments and to repay the irrigation costs of the Oahe unit which are beyond the capacity of the irrigators to repay. The required rate increase has been promulgated by administrative action and the proposed interest rate criteria have been authorized by the Congress through enactment of section 4(b) of the Act of August 5, 1965 (79 Stat. 433).

The allocation of $11,324,000 to municipal and industrial water supply plus interest during construction (534,000) would also be repaid with interest by the beneficiaries of this water service. No additional capacity or special structures would be required to provide municipal and industrial water service and no specific costs are included in the estimate for the Oahe unit. Joint costs allocated to municipal and industrial water supply would be repaid with interest by an average charge of approximately $26 per acre-foot of raw water. Delivery of water would be made at canalside and at the James River, and all works required to treat or to transport the water to places of use would be the responsibility of the user. Storage facilities for the winter period would be required in most instances because project facilities would be operated only during the irrigation season.

Non-Federal interests would also be responsible for administration of the unit land and water areas for fish and wildlife and recreation purposes and for the repayment of $674,000 of specific costs, including interest during construction ($41,000), for fish and wildlife enhancement features, and specific costs for recreation of $326,000, including interest during construction ($7,000). The Oahe Conservancy Subdistrict and the Game, Fish and Parks Commission of the State of South Dakota have indicated by letter of September 22, 1966, their intent to agree to administer and share in the separable costs of the unit in accordance with the provisions of the Federal Water Project Recreation Act (79 Stat. 213).

The remaining project and assigned costs allocated to fish and wildlife enhancement and recreation development ($12,738,000) would be Federal costs and would be nonreimbursable. Likewise, the costs allocated to the flood control function ($1,234,000) would be nonreimbursable. The allocation to highway betterment in accordance with section 207(c) of the Flood Control Act of 1960 (74 Stat. 500) as amended by section 208 of the Flood Control Act of 1962 (76 Stat. 1196), amounting to $2,000,000 would also be nonreimbursable.

Enactment of the bill would authorize expenditures of $1,808,000 for lands for the enhancement of migratory waterfowl production and resting habitat. This amount would be charged against the expenditure limitation of $28,000,000 for such expenditures established by subsection 6(c) of the Federal Water Project Recreation Act (79 Stat. 213).

We recommend the following amendments to the bill:

Section 1

Since enhancement of hydroelectric power generation is no longer a purpose of the unit, on page 2, line 4, delete the words "enhancing the generation of power,".

Section 2

Section 2 of the bill concerns the functions of recreation and fish and wildlife enhancement in connection with the initial stage of the unit. The passage of the Federal Water Project Recreation Act (79 Stat. 213) and subsequent legislative history makes it possible to provide for inclusion and cost-sharing functions by reference to that Act.

Accordingly, we recommend the following language in lieu of that found in section 2 of the bill:

"The conservation and development of the fish and wildlife resources and the enhancement of recreation opportunities in connection with the initial stage of the Oahe unit shall be in accordance with the provisions of the Federal Water Project Recreation Act (79 Stat. 213)."

Section 6

Because enhancement of power generation and additional capacity of some supply works have been eliminated and an estimated $2,000,000 for highway

betterment has been added, on page 4, line 1, the figure "$200,684,000" should be reduced to "$188,500,000".

Also, to conform the terminology of the bill to that used in the planning documents for the unit, the term "initial stage" should be substituted for "first stage" in the title of the bill and on page 1, line 7; on page 2, line 7, and be inserted in lieu of "the Oahe unit" on page 3, line 25.

Enclosed is a statement concerning the estimated employment and expenditures as required by 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,

KENNETH HOLUM,
Assistant Secretary of the Interior.

OAHE UNIT, JAMES DIVISION, MISSOURI RIVER BASIN PROJECT, INITIAL STAGE, 190,000 ACRES—ESTIMATED ADDITIONAL MAN-YEARS OF CIVILIAN EMPLOYMENT AND EXPENDITURES FOR THE FIRST 5 YEARS OF PROPOSED NEW OR EXPANDED PROGRAMS

	1st year	2d year	3d year	4th year	5th year
Estimated additional man-years of civilian employment:					
Executive direction:					
Executive	0	1	1	2	2
Clerical	0	1	2	3	3
Total, executive direction	0	2	3	5	5
Administrative services and support:					
Accountant	2	3	4	9	12
Property management	2	2	3	10	13
Records maintenance	1	2	3	5	7
Clerical	2	5	7	10	18
Total, administrative services and support	7	12	17	34	50
Substantive (program):					
Engineering technicians and aids	20	53	82	126	130
Engineers	10	20	36	48	55
Others	6	7	8	8	8
Total, substantive	36	80	126	182	193
Total, estimated additional man-years of civilian employment	43	94	146	221	248
Etimated additional expenditures:					
Personal services	$296,000	$638,000	$993,000	$1,488,000	$1,671,000
All other	2,104,000	5,762,000	12,907,000	14,312,000	13,029,000
Total, estimated additional expenditures	2,400,000	6,400,000	13,900,000	15,800,000	14,700,000

Senator JACKSON. The unit involved contains 190,000 acres. It will provide, in addition to irrigation, municipal and industrial water supply for communities in the area and a considerable recreation and wildlife benefit.

The Department of the Interior has reported favorably on the project, with Budget Bureau approval, indicating that direct benefits will exceed costs 1.6 to 1 and that the ratio of all benefits to costs, including indirect, will be 2.5 to 1.

A field hearing on the bill and the project was conducted May 22 in Redfield, S. Dak., by Senator McGovern, Senator Frank Moss, and Senator Burdick. More than 100 witnesses testified or submitted statements.

Every witness who appeared endorsed and urged construction of the project. Two statements were filed which opposed or questioned it. The Redfield hearing transcript will be published along with the transcript of our session here today.

The Oahe project was first authorized in 1944 in the Flood Control Act which covered the so-called Pick-Sloan plan for Missouri River development. It was then conceived as a 750,000- to 1 million-acre project. Subsequent detailed investigations have indicated that about 495,000 acres in the area are best suited for irrigation. It is contemplated that future units will extend the project to at least this total acreage.

Since joining the Interior and Insular Affairs Committee in 1963, our colleague, Senator George McGovern, has kept many of us aware of the importance of this project to the State and Nation, as has the very able senior Senator from South Dakota, Senator Karl Mundt.

Senator Mundt, incidentally, is the ranking member of the Appropriations Committee for the Department of the Interior. As you all know, these projects first have to be authorized. That is the main problem for Senator McGovern. But having authorized it, that is not enough. You have to get the money. Senator Mundt is the ranking minority member on the Interior Appropriations Subcommittee and I am sure he will have something to say, as will Senator McGovern, about the prospects of not only the authorization, but getting the money. We are delighted and pleased that both Senators are here today.

I am going to ask the two Senators to make their opening statements, first Senator McGovern and then Senator Mundt.

STATEMENT OF HON. GEORGE McGOVERN, A U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator McGovern. Mr. Chairman, first of all I want to express my personal appreciation, and I think I speak for all South Dakotans, to you for the prompt scheduling of these hearings.

We have the favorable report before us from the Department of the Interior. It was followed by just a couple of days by the favorable report from the administration.

So I am grateful to you and also to the subcommittee chairman, Senator Anderson, and the rest of my fellow committee members, for the prompt consideration being given this bill.

I would like to also take this occasion to thank Senator Moss of Utah, and Senator Burdick, our colleague from North Dakota, who joined with me in the field hearings in Redfield on the 22d day of May. We heard about 100 witnesses at that time. I am sure that the hearing, and the experience we had in the State, will help pave the way for authorization of the bill.

Senator Moss told me after the hearing in Redfield that it was one of the finest, if not the finest, field hearing it has ever been his pleasure to participate in.

Senator Jackson. Senator McGovern, I wanted to say to both you and Senator Mundt that I have another meeting scheduled right at this hour. I will be leaving shortly. I will ask Senator Burdick to preside at the hearing this morning. I hope you gentlemen will understand the situation.

Senator McGovern. We appreciate your being here to open the hearings, Senator Jackson.

I also want to say a word of appreciation to my senior colleague in the Senate, Senator Mundt. As the chairman has said, he will play a key role in getting appropriations for this project. But, he has been working over the years on the authorization, as has Congressman Berry and Congressman Reifel, who will testify later on, along with our Governor, Governor Boe.

One of the most persuasive aspects of this entire Oahe development project from the very beginning has been the bipartisan spirit in which we approached it. Senator Mundt is the only member of the delegation who was here at the time of the Flood Control Act of 1944 when this project first got its authorization, but all of us have been working together through the years for the authorization of this very important project which is so vital to the future of South Dakota.

If I could take just one more moment, I would like to express my appreciation to the Assistant Secretary of the Interior, Kenneth Holum. He has been the moving spirit behind getting this project on its way to construction. He is the man who broke it loose and moved it through administrative channels. We will be hearing from him a little later on this morning.

The authorization in Senate bill 6 to begin construction of the Oahe irrigation project has been more than a quarter of a century reaching this committee. As has been said the Oahe project was included in the blanket Missouri River development program authorized in the Flood Control Act of 1944.

Because of major changes in many project plans, however, Congress passed an act in 1964 requiring the reauthorization of all Missouri Basin projects. That is why we are before the committee now, although we probably would have been regardless of the 1964 act since it has been the Bureau of Reclamation's policy to submit these major projects to the Congress without regard to the 1944 authorization.

The Oahe project is the biggest development project on South Dakota's economic horizon today, as it has been for many years. Eastern South Dakota, where it is located, lies between the humid center of the Mississippi Valley and the semiarid outer reaches. Rainfall and agricultural crop production are uncertain. We have lost many crops as a result of drought; farmers have suffered, and the communities which are dependent on agriculture have suffered with them, in both dry and semidry years.

These conditions have, over the years, eroded the expectations of those who settled in South Dakota on the assumption that its fertile soil would bring forth a bountiful harvest year after year, unmindful of the many dry years. They and their heirs have undergone acute economic problems as a consequence. Our population has been nearly static for many years, and there has been a high outmigration of younger people looking for greater opportunity.

We have, for at least two generations, envisioned the Oahe irrigation project as one major way to bring stability to central and eastern South Dakota. Men such as my predecessor in the Senate, the late Francis Case, former Gov. M. Q. Sharp, the late Bob Lusk, Pierre editor Bob Hipple, and many, many other people from our State for years have seen the possibilities of irrigation development.

It was the promise of large-scale irrigation development that caused us to accept the sacrifices and the loss of rich river bottom land that was necessary to make possible the enormous flood potential, navigation, power generation, and irrigation reservoirs on the Missouri River.

It is estimated that the first stage of the project that we are considering here today, a 190,000-acre project, will support an increased population of some 14,000 people, and that it will generate an average increase in our annual economic activity of some $71 million.

For South Dakotans, it means an end to the depressing cycle of dry years that has plagued our agriculture for many decades.

For the benefit of those who are concerned about bringing new land under irrigation as it relates to surplus crops, I point out that irrigation in our State will actually work in a beneficial direction by freeing us from dependence on those grain crops that are in surplus. It will enable us to expand livestock production. Meat products are in increasing demand in our country as we upgrade the quality of the foods we consume.

It is my personal belief that because of the growing demands for food that will be placed on agriculture in this Nation from both our own country and from other parts of the globe in another decade, that we should begin now to increase our productivity and our productive possibilities to meet those demands.

Again, let me say I look forward to hearing from the witnesses who are in the committee room today, particularly Mr. Fred Holscher, chairman, Oahe subdistrict, and his fellow directors.

I want to give assurances to everyone who testified at the Redfield hearings that those remarks will be incorporated in the official hearings to be printed at the conclusion of the testimony we will take today.

I will not take any further time from the hearing today since I can express further views in executive sessions. We have a number of expert witnesses with us, from the administration, from our State, members of the congressional delegation, as well as our Governor, whom we want to hear.

Thank you, Mr. Chairman.

Senator BURDICK (presiding). Senator Mundt?

STATEMENT OF HON. KARL E. MUNDT, A U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator MUNDT. Mr. Chairman, may I say first of all it is good to be back before this committee again, where I have been so many times. We have a real affinity for this committee on our Appropriations Committee because we deal, in large part, in one of our subcommittees, with the constructive work which you authorize in this committee.

I see all of you at times before our committee asking for funds to carry out projects you authorize. I think the last invasion we had from this committee was by the acting chairman, Senator Burdick, who came down for the funds for the Garrison project, which is a sort of twin project to our Oahe unit. It is a little further north, and a little faster moving. It moved especially fast, of course, because of

the eloquent appeal of our acting chairman, aided a little bit by the fact that his senior colleague serves on the Appropriations Committee.

Senator BURDICK. And we are very grateful to both of you.

Senator MUNDT. Thank you. May I say, sir, that all of the eloquent arguments that you made for the Garrison project are equally pertinent to the Oahe project. Each is similar to the other. So I am happy, and I associate myself first of all with the remarks of my junior colleague with regard to our appreciation to the many witnesses who have come here from South Dakota today, and the assistance we received from Mr. Holum, the cooperation that this committee has provided as we move now in the direction of authorizing S. 6, to take care of the Oahe unit, which we hope can be done expeditiously. Of course, the wheels of the Appropriations Committee cannot turn until the authorization bill has passed the Congress.

This brings to a period of fruition a long-time development of our Missouri River development program. I well remember the early 1940's when we were going up and down the river through a nine-State area with Members of Congress and the various Governors who were serving at that time, with representatives of the Corps of Engineers and the Bureau of Reclamation, seeking to sit down together and develop a plan which would provide the needed flood control, irrigation, and other resource development programs to enhance our overall economy and well-being on the Missouri River and protect the people in the lower areas from the awesome floods which have been disturbing the populace for many years.

I recall the many meetings with General Pick and Glenn Sloan, who started out at arms' length at the beginning of that long tour and wound up working together with complete cooperation, and cutting a real path, it seems to me, in the way in which two companion divisions of Government, the Corps of Engineers and the Bureau of Reclamation, could work together as one.

The plan called for the construction of four high dams on the Missouri River in South Dakota and one in North Dakota, which would provide water for irrigation of what was thought to be around 750,000 acres. It also would provide significant flood control, navigation, and water quality control benefits to many residents down the stream, along the Missouri and Mississippi Rivers.

Of course, it has been tremendously successful in the generation of cheap hydroelectric power. From the very beginning, the people and all public officials of South Dakota have strongly backed the full development of the Pick-Sloan plan, even though it would flood and remove from the tax rolls in South Dakota, as it did in North Dakota, over 1 million acres of productive agricultural land.

The irrigation development is a benefit of construction of the large-scale dams, and as a result of the inundating of our fertile land, irrigation in the Oahe project was to be our compensation for giving up this one-half million acres of land. Thus, when we come before your committee today, and we appear before the Congress, we are asking for less than 1 acre of irrigation development for each 2 acres of our land that is now inundated because of the development of this great natural resource.

The portion of this irrigation, an area of 190,000 acres which would be provided for in this initial stage construction of the Oahe irriga-

tion unit, is located in what is commonly referred to as the high-risk farming area in east central South Dakota. Irrigation would provide the opportunity to stabilize and increase agricultural income and other business income in this great area of our State.

In looking at the balance sheet on the progress of completing the Missouri River development program, or the Pick-Sloan plan, we find that the mainstem dams have been constructed and are functioning to provide full benefits in all the multiple purposes for which they were created. These benefits almost all accrue to the States which are downstream on the Missouri River from South Dakota.

Electric power generation and transmission facilities are in large measure completed, but here also substantial quantities of the electric power generated is transmitted to States adjoining South Dakota. The large reservoirs in South Dakota are providing great recreation and fish and wildlife development, but additional development of these facilities is dependent upon irrigation development as would be implemented when the Congress approves S. 6.

As authorized in 1944 by the Flood Control Act, the Oahe unit envisioned a diversion of water from the Missouri River for irrigation in east central South Dakota. A feasibility study, which was dated May 1965, by the Bureau of Reclamation, shows that the multiple-purpose Oahe unit would provide about 495,000 acres of irrigable land. That is our plan and that is our hope for the future.

We talked here this morning of the initial stage of that. The full program would provide for a municipal and industrial water supply for 23 cities and towns. It would provide for recreation, and fish and wildlife development in 29 localities, and flood control and pollutant abatement benefits for people generally in the eastern part of the State.

We have been told by the chairman that the project has a cost-benefit ratio of 2.8 to 1. So we ask this morning, Mr. Chairman, in this legislation for authorizing the initial stage of development.

I repeat, this is the initial stage of a large program which will continue to evolve and grow, I am sure, by steady increments, as we start getting the benefits and see the wisdom of how irrigation works. This initial stage is for 190,000 acres of land.

For a moment, I would like to mention some of the significant economic impacts which it is expected that this project will have on the economy of South Dakota.

No. 1. The primary impact, of course, would be the stabilization of farm production and income.

No. 2. It would increase the gross income from farms by an estimated $30 million to $50 million, and the net farm income for the area involved by $15 million to $20 million.

It would provide a more accessible market for over 50,000 head of feeder cattle. The increased volume of business generated directly by the irrigation development is estimated to amount to over $75 million.

Federal taxes from this new income would greatly benefit our Federal treasury.

Increased local, State and Federal tax revenues resulting directly from the irrigation development would total over $6 million annually.

The Federal tax revenues during the 50-year repayment period would be over $3.5 million, or over 85 percent of the costs allocated to irrigation.

Of course, also, all of the costs allocated to irrigation would be repaid by the water users, and power revenues during this 50-year period.

No. 6. The area development and the population would increase by about 15,000 people as a direct result of the irrigation project. It would provide an opportunity for us to retain in South Dakota the young people whom we educate but who are now moving away to areas of greater opportunity, or areas where they think greater economic opportunity might prevail.

Development of this Oahe unit as proposed by this legislation would largely alleviate this situation and tend to stop the drift from rural America to the crowded corridors of urban America where they can only find themselves caught in the riots, in the crime, in the frustrations which occur when too many people are crowded into too small an area without the good standards of living which they want to have for themselves and without the jobs that they thought they would find at the foot of the rainbow.

Senator McGovern. Senator Mundt, would you yield at that point?

Senator Mundt. Yes.

Senator McGovern. Doesn't that point up where the cities have an interest in development projects of this kind? I think the events of this summer, the explosion of a good many of our great cities, demonstrates that piling up more and more people on top of each other in a few large metropolitan areas is a threat to those areas and a threat to the stability of our whole society.

Anything we can do in the interior of the country, where the population pressures are not so great, to hold the people there, to build up the opportunities for life in that part of our Nation, not only benefits us but it also takes off some of the pressures that are now building up in the cities.

Senator Mundt. The Senator is exactly correct. The cities have a direct interest in this, not only because of this point we have been discussing, but you have to find jobs, you have to find economic opportunities for people in rural America if they are not going to continue to drift to the cities. When they get to the cities, they crowd into too small a place and find themselves frustrated because the hoped for economic opportunities do not eventuate.

They have cut their umbilical cord with their home areas. They become restless and get caught up in this current turmoil which is tending to plague the entire country. Of course, the cities have another very direct interest, may I say to my colleague, in the fact that as we produce more and become more prosperous, we in turn become a better market for the products of the big cities.

The seventh and final point I would like to make is that there would be an assured industrial and municipal water supply for 17 or more towns and cities coming immediately from this initial project of 190,000 acres. I am sure that I do not have to elucidate to Members of Congress or of this committee on the importance of water to our ever-increasing communities and to the development of many other resources in this Nation today.

From virtually every State of the Union now, we get in one way or another alarming signals, little bronze lights flashing, about the problems of maintenance of good, clean, pure water in adequate quantities.

So the people of South Dakota have expressed their strong desire to develop this great water resource. As an indication of this desire and support for the development of irrigation and other benefits which will accrue from this Oahe unit, may I cite the following:

The Oahe Conservancy Subdistrict was formed at the 1960 general election with 85.5 percent of the electors voting for its formation. This subdistrict encompasses a 15.5 county area which includes, but is much larger than the Oahe unit area.

In this election, the local people voted to levy one-tenth of a mill on taxable property in the area. In the 1966 election these same voters voted to grant contractual authority to the subdistrict, a board of directors, by over a 75 percent majority.

I am sure that those of us who live by the vote and die by the vote recognize that majorities of 75 percent and 85 percent are highly gratifying and hard to come by. And certainly it indicates a great deposit of confidnce and a great reservoir of support for this project which we now are presenting to you.

I am sure that chairman of the conservancy district will tell us much more about this in detail, and Secretary Holum also, from the standpoint of the Bureau of Reclamation, will add to this discussion, especially from the standpoint of the engineering and economic feasibility.

Mr. Chairman, I don't want to delay the committee any longer. We have two Members in the House from South Dakota, our Governor and some fine, distinguished citizens representing different walks of life and different areas of activity.

I conclude simply by saying this is a team play. The State is united. The congressional delegation is united. The people are united. They are asking that this committee, as expeditiously as possible, vote its approval so we can get on with the authorization of the Oahe unit of this great Missouri River Basin development program.

Thank you very much.

Senator BURDICK. Thank you, Senator Mundt.

Our next witness will be Congressman Berry, from South Dakota.

STATEMENT OF HON. E. Y. BERRY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. BERRY. Thank you, Mr. Chairman. I represent the Second Congressional District of South Dakota.

I would ask, Mr. Chairman, that I be permitted to file my statement for the record.

Senator BURDICK. Your entire statement will be made part of the record at the end of your remarks.

Mr. BERRY. I would like to briefly express my appreciation to this committee and the members of this committee for holding these hearing today, and the hope that the committee will pass this on to the full committee and the Senate floor for passage during this year.

This is the beginning of a great climax that has been in process of development in the Missouri River Basin for 25 or 30 years.

I should point out, Mr. Chairman, that while the House Interior Committee, upon which I have served for 17 years, will not be holding initial hearings any more this year, they have authorized field hearings to be held in South Dakota on the project October 27, 28, and 29, so if it is possible to pass this legislation in the Senate this year, we should be able to get early passage next year.

I would like to give just a short history that has not already been covered by Senators Mundt and McGovern.

It was just 30 years ago last month that 13 of us gathered together in South Dakota to organize the South Dakota Reclamation Association, the purpose being to put Missouri River water on dry South Dakota and North Dakota land.

It was about the same time, Mr. Chairman, that the North Dakota Reclamation Association was incorporated.

In 1939, as a member of the State senate, I helped get legislation through authorizing the Missouri River States Committee, a committee to be composed of the Governor and one other member from each of the Upper Missouri River Basin States at that time, and whose purpose it was to help bring reclamation into our two States.

We worked closely with the Bureau of Reclamation under Glenn Sloan, who was at that time Commissioner of the Bureau of Reclamation. The Sloan plan was devised about that time, the plan being to pump water out of the Missouri River just below the Montana-North Dakota line, pump it up over the divide into the Sorres Basin and then bring it down the divide between the Red River on the north and the James River on the south, and returning what flow had not been used into the Missouri. The purpose was to irrigate on both sides.

Then, about the same time, the Corps of Engineers, then under Colonel Pick, was working out a plan for flood control. Every 4 or 5 years we would have a devastating flood on the Missouri River. The Corps of Engineers was planning a system of mammoth dams to provide flood control, but it was not until the flood of 1944 that these two plans were amalgamated.

As Senator Mundt indicated, the Pick-Sloan plan, as we called it, was then devised. This plan would provide mammonth dams and at the same time provide the States that were losing a million acres of land through inundation to supplement production by providing these irrigation programs.

We met, Governor Sharpe and I, in Omaha and two things were devised: The Pick-Sloan plan for the prevention of these mammoth floods which were doing millions and millions of dollars worth of damage down on the Missouri River, and also the formation of the inter-agency committee composed only of the Governors.

These dams have now been completed, Mr. Chairman, as you well know. Now the thing that remains is to have the passage of this legislation. The Garrison diversion legislation was passed 2 years ago, I believe it was, the authorization passed and the appropriation starting the work has already been passed. The one thing that remains is this Oahe reclamation project.

When this is completed and South Dakota has been compensated for the half-million acres it has given up, this great project will have been completed.

I would just say this: We remember the words of Robert W. Service. He said "A promise made is a debt unpaid."

Today this committee is completing, bringing about the climax, if you please, of a promise made in 1944, which has developed and is being developed to completion.

Again I want to thank this committee, and I want to assure you the House will follow rapidly on your steps if you will just take the lead during this year.

Thank you very much.

Senator BURDICK. I am pleased to know that the House will follow. Will that be in January?

Mr. BERRY. February.

(The prepared statement referred to follows:)

STATEMENT OF HON. E. Y. BERRY, A U.S. REPRESENTITIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. Chairman and Members of the Committee, my name is E. Y. Brry and I represent the Second Congressional District of South Dakota which is the area of the state where a great part of this reclamation dream will unfold. It is a great pleasure for me to appear before the Committee and urge favorable passage of legislation authorizing this project because it is a project I have lived with day after day for more than thirty years.

I often recall when in the fall of 1939 a dozen other South Dakotans and I met in Belle Fourche, South Dakota, to organize the South Dakota Reclamation Association which has spearheaded the Missouri River Development program ever since.

It was my privilege to be appointed to serve with the then Governor Harlan J. Bushfield when the Missouri River States Committee was organized, the purpose of which was to organize the states of the upper Missouri River to work for development of the vast Missouri River basin. I served on that committee until the Interagency Committee was organized. This was composed only of the Governors of the various states, but by that time the Flood Control Act of 1944 had been passed by the Congress.

The first plan for development was outlined by the Bureau of Reclamation under Glen Sloan and provided for taking water from the Missouri, pumping it up on the divide and bringing it down in a great canal through North and South Dakota using it for irrigation all the way down until it was returned to the river at about Yankton in my state.

At the same time the Corps of Engineers had a plan of development. They proposed large earthen dams on the main stem of the river to control flood waters. Floods were doing millions of dollars in damage to such cities as Sioux City, Iowa; Omaha, Nebraska; and St. Louis, Missouri, to say nothing of the damage done almost annually to farm lands and towns along the river bottom.

The Missouri River States Committee and later the Interagency Committee worked as a liaison organization in helping to develop the Pick-Sloan plan which united these two great programs. This plan provides great earthen dams to control floods and pumping facilities for irrigation of large acreages in the upper states to supplant the million acres flooded forever to provide flood protection in the lower reaches of the river. The Garrison Reclamation project in North Dakota has already been authorized. These identical bills in the Senate and identical bills in the House provide for irrigation development in South Dakota to supplant the half million acres used for reservoir purposes in our state.

The overall plan is devised for five basic purposes—flood control, navigation, power production, irrigation and recreation.

The first step in taming the Big Muddy was in the construction of a series of multi-purpose dams. These dams had to furnish a wide variety of benefits to the greatest number of people. Now that we have tamed the wild Missouri, the question remains as to how to put this giant to work.

The construction of these dams has meant expanding of water recreation industry that has surpassed even the most optimistic hopes of a decade ago. We have also captured the great power of these reservoirs and are providing low cost hydro-generated electricity for large Midwest areas. Flood control potential of the Missouri River Basin plan for the main stream has been realized and the

main stream dams in South Dakota regulate the river's flow to insure navigability of the Missouri from Sioux City to St. Louis. Therefore of the original purposes, flood control, power recreation and navigation have all become a reality.

Construction of dams in South Dakota has resulted in many benefits, but South Dakota has had to make heavy sacrifices. By controlling the Missouri in South Dakota, we have insured flood control, and a steady flow of electric power for our neighboring states. This has meant, in fact, a great loss to South Dakota. The mighty Missouri bottomland that was once fertile ranch and farm land has been almost entirely inundated. More than half a million acres have been lost to production. This total includes 138,000 acres of fertile bottomland, 230,000 acres of high quality grazing land and 133,000 acres of brushland and timberland.

In essence water reservoir development is "bittersweet." It is bitter to see rich farm land lost, but it is sweet to see a wide range of benefits extended from irrigation, industrial and municipal water supplies, recreational development and fish and wild life enhancement.

The last step to be taken so far as South Dakota is concerned is the immediate authorization of the initial step of the Oahe Irrigation Unit. This project is a vital step in the economic development of a vast South Dakota area. The need for this project cannot be stressed too strongly. The land at present is a dry land farming area—crop yields vary greatly from year to year depending on moisture. And yet one of the most important needs, in fact the base for 70% of the state's economy, is the stability of its agricultural production. By providing water for irrigation, production stability can be insured. Irrigation would broaden the farm income base, broaden the overall economic base by increasing agri-business, and provide, as the Oahe report states, an opportunity for developing about 500 new farms and about 38,000 non-farm employment opportunities. It is estimated that as new farm incomes are spent and invested, the business volume in South Dakota would be boosted by more than $71 million.

Water also will permit the introduction of new crops which are dependent upon steady water supply. Additionally water will be used for industrial-municipal growth. It will mean unlocking the potential of many smaller towns which currently lack sufficient water supplies.

All this benefit will supplant a half million acres lost forever to the state of South Dakota by construction of these vast reservoirs.

These facts and the dream they envision are supported overwhelmingly by local people. Formation of the Oahe Conservancy Subdistrict, the organization which handles sale of water to users, makes the collection and repays the federal government according to schedule, was favored by 86% of the voters in November of 1960. In 1965 similar percentages were reflected in local elections in Spink and Brown Counties.

The Oahe project in its initial stage centers upon irrigation of 190,000 acres of farmland in Spink and Brown Counties. The principal supply works for the unit include Oahe and James Pumping Plants, three regulating reservoirs, the existing James Diversion Dam, and channel improvements for the James River. These facilities would be supplemented by distribution canals, laterals, and pumping plants to deliver water to the irrigable lands, and the necessary drainage facilities. Pumping power would be obtained from the Missouri Power System. The one problem which delayed this program for some months was the question of pollution of the James River by return flow. This problem has been successfully resolved and I am sure departmental witnesses will go into more detail on this question.

A breakdown of project and assigned costs as modified by the Bureau of the Budget in its August 29 report is as follows: Irrigation, $205,790,000; municipal and industrial water supplies, $11,324,000; fish and wildlife, $11,066,000; recreation, $2,624,000; and flood control $1,234,000. These figures represent a reduction of $14,192,000 from original cost estimates because the current plan deletes an infeasible power function and excludes the extra capacities proposed in the principal supply works for ultimate development of the unit.

The project is economically feasible. Initial cost will be approximately $200 million and all but 10% of this will be repaid to the federal government without interest over a fifty year period. The 10% that will not be repaid is for non-reimbursable expenses for flood control, recreation, and fish and wild life programs. Additionally assigned costs will bring the total expenses to roughly $232 million which is below the original projected costs and reflects several cost cuts in construction. Interest charges will add another approximate $12 million.

Of these projected costs, water users and the Oahe Conservancy Subdistrict would pay $33.4 million over fifty years. The balance of $174 million would be repaid from the Missouri River Basin project power revenues.

Engineers have evaluated that direct benefits will exceed costs in a ratio of 1.6 to 1. When calcuable secondary benefits are considered, the benefit-cost ratio is 2.5 to 1.

The citizens of the state and of this Conservancy District have indicated their overwhelming interest in this project over the past three decades. There are others here today who will also testify in support of this project including the duly elected officers of the Oahe Conservancy Subdistrict and many others.

As the Congressman from the District which includes a very large portion of this project, I completely and wholeheartedly recommend the committee's approval of S. 6. Barring unforeseen difficulties the House Irrigation Subcommittee will hold field hearings on October 27, 28 and 29 on the identical bill, H.R. 27 which I introduced in the House on the opening day of the session.

It is my sincere hope that this subcommittee will report S. 6 to the full committee without delay and that it may have Senate passage before the adjournment of the Senate this year. Such action could guarantee early passage by the House next year and possibly an appropriation next year to start this great project on its way.

South Dakota has given much to the Missouri River development program. We have given a half million acres to protect the cities and farm land below from floods. Increasing production in the reclamation area is the only way our state can be compensated for the thousands of productive acres it has given up.

Thank you, Mr. Chairman and Members of the Subcommittee, for your attention.

Senator BURDICK. Our next witness will be Congressman Ben Reifel.

STATEMENT OF HON. BEN REIFEL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. REIFEL. Mr. Chairman, distinguished members of the committee. I appreciate this opportunity to appear before you today to urge support of a project that is most important to South Dakota.

I know you have all been students of the Missouri Basin project for quite some time. The senior Senator, Karl Mundt, and our junior Senator, George McGovern, and my colleague in the House, Congressman Berry, have done an excellent job of reviewing the facts for you and we have a number of people from our State who have traveled some 1,500 miles to give their testimony.

Therefore, in the interest of saving time, I would like to submit my statement in full for the record, preceded by a brief summary, if I may.

Senator BURDICK. Without objection, the entire statement will be made part of the record at the end of your summary.

Mr. REIFEL. Thank you, Mr. Chairman.

It is extremely important to the economy of our State and the future of our United States that construction of the Oahe irrigation project be started as soon as possible.

This irrigation project will greatly enhance the economy of our State and will be a major step for our Nation in preparing for obvious result of the continuing population explosion; that is, for more mouths to feed in all parts of the world.

The Oahe unit has the enthusiastic support of the people of South Dakota, as has been indicated here, and that has been my observation as I travel across the State. The Bureau of Reclamation of the Interior Department and the Bureau of the Budget have stated their

approval also. You have displayed foresight in realizing the importance of the Garrison diversion project to North Dakota and the Nation. South Dakota strongly supported that project.

The arguments that applied to the Garrison project apply equally to Oahe. We earnestly request your support.

In closing, I should like to quote a respected former colleague of ours, the Honorable Walter Rogers, of Texas, who said in a South Dakota address last year:

> I know also that towns and villages have been uprooted and that thousands of Indians have had to be relocated. I know what these actions have meant to your State in terms of reduced income and reduced tax base. I would guess that up to this time the overall impact of the Missouri River Basin Project on your State has probably been negative.

In that connection, as reference is made to the Indians, as I sat in the hearing this morning, I felt I must bring to the attention of the committee, since every member of this distinguished committee is concerned with Indians in their State, that we are mindful, and I think it is well to remind ourselves again, that the best lands of the Indian reservations, as you know, Mr. Chairman, in your great State, were taken from the three affiliated tribes in North Dakota. That was true also in North and South Dakota as far as the Standing Rock Indian Reservation is concerned. That was true of the Cheyenne River Reservation, as you know, Senator McGovern and Senator Mundt, and true also in the Yankton and Crow Creek Reservations in South Dakota.

While this committee was most generous in its economic settlement for those lands taken, in my considered judgment it did not balance the social disorganization that resulted. These folks who were displaced from lands that they owned, now covered by water, merely moved back on less productive land. Our welfare roles and the concern of the tribal leaders—and you who are members of this great committee, as well as those in Congressman Berry's committee, the House counterpart of your committee, and in Senator Mundt's Appropriations Committee and my Appropriations Committee, where we are faced every year with helping the Indian people because of the distressed situation in which they find themselves—have been added to by the taking of these lands.

I think one point that needs to be made over and over again in this connection is that, as we increased the economic opportunities in South and North Dakota as the result of the development of these irrigation projects, these will provide opportunities, a real potential as agriculture is stabilized and opportunities for industry are increased.

We can help some of these young Indian men and women find jobs within their own State, rather than having to go out to California, New York, Chicago, or other places in the Nation.

I just wanted to add that. I didn't include it in my prepared statement. Reference has not been made to it so far, though it may be referred to later on. The completion of the project is necessary for the benefit of these people.

I believe most South Dakotans would have to agree with Congressman Rogers' observation that I just quoted. We appreciate the development that has taken place, but the Federal Government's

solemn promise of years past still is dependent for fulfillment on construction of the Oahe unit.

I thank the distinguished chairman and members of this committee for this additional step in the fulfillment of this promise.

(The statement referred to follows:)

STATEMENT OF HON. BEN REIFEL, A U.S. REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. Chairman and distinguished members of the Committee, I appreciate the opportunity to appear before you today for the purpose of urging you to authorize construction of the initial stage of the Oahe Unit of the Missouri River Basin Project in South Dakota.

As we all know, the Oahe Project, a dream of a quarter of a century, was envisioned in the Missouri River Basin Plan approved by Congress in the Flood Control Act of 144. The resulting plan that is before the Committee now is the product of the Bureau of Reclamation, the Corps of Engineers, the Bureau of the Budget, the study of Committees and of many people in the several States that are affected by the plan. We must recognize the Missouri River Basin Project as a comprehensive, integrated, basin-wide undertaking which is only partially completed, and study the Oahe Unit as one of the additional steps in the overall basin development.

In doing so we cannot ignore the legislative history over the last two decades which has already established the guidelines for the federal role and responsibilities in the Missouri Basin.

The Flood Control Act of 1944 has been referred to as a "framework rather than a blueprint." However, some basic commitments were made at that time by the states involved making the effect of the Flood Control Act a compact, ratified by Congress, assuring the upper basin States that their sacrifice of productive lands to provide benefits for the lower basin would be compensated for by full development of other potentialities in the upper basin States.

Any material change in the course of the development of the basin project would be unfair to our State. Residents of South Dakota have counted on the promised irrigation since the first planning was started for the Missouri River Basin Project in order to justify the large sacrifice in agricultural land which the reservoir required. South Dakota has lost some 387,000 acres of land to the four main stem reservoirs constructed within the state. These include 83,000 acres of fertile bottom lands and 180,000 acres of high quality grazing lands.

In a speech given in South Dakota last year the Honorable Walter Rogers stated:

"The project is only partially completed. The most important part of the project from the standpoint of South Dakota has not been built. Irrigation development in this State and other upstream states has lagged behind development for the other purposes.

"To a great extent, the benefits flowing from the project at the present time accrue to downstream interests at the expense of up-river states. I know that several hundred thousand acres of prime agricultural and wildlife lands in the South Dakota flood plains of the Missouri River are now inundated and removed from use by the main-stem control structures.

"I know also that towns and villages have been uprooted and that thousands of Indians have had to be relocated. I know what these actions have meant to your state in terms of reduced income and reduced tax base, and I would guess that up to this time the overall impact of the Missouri River Basin Project on your State has probably been negative."

It is extremely important to the economy of our State and to the future of our United States that construction of the Oahe Irrigation Project be started as soon as possible.

The Oahe Unit is a multipurpose, water and land resource development project encompassing irrigation, municipal and industrial water supply, recreation, fish and wildlife, flood control, pollution abatement, and area redevelopment. The first stage is designed to develop a dependable water supply from the Missouri River for 190,000 acres of irrigable land in the Lake Plain area of northeast South Dakota adjacent to the James River and to provide municipal and industrial water supplies for 23 communities. It is anticipated that as the total project

develops, encompassing some 495,000 acres of land, many other communities will utilize the Missouri River water.

South Dakota's future development of industry, agriculture, rural life and municipal growth depends on the availability of an abundant, economical, and reliable water supply. Cities and towns are using more water every year. Not only is the population increasing but each person is using more water. Each year, boating, fishing, and other water-based recreation are becoming more in demand. Next to agriculture, tourism is South Dakota's biggest industry, bringing about $150,000,000 a year to the state's economy.

Our common sense will lead as to the conclusion that, if the population of the world continues to grow at the present rate, some time in the near future we will have to greatly increase our capacity to produce food in order to feed not only the people of the United States but also the people of the under-developed countries throughout the world that depend on us.

In our endeavor to propagate our system of government "by the people" we must not forget that people listen first to their stomachs and, after their basic needs are solved, then they listen to polititians about government. Programs designed to increase the capacity of our agricultural production, such as the irrigation projects in the Missouri Basin, should have as high a priority as any other program before Congress. The construction of the Oahe project, as well as the benefits from the project, will provide opportunity for employment and an incentive to remain in the State for the young people of our society. In order to keep all the people from migrating to the cities, which already have enough problems, opportunity must be provided to the people of the agrarian communities, and it must be done soon.

The total project and assigned cost for the initial stage of the Oahe Unit as shown in the feasibility report would be reduced from $246,230,000 to $232,038,000 (January, 1964, prices).

The allocation of the cost of the project to the benefits that would result are as follows: Irrigation, $205,790,000; municipal and industrial water supply, $11,324,000; fish and wildlife, $11,066,000; flood control, $1,234,000, and recreation, $2,624,000. With the elimination of the power benefits and the reduction of the estimated costs, the benefit-cost ratio of the Oahe Unit is 2.5 to 1 for total benefits. This ratio is very favorable when compared with other irrigation projects that have been authorized in recents years.

The Oahe Unit has the enthusiastic support of people in the project area, the Interior Department and the approval of the Bureau of the Budget. The federal investment for the construction of the Oahe Unit, estimated at $192 million, will be repaid to the federal government in accordance with reclamation policy established throughout the West.

It is my understanding that with the power rate increase the Missouri River Project is now operating on a sound financial basis with the expectation that all the project reimbursable costs—both water and power—can be repaid within a 50-year period.

With the population explosion, the need for an increased production in farm products is essential to the well being of our economy and our position in international affairs. The economy of the state of South Dakota will be greatly enhanced and stabilized by the Oahe Unit. South Dakotans have been happy to support the over-all project, just as we supported the Garrison Project, because we know that wise water resources development benefits all Americans.

We now ask your support in our endeavors. South Dakotans have indicated their enthusiasm for the Oahe Unit by the work they are doing and the progress they have made in organizing for irrigation development.

Senator BURDICK. Thank you.

Are there any questions that committee members would like to ask of the South Dakota delegation?

Senator JORDAN. May I elaborate on one point which I think is very significant?

We have now heard the testimony of all members of the South Dakota delegation. They stress the fact that a half million acres of very productive bottom land were inundated in their State, thus removing these productive lands from the tax roll of the State and from

the productive agricultural economy of the State. About what time were those lands inundated and taken off the tax rolls?

Senator MUNDT. The project was authorized in 1944. One of the first things that they had to do when the project was funded was to get title to the lands. They began a series of negotiations, trying to get land by voluntary agreements. In some cases they could; in most cases the corps was not able to offer enough to make the landowner feel he was being adequately compensated.

So with the exercise of the right of eminent domain, the citizen has a right to take it into court or before some judicial body, which they did. In virtually every instance where they did take it into court, the courts ruled that the money offered by the corps was inadequate and they increased it. But unhappily, most of the increase did not go to the landowner. It went to the attorneys and the costs involved in taking it into court. So we have had a loss in some instances, I suppose, between 1945 and 1950.

Senator JORDAN. Then your State has been deprived of tax revenues which before that date accrued to the State from this land?

Senator MUNDT. For between 15 and 20 years, that is generally correct.

Senator JORDAN. So in essence, this project as presented to us today, is a partial restoration of that tax base that was taken from you by the lands that were inundated.

Senator MUNDT. Right. For 15 of the 20 years there has been a loss, though some compensation was given to the landowner.

In most cases, from the standpoint of the recipient, in virtually all cases it was inadequate. Now we make available through this project about 1 acre for every 2 that was lost, but in the long pull South Dakotans are glad to do this because of the multipurpose benefits and because the floods which in the main were not in South Dakota, were costly in life and costly in dollars.

Our people enthusiastically support the Pick-Sloan plan, even though they had to forgo part of the tax base.

Senator JORDAN. But the interim effect on the State and local tax resources was negative, as has been testified to here today?

Senator MUNDT. You are exactly correct.

Senator MCGOVERN. If the Senator will yield, it has been estimated that it is costing us about $20 million a year in farm income that we have lost in revenues as a result of the lands under the reservoirs that have been flooded.

Of course, that has resulted in enormous savings to the downstream States in the prevention of flood damage, which in some years ran many times that amount.

As Senator Mundt has said, I don't think very many people in South Dakota regret that investment we are making for the future, but it would, of course, be a cause of great disappointment if we couldn't now move ahead and complete the project and realize a return on that sacrifice in the form of these irrigation benefits.

Senator JORDAN. I think that is a significant point. In effect, South Dakota has been the good samaritan throughout the years and now you want a partial restoration of what you sacrificed for the benefit of the whole Nation.

Senator HANSEN. Mr. Chairman, I couldn't help thinking, though I was precluded from being here earlier, when reference is made to the tax base and the negative effect that has been brought about by the inundation of these lands, of a similar situation in Wyoming when lands passed from private into public ownership.

At that time I happened to be a county commissioner for Wyoming's least populous county. Despite the fact that we had significant Federal ownership prior to the enlargement of a national park, more of our lands were taken out.

At the present time I think our county is about 97 percent federally owned. I was trying to assess the impact that this loss of income from lands private which have passed into public ownership would have. I was interested to learn that as these farms and ranches that were in the area of Federal expansion passed from private to public ownership and went off the tax rolls, fully two-thirds of the tax contribution that was being made by those landowners came about through taxes on private property, on livestock, on machinery, that sort of thing.

I think we are prone oftentimes to overlook that fact. I suggest that to those who will be considering this problem should not be oblivious to the fact that South Dakota suffered not alone from the taking of the land and its removal from the tax rolls, but all the other things that were there and that were made possible by the use of that land.

I want to say I certainly will do my best to support South Dakota in seeing this project become a reality.

Senator BURDICK. Thank you very much.

Our next witness will be the Governor of South Dakota, the Honorable Nils Boe.

STATEMENT OF HON. NILS A. BOE, GOVERNOR OF THE STATE OF SOUTH DAKOTA

Governor BOE. Thank you, Mr. Chairman.

I might say I have hesitancy in continuing with a statement after the eloquent and cogent statements that have already been made by the members with respect to the project under discussion. I want to thank the members for the observations they have made, and which are so fully correct. I fear that probably throughout the course of this hearing the words that may be expressed by the witnesses to an extent may become somewhat repetitious. It is for that reason that I will intentionally try to make my statement brief.

As the leader of the delegation from the State of South Dakota, I would like to allow many of those individuals to have the opportunity to speak from their hearts how they feel with regard to this vital project which has been so close to them and for which they have worked so arduously over the course of many, many years.

I speak, however, for the entire State of South Dakota. As expressed by Senator Mundt and Senator McGovern, I wish to reiterate this is not a partisan matter. This has been probably the most bipartisan project that has ever been undertaken by the people of South Dakota, supported by all, not only geographically but by people throughout the entire portion of the State, in the Southeast, the Southwest, the North, and the South, the East, and the West. It is for this reason that I feel that such a project should be given the fullest and most earnest con-

sideration on the part of this subcommittee and then on the part of the committee as a whole.

I would, if I might, indulge for a moment with respect to a story that came to my mind as I was sitting back listening to the other testimony. I have told it before, as others in the room may have heard it, but I do think it is apropos to the subject matter under discussion.

I think all of us here are well aware of the conditions that existed in the areas of South Dakota, Wyoming, and the entire Midwest area back in the 1930's, when we suffered the extreme drought, and when we had crop failure after crop failure, when all we could see was the thistle being blown down the roads.

It was during this period in the 1930's that there were three gentlemen, so to speak prospective fathers, who were in a waiting room in a maternity hospital in Chicago. One of the fathers was from California, one from Pennsylvania, and one from South Dakota.

As natural, I presume, I being a bachelor, as I understand, fathers are probably quite concerned at this critical time in their lives with respect to the birth of their first offspring, and after a considerable period of waiting a nurse came into the waiting room and smiled at the father from California and said, "I am very happy, sir, to announce that you are the proud father of a 10-pound baby boy." The man from California got up and proudly walked around the room and said, "Well, this is the type of products we raise in California."

After a few more moments, the nurse again came into the room and said to the father from Pennsylvania, "I am very happy to announce that you are the proud father of an 8¾-pound baby girl." He, too, arose and proudly strutted about the room. He said, "This is the kind of products we raise in Pennsylvania."

After a few more moments, the nurse again returned and with a rather dour look spoke to the father from South Dakota and said, "You are the father of a 3-pound baby boy," and with that news the father from South Dakota stood up and proudly walked around the room and said, "Well, this is the kind of products we at least can have in South Dakota."

The other two gentlemen with a quizzical look said, "Pardon me, do you mind telling us how you can be so proud of a 3-pound baby boy? Here we both are fathers of an 8¾-pound baby girl and a 10-pound baby boy."

With that the father from South Dakota said, "Well, gentlemen, with the drought and the conditions that we are having in South Dakota, we out there are glad to get our seed back."

I say this because there is more truth than fiction in that particular story because for a while out in South Dakota I feel that maybe the philosophy that was inculcated into the minds of people was that of getting along, "Let's get our seed back and we will call it a good year."

But this no longer is the philosophy. It is no longer the view that our people have and wish to have. We in South Dakota hope, pray, and look for a return upon an investment which has been made within our State, and which has been referred to during the course of the testimony thus far.

In my opinion, the Oahe irrigation project constitutes the greatest economic impact that ever could be realized by the State of South Dakota.

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No other program could have a greater impetus upon the growth and development, not only to a particular area, but to our entire State, than this irrigation project now being considered, Senate bill 6.

In so doing we are considering the utilization within the State of South Dakota of one of our own resources—water—which, indeed, is one of our most precious resources.

I know that all of you distinguished gentlemen are familiar with the history of the development and construction of the four mainstem dams upon the Missouri River within the State of South Dakota.

Three purposes were in the minds of those men and women, some of whom are no longer with us, as they envisioned the fulfillment of their dream to harness and utilize the waters of the mighty Missouri. First, flood control, the control of water as it flowed through the State of South Dakota and on into the regions bordering our State to the south; second, the generation of hydroelectric power; and, third, irrigation.

I think all must agree that the objective of flood control has been successfully accomplished. Through the help of the Federal Government, the Rural Electrification Administration, and other departments and agencies of our Federal Government, electricity has been brought to the rural areas of the State of South Dakota, as well as to industry and to the cities of our State. The development of the third and ultimate objective, irrigation, remains to be accomplished.

To date the Federal Government has spent billions to help improve the economic conditions in the various areas of our United States of America. Vast appropriations are annually made to produce a climate whereby the economic growth and development of these respective regions of our country might be stimulated.

I am sure that I share the full concurrence of all who testify with me today in support of S. 6 when I state that no device, no program, could be prepared or established which would be of greater economic impact to the State of South Dakota than the authorization and the implementation of the Oahe irrigation project. Through this means our State and our people could not only climb the ladder of success and prosperity without further assistance, but could also contribute immeasurably to the needs and wants of people not only within our country but throughout the world.

Yes, the land that has been taken for the storage of the waters created in these giant reservoirs has been paid for in dollars and cents insofar as the individual owners thereof are concerned.

As Senator Jordan has already indicated, I certainly would urge that each of you bear in mind that these storage reservoir areas now comprise and total approximately one-half million acres of land—land which has been taken out of production, land which has been forever taken from the tax rolls.

The total storage potentiality within these giant reservoirs within our State is 34 million acre feet. Annually, the volume of water that flows out of the State of South Dakota and on into the States to the south and into the Gulf of Mexico totals from 17 to 30 million feet.

In speaking for the citizens of the State of South Dakota and in support of S. 6, may I state that in so doing we do not seek or covet the resources of any other region or area. We only ask for the right

to stake our claim to a portion of the resource which God has given to us.

There has been mentioned with respect to the necessity of revitalizing the agricultural areas of the United States. We have heard much, and I know our Senators, Senator Mundt and Senator McGovern, have on the floor of the Senate urged that action be taken to stem the flow from the farms into the urban areas. You gentlemen are well aware of the conditions that have existed in the metropolitan areas of the United States throughout this past summer. We hope to God that they will not continue to be repeated.

A few weeks ago I attended a Midwest Governors' Conference, and at this conference, at a seminar, it was suggested to all of the Governors that greater emphasis should be placed upon vocational education. Yes, even in the agricultural States such as North and South Dakota.

The reason that was given was that we in North and South Dakota, Wyoming, Kansas, Nebraska, should recognize our obligation in helping to train these young men and women so that when they went into the cities of the East and the Far West they would have a trade and a skill, and would not be thrust upon the streets in the conditions that they are found to be in today.

Of course, we have an obligation in this Midwestern area of ours, in the agricultural States. The statement that was made I feel was true. But only partially. I feel it failed in much logic.

It is fine to start to say we are going to have a vocational program to train our young men and women when we send them into the cities, but I wonder if it isn't about time that we provide the opportunities for our young men and women to stay upon the land and upon the farms of North and South Dakota, Wyoming, Colorado, Nebraska and Minnesota, and earn their livelihood there. Why should we spend millions and billions for urban renewal, the rebuilding of our cities, in the welfare projects that are being instituted in these cities to take care of persons there, when with a few million dollars we could transform a land such as South Dakota into a Garden of Eden which would attract and retain these young men and women where they could be a credit, not only to their State, but where they would be a credit to the Nation and to civilization.

It is for this reason that I feel that great attention should be given, in view of the tremendous economic conditions that we are finding exist in the United States of America today, that we turn our attention to see what we can do to direct the flow back from the cities into the rural areas. This is where America is, and this is where the strength and the moral fiber will be found when called upon in the years to come.

I respectfully urge this committee to give to the State of South Dakota the fullest consideration in making a favorable report with respect to the enactment of S. 6.

I appreciate your courtesy in allowing me these few moments in support of legislation which I deem to be of such momentous import to the great State of South Dakota and its people.

Thank you very much.

Senator BURDICK. Senator McGovern?

Senator MCGOVERN. Mr. Chairman, I just want to commend the Governor on a stirring and eloquent statement, and also to thank him

for testifying not only before the committee here today but also at the Redfield hearings, where he made an excellent statement, consistent with the effort he has placed behind the project from the very beginning.

I am very grateful for his statement.

Senator BURDICK. Senator Jordan?

Senator JORDAN. I have no questions, but I do want to thank the Governor for his statement.

Senator BURDICK. Senator Mundt?

Senator MUNDT. Thank you. I am glad the Governor emphasized the point made earlier, about the part this plays in the overall economy. There is presently an imbalance in this country between urban America and rural America. Surely if we are going to stop shifting our population away from home into places where they can get into trouble, it is essential we provide the economic opportunity.

I like the concept of giving them the vocational skills to make a living in their home States, rather than giving them the vocational skills so that they can travel abroad.

Thank you, Governor.

Senator BURDICK. Senator Hansen?

Senator HANSEN. I have no questions. I do want to add my compliments to my good friend the Governor of South Dakota for a very excellent statement.

Governor BOE. Thank you.

Senator BURDICK. And may I make it unanimous.

Governor BOE. Mr. Chairman, may I have the privilege to offer before this committee an exhibit which is known as house concurrent resolution No. 2, which was passed unanimously by the 1967 Legislature of the State of South Dakota, by which they urge the Congress of the United States to take favorable action, as soon as possible, in authorizing and funding the construction of the Oahe unit, initial stage, 190,000 acres of Missouri River Basin project.

Senator BURDICK. Without objection, the document will be received for the record at this point.

(The document referred to follows:)

HOUSE CONCURRENT RESOLUTION No. 2

Introduced by Committee on State Affairs

A CONCURRENT RESOLUTION, Memorializing Congress to promptly review and approve authorizing legislation and funding for the construction of the "Oahe Unit—Initial Stage—190,000 Acres, James Division, South Dakota, Missouri River Basin Project"

Be it resolved by the House of Representatives of the State of South Dakota, the Senate concurring therein:

Whereas, the Flood Control Act of 1944 (58 Stat. 887) as supplemented and extended by the Flood Control Act of 1946 (60 Stat. 641) authorized a general comprehensive plan for the conservation, control and use of the water resources of the Missouri River Basin; and

Whereas, the Oahe Unit as an integral part of the Missouri River Basin Project, which followed exhaustive studies and investigations by the Bureau of Reclamation has been found to be engineeringly feasible and economically justified as evidenced by that agency's report entitled "Oahe Unit, James Division—South Dakota, Missouri River Basin Project" dated May, 1965, as supplemented by "Supplemental Report on Oahe Unit—Initial Stage—190,000 Acres, James Division, South Dakota, Missouri River Basin Project" dated June, 1965, which was subsequently approved by the Secretary of the Interior; and

Whereas, residents of South Dakota have for many years counted on new irrigation development possible through the construction of the Oahe Unite to justify the large sacrifice of 509,000 acres of productive lands given up for the storage of water behind the four main-stem reservoirs constructed with the State; and

Whereas, the development of the Oahe Unit will further result in increased and stabilized agricultural production from lands which are presently under production, which in turn will result in many benefits to the State of South Dakota, the region, and the Nation: Now, therefore, be it

Resolved, by the House of Representatives of the State of South Dakota, the Senate concurring therein, That the Forty-second Legislative Assembly of the State of South Dakota sincerely and respectfully petitions and urges the Congress of the United States to promptly consider and take favorable action authorizing and funding the construction of the "Oahe Unit—Initial Stage—190,000 Acres, James Division, South Dakota, Missouri River Basin Project; and be it further

Resolved, That the Secretary of State is hereby directed to forward copies of this resolution to the Chairman of the Senate and House Committees on Interior and Insular Affairs, the members of the Missouri River Basin States' Congressional delegations, the Secretary of the Interior, and the Commissioner of the Bureau of Reclamation.

Adopted by the House of Representatives on January 23, 1967.

JAMES D. JELBERT,
Speaker of the House.
PAUL INMAN,
Chief Clerk of the House.

Concurred in the Senate on January 26, 1967.

OLEN OVERPECK,
President of the Senate.
NELS P. JENSEN,
Secretary of the Senate.

Filed in the office of the South Dakota Secretary of State on January 27, 1967.

[SEAL]

ALMA LARSON,
South Dakota Secretary of State.

Senator MCGOVERN. I ask unanimous consent to have printed in the record a resolution first adopted on November 22, last year, and reaffirmed by the board of directors of the South Dakota Association of Cooperatives on May 5 of this year, and next a statement by the South Dakota Council of Churches, by Rev. Orville M. Hepler, the executive secretary. I would like to ask that both of those statements be printed as part of the record.

Senator BURDICK. They will be made a part of the record.

(The documents referred to follow:)

SOUTH DAKOTA ASSOCIATION OF COOPERATIVES, HURON, S. DAK.

RESOLUTION REAFFIRMING DEVELOPMENT OF THE OAHE IRRIGATION UNIT

Whereas full development of water resources is of paramount importance to the development of the commercial, industrial, agricultural and recreational potential of this region; and

Whereas we support the comprehensive and prompt development of all economically feasible projects and sites on all River Basins; and

Whereas the development of the Oahe Irrigation Unit will enhance the stability of the farming activities in a large part of South Dakota by eliminating crop failure due to drought and will make it possible for farmers to diversify their operations to meet the demands of an ever increasing, changing-market; and

Whereas the stabilizing effect irrigation will have on the agricultural economy of South Dakota will extend far beyond the project area and enable farmers within the unit to produce sufficient livestock feed, not only for their own use, but for adjoining ranching areas; and

Whereas the development of the Oahe Unit will stimulate population growth in the project area increasing the number of farm families and attracting numerous other families to staff the increasing industrial developments associated with this multiple-purpose development thus reversing the trend of declining population that has been experienced in the state for a number of years: Now, therefore, be it

Resolved by the South Dakota Association of Cooperatives assembled in annual convention in Huron, South Dakota, this 23rd day of November, 1966, That this association reaffirm its support for the development of the Oahe Irrigation Unit and ask that early authorization is given this project by the Congress of the United States.

Adopted by SDAC's Membership November 22, 1966.

Reaffirmed by Board of Directors May 5, 1967.

STATEMENT OF REV. ORVILLE M. HEPLER, REPRESENTING SOUTH DAKOTA COUNCIL OF CHURCHES

Mr. Chairman, Members of the Committee: I am Rev. Orville M. Hepler speaking for the South Dakota Council of Churches, and other church bodies in South Dakota.

We do want to commend and thank the committee for holding the Senate Sub-Committee Hearing on the Oahe Irrigation Project at Redfield, South Dakota on May 22, 1967. At that time several hundred local people and Community leaders demonstrated to your sub-committee the grass roots interest and concern of the people of South Dakota for this project.

We strongly urge your favorable consideration and support of this project. There are many persons who favor this irrigation project simply from an economic viewpoint. In this statement of support we wish to go beyond the economic, to present some of the broader ethical, moral, and social implications of the Oahe project for the State of South Dakota, for our nation, and for the world.

The economic advantages of irrigating the soil through the Oahe project could have direct and far reaching consequences for the social and spiritual life of this entire area. The home, the school, the church and the entire community will be affected by what is or is not done as a result of this hearing. Through irrigation of farms, many families can find a new lease on hope and on life.

Farms which now do not produce enough for a farmer to take his sons into partnership could be enabled to sustain such a relationship, and so keep families together. Many marginal farmers would find that, where at present they must have additional income from off the farm to maintain their families, proper irrigation with a sufficient supply of water would increase their farm income so that off the farm income would no longer be necessary. Thus they could become full time and better farmers, with renewed hope and enthusiams for the future.

Farm income affects all the surrounding community life, including our towns and cities. A good water supply is the life blood of agriculture. As agriculture became more stabilized with greater production, this in turn would help to stabilize the entire economy, be helpful in long range strategy and planning for our churches and schools as well as our other social institutions and communities. In our smaller towns with their declining population, these institutions which are at the heart of our American way of life, suffer most. Without an adequate tax basis for our schools we cannot provide the best educational opportunities for our children. Without sufficient people and financial resources the influence of the church in many of these communities will be lost, as more and more churches are forced to close.

We have mentioned the trend of declining population in South Dakota. This project could lessen or reverse that trend as the young people of our communities found new job openings awaiting them at the end of their school years. Some of the future community leaders whom we are now forced by economic necessity to send to other states would perhaps remain in South Dakota and our communities would be better because of their leadership. City development is, of course, closely tied to the stabilization of the population and economy. More effective city planning would be possible with a stable economy. New areas of conservation and wild life development would be possible, thus creating a more inviting atmosphere for living in South Dakota. This, in turn, could contribute in some small measure in helping to alleviate the overcrowding of our cities.

With only 10% of the earth's land capable of producing food to sustain life, we have a moral and ethical responsibility to prepare ourselves and to use our resources to help meet human need. The church is alert to and aware of these civic projects which affect the lives of our people and communities. Good stewardship involves the fullest and the wisest use of our God given resources of land and water. With sufficient water and proper irrigation the contribution which South Dakota makes to the nation's food supply could be greatly increased. However, a far greater good would result because of the potential increase in food supplies made possible to alleviate the hunger of those millions of people in our world who go to bed hungry every night.

Senator BURDICK. In addition, there is a resolution of the North Dakota State Water Commission which will be made a part of the record.

(The document referred to follows:)

RESOLUTION 67-3-235

(Adopted by the North Dakota State Water Commission, First Stage, Oahe Unit, James Division, Missouri River Basin Project)

Whereas, construction by the Federal Government of the four dams on Missouri River in South Dakota—Gavins Point, Fort Randall, Big Bend, and Oahe—has resulted in the loss to the State of over half a million acres of valuable agricultural land required for the projects, which loss can be partially mitigated through the irrigation development authorized by the Congress as a part of the Missouri River Basin Project in the Flood Control Act of 1944; and

Whereas, proposed legislation pending in Congress—H.R. 27 and 1163, and S. 6—would authorize the Secretary of the Interior "to construct, operate and maintain . . . the first stage of the Oahe unit, James division, Missouri River Basin project, South Dakota, for the principal purposes of furnishing a surface irrigation water supply for approximately 190,000 acres of land, furnishing water for municipal and industrial uses, controlling floods, enhancing the generation of power, conserving and developing fish and wildlife resources, and enhancing outdoor recreation opportunities, and other purposes"; and

Whereas, the unit report and legislative measures have been developed through exhaustive studies and investigations by the Bureau of Reclamation, South Dakota's congressional delegation, and affected local interests, and all have determined the unit to be engineeringly sound and economically feasible, and a development that will bring many benefits to South Dakota, the region, and the Nation through the balanced and stabilized economy in the area and other benefits which it will provide; and

Whereas, North Dakota as the upstream border state has a common interest with its sister state in the regional economy of the two-state area; Now, therefore, be it

Resolved by the North Dakota State Water Commission, meeting in regular session in its office in the State Capitol, Bismarck, North Dakota, March 23, 1967, That it strongly favors and supports the proposed Oahe unit, initial stage, development and does hereby most respectfully urge the Congress to consider and take favorable action upon the aforesaid legislative bills at the earliest practicable date; and be it further

Resolved, That the Secretary be and he is hereby directed to transmit a copy of this Resolution to the Honorable Nils A. Boe, Governor of South Dakota; U.S. Senators Karl E. Mundt, George McGovern, Milton R. Young, and Quentin N. Burdick, and U.S. Representatives E. Y. Berry, Ben Reifel, Mark Andrews, and Thomas S. Kleppe; Honorable Stewart L. Udall, Secretary, Honorable Kenneth Holum, Assistant Secretary of Water and Power, and Honorable Floyd E. Dominy, Commissioner, Bureau of Reclamation, Department of the Interior.

For the North Dakota State Water Commission:

WILLIAM L. GUY,
Governor, Chairman.

Attest:

MILO W. HOISVEEN,
Chief Engineer-Secretary, State Engineer.

Senator BURDICK. Our next witness will be the Honorable Kenneth Holum, Assistant Secretary for Water and Power Development.

STATEMENT OF HON. KENNETH HOLUM, ASSISTANT SECRETARY FOR WATER AND POWER DEVELOPMENT, DEPARTMENT OF THE INTERIOR; ACCOMPANIED BY JAMES T. CASEY, ACTING CHIEF, PROJECT DEVELOPMENT DIVISION; HAROLD E. ALDRICH, REGIONAL DIRECTOR, BILLINGS, MONT.; AND PRESTON FUNKHOUSER, PROJECT DEVELOPMENT ENGINEER, HURON, S. DAK., BUREAU OF RECLAMATION

Mr. HOLUM. Thank you, Mr. Chairman and members of the committee. It has been a real pleasure for me to be in the hearing room this morning and to hear the excellent statements made to this committee by all of the members of the South Dakota congressional delegation and by our Governor who preceded me. It is also a pleasure to come to this table, having already heard not only bipartisan support from my home State of South Dakota for this project, but also having heard expressions of sympathy and interest from both sides of the table as far as this project is concerned.

It is always a pleasant experience for a spokesman of the executive branch to come before a congressional committee in that spirit. That is, of course, the way in which we have approached conservation and water resources development activities during the 6½ years that I have been with the Department of the Interior.

I would be less than candid if I didn't say that having appeared before this committee on innumerable occasions, supporting reclamation projects and general law, relating to water resource development all over the country, but more specifically in the 17 reclamation States, that all of these experiences have been pleasant and profitable.

All of the actions taken by the Congress during these 6½ years have been, I am sure, in the interest of the West and the total interest of the country, and we have moved ahead significantly with water resource development during this period.

I would be less than candid if I didn't say to you that it is a particular pleasure to come before you this morning in support of the first stage of the Oahe unit in my home State of South Dakota; and to have the people directly affected in the hearing room, prepared to appear before you later and supply the essential information that the Congress and the committee requires from those who must assume certain obligations in connection with this unit.

I know that these people here in the hearing room are friends and neighbors of mine from my home State of South Dakota, most of whom I have known intimately over a long period of time.

It is a unique pleasure for me to be here this morning speaking for the administration on behalf of the Oahe unit in South Dakota.

The committee has already heard substantial information with respect to the relationship between the Oahe unit and the Garrison diversion unit authorized by the Congress in 1965, and earlier by the Flood Control Act of 1944. The Flood Control Act was a significant and historic action by the Congress, laying out a truly multipurpose water resource development project for the 10 States of the Missouri Basin.

The Missouri Basin is, from a geographical point of view—the land mass involved—the largest river basin in our country.

As a result of the Flood Control Act of 1944, as has already been noted and discussed by the members of the committee, a multipurpose resource project was laid out for the Missouri Basin, involving as its keystone a series of great dams and reservoirs on the Missouri River in North and South Dakota, supplementing the Fort Peck Dam which had already been constructed in Montana.

At that time, the Congress contemplated and authorized the Garrison diversion unit and the Oahe unit in South Dakota as a part of this multipurpose water resource development program, by incorporating the provisions of Senate Document 191 into the act.

Since that time, the project has moved ahead. The great dams have been built. Thanks to their existence the unusually heavy runoffs of last season and this season are now stored in this great series of lakes stretching across North and South Dakota and up into Montana. Flood control has been provided. Water has been available for navigation in the lower States of the Missouri Basin and also in the Mississippi River down to New Orleans. Hydroelectric power has been available.

As has already been noted, it has made rural electrification and other development possible in eight of the 10 States of the Missouri Basin.

In 1962 and 1963, as a result of the congressional concern and as a prelude to the authorization of the Garrison diversion unit, we were required—and I know it was our duty—to take a careful look at the entire Missouri Basin project from the point of view of its financial stability.

One of the things that we learned—we knew it before but it was driven home very graphically in these studies conducted by the Department in 1961, 1962, and 1963—was the tremendous delay that had occurred in the construction of the reclamation features of the Pick-Sloan plan, particularly in the upper basin States. That, of course, is why we are happy to be here today. It can be convincingly argued, and it already has been, that there is a national obligation to the States of North and South Dakota and the other States of the Upper Missouri Basin, to proceed with the development of these projects that are required in order to permit these States to reap the benefits that Congress envisioned in 1944 when the Flood Control Act was enacted.

I think it is my responsibility, however, to base my presentation to you this morning essentially on the basis that the Oahe unit in South Dakota is sound, and in the interest of the State of South Dakota and the people who live there and in the national interest. That will be the essential thrust of my presentation.

If I were to make a short form presentation this morning, Mr. Chairman, I could very easily say to the committee, as has already been noted, that the Oahe unit in South Dakota is almost identical, except for its physical features, with the Garrison diversion unit in North Dakota.

The Garrison diversion unit, in large part because of your interest and support, has been authorized by the Congress and is under construction.

The two States, North and South Dakota, have almost identical climates. They have almost an identical economy. They are the two most agricultural States of the Union.

In both States—and we went into this in considerable detail at the time of the Garrison hearings—the people in the towns and on the land, because of the type of climate that we have and the undependable rainfall in these high plain States, are forced to depend to too great an extent for their own good and the National interest, upon the production of cereal grains.

The Garrison diversion unit and the Oahe unit will provide the opportunity for farmers in eastern North Dakota and eastern South Dakota to switch from an economy dependent essentially upon the production of cereal grains to the production of livestock and livestock feeds which are much more urgently needed in the economy today. I am convinced, and the Congress agreed with respect to the Garrison diversion unit, that this is not only in the interest of the States affected but in the national interest.

The Garrison unit and Oahe unit are similar, too, in that North and South Dakota are areas which provide a substantial portion of the migratory water fowl that are produced domestically in the United States. Both the Garrison diversion unit and Oahe unit provide a unique opportunity to enhance wildlife, particularly migratory waterfowl, in our country, not only for the benefit of the people up and down the central flyway but all over the United States.

I think this Congress and this committee is too diligent to be satisfied with such a short statement. You want to know, and it is my obligation to provide to you specific information with respect to the Oahe unit and what it will do, what its physical features are, how it will operate and what the Department of Interior has done to make sure that this project as we bring it before you is in compliance with the law and policies which have been established by the Congress of the United States with respect to water resource development.

With that in mind, I will turn to my prepared statement. Before I do, I want to say to you that ordinarily when I come before you to discuss reclamation projects I have with me the Commissioner of the Bureau of Reclamation or an Assistant Commissioner to talk about the technical features of the project.

In this instance, both Commissioner Dominy and Assistant Commissioner Stamm are out of the country. I will take that responsibility myself. I think I do know something about the physical features of this particular project. I do have with me at the table Jim Casey, the Acting Chief of the Project Development Division of the Bureau of Reclamation here in Washington; Harold Aldrich, our Regional Director from Billings, Mont., and Preston Funkhouser, from the Project Development Office in Huron, S. Dak.

Now I will proceed to the prepared statement.

The original act provided for irrigation of 750,000 acres west of the James River between Huron and Aberdeen. More detailed studies of the soils, however, indicated that the area should be adjusted to include all of the silt soils in the lakebed of prehistoric glacial Lake Dakota along the east and west sides of the James River, and that lands with glacial till soils to the south and west of the lakebed should be dropped because they were not suitable for irrigation under then existing criteria.

In essence, the Oahe unit was shifted east and northward and the irrigable area in the James River Valley was reduced from 750,000

acres to 445,000 acres. This shift in the availability of land in South Dakota is what requires the reauthorization that we are considering this morning, Senate bill 6.

The lands in the James River area are now called the Lake Plain. An area with loess soils suitable for sustained irrigation located near the route of the unit facilities in the vicinity of Oahe Reservoir, was included in the plans for the unit. This area totals about 50,000 acres and is referred to as the Missouri slope. The total area now identified for ultimate development is 495,000 acres.

The Oahe conservancy subdistrict is the principal, responsible local sponsor of the Oahe unit. The subdistrict includes a 15½ county area in north-central South Dakota and was established under provisions of South Dakota State Law at the general election in November 1960. Eighty-five percent of the votes in the 1960 general election supported the creation of the district.

The district promotes water resources development and conservation. The subdivision has taxation authority up to one-tenth of a mill on the assessed valuation of all taxable property within the subdistrict prior to execution of a repayment contract and up to 1 mill after execution of a repayment contract. The electorate granted contractual authority to the subdistrict board of directors at the general election in November 1966.

During the summer of 1964, local interests initiated steps toward formation of irrigation districts in the Lake Plain Area in Spink County and in Brown County to the west of the James River.

In December 1964, the Oahe Conservancy Subdistrict Board of Directors formally asked the Bureau of Reclamation to complete a report on the potential for development of 495,000 irrigable acres and other functions of the multipurpose Oahe unit, and they also asked that we prepare a supplemental report for 190,000 irrigable acres as an initial stage of the ultimate plan. The 190,000 acres we are talking about are identified on the wall map in yellow and lands that will be considered in future stages are shown in brown, making a total of 495,000 acres.

Consistent with the request of the local sponsors, we present for your consideration the initial stage of the proposed Oahe unit which includes development of 190,000 acres of irrigable land, a municipal-industrial water supply for 17 municipalities, five recreation areas, 18 fish and wildlife areas, flood control through the unit area along the James River, and area redevelopment benefits resulting from construction of the unit and from operation and maintenance activities that would follow.

Water for the Oahe unit will be diverted from existing Lake Oahe, on the Missouri River, by the proposed Oahe pumping plant into the Pierre Canal. The average pump lift will be 122 feet.

From this point, water will flow by gravity through a system of main canals and two regulating reservoirs to irrigable lands lying west of the James River.

Land lying east of the James River will be supplied water during the initial stage by releases from the West Lake Plain canal system into the James River and rediverted, together with irrigation return flows and floodflows into Byron Reservoir, by means of a pumping plant located at the existing James Diversion Dam.

The average pump lift at this point will be about 28 feet. The water supply will be relifted an average of 71 feet from Byron Reservoir and conveyed northward through the East Main Canal to serve irrigable lands east of the James River.

These major facilities will be supplemented by distribution canals, laterals, and pumping plants to deliver water to the land, and the necessary drainage facilities will be provided. Power for pumping will be obtained from the Missouri River Basin power system.

Delivery of water to municipalities and fish and wildlife habitat areas will be at canalside of the system constructed primarily to serve irrigable lands.

The total water requirement for the initial stage will average 563,900 acre-feet annually. Diversion from Lake Oahe will supply about 72 percent of this amount or 408,400 acre-feet, 10,800 acre-feet will be obtained from recaptured return flows carried by the James River in the Lake Plain area, and the remaining 50,700 acre-feet will be obtained from natural flows of the James River.

Fish and wildlife areas will require an average of 19,800 acre-feet annually, municipal and industrial requirements for the 17 communities will total about 26,600 acre-feet annually, and irrigation demands will require 517,500 acre-feet annually.

Senator BURDICK. Could I ask a question before you get into that area?

Will the unused water continue down the James River?

Mr. HOLUM. Yes. We will be making use of the natural flows of the James River.

Senator BURDICK. Under the Garrison project, any——

Mr. HOLUM. There will be some return flows from the Garrison diversion project but a very minor amount into the James River as it is planned now.

Do you have that figure, Mr. Casey?

Mr. CASEY. If the question goes to the Garrison return flows into the James, most of those go into the Red River system.

Senator BURDICK. The Garrison diversion unit plan calls for return flows to the James?

Mr. HOLUM. Yes, there will be some. I take it we are not in a position to tell you exactly.

Senator BURDICK. Will you be able to supply that information to the committee?

Mr. HOLUM. Yes, we will.

(The information requested is as follows:)

Section 3 of the Act of August 5, 1965, to make certain provision in connection with the construction of the Garrison Diversion Unit, Missouri River basin project, provides among other things that the Secretary of the Interior shall give consideration, to returning to the Missouri River to the fullest extent practicable, such of the return flows as are not required for beneficial purposes.

Such return flows from the Garrison Diversion Unit as might otherwise accrue to the Sheyenne and Souris Rivers and thus flow into the Red River of the North, would if found to be practicable, be returned to the James River, a tributary to the Missouri. As the studies required implicitly by the above-cited Section 3 have not been completed, it cannot be stated at this time what the magnitude of this return flow resource would be. If and when such flows can be feasibly returned they would contribute to the water resources available to the Oahe Unit from the James River. To this extent pumping from the Missouri River could be reduced to the overall economic and financial advantage of the Oahe Unit.

Mr. HOLUM. Development of this initial stage plan will deplete the flow of the Missouri River below the confluence of the James River by about 303,000 acre-feet annually which is about 1.3 percent of the average annual flow of the Missouri River at that point.

Senator MCGOVERN. May I interrupt at this point?

Mr. Chairman, I would like to ask Secretary Holum if the reduction in the amount of water in the river as a result of the proposed irrigation project will create a situation in which we have a conflict with the navigation interests, or has agreement been reached on that point?

Mr. HOLUM. There will be some consumptive use of water in the Oahe unit, just as there will be some consumptive use of water in the Garrison diversion unit. But this was all contemplated at the time the Flood Control Act was enacted in 1944.

I think it represents understandings between all of the States affected. Of course, except for the consumptive use, all of the return flows from the Oahe unit will reach the James River and be available for navigation flows in the lower Missouri River. We trust there will be no problem in that connection.

In fact, Mr. Casey reminds me that the Congress not only contemplated this at the time of the Flood Control Act, but they wrote it into law by enacting at that time the O'Mahoney-Milliken amendment, which made very clear the congressional intent in 1944.

Of course, that still is the law of the land and will continue to be.

Irrigation in the area proposed for development in the Oahe unit has been extremely limited because of inadequate surface supplies during the growing season and the limited ground water supply. Rainfall is neither timely nor adequate to realize the agricultural potential the land will have with a full water supply.

The cities and towns of the area rely on agriculture for their prosperity as much as farmers do themselves. Many towns in the area now lack suitable water for present domestic needs or future growth. Ground water, used extensively in many towns for a municipal supply, is highly mineralized and consequently of poor quality.

Industrial development and municipal growth in the James River Basin will depend to a large extent upon additional water being brought into the basin from an outside source.

The provision of a dependable water supply for irrigation will remove the present high risk associated with dryland farming, improve the agricultural base, stimulate and stabilize the overall economy of the area to the benefit of the State and Nation.

The present heavy reliance on small grain farming will, with irrigation, substantially shift to more diverse crops associated with the production and fattening of livestock.

The principal crops raised under irrigation development will be forage and grain crops for livestock feed. These would include corn for grain and silage, sorghums, alfalfa, rotation pasture, and some small grain for the crop rotation. There would also be some cash crops raised which will include sugar beets, potatoes, soybeans, and other truck crops on a relatively small acreage.

The National Park Service has developed a coordinated plan for outdoor recreation. Recreational development would be associated with the Blunt, Cresbard, and Byron Reservoirs, North Scatterwood Lake, and a reservoir formed by the recently completed James Diversion Dam.

A modification and improvement to the proposal for recreational development at Blunt Reservoir was made by the National Park Service in September 1966. This change provides for fewer facilities at Blunt Reservoir because of recently developed recreational facilities at Hipple Lake and Lake Oahe, on the Missouri River, which are within 30 miles of Blunt Reservoir.

Additional water-based recreation is needed in the west-central part of the Oahe unit area; therefore, recreation facilities were proposed at North Scatterwood Lake, a natural lake, that will be stabilized, as a result of construction of the project.

The total investment, O.M. & R. costs, and annual benefits for both Blunt Reservoir and North Scatterwood Lake recreation developments would be the same as for the original plan for Blunt Reservoir.

The Bureau of Sport Fisheries and Wildlife has formulated a coordinated plan for development of 18 fish and wildlife management areas. Eleven of these areas would serve as mitigation areas and seven areas would be for enhancement of fish and wildlife.

Six of the mitigation areas, totaling 10,355 acres, are proposed for Federal management and will compensate for habitat losses—pothole and marsh areas—adversely affecting migratory waterfowl.

The other five mitigation areas, totaling 3,471 acres, are proposed for State management and will compensate for habitat losses affecting pheasants and other upland game deer and to some extent waterfowl.

Three of the enhancement areas, totaling 12,005 acres, are proposed for Federal management of migratory waterfowl. The other four enhancement areas, totaling 14,215 acres, are proposed for State management of fish and to a lesser degree wildlife.

The Corps of Engineers prepared the proposed plan for channel improvements of the James River to serve as a principal waterway for conveyance and disposal of irrigation return flows.

Benefits accruing to flood protection derive from the ability for the improved channel to carry spring floodflows when it is not being utilized to carry irrigation return flows. The James pumping plant will contribute to flood control by diverting floodflows from the James River to Byron Reservoir.

Under existing conditions the quality of water in the James River varies considerably each year. The State of South Dakota has suggested a total dissolved solids (TDS) standard of 1,000 parts per million for the James River in the reach from the James Diversion Dam to Huron, this being the only part of the stream classified as a domestic water supply.

Quality of water records for 9 years, 1958–65, indicate that the State's suggested standards are exceeded on the average of 100 days a year.

We have made studies to determine the effect that the initial stage of the Oahe unit would have on the quality of James River flows in this reach of the stream.

It was found that irrigation return flows would probably cause an increase in TDS to undesirable levels during the months July to November and would have a minor diluting effect on the otherwise poor quality flows during the winter months of December to March.

Studies indicate that by importing an additional 36,000 acre-feet of water from the Missouri River through the Oahe unit system for dilution of irrigation return flows, satisfactory quality of water can

be maintained during those periods when return flows would cause the TDS to exceed the suggested standards.

This water can be provided at an incremental cost of pumping energy estimated to average $14,000 annually. This cost would be allocated to all functions of the unit.

The Bureau of Reclamation and the Federal Water Pollution Control Administration will continue their cooperative studies during preconstruction investigations to refine these findings and develop operating criteria and safeguards.

Total project and assigned costs for the initial stage of the Oahe unit are as follows:

Project costs	$191,389,000
Assigned costs—storage and power	42,649,000
Total cost	234,038,000
Less assigned costs and money spent or appropriated to June 30, 1965	−45,546,000
Total cost to complete	188,492,000

The assigned costs are the investments already made for the mainstream reservoirs and power system of the Missouri River Basin project.

The total new money required to complete the project is, as I said, $188,492,000.

The costs to June 30, 1965, include $2,897,000 for the existing James Diversion Dam and investigation costs through fiscal year 1965.

As indicated in the Secretary's August 29 transmittal of his feasibility report—House Document No. 163, 90th Congress—on the unit, certain changes were made in the plan of development that reduced the estimated costs.

Some of the principal supply works originally were sized to accommodate requirements for the ultimate stage of development. This proposal has now been dropped from the plan, and facilities will be built only to accommodate initial stage requirements. This reduces the project cost by $11,417,000.

Senator McGovern. May I ask a question at that point?

The reduction in the size of these main canals to accommodate only the first stage rather than the ultimate 495,000-acre project which we all expect to be completed, in no way jeopardizes the ultimate completion of that project, does it?

Mr. Holum. I think not, Senator, not at all. I think that this reserves options for the executive branch and the State of South Dakota and was a good decision. It in no way indicates any attitudes in the future with respect to the construction of the additional stages of the unit.

Senator McGovern. With or without the $11 million figure which you quoted as representing the reduction in project costs, the question of moving ahead on completion of the ultimate project is not affected?

Mr. Holum. I think not.

Senator Mundt. I want to button that down a little more definitely, if I may. I think my colleague brings out a good point. The way this sentence reads, if you take it out of context, somebody might get the wrong impression. You say that the proposal has now been dropped. I am sure you meant the proposal that was dropped was to insert into

the original project the full scale of works required on the ultimate project.

It is not the ultimate goal of acres that has been dropped, but we have dropped the concept of building for the future while planning for the present.

Mr. HOLUM. That is correct. Actually, in 1944 we were thinking about a 750,000-acre project. I think the State still is. I think we still are. We were confronted with the situation where plans for only 495,000 acres of irrigable land, with the right type of soils and in a contiguous area, have been developed at this time.

I think the goal still is to move to the 495,000 acres and then to move to the 750,000 acres. But there is a long construction period involved, with a substantial investment.

The $11 million will be an expenditure that by any standard could be earning interest if not made or costing the Government interest if it was made for canal capacity that was not being used. I think our recommendation to forgo this future capacity represents a sound decision that doesn't prejudice the future but, rather, provides more flexibility in future planning.

Another proposal made in the Secretary's report was to operate the Oahe unit in a manner which would permit the Oahe pumping plant to be shut down during the midsummer period of peak power demand and thus permit the use of the seventh power generating unit at Oahe Dam to help meet these peak power demands.

Subsequent studies indicated that operation of the generator during this summer period would not be economically justifiable; therefore, this proposal will not receive further consideration which reduces the cost estimate by $2,775,000.

The cost estimate contained in the Secretary's report included an amount for relocation in kind of area roads and highways. Since the transmittal of that report to the Congress, it has been determined that an additional cost of $2 million will be incurred in constructing these roads to present day standards in accordance with section 207(c) of the Flood Control Act of 1960—74 Stat. 400—as amended by section 208 of theFlood Control Act of 1962—76 Stat. 1196.

This additional cost will be a Federal nonreimbursable obligation. Annual direct and total benefits of $12,782,900 and $20,409,600, respectively, would accrue to the local area, State, and Nation as a result of construction and operation of this proposed development.

The benefit-cost ratio based on total benefits is 2.5 to 1, and using direct benefits only, it is 1.6 to 1.

A compilation of benefits derived from each function served by the initial stage is as follows:

Purpose	*Annual equivalent benefits*
Irrigation:	
Direct	$11,507,700
Total	19,618,300
Municipal-industrial water supply	465,600
Fish and wildlife enhancement	435,900
Flood control	46,700
Recreation	108,400
Area redevelopment	218,600
Uncompensated adverse effects	483,900
Net benefits:	
Direct	12,782,900
Total	20,409,600

Uncompensated adverse effects relate to agricultural lands taken out of production by construction of project works.

The estimated project costs of $191,389,000 plus the proper share of existing Missouri River Basin project costs of $42,649,000 total $234,038,000. These costs are allocated among the functions served by the unit as follows:

Irrigation	$205,790,000
Municipal and industrial water	11,324,000
Fish and wildlife enhancement	11,066,000
Flood control	1,234,000
Recreation	2,624,000
Highway betterment	2,000,000
Total	234,038,000

All project and assigned costs allocated to irrigation are reimbursable. Average annual payment capacity of irrigable lands in the initial stage is $11.40 per acre. Deduction of a contingency and incentive allowance of $1.40 per acre results in a recommended average annual water charge of $10 per acre. Operation, maintenance, and replacement costs are estimated at $6.80 per acre which leaves $3.20 per acre for amortization of project costs.

Irrigation water users and the Oahe Conservancy Subdistrict will repay a total of $33,440,000 or about 16 percent of the costs allocated to irrigation in the 50-year repayment period.

Missouri River Basin project power revenues will repay the remaining $172,350,000, or about 84 percent allocated to irrigation in the 50-year period.

The Report on Financial Position, Missouri River Basin project, dated December 1963, demonstrates that revenues would be available to repay these costs within 50 years following the permissible development period.

The accounting concepts and criteria employed in that report were approved by the Congress through enactment of legislation reauthorizing the Garrison diversion unit of the Missouri River Basin project, the act of August 5, 1965 (Public Law 89–108).

The allocation of $11,324,000 to municipal-industrial water supply, and interest during construction amounting to $534,000, would be repaid with interest by these water users.

No additional capacity or special structures are required in the system to convey municipal-industrial water and no specific costs are included for this purpose. Delivery of water will be made at canalside and at the James River.

All works required to transport, treat, and store the water from point of delivery will be the responsibility of the water users. Joint costs allocated to municipal-industrial water users would be repaid, with interest, at an average charge of about $26 per acre-foot. The municipalities will also pay O.M. & R. charges estimated at $2.70 per acre-foot of water.

To comply with cost-sharing provisions of the Federal Water Project Recreation Act, it would be necessary that a non-Federal public body be responsible for the repayment of $326,000 of specific costs for recreation facilities and $674,000 of specific costs for fish and wildlife enhancement facilities, including interest during construction.

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The South Dakota Department of Game, Fish, and Parks and their Oahe Conservancy Subdistrict have indicated by letter, their intent to administer and share in the separable costs of the unit in accordance with this act.

Local centralized operation and maintenance of the multipurpose Oahe unit facilities would be provided by the Oahe Conservancy Subdistrict. The conservancy subdistrict would also act as fiscal agent for reimbursable costs.

There will be a master contract between the United States and the Oahe Conservancy Subdistrict which will include standard provisions of Bureau repayment contracts. These provisions will include requirements that irrigable lands in excess of 160 acres in a single beneficial ownership cannot be served with project water unless the owner executes a recordable contract agreeing to dispose of the excess holding within 10 years.

Other subsidiary or supporting contracts will include:

1. Participating contracts between the Oahe Conservancy Subdistrict and water users, including irrigation districts, municipalities, and other agencies.

2. Security contracts between the United States and the irrigation districts. These contracts will be invoked only if the Oahe Conservancy Subdistrict defaults in its obligation.

3. A three-way contract among the United States, the Oahe Conservancy Subdistrict, and the South Dakota Department of Game, Fish, and Parks.

Preliminary drafts of these contracts have been prepared and are being negotiated with the board of directors of the Oahe Conservancy Subdistrict. Substantial agreement has been reached on major provisions to be included in the contracts.

Senator McGOVERN. I think it would be interesting to note at this point the really remarkable degree of local support in concrete terms that has been registered for this project this last November by a better than 3-to-1 margin.

The voters in the area gave the Oahe Conservancy Subdistrict Board contracting authority needed to move ahead with the project, and they also gave them the authority to increase taxation from one-tenth of a mill to 1 mill.

I think that is very remarkable in view of the understandable resistance these days about raising tax authority, to get that kind of a vote as recently as last November. I believe it underscores the very strong local support for the project that the Secretary is referring to.

Mr. HOLUM. Of course, it is very comforting for the executive branch to know that the repayment obligations that the United States requires in this type of water resource project will be met and that the local people have taken the necessary action. Their elected officials have been ready to negotiate and commit themselves to these obligations that are required before construction starts.

Yes, we are in splendid position as far as the willingness of the people of the State of South Dakota to accept the financial obligations that the United States requires. They will testify, I am sure, in more detail.

It is indeed difficult to measure and quantify all of the benefits that would accrue as a result of development of the initial stage of the

Oahe unit. The principal benefit of this development, as indicated earlier in my statement, would be the diversificaton, intensification, and stabilization of the agricultural production and net farm income of the area and its concomitant effect on employment and income of the business and industrial economy.

In that respect, I think, as far as the Garrison diversion unit in North Dakota is concerned, that a dependable supply of livestock forage in the central area of the State is not only going to affect the agricultural economy of the acres actually brought under irrigation, but the effect will be much broader across the whole State. This would also be the case in South Dakota with the development of the Oahe unit.

The inital stage of the Oahe unit is a desirable resource development. It would strengthen the economy of the area, State, and Nation. It is engineeringly feasible and economically justified. The estimated total annual benefits exceed annual costs by a ratio of 2.5 to 1. Development of the initial stage is compatible with future development of the ultimate plan.

Its development would fulfill a longstanding obligation to the State of South Dakota which gave up over a half-million acres of its agricultural land for the mainstem reservoirs which have been providing flood protection and other benefits to other regions of the Missouri Basin for many years now.

Irrigation districts have been formed, and the local people, from the Governor on down through and including the individual water users, have demonstrated their sincere willingness to assume the obligations imposed by this undertaking.

We are, therefore, confident that the necessary degree of local desire is present and that no appreciable difficulty will be encountered from this standpoint.

The Department recognizes that this is a substantial undertaking. It is daring and imaginative in concept. The time required to attain its full development will exceed our lifetime. The amount of money and effort involved will be considerable.

However, we cannot fail to recognize our responsibility to the future. We should initiate this program at the earliest reasonable date. We believe the plan is soundly conceived, eminently justfied, and represents a logical step in an orderly program of natural resource conservation and use.

On behalf of the Department of the Interior and the administration, I recommend prompt and favorable approval of this measure.

Mr. Chairman, it has been a pleasure to present the views of the administration with respect to this project. I will be pleased to submit any further information you may request.

Senator BURDICK. Thank you, Mr. Holum. I just have a few questions.

One of the questions we heard most frequently during the Garrison period was, Why do you wish to spend taxpayers' money to develop a project like this when we have overproduction in this country of various crops?

As I look at the map on the wall, I find the areas to be irrigated are already in production. Is that not correct?

Mr. HOLUM. The lands are all in production.

Senator BURDICK. In other words, there are no new or reclaimed lands, which had not been cultivated before, being brought into the picture at all?

Mr. HOLUM. No; there are not.

Senator BURDICK. Is it true also under this bill, and isn't it true also of the Garrison project, that for a period of 10 years from the time of the enactment of this legislation that crops would not have the benefit of the price support program?

Mr. HOLUM. Senators McGovern and Mundt include that language in Senate bill 6. The Department has no objection to it whatsoever.

Senator BURDICK. In other words, there are no new lands brought in and for those that are irrigated, where water is brought to them, there will be no Government programs available for those crops. I would think that would take care of all those detractors.

Mr. HOLUM. We understand, Senator Burdick, that there is this concern over certain crops that are temporarily in surplus. I think the net effect of the Garrison diversion unit and the net effect of the Oahe diversion unit is to divert lands that are now involved in the production of surplus crops to the production of crops that are urgently needed and will be needed with increasing urgency in this country and around the world.

We have discussed the growing needs of the country for meat and meat products. We will be glad to supply them again with regard to this hearing. But these projects will permit, in fact they will not only permit but encourage and make inevitable, a substantial shift from the production of cereal crops to the production of livestock and meat products.

The country urgently needs more capacity to produce beef, pork, lamb, and other meat products, as our population grows and our economy grows. We shift more and more to a meat diet when the economy grows.

Senator BURDICK. The third point I think we should mention is the fact that we are projecting this beyond the construction period, which will be 10 or 15 years at least. The population to be fed will be greater by that time also.

Mr. HOLUM. There are substantial periods involved even before the 190,000 acres in the first stage is in production.

Senator BURDICK. Mr. Secretary, I want to acknowledge again the tremendous job that your Department did in the Garrison project, and also in the Oahe unit. The assistance that you, your staff and your Department have given has been very great.

Mr. HOLUM. We have found a great deal of satisfaction in working with you, Senator Burdick, and your colleagues, on the Garrison diversion unit. We think it is a very wise resource development. We feel the same satisfaction with respect to the Oahe.

Senator BURDICK. Senator McGovern?

Senator MCGOVERN. Thank you, Mr. Chairman.

I want to join in commending Secretary Holum for what I regard as a superb review of the whole background and the case for this project.

With regard to the questions that the chairman has just raised, when we talk about meeting the food needs of this country as it relates to the Oahe project, isn't it true that we are talking roughly about a 20-

year development project, in terms of the full-scale impact of this project?

We have to look down the road at least 20 years, do we not?

Mr. HOLUM. I would prefer not to speculate too precisely as to the length of the construction period we are talking about. It is obviously going to be substantial. There are substantial facilities, main canals and pumps that have to be built. We always think in terms of a 10-year development period after the project is completed, with laterals and drains having all been put in place before the agricultural lands will be producing up to their full, ultimate capacity.

That has been a standard part of our thinking with respect to reclamation development and it is part of our thinking here, too. We are thinking in terms of a long period before the full agricultural productivity will be realized.

I am sure there will be benefits immediately when water is available, but the benefits will accelerate over a period of time.

Senator MCGOVERN. Secretary Freeman testified before our Agricultural Committee a year or so ago in support of the administration's expanded food-for-peace effort. He said that unless very dramatic, almost miraculous gains are made in the production of food in the next 20 years, the world will just plain run out of food and we won't be able to meet expected demands by the year 1985 unless there are very, very dramatic breakthroughs in the production of food.

I think that underscores the nature of the problem we are up against. It is not going to be a problem of producing too much, but how we can increase production over the next 15 or 20 years to meet the demands.

Mr. HOLUM. As I recall, and I should have refreshed my memory, studies that we looked into in 1964 and 1965, when we were talking about the Garrison diversion unit, studies made by the Department of Agriculture and independent studies made by Resources for the Future, indicated that the country will have to increase its ability to produce meat and meat products by 60 percent in the next decade, just to meet the growing needs of the economy. I trust my memory is close to being correct on those figures.

Senator MCGOVERN. Thank you very much.

Senator BURDICK. Senator Jordan.

Senator JORDAN. Thank you, Mr. Chairman.

Mr. Secretary, I would like to explore with you some of the arithmetic you gave us with respect to this project.

In the first place, the part allocable to irrigation is $205,790,000. Is that correct?

Mr. HOLUM. That is correct.

Senator JORDAN. This is for 190,000 acres, is it not?

Mr. HOLUM. Yes.

Senator JORDAN. It would be at the rate, then, of about $1,030 per acre.

Mr. HOLUM. $1,083 per acre.

Senator JORDAN. The irrigators will pay the sum of $33,440,000.

Mr. HOLUM. That is correct.

Senator JORDAN. That is about $175 per acre?

Mr. HOLUM. Yes.

Senator JORDAN. It is 16 percent, approximately, of the total cost.

Mr. HOLUM. That is correct, Senator.

Senator JORDAN. Is this high or low as compared to the percentage that the irrigators themselves will pay when compared with other projects?

Mr. HOLUM. It is about average, Senator Jordan. There are areas of the country, particularly the Pacific Southwest, Arizona and California, having a year-round growing season where the irrigators pay a substantially higher percentage.

There are other areas, irrigation projects in higher country, where they have shorter growing seasons where the irrigators pay less. So I would say it is about average.

Senator JORDAN. And the water to be diverted for irrigation purposes, 563,900 acre feet, I believe someone testified, would be at the rate of about 3 acre-feet per acre? Is this the application for that area, about 3 acre-feet?

Mr. HOLUM. Yes, about that.

Senator JORDAN. And the irrigators will pay back $10 per acre per year. Is that what you said?

Mr. HOLUM. Yes.

Senator JORDAN. Of which $6.80 will be for operation and maintenance, leaving $3.20 to apply on the amortization of the principal sum.

Mr. HOLUM. That is correct.

Senator JORDAN. The water at canalside on this project will cost a little over $3 per acre-foot, a very reasonable cost, it seems to me.

Mr. HOLUM. Representing the ability of the water irrigators to pay for water.

Senator JORDAN. What is the evaporation loss from a reservoir like Oahe? What is the annual evaporation loss?

Mr. HOLUM. About 3 feet per year.

Senator JORDAN. In other words, with a reservoir that inundates a half million acres and an evaporation loss of 3 feet in a year, the annual loss from evaporation will be a million and a half feet.

Mr. HOLUM. These are Corps of Engineers' reservoirs. I don't know if we have those figures or not. Mr. Funkhouser?

Mr. FUNKHOUSER. We don't have the figure for Oahe Reservoir but the estimate for the mainstem reservoirs in North and South Dakota is over 1 million acre-feet per year.

Senator JORDAN. And the diversion of additional waters for reclamation, of which this is the initial 190,000, will not do violence to the navigation program downstream?

Mr. HOLUM. No; we think not. This was all very carefully considered by the Congress in 1944 when the Flood Control Act was enacted. The Congress made it clear at that time that it did consider it most important that the upstream States, the States where the water is being produced, where the economy needed the assistance, should have the right to use that water within the States, by writing into the Flood Control Act the O'Mahoney-Milliken amendment.

Senator JORDAN. Are any costs included in this initial 190,000 that will not be necessary to allocate to an additional unit that might be brought in? In other words, are we to expect that additional units that come in will cost $1,000 an acre or up?

Mr. HOLUM. I don't know if we are in a position to speculate about that or not, Senator Jordan. This project, and it has obviously given Senator Mundt and Senator McGovern concern, has been stripped down to the capacity needed to serve 190,000 acres. But we do not have the detailed studies on possible future development that would permit me to give you a definitive answer.

Senator JORDAN. In the Missouri Basin, you have a basin account for applying power revenues to the assistance of the irrigation price.

Mr. HOLUM. Yes, we do.

Senator JORDAN. You calculate that $172,350,000 of the amount allocable to irrigation will be paid out of this fund for this project?

Mr. HOLUM. Yes, we do. We did a very careful review of the financial position of the Missouri Basin account before we brought the Garrison diversion unit before the Congress. At that time, as part of the Garrison diversion unit, the Congress authorized us to make some changes in the Missouri Basin account to bring it into conformity with other basin accounts across the country.

We found that it was necessary to increase power rates in order to have the type of financial security under the project that we and the Congress demanded. We had to raise the rates a quarter of a mill per kilowatt-hour on firm power.

We can come to you today and say that the basin account will provide the dollars that are needed when they are needed to repay Oahe unit costs.

Senator JORDAN. That is what I was leading up to. I remember the talks we had several years ago as to the solvency of the fund. It seemed to me that the power rates were too low to look to it with any assurance that revenues would be available for the assistance to irrigation at that time. But you moved to correct that.

Mr. HOLUM. I spent 2½ years with a very impatient Senator Burdick and colleagues from North Dakota, and very impatient Senators from South Dakota, addressing myself to the financial payout of the Missouri Basin project. We did find the answer.

The Congress approved it and I think we are now in a position to move ahead on Oahe as we did on Garrison.

Senator JORDAN. With the water supplies as you anticipate them to be, and with the present power rates, you do believe that this is a solvent basin account and we can look to it for this amount of assistance for this project?

Mr. HOLUM. Yes, I do, Senator.

Senator JORDAN. Thank you.

Senator BURDICK. Senator Mundt?

Senator MUNDT. I have no questions. Senator Jordan anticipated a lot of questions that I had in mind.

I want to join my colleagues in congratulating Secretary Holum in presenting a complete and comprehensive analysis of this project. I think it is an excellent prospectus to demonstrate that we have here a project which is not only needed but which is solvent. Thank you for your fine statement.

Mr. HOLUM. If I may go back to Senator Jordan for a minute, it would be useful for the Senator and this committee, I believe, if we were to supply the specific financial forecasts that we made.

(The forecasts referred to follow:)

AVAILABILITY OF MRBP FINANCIAL ASSISTANCE

The 1963 Missouri River Basin Project repayment studies indicated that reimbursable costs could be repaid in accordance with the following schedule:

1. Commercial power repayment completed by—2014

2. All irrigation investment associated with units built or under construction on 6/30/64 repaid by—2018.

Following power payout in 2014 and the payout of existing irrigation units in 2018, approximately $40 million, annually, in power revenues will be available to assist irrigation repayment in the basin. Assuming an early authorization of the initial stage of the Oahe Unit in 1969 the first increment of financial assistance required from the Missouri River Basin Project would be in 2036 at which time about $720,000,000 would be available to assist irrigation. Of this the Garrison Diversion Unit will require about $193,000,000, and the Nebraska Mid-State Division about $32,000,000 leaving about $500,000,000 to assist other units. The total assistance required for the initial stage of the Oahe Unit would be $172,350,000. The last increment of assistance would not be required until 2057.

Senator BURDICK. Senator Hansen?

Senator HANSEN. I have no questions.

Senator MCGOVERN. Could I make a brief announcement, Mr. Chairman?

It is my understanding that we are about to take a noon break, coming back into session at 2 o'clock for the rest of the witnesses. Senator Mundt and I have reserved places in the Senate dining room in this building, in room G–211, for the South Dakota witnesses who are here with the Governor and our congressional delegation.

We would like to extend an invitation to all of the South Dakota people who are here in the hearing room to join us there about 12:15 for lunch. I will leave it to the chairman as to when we reconvene.

Senator BURDICK. In view of that announcement, and it now being 12:08, we will be in recess until 2 o'clock.

I want to announce, in view of the fact that I have a Judiciary meeting that has been going on all morning and which will resume this afternoon, and which I must attend, the meeting this afternoon will be chaired by Senator McGovern.

Before I have to leave I would also like to make the subcommitee aware of the support my good friend, Milo Hoisveen, State engineer of North Dakota, is giving this project. I would like to have his letter included in the record at this point.

(The letter referred to follows:)

NORTH DAKOTA WATER COMMISSION,
STATE CAPITOL,
Bismarck, N. Dak.

Hon. QUENTIN N. BURDICK,
U.S. Senator, Senate Office Building, Washington, D.C.

DEAR SENATOR BURDICK: In my position as State Engineer for the State of North Dakota, it has been my privilege to study certain aspects of this project over a period of years. The project appears well designed and should meet the much-needed moisture requirements of that area to enhance the agricultural economy, municipal water supply, and wildlife propagation in South Dakota.

In North Dakota we are commencing work on the giant Garrison diversion unit after many years of consideration; consequently, we are aware of the years of constant effort South Dakota has made in regard to the Oahe project. It is my opinion that these projects can be made to, and will, complement each other.

The Oahe project has been considered as a part of the overall Missouri Basin project authorized in the Flood Control Act of 1944 and, as such, it has been de-

layed for at least a score of years as the reclamation program in the Upper Missouri Basin has not kept pace with the developments of water projects in the remaining Basin.

I am hopeful that you will see it possible to file this letter as an endorsement and as a part of the testimony presented to your Committee at the Oahe hearing. I am looking forward to appearing at some future hearing held by Congressional committees relative to the Oahe project.

With kind personal regards, I am

Sincerely yours,

MILO W. HOISVEEN,
Engineer-Secretary.

Senator BURDICK. We will be in recess until 2 o'clock.

(Whereupon, at 12:10 p.m. the subcommittee recessed, to reconvene at 2 p.m. the same day.)

AFTER RECESS

(The subcommittee reconvened at 2 p.m., Senator George McGovern presiding.)

Senator MCGOVERN. The subcommittee will be in order. We will resume our hearings.

As you folks know, the Senate is in session this afternoon, so we will not have very many members of the committee here. They may be dropping in from time to time. Rather than delay the hearings, I think we will go ahead at this time.

Our first witness this afternoon will be Mr. Henry J. Schmitt, editor and publisher, Aberdeen American-News, and chairman, South Dakota Industrial Development Expansion Agency.

STATEMENT OF HENRY J. SCHMITT, EDITOR AND PUBLISHER, ABERDEEN AMERICAN-NEWS; CHAIRMAN, SOUTH DAKOTA INDUSTRIAL DEVELOPMENT EXPANSION AGENCY

Mr. SCHMITT. Thank you, Mr. Chairman.

My name is Henry J. Schmitt. I am the editor and publisher of the Aberdeen American-News, a daily newspaper published in Aberdeen, S. Dak.

I am also chairman of the South Dakota Industrial Development Expansion Agency, the official State agency charged with the responsibility of stimulating the State's economy through expansion of industry.

I am appearing today to urge the authorization of the Oahe irrigation project.

Annual per capita income in South Dakota varies with the amount of rainfall received. Construction of the irrigation project would help to stabilize this income and provide for industrial expansion.

In my opinion, in addition to the obvious benefits from the construction phase, the Oahe project would:

1. Stabilize feed and feed grain production, resulting in expanded livestock feeding which, in turn, would increase the meat processing industry in the State.
2. Expand the fertilizer industry in the State.
3. Permit greater crop diversification, including production of vegetables which would result in the processing, wholesaling and warehousing of these crops.

4. Expand seed growing and processing. South Dakota soil is ideal for seed and vegetable production, provided moisture is assured.

The impact of irrigation would extend nationwide as machinery, fuel, and supplies are required by the farming areas. There would be, of course, a continuing demand for tractors and all lines of farm machinery.

In addition to the farming and farm-related impact, an assured supply of industrial water would also enhance the competitive position of South Dakota communities in seeking nonfarm industries.

With the advent of irrigation, there will be more job opportunities in industry for South Dakota young men, many of whom are now leaving the State. Out on the Great Plains area we have the space, the talent, and the skills. We need more industry to create more jobs and water flowing onto our land from the Missouri would be a great step in attracting more industry to the State.

The total economic impact of the construction of the Oahe irrigation unit makes it the most important single project in the history of this area. I urge immediate authorization of the project.

Thank you.

Senator McGOVERN. Thank you, Mr. Schmitt, for a very fine statement.

Mr. SCHMITT. Thank you, Mr. Chairman.

Senator McGOVERN. Our next witness will be Mr. S. E. Sewell, vice president of Northwestern Public Service Co., Huron, S. Dak.

STATEMENT OF S. E. SEWELL, VICE PRESIDENT, NORTHWESTERN PUBLIC SERVICE CO., HURON, S. DAK.

Mr. SEWELL. Mr. Chairman, my name is S. E. Sewell. I am vice president of Northwestern Public Service Co., an electric and natural gas utility serving 108 communities in eastern South Dakota with electricity and 27 communities with natural gas in South Dakota and Nebraska. The headquarters of our company is located in Huron, S. Dak.

In addition to my capacity here today as a spokesman for industry, I would like to add that my interest in reclamation and water development is one of many years standing. I am currently a member of the executive committee of our State reclamation association, and was privileged to serve as its State president in 1966.

On behalf of my company, Northwestern Public Service Co., it is my pleasure to appear before you today to urge support for the speedy authorization by Congress of the first stage development plan for irrigation in Spink and Brown Counties of South Dakota. I believe it is especially urgent that your committee and Congress give early approval of this most important project. Your support for this project should come at this time for a number of reasons.

1. You will be fulfilling an obligation assumed by Congress in 1944 when the Flood Control Act was enacted by your body. When the large multipurpose dams were constructed on the Missouri River, it was clearly understood by the people of South Dakota that the major benefit for our State would come from the ultimate irrigation of hundreds of thousands of acres within our State.

In return for this assurance, South Dakota citizens have permitted the flooding of hundreds of thousands of acres of what was our most productive farmland to provide water storage areas to prevent flooding on the Missouri River downstream. This valuable cropland has now been lost forever, and along with it the income that would otherwise have been produced from these lands.

In addition to this, substantial tax revenues for local tax districts have also been lost forever because of the resulting flooding of the entire Missouri River Valley within the State of South Dakota. This serious economic loss to the people of our State can at least be partially replaced by the development of irrigable lands that lay generally up and down the James River Valley, which is approximately 100 miles east of the Missouri River.

All other phases of the multipurpose river development project within our State have now been completed. It is time now to move ahead with the irrigation phase of this multipurpose project.

2. The development of the first stage of the Oahe irrigation proposal, which involves a potential of 190,000 acres of irrigated land, primarily in Brown and Spink Counties, will reestablish new economic opportunities for the people in this area which will result in great benefits to the citizens of South Dakota as well as to people throughout our Nation and, in fact, the world.

I have read on many occasions statements by economists, agricultural leaders, and politicians that in a short time adequate food supplies will no longer be available in our country to meet the growing needs of our people and others beyond the borders of our great Nation. The vast amount of foodstuffs that can be produced on this highly irrigable land that you are being asked to authorize at this time can do much to alleviate this anticipated shortage.

3. Some opponents of this project have expressed the view that increased irrigation at this time will only contribute to present-day food surpluses which, because of price supports, have caused a drain on the general taxpayer of America and have had the added effect of depressing prices for certain agricultural commodities. I do not think that this will be the case at all.

Figures released by the Bureau of Reclamation in June of 1965 indicate that the development of this first stage unit of 190,000 acres will actually have the effect of reducing those crops which have been in surplus. This will come about by reduction in thousands of acres of cropland that are presently being used to raise grains now in surplus, by the diversion of these acres to the raising of crops not in surplus but which may be needed for both feed and forage purposes.

For example, acreage currently used for the raising of surplus crops of barley, oats, and wheat would be reduced by over 75,000 acres, thus tending to reduce the surplus of these grains, while such crops as sugar beets, certain sorghums for feed, increased use of pastureland, et cetera, will be increased providing new sources for food not now in surplus. This will result in savings to the taxpayers by reduced support payments.

4. South Dakota is a sparsely settled State. This first stage alone will provide an additional 14,000 jobs for our people or others who may wish to come ot our proud State for a better and more healthful way of life.

While South Dakota will necessarily be the chief beneficiary of having additional people moving to our State, it seems to me that the whole Nation benefits because this migration into our State will certainly help to alleviate the increasing problems of urban congestion that exist in America today. It may certainly be a contributing factor to resolving some of the pressing problems faced by the metropolitan areas at this time.

5. It has been estimated that the increased economic benefits for South Dakota by the institution of the first stage of the Oahe irrigation development program will amount to more than $71 million annually. In a State as sparsely populated as South Dakota, an additional $71 million of income is extremely significant.

6. Another great advantage that should be of importance to you is that the irrigation of 190,000 additional acres of land in South Dakota will create a large new tax base. For example, local and State tax revenues will be increased by $2,600,000. Additional income tax payments to the Federal Government will be in excess of $3½ million per year.

We are all aware of the extremely pressing need for increased tax sources for our local taxing districts. The additional $2.6 million in local taxes will do much in Brown and Spink Counties to assist those people in providing the necessary services normally provided by local government.

Further than that, while you people here in Washington are now prone to talking in terms of billions, we in South Dakota feel that an additional $3½ million for our Federal Treasury should not be overlooked.

While we recognize that the irrigation development will be repaid over a period of many years from both water payments and electric power payments, I would like to point out that during the next 50 years the estimated additional total of $175 million that will be paid in Federal income taxes is actually equivalent to 85 percent of the total cost presently needed for the construction of the entire Oahe irrigation project.

It should be refreshing to you that a project of this kind, while requiring tax funds at the moment, will soon become a taxpayer and not a tax taker, and will ultimately be making substantial contributions to help balance Federal and local government budgets.

7. I indicated to you earlier that my company is also in the natural gas business in Nebraska where we are privileged to serve the fine communities of Grand Island, Kearney, and North Platte. All these cities are located along the Platte River where a great deal of irrigation has been developed during the last 20 or 30 years. We have witnessed a substantial amount of new agriculturally related industry develop in these cities because of the vastly increased crop production in this area.

For example, the city of Grand Island now has more than 190 different manufacturing and processing plants in and adjacent to that city. Most of these businesses have been established to accommodate the tremendously increased amount of farm and cattle feeding activity in the area.

I believe that the same results will occur in the James River Valley when the Oahe project becomes a reality. This kind of industrial development obviously will have the effect of bringing even greater

employment, greater tax payments, and greater income for the people of our State.

These plans have been on the drawing board since 1944. Our prize land has been inundated for many years now in order to protect the citizens downstream. It is now time that the people of South Dakota reap this most significant benefit from the Missouri River development.

I respectfully urge your committee to report favorably on the project and follow it closely so that early approval and construction on the first phase of this project can be started at an early date.

Senator McGovern. Thank you, Mr. Sewell, for a very fine statement. It will be of great value to the committee in considering this legislation.

Mr. Sewell. Thank you, Mr. Chairman.

Senator McGovern. Our next witness is Mr. Fred H. Holscher, chairman, Oahe Subdistrict, Faulkton, S. Dak.

STATEMENT OF FRED H. HOLSCHER, CHAIRMAN, OAHE CONSERVANCY SUBDISTRICT BOARD OF DIRECTORS; ACCOMPANIED BY RAYMOND GALLAGHER, SUBDISTRICT LEGAL COUNSEL; AND JAMES LEWIS, SUBDISTRICT MANAGER, FAULKTON, S. DAK.

Mr. Holscher. Thank you, Mr. Chairman.

Members of the subcommittee, and I hope some more will be here but I understand about the sessions this afternoon, my name is Fred Holscher and I reside in Faulkton, S. Dak.

I am chairman of the Oahe Conservancy Subdistrict board of directors, a position I have been privileged to hold since the subdistrict was organized in 1960. I also own and operate a farm unit near Faulkton.

With me are Mr. Lloyd Miller, our vice chairman, from Huron; Nelson Hundsted, secretary, from Bath, S. Dak.; Hans Jassen, director, Tulare, S. Dak.; John Schwab, our director from Andover; and Melvin Rausch, director from Roscoe, S. Dak. I also have with me today Mr. Raymond Gallagher, subdistrict legal counsel, and Mr. James Lewis, subdistrict manager, and with the committee's permission I would like to have them join me.

We appreciate the opportunity to appear before this distinguished committee today on behalf of the Oahe Conservancy Subdistrict to express strong local suport for S. 6, a bill to authorize the Secretary of the Interior to construct, operate and maintain the first stage of the Oahe unit.

I am sure there will be some repetition in my statement this afternoon, Mr. Chairman, but I feel it is quite important as we have worked quite some time on this Oahe unit and I feel these facts should be brought out.

We would like to express our gratitude to this committee for conducting a hearing on the Oahe unit in South Dakota on May 22 of this year thus allowing many hundreds of our citizens to participate therein and affording many more witnesses the opportunity to be heard then would otherwise have been the case had they been required to come to Washington.

We would also like to express our appreciation to the committee for scheduling this hearing and for the tremendous support you have given to the Nation's reclamation program in the Missouri River Basin as well as throughout the West.

Authorization of the Garrison diversion unit in North Dakota by the 89th Congress was an historic step in the continued development of the basin's vast promise. We applaud the actions of this committee in moving the reclamation program forward as well as your leadership in the tremendously important area of conservation in general and comprehensive resource development.

In view of the fact, Mr. Chairman, that witnesses from the Federal agencies have already supplied a great amount of detailed information concerning the project, in the interest of time I will devote my statement to several other important points.

South Dakota lies in the heart of the Missouri River Basin and our people have long supported the comprehensive plan for the conservation, control, and use of its waters. For a number of citizens this has meant great personal sacrifice.

In order to protect the lives, property, and well-being of others living in downstream States from devastating floods, South Dakotans have given up 509,000 acres of land. This land was inundated by reservoirs created by the four Missouri River mainstem dams constructed within the State as a part of the basin program.

We recognize that this was necessary in order to provide flood protection for these States, to make possible navigation, to provide power generation from which so many of us have benefited, and for irrigation, pollution abatement, and municipal water supplies. To a large degree the water uses envisioned by the planners have been implemented. There is one notable and very important exception, however. The irrigation potential remains largely undeveloped.

It is the realization of a part of this potential for which we seek authorization today. We look to this as a means of replacing the economic loss resulting from lands which now lie beneath the great lakes of South Dakota.

It has been estimated by the Bureau of Reclamation that the annual income lost as a result of these lands being taken from production equals $9,200,000 a year. This does not include an annual real estate, personal property, and States sales tax loss of $600,000.

We also look upon the Oahe unit as an invaluable resource development program, a program which will give us the opportunity to put our precious water resources to greater use for the benefit of both South Dakota and the Nation as a whole.

Like other States in the drought-prone Great Plains region, South Dakota has long recognized the importance of water to our future.

In 1959, the 36th legislative assembly enacted the South Dakota Conservancy District Act to speed the development of this precious resource. This act provided a method for the effective development and utilization of the land and water resources of the State. It further provided the machinery whereby local people could organize conservancy subdistricts to assist them in the planning and development of desired water resources in a given area.

At the first opportunity after this enabling legislation became effective, the Oahe Conservancy Subdistrict came into being when, at the

1960 general election, voters within its boundaries approved its formation by the overwhelmingly favorable vote of 85.3 percent.

The subdistrict consists of 15½ counties in north-central South Dakota which contains 21.8 percent of the State's land area and 21.5 percent of its population. Through their action the local people created a taxing power entity which meets the requirements of Federal agencies and the Congress for the sponsorship of multiple-purpose water resource development projects such as the Oahe unit.

It provides a way to relate, reasonably and equitably, the financing of water resource projects to the degree of benefits received from such projects. This is accomplished in part through the subdistrict's ability to levy a tax not to exceed 1 mill on all taxable property within the subdistrict.

The subdistrict board has the authority to contract for certain obligations and responsibilities associated with the Oahe unit and to secure these obligations by its taxing power.

An 11-member board of directors governs the affairs of the subdistrict. They are elected by the local people from director areas established within its boundaries. Nine of the 11 directors represent rural areas and two act as directors at large representing municipalities.

Each director has a responsibility to the electorate of his district and we are confident that the board of directors will be able to provide able management for the Oahe unit once it is constructed.

The Oahe unit lies in its entirety within the Oahe Conservancy Subdistrict and we believe the subdistrict, by its authorities, provides an organization through which project beneficiaries can be equitably represented in such matters as contract negotiations with the Government and in the operation of the project. Through its ability to levy a general tax a method is provided whereby indirect beneficiaries, be they urban or rural, will help share in the project costs.

It is anticipated that during the early development period of the Oahe unit the subdistrict's obligations will require an annual levy of about thirty-four one-hundredths of a mill.

In 1966 the total assessed property valuation of the subdistrict totaled $549,223,386. This is 23 percent of the total State's valuation. A considerable portion of the revenue derived from this levy will be contributed by indirect beneficiaries.

The levy will be used to give assistance to the irrigators and other project beneficiaries during the transitional period and to aid project repayment after irrigation becomes established.

The economy of our State is primarily based upon agriculture. As a result, whenever even a partial crop failure is experienced it has a depressive impact on virtually every segment of our State's economy.

From the early days when the prairie sod was first turned for crop use, through the terrible "dirty thirties" until today, sky watching and hoping for rain has been a way of life for our farmers.

Senator McGOVERN. That is true in the State right now, isn't it?

Mr. HOLSCHER. That is correct.

So often the difference between a successful harvest and crop failure is that one rain that comes too late or not at all. Many times in the past 10 years counties within the subdistrict have been declared disaster areas in accordance with the existing farm program.

In 1966, every county except one was so designated. With the construction of the Oahe unit farmers in the project area will no longer be subject to the whims of nature. The advent of large-scale irrigation will bring to the State an increased, stabilized, and diversified agricultural economy. The Bureau of Reclamation has estimated that as a result of the development of the initial stage of the Oahe unit gross farm income will increase over $30 million annually.

Much of this increase will be the direct result of the elimination of the "boom or bust" type of economy which has traditionally been associated with agriculture in the State. These economic benefits would not only find their way into the pockets of our farmers, but would extend to the merchants up and down the main streets of our cities and towns and in general to citizens of the State and surrounding trade area.

This increased farm income would generate additional annual wholesale, retail and service trade in an amount exceeding $71 million. The impact of this increase would be felt far beyond the State's boundaries in areas where farm supplies are manufactured and farm products are processed.

Each year that passes finds a decrease in the number of farms and an increase in the size of the farm unit. The construction of the first stage of the Oahe unit would add approximately 500 farms to the project area providing new opportunity. Farms in the State have decreased in number from 83,157 in 1930 to 49,703 in 1964 while the average size of the farm unit has been increasing from 439 to 917 acres.

In counties which are included either partially or wholly within the subdistrict farm numbers have declined from 20,538 to 11,933 during the same period and the average size farm unit has increased from 523 to 1,030 acres.

It is recognized that a small percent of this change is the result of a modification of the definition of a farm by the Bureau of the Census.

However, the effect this has had on South Dakota's farm statistics is relatively minor. An increase in farm units will cause a corresponding increase in population in the project area of about 14,000. This is a marked difference from the more or less static condition now prevailing in the State.

Speaking in round figures the State's population now stands at 680,500—1960 Census of Population—this has been an increase of only 37,500 over a period between 1940 and 1960. South Dakota's population has increased about 6 percent while the Nation's increased roughly 36 percent during this same 20-year period.

The increased prosperity which would come to the State as a result of this project would result in increased annual State and Federal tax revenues in an amount of $6,133,000 yearly. According to the Bureau of Reclamation the annual Federal tax revenue, in excess of that estimated from dryland production without irrigation development, would total $3,506,000 in 1 year and $175 million in 50 years.

This $175 million equals 85 percent of the total costs allocated to irrigation. This is slightly greater than the irrigation assistance estimated to be repaid from the power revenues of the Missouri River Basin project.

Perhaps one of the most important benefits that would accrue to the State as a result of the construction of the Oahe unit would be the new job opportunities it would make available to those within the State.

Each year we find a great number of South Dakota's young people leaving the State to seek employment elsewhere. This is a tremendous resource loss to South Dakota.

South Dakota State University at Brookings indicates that each year only 35 to 45 percent of their graduates find employment in the State. Dr. B. D. Perkins, professor of management and director of business placement in the School of Business, State University of South Dakota at Vermillion reports that only 19 percent of the 1966–67 business graduates will start their careers in South Dakota. Many of these young people desire to remain in the State close to home and family.

However, in order to find jobs commensurate with their education they must look beyond the boundaries of their State. South Dakota needs new capital, new wealth, new economic opportunities which can only come, in my opinion, through the development of our land and water resources.

While the project would be constructed primarily to provide water service for irrigation we recognize there are many other benefits which would accrue to the State. In 1962, the South Dakota Department of Health released a report prepared for the subdistrict regarding the present and future needs of 67 public water supplies within the subdistrict.

This report indicated that on the basis of the then published Public Health Service drinking water standards, 59 public water supplies had unsatisfactory quality water for general domestic use.

In many instances the amount of water available would not be sufficient to provide for projected population increases to the year 2000. Construction of the initial stage of the Oahe unit would make water available to 17 municipalities in or near the unit.

In South Dakota, recreation ranks second only to agriculture in the State's economy. Water would be made available through the Oahe unit facilities for fish and wildlife developments at 18 locations. These new and improved areas would stimulate the sale of outdoor water-based sporting equipment, thus adding incalculable dollars to the State and Nation's economic picture.

There also would be the addition of four new recreation areas to help satisfy the increased demand for recreational facilities evidenced on a national level.

Contained in the Oahe unit report is a plan to channelize and straighten the James River from approximately Columbia to Redfield. This would result in a reduction of river miles from 120 to 54. This improved channel would be designed primarily to care for the project's irrigation return flows.

It would, however, be available to handle a portion of the natural spring floodflows thus relieving, in part, flooding from the river which occurs nearly every year.

In 1966, the James River Flood Control Association, an organization of farmers living along the river, conducted a survey from among their membership in an attempt to ascertain the damages which resulted from these floods.

According to the survey total loss to crops and pastureland in 1966 amounted to $1,365,000. This figure includes the cost of repairing or replacing dikes and fences but does not include losses to roads, bridges, public parks, and wildlife areas. The flood control features planned in

conjunction with the Oahe unit will do much to help alleviate a portion of this damage in future years.

The subdistrict board of directors recognizes the tremendous impact the Oahe unit will have on the State and since the subdistrict was organized they have worked tirelessly to further its development. Through one of its committees they have had under consideration repayment contracts for the Oahe unit. These call for the Oahe Conservancy Subdistrict to operate the entire Oahe unit through a master contract between the United States and the subdistrict. The subdistrict will also act as principal and guarantor for payments on the construction costs.

Under the terms of this contract the subdistrict will commit a portion of its districtwide taxing power to:

1. Assist irrigation districts in paying operation, maintenance, and replacement deficits that are expected to occur during the development period;

2. Finance operation, maintenance and replacement and construction costs for a small number of irrigable acres that are within the service area but are not presently included in an irrigation district and;

3. Pay a construction component to be applied on the water supply works.

Participating contracts will then be entered into between the subdistrict and each water user entity covering water service through the Oahe unit project works. This contract will also set forth the relationships which will exist between the subdistrict and the water user entity.

A security contract will be enacted between the United States and each irrigation district to become effective only in the event the subdistrict should default on the terms of the master contract.

Prior to the enactment of the Federal Water Project Reclamation Act (Public Law 89-72) contract negotiations were nearly completed. Since that time the subdistrict has agreed to act jointly with the South Dakota Department of Game, Fish, and Parks as a local non-Federal sponsor for certain fish, wildlife and recreation areas proposed in connection with the initial stage of the Oahe unit. This intent has been forwarded, in writing, to the Secretary of the Interior.

As a result of this agreement it has been necessary to go back and take a second look at some of the contract provisions in order to make them reflect this agreement. Considerable progress has been made between the Bureau of Reclamation, water user entities and the subdistrict in ironing out these various types of contracts and we believe that a complete agreement will be reached in the near future.

We are aware that in deciding whether or not a project should be authorized many factors are considered. One of these being the degree of local support present for the project under consideration. Being a representative of a grassroots organization in direct daily contact with the local people it gives me great pleasure to report that the Oahe unit has the strong support of almost all the people in the subdistrict.

It should be mentioned, however, in all fairness to the committee, that while general overall support for the project is prominent there exists in occasional instances local opposition to irrigation.

The degree of support can be best measured by a number of decisions made by the local people during the past 7 years. Many of these decisions resulted from referendums which allowed those directly concerned to freely express their opinions. The first of these was in 1960 and resulted in the formation of the subdistrict.

As stated earlier, the subdistrict was organized by a favorable vote in excess of 85 percent. Every elector within the subdistrict qualified to vote at the general election was entitled to vote on the question. It was interesting to note that the percentage of favorable vote by counties ranged from a low of 76.1 percent to a high of 93 percent.

The prime stimulus for the formation of the subdistrict was the desire of the local people to create an entity to represent them in the negotiation of contracts with the Federal Government and for the operation of the Oahe unit.

In January of 1965, farmers directly concerned indicated they were anxious to proceed with the Oahe unit when they formed two irrigation districts. These two districts located in Brown and Spink Counties encompass a majority of the irrigable land to be served through the first stage development.

The organization of these two districts was approved by an affirmative vote exceeding 80 percent. Only those who owned 10 or more acres of land within the district were eligible to vote. The lands included in the districts were done so on a voluntary basis. Those who desired to exclude their lands were permitted to do so.

We are now finding that many who initially asked that their lands be withdrawn are petitioning the irrigation district boards of directors to have them placed back into the districts.

Once again local people demonstrated their support when at the 1966 general election they granted the subdistrict the authority to enter into contracts with the United States and others to assist with the continued development of the Oahe unit and other water resources projects within its boundaries.

Everyone within the 15½-county area comprising the subdistrict qualified to vote at the general election was eligible to vote on this question. Voters approved the granting of such authority by the overall vote of 75.1 percent. The question carried in all counties by at least a 60-percent majority, well over the 50 percent required for passage.

A breakdown of the vote shows that it carried by 70.1 percent in rural areas and by 77.8 percent in the urban areas. Approval of the question authorized the subdistrict board of directors to levy up to a full mill on all taxable property within the subdistrict in support of such contracts. Up until that time a one-tenth mill levy was the maximum.

In addition, support for the project has been demonstrated by the South Dakota Legislature when during both the 1966 and 1967 session it adopted concurrent resolutions urging early authorization of the Oahe unit.

Interest in receiving project water to irrigate lands outside of the presently formed irrigation districts has also been voiced. The subdistrict has received petitions signed by landowners expressing their desire to irrigate with project water taken directly from main supply systems, deliveries to be made only as long as excess water exists in the system.

Perhaps one of the most outstanding displays of public support was demonstrated at a hearing regarding the Oahe unit held by members of this committee at Redfield, S. Dak., on May 22, 1967.

At that time approximately 600 people (508 registered), a great percentage of them farmers who would be directly affected by the project, attended. These farmers took time from their field work to be present and indicate their interest to the committee.

In many instances this necessitated a day's absence from field work which was already considerably behind schedule due to a late spring.

I believe the results of these actions expresses better than words the tremendous support the people of the subdistrict have for the Oahe unit.

I would also like to call to the committee's attention the fact that the initial stage of the Oahe unit has received a strong endorsement from the National Rivers and Harbors Conference as set forth by the June 8, 1966, report of the Project Committee to the 53d National Convention of the National Rivers and Harbors Conference.

South Dakotans are anxiously looking forward to the realization of the Oahe irrigation unit. The people of the subdistrict have taken many steps to place them in a position to assume the financial obligations that will be required of them. We now await the action of the Congress.

I sincerely appreciate the opportunity to appear before this committee and earnestly urge, on behalf of the Oahe conservancy subdistrict, your favorable consideration of S. 6. I would be happy to respond to any questions which you may have.

Senator McGovern. Thank you very much, Mr. Holscher. I think you know how much we are all looking to you for continued leadership in implementing this project.

The statistics that you cite concerning local support in the State for the project, in my judgment, are in considerable part a result of the work, the effort and leadership of you and your colleagues on the subdistrict board which you have already given to the advancement of this irrigation proposal.

I am pleased to see that your very able manager, Jim Lewis, is with you, and Ray Gallagher, your attorney from Redfield, who so ably represents the group.

I do want you to know we appreciate not only this very well drawn statement that you have given today, but also the part that you played in our Redfield hearings, and your previous interest in connection with this project.

There is just one question I would ask you concerning the point where you were outlining the agricultural benefits of the program. I think we all recognize that that is the chief benefit that would come from bringing irrigation to eastern and central South Dakota.

While this 190,000-acre project lies largely within two counties, is it not true in a livestock economy, the kind we have in South Dakota, that by assuring the feed base in that area, we are, in effect, stabilizing our entire livestock industry across the State, from border to border?

Mr. Holscher. It is very true. Even though we may not have an irrigation district in my home county, they will have the assurance of

a feed supply within the State. This has been so devastating to South Dakota, that when we do not have the rainfall there is no feed supply. This is to insure a feed supply for livestock, yes.

Senator McGOVERN. I think your statement is very complete. I don't know how it could be improved upon. Many of the questions that we might ask you about it have been brought out this morning and there is no point repeating that line of questioning. We do want to thank you for your most helpful statement. It is going to be an important part of the hearing record.

Mr. HOLSCHER. Thank you.

Senator McGOVERN. I neglected to point out when we resumed our hearings this afternoon that it is against the rules of the Senate for a committee to be in session when the Senate is in session, but we got unanimous consent of the Senate to meet today during the time the Senate is in session on the grounds that many of the witnesses here, in fact all the witnesses, have come a great distance. The Members of the Senate wanted to accommodate you.

Our next witness is the president of South Dakota State University, Dr. Hilton Briggs.

Dr. Briggs, who is an extremely busy man, took the time to fly down here and give us his testimony. We certainly welcome you befor this committee, Dr. Briggs.

STATEMENT OF HILTON M. BRIGGS, PRESIDENT, SOUTH DAKOTA STATE UNIVERSITY, BROOKINGS

Mr. BRIGGS. Thank you, Mr. Chairman.

It is a real privilege to have the opportunity to come before you and this committee to testify. It is a special privilege to follow Mr. Fred Holscher, with whom our staff has had the privilege of working very closely during the last few years on this very important project.

South Dakota State University, the State's land-grant university with its Agricultural Experiment Station and Cooperative Extension Service, supports the Oahe irrigation unit. Its impact on the economy of South Dakota and the welfare of its people will be tremendous. The effect nationally will be considerable also.

Agriculture is the State's primary industry. The economic development of South Dakota and the income of South Dakotans will continue to depend on agriculture's growth. But water is a limiting factor. South Dakota needs the stability the Oahe irrigation unit would make possible.

The agricultural revolution has caused the farmer to enlarge his farm unit either by increasing acres, intensifying production, or both. This has increased the risk and also the migration of farmers to the cities.

In South Dakota this migration has resulted in outmigration to other States, since it has few cities and industries which can absorb many of these farmers.

Between 1959 and 1964, nearly 6,000 farm operators and their families left the farm in South Dakota. Since 1954, one of every five farm operators has changed occupations or retired without being replaced.

This outmigration is causing a series of repercussions which is affecting the social and economic base of the community, county, and State.

The school district, the church, and many community businesses and services are finding it difficult to continue to operate.

The tax base of community and county is deteriorating; making it difficult to operate local units of government, including provision of a quality education.

Outmigration costs us our youth—the people we have educated—just as they reach the productive age where they would benefit the State most.

Net outmigration of the 20-to-24 age group is 23.9 percent, for the 25-to-29 age group it is 25.9 percent, and for 29 to 34 years it is 19.5 percent. Total estimated outmigration from 1950 to 1960 of the overall population was 12.1 percent. This leaves South Dakota's population disproportionately heavy at the older and younger ends of the scale. Most of the young people would prefer to stay in South Dakota if employment opportunities were open to them.

The Oahe irrigation unit will generate employment so that about 37,000 additional people might live in that area. Dependable sources of good-quality water will provide job and business opportunities that presently do not exist.

The unit will make possible a dependable feed supply for dryland areas of the State and diversify agriculture into such areas as food processing and seed production. It will stabilize the economy of the farms and towns throughout the State as well as in the immediate area.

Livestock production accounts for about 70 percent of South Dakota's annual cash farm income. Over 50 percent of the beef calves are exported from the State. It is estimated that about 190,000 head of cattle will be finished in the Oahe area once feed supplies become reliable as a result of a dependable moisture supply. About 140,000 head will be purchased from dryland ranches.

The State's crop production index reflects quite faithfully the rainfall received during a particular year, although the time of precipitation and other climatic conditions also have a marked influence.

Year	Production index [1]	Annual inches of precipitation
1955	82	16
1956	76	17
1957	122	23
1958	120	15
1959	58	17
1960	117	18
1961	93	17
1962	111	25
1963	114	19
1964	91	18
1965	110	22
1966	105	19

[1] 1957–59 average=100.

Presently, spring wheat is the principal crop grown and sold in the Oahe area. When irrigation comes, it is possible that the wheat acreage may be replaced almost completely by feed crops for livestock—unless drastic shortages should develop in the domestic or world markets.

The Oahe study estimates that in the project area about 281 percent more corn, 221 percent more silage, 76 percent more barley, and

120 percent more alfalfa will be produced under irrigation than is now being produced.

It is reasonable that South Dakota should first develop its agriculture and agriculturally related resources. Later it should be possible to gradually incorporate other industries that fit the State's climate, market conditions, transportation, and other factors.

There is another consideration that merits attention—the probable expansion of the influence of the Oahe project to areas far removed from the project itself. A student of economic growth has termed such phenomena "islands of excellence."

He advocates commitment of all available resources to these islands of excellence, contending that such islands would spawn satellite islands that would spawn still more islands. This process of excellence feeding upon excellence would result in broadly based economic growth.

South Dakota needs an agricultural island of excellence.

South Dakota State University will commit all possible resources to this Oahe island. Extensive plans are being prepared to do this. Many already underway will provide a base for sound use and management.

In 1964, the Water Resources Institute was established at South Dakota State University. To give you an idea of the type of work being done, here are examples of research projects being conducted cooperatively by the agricultural experiment station and the institute.

1. Investigations using new methods, to determine if tile spacings in the Oahe irrigation unit can be safely increased beyond present unit design.

2. Correlating soil moisture conditions and microclimate with evaporation losses and water requirements of plants in the Oahe area.

3. Correlating different irrigation water management practices and soil moisture movement.

The Cooperative Extension Service has conducted extensive educational programs the past 7 years which led to the formation of the Oahe conservancy subdistrict (as well as four other subdistricts) and three irrigation districts within the Oahe subdistrict.

In 1966 the Extension Service assumed the leadership of an educational program helping the people of the Oahe subdistrict understand the "Contracting Authority" and the need for giving the Oahe subdistrict board that power. The people responded by granting the board this power.

The Cooperative Extension Service has prepared, published and distributed 27 different publications relating to various phases of educational work undertaken. Thousands of news stories have been published as well as hundreds of meetings conducted to provide people with information.

To further expedite the educational work among the potential irrigators and people of the Oahe irrigation unit, the Cooperative Extension Service recently employed an area irrigation management agent.

The Oahe irrigation unit as it pertains to the national interest should come in for very serious consideration.

The unit's repayment capacity and the very substantial returns it will make to the Federal Treasury in the form of taxes are documented in the unit report.

The relation of the Oahe irrigation unit, and others of its kind, to the world food situation and to domestic population imbalance are not discussed in the unit report. They are worthy of your consideration.

Consider first the world food situation.

Present national policy is to help developing nations help themselves, to provide technical assistance but provide food only as needed while self-help is getting underway or on a disaster basis.

The report of the President's Scientific Advisory Committee on the World Food Problem states that family planning must be accepted as an important part of the effort to bring population and food into balance in developing countries. The same report also states, however, that birth control must be considered as a long-range element of planning since its effects will not be felt materially until the next generation.

How long it will take developing nations to acquire the ability to feed themselves is indeed a big question. Massive education, attitude changes, transportation, and consumer buying power are tasks and problems that make the date uncertain.

Even American agricultural scientists face the problem of experimentation with tropical crops before they are in a position to lend extensive aid in many developing countries. Most of the agricultural scientific knowledge relates to crops of the temperate zones.

The United States has unused land resources that can be tapped to help fill this time gap. But a USDA report, "Food for Freedom," dated February 10, 1966, shows that even if all available land resources were allocated to food production and allowing for advanced technology, the world food demand would exceed the ability of the United States to supply by 1984.

Diversion of substantial amounts of U.S.-produced food to developing nations for the foreseeable future then appears inevitable in spite of their self-help efforts.

In university laboratories across the Nation, scientists are striving for new and better methods of producing more and better food and fiber. But I wish to remind you that science, of and by itself, cannot develop arable land. Only the institutions of Federal, State, and local government are equipped for this task.

The United States is about to dispute the Malthusian theory. The Nation needs to muster all available forces. Irrigation of arable land is one of these forces.

In my discussion of the local interests as pertained to the Oahe irrigation unit, I expressed concern over the out-migration of South Dakota people.

In a recent USDA publication, "Agriculture/2000," we are reminded that, and I quote:

> By the turn of the century, if present trends continue unchecked, New York (city) will have become part of a super megalopolis stretching from present-day Boston south to Washington, D.C., and containing 56 million people. This strip city, and four other strips like it, will house 174 million Americans on urbanized land ranging in density from 660 to 2,600 people per square mile.

History is full of incidents where nations have fought wars to obtain room in which to live. The problems of congestion are already all too apparent in our own land. Transportation problems, smog, housing, recreation needs, and general unrest are of national concern.

If the megalopolis envisioned in the year 2000 becomes a reality, each person's "living room" will be only a few square feet. Millions of children will grow up without an appreciation of space and nature. The social cost defies the imagination.

Gentlemen, I must remind you that if South Dakota residents divided their State equally, each man, woman, and child would have about 70 acres of living room.

Something can be done about this imbalance. We must not accept as inevitable the staggering social and economic costs of a continuation of this trend. In a Dallastown, Pa., speech, President Johnson asked:

> Must we export our youth to the cities faster than we export our crops and our livestock to market?

Surely American resourcefulness and ingenuity can stem this tide. The problems will be many and the methods challenging.

The Oahe irrigation unit will not solve this national dilemma—but it will be a significant step toward correcting the imbalance. Congress might well consider ways this correction of imbalance can be accelerated. The objective would be to develop a concentration of agriculturally oriented industries in areas of concentrated and dependable agricultural production.

Gentlemen, in my discussion of the Oahe irrigation unit as it affects the national interest, I have stepped far beyond usual considerations. I have done this because I believe that every possible tool should be used to combat the pressing problems that face our Nation and the world. Projects such as Oahe area, I believe, one of the small but important tools.

South Dakota needs the Oahe irrigation project now—so does the United States. It is needed to stabilize the States's economy and its social institutions. It is needed as a means to help decentralize industry.

It is needed to give the Nation a better balance of population. It is needed for the diversity of foods it could produce to help feed the world's increasing population.

Senator McGovern. That was a superb statement. I think that final paragraph is as effective and as moving a summary of the reasons why we need this project as I have seen anywhere. I really wraps up all of the major ideas.

I am glad to see you stress the important role that a project of this kind can play in doing something about the imbalance in our population. I can't conceive of this country permitting the kind of a situation to develop that you have indicated will develop if we don't, as a matter of conscious policy, prevent this accelerated movement from the rural States into the great cities, people in one continuous strip of the country from Boston to Washington with a density of 2,600 persons per square mile.

It seems to me to be beyond comprehension. I think you are quite correct, that Oahe is a project that we not only need in South Dakota, but it is a project which will benefit the whole Nation. We have to do more to make rural areas attractive to our young people, instead of exporting them into the cities.

Mr. Briggs. Man is the only beast in the past who has ever helped design his own future and man at the present is making his future history.

Senator McGOVERN. Thank you very much for an excellent statement.

Mr. BRIGGS. Thank you.

Senator McGOVERN. Is Mr. Carl Bronn, executive director, National Reclamation Association present?

Mr. BRONN. Yes, Mr. Chairman.

Senator McGOVERN. We will be happy to hear from you.

STATEMENT OF CARL BRONN, EXECUTIVE DIRECTOR, NATIONAL RECLAMATION ASSOCIATION

Mr. BRONN. I am Carl Bronn, executive director of the National Reclamation Association, and I appear in favor of S. 6 to reauthorize the first stage of the Oahe unit.

The National Reclamation Association endorses this bill and endorses it strongly.

It happens, Mr. Chairman, that many of the points I had wished to emphasize today have been stated, emphasized and reemphasized by very competent witnesses preceding me.

With your permission, I will omit the first page of my testimony, but I would like to discuss the second page.

The reasons for this are that I see Oahe's biggest hurdle of the future being the obtaining of money at an economical rate. We are going to have some problem convincing people who advance the funds but don't get any water that they have an interest in Oahe.

To show them this, I will go through a study of an old irrigation project, one which is comparable in many ways to Oahe, to show how the benefits do spread out far beyond the immediate area.

The old project I refer to is in Canada, in the Province of Alberta.

In Canada, local and National Governments made a study to determine whether the Province and the National Government should contribute to the costs for rehabilitatig the irrigation works.

A committee of experts examined the influence of that project on local business, on the rest of the Province, and also outside of the Province. The experts found this: That the national benefits were 47 percent of the total; Provincial benefits, 31 percent; total local benefits, excluding that of the irrigator, 16 percent. The benefits to the irrigator, this is his net accrual out of the total, were but 6 percent.

Were we to spread the benefits as they were found in Canada to Oahe, we could make a summary like this: In return for 6 percent of the total benefits, direct and indirect, the irrigators will pledge partial repayment of the capital investment and they will also mortgage themselves for $55 million of on-farm improvements.

In return for 47 percent of the benefits, the region will pledge its resource of water, including part of its capability to produce power, to repay all of the remaining direct costs, those not paid for by the irrigators.

For the remaining 47 percent of the total benefits, the nation advances the money, which is secured by the works constructed. In the total budget today, defense and nondefense, there is very little money secured by any tangible works.

Further, when repayment is completed, the Nation still retains title to the works.

Each year over the life of this project, for from 50 to 100 years, you will get between this advance in capital, the local risk taking and their hard labor, 30-percent return on the annual costs. That 30 percent is based on a 50-year life.

If you extend it to 100, the figure jumps to a 60-percent return on annual project costs.

Beyond this, the taxes on this new enterprise will, over the project life, repay a second time the total project costs.

These are the reasons why the National Reclamation Association urges that the committee authorize this project and why we stand ready to help in any way we can in the funding when that comes up before the committee.

Thank you very much.

(The prepared statement follows:)

STATEMENT OF CARL BRONN, EXECUTIVE DIRECTOR OF THE NATIONAL RECLAMATION ASSOCIATION

Mr. Chairman and other Members of the Committee: I am Carl Bronn, Executive Director of the National Reclamation Association. I appear in favor of S. 6 to reauthorize the first stage of the Oahe Unit, James Division, Missouri River Basin Project.

The National Reclamation Association endorses the Oahe Project as would be authorized in S. 6. Since the project and its purposes have been described to you, I emphasize here a few of the factors which merit authorization of Oahe, now.

Oahe is before you at a time when Appalachia is receiving consideration as a depressed area and when the cities are asking for greater economic opportunity. Opportunities in South Dakota are needed also: In the early part of this decade, per capita income in that state was but 70% of the national average.

During the period 1950 to 1960, the population of South Dakota increased by only 0.4%—whereas births exceeded deaths by 250%. And the population of the United States increased at a rate 400% higher than did South Dakota's!

A factor in this migration of people may have been the loss of farm lands because of the four federal dams built in South Dakota. A half-million acres of land, one-fourth of which were fertile bottom lands, are flooded by the reservoirs behind those dams.

But Oahe in its first stage would put 190 thousand acres into irrigated agriculture. Moreover, the products from that acreage would reflect the diversification and relative stability in yield which dependable water supply make possible.

The project would also result in an overall gain in fish and wildlife values—an objective of national interest today, and for the long-range tomorrow.

Also, Oahe is to pick up $43 millions of costs assigned from main-stem storage projects. While carrying the burden of costs for moneys already spent, Oahe still has a benefit-to-cost ration of 1.3.[1]

This favorable ratio of output to input should enable Oahe to compete strongly for funds. As to its competitive standing, I note that the measurable benefits of many other programs outside of public works, programs proposed to create opportunity, are not sufficiently tangible to provide any B/C ratio at all.

This characteristic of results sufficiently tangible for measurement permits the determination of other important data. For example:

In Canada, local and national governments studied an old irrigation project to determine whether the province and the national government should contribute to the costs for rehabilitating the works. A committee of experts examined the influence of that project on local business, on the rest of the province, and also outside of the province. Here are the experts' conclusions as to the distribution of total benefits:

	Percent
National benefits	47
Provincial benefits	31
Total local benefits	16
Benefits to the irrigator	6

[1] Based on 50 year life. For 100 year life, the ratio is 1.6.

Were the spread of benefits in Canada to apply to Oahe, we would find:

A. In return for 6% of total benefits, the irrigators pledge partial repayment of capital investment and also mortgage themselves for $55 millions of onfarm improvements.

B. In return for 47% of total benefits, the region pledges its resource of water—including part of its capability to create energy—to repay directly all of the remaining capital costs allocated to agriculture and water supply.

C. In return for the remaining 47% of benefits, the nation loans the money, secured by the works constructed. And when repayment is completed, the nation will retain title too those works!

Further, each year—for 50 to 100 years—the constructed works, coupled with local risk-taking and hard labor, would produce 30%[2] more than the annual project costs. The secondary benefits would triple those returns and do so far outside the region. And in addition to these compensations, the taxes on new enterprise will yield a second repayment of the investment.

These are some of the sound reasons why the National Reclamation Association finds the Oahe Project to be in the national interest. We urge this Subcommittee to recommend its authorization.

Senator McGOVERN. That was a brief statement but a brilliant analysis of the benefits-cost aspect of this project. I know your full statement, together with the aspect of it that you pointed up here today, will be very helpful to us.

We appreciate very much your taking the time to come here to testify in support of the project.

Mr. BRONN. Thank you, sir.

Senator McGOVERN. The two bells that rang about 5 minutes ago indicate that a rollcall is coming. We will have to recess for about 30 minutes. I hate to do this, but the alternative is to be interrupted in the middle of some statement.

It is now 5 minutes to 3. We will recess until 3:30.

(A brief recess was taken.)

Senator McGOVERN. The subcommittee will come to order.

The next witness is Robert W. Ford, manager, South Dakota Rural Electric Association. We will be happy to have your statement now.

STATEMENT OF ROBERT W. FORD, MANAGER, SOUTH DAKOTA RURAL ELECTRIC ASSOCIATION

Mr. FORD. Thank you, Mr. Chairman. I might say I am appearing in behalf of our president, Mr. Hauffe, who was detained and could not attend.

My name is Robert W. Ford. I am manager of the South Dakota Rural Electric Association, a service organization serving our State's 33 rural electric distribution cooperative and three power supply cooperatives.

I appear here today in behalf of Mr. A. C. Hauffe, our president, who had an unavoidable conflict.

First of all, let me express to you our sincere appreciation for receiving us today to testify in support of Senate bill 6.

Senate bill 6 authorizes the initial stage of a 490,000-acre irrigation project known as the Oahe unit. The initial stage calls for 190,000 acres.

The full development of the entire Oahe project cannot, in our opinion, be overemphasized. The development of all our natural and human resources is a highly desirable goal for all Americans.

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[2] 30% for 50 years life, up to 60% for 100 year economic life.

You have already heard today from the technical experts who have shown the economic feasibility of this project, so I will not burden this committee with a restatement of their conclusions.

I would like to speak for just a moment about the benefits to accrue to South Dakota, to our region, and to our Nation as a whole, should Senate bill 6 be enacted.

For far too long South Dakota has been exporting at an alarming rate her greatest resource—people. A look at farm census figures for the last 30 years will dramatically underscore this fact. When the entire Oahe unit is completed, it will mean an increase of 1,500 more farms, 500 of which should result from authorization of this initial stage. The entire project would mean a population increase for South Dakota of 37,000, 14,000 of which will result from the initial stage alone.

When the entire Oahe project is completed $185 million annually should be put into the national economy; $71 million a year alone will be generated by the completion of the first stage of the Oahe project. These $185 million annually will add to the economy of the entire Nation. Goods, services, supplies, and products, purchased from the industrial and trade centers of our Nation will find a new market in our region because of the completion of this unit.

The Nation today is deeply disturbed by the migration of the rural population to the urban centers of this country, thereby creating tremendous new problems. When the entire Oahe project is completed, new jobs will have been created for thousands of people helping to reverse the trend of moving to the cities.

New taxes in the amount of $15 million will be generated annually for local, State, and Federal Government, to meet governmental service responsibilities.

South Dakota's economy is agricultural, or an agriculturally related business enterprise. Figures show that in excess of 90 percent of our economy is agriculturally oriented. Being located in the food-producing Midwest we have a responsibility to the rest of the Nation to help produce the food and fiber necessary to feed, not only this country, but to help fulfill our responsibilities to a hungry world.

Our region of the country is known as being semiarid. Precipitation ranges from about 17 to 19 inches annually. Because of the short growing season, averaging approximately 140 days a year, and because we cannot count on it to rain when needed, there is a tremendous interest in irrigation in our region.

The Flood Control Act of 1944 was a multipurpose project, designed to develop the Missouri River Basin for the purposes of flood control, hydroelectric generation, irrigation, and navigation. At this time approximately 90 percent of the facilities in all areas, except irrigation, have been completed.

As Senator McGovern stated to the Senate last March 2, South Dakotans were willing to make the sacrifice of their land for the development of the Missouri Basin projects, because they believed that the development of the Missouri Basin was in the public interest, and because they also knew that the loss of their land would ultimately be repaid with the economic thrust of a half-million-acre irrigation project.

The people of South Dakota expressed their overwhelming support of this project by the formation and support of conservancy districts

necessary for the implementation of this project. Support was also shown by the attendance of over 700 people last May 22 at a field hearing in Redfield, S. Dak. The people of South Dakota stand ready to do their part in utilizing the irrigation potential made available by this unit.

The Rural Electric Cooperatives of South Dakota, along with all other segments of our economy, stand ready to do their part to bring proper utilization of the Oahe project into reality. Every rural electric cooperative located in the area covered by the Oahe unit, as well as others, recently completed an intensive irrigation study in order to determine their power requirements so that they may fulfill their role in the development and utilization of the Oahe unit.

This administration has stated on numerous occasions that ways must be found to provide new opportunities in the rural areas. The construction of this project will help realize this goal and thereby benefit the Nation. The entire country today is concerned about the migration of our citizens from the rural areas to the urban centers. The construction of this project will reverse this trend in our area, thus benefiting the Nation.

The success of American agriculture, and the failure of many parts of the world to feed itself, has placed a responsibility on us to provide not only enough food for our own needs, but to help feed a hungry world. The construction of this unit, resulting in an increased stability of agriculture, will help us fulfill our commitment, not only to the Nation but to the world.

Mr. Chairman, the 36 rural electric cooperatives of South Dakota have unanimously resoluted support for this entire project. The eventual development of this 490,000-acre project on the plains of South Dakota, though seemingly far removed from our teeming urban centers and their myriad problems, will in our opinion be of significant importance to all sections of our great Nation for the reasons we have given in this presentation.

Thank you, Mr. Chairman, for this opportunity and our thanks to the committee for its kind attention.

Senator McGovern. We appreciate having your statement, Mr. Ford.

Our next witness will be Mr. Chester Gullikson, president, Northern Electric Association.

The REA's obviously have an interest in this project. We are glad to have a number of their representatives here today.

STATEMENT OF CHESTER GULLIKSON, PRESIDENT, NORTHERN ELECTRIC COOPERATIVE, INC., ABERDEEN, S. DAK.

Mr. Gullikson. Thank you, Mr. Chairman.

My name is Chester Gullikson, from Brown County, S. Dak. I represent, as president, Northern Electric, Inc., Aberdeen, S. Dak., and Gullikson Farms, Bath, S. Dak.

Northern Electric is a rural electric distribution cooperative serving a major portion of the Oahe irrigation unit in Brown and northern Spink Counties, and will be greatly affected with the coming of irrigation.

Our present rural membership of 2,500, and the many expected new members, will be vitally affected by irrigation. A new, modern headquarters building, with an excellent staff, is ready to expand its services to facilitate and speed the development of irrigation, and related businesses in the Oahe project area.

Northern Electric has the capabilities of contributing greatly to the progress and development of this historic project once it is authorized by the Congress. It can furnish the extra power, and technical skills needed in this field. Irrigation will help Northern Electric, and Northern Electric will help irrigation.

My everyday business is the operation of a livestock farm where registered, Polled Hereford cattle for seed stock are produced, the feeding of cattle for market, and the production of feed for my cattle operation.

After being on four irrigation tours in Nebraska, the great advantages of bringing water to the land became readily apparent to me. There seemed no limitation to the potential production of the land where irrigation was being practiced.

While I was a student at South Dakota State University, the soils professor stated that the James River Valley had one of three finest soils in the world. So we have the No. 1 basic ingredient for successful irrigation. With adequate water, it will contribute greatly to the area economy and Northern Electric territory.

The James River runs through my farm. Although it is a rather uncertain supply of water, I decided to try to irrigate from it. In 1965 I leveled 50 acres of land. In 1966 this 50 acres was irrigated along with 15 acres that did not need leveling. This year another 40 acres was leveled and planted to corn, making a total of 105 acres under irrigation. I will add another 40 acres to this unit at a later date.

The results of my 1966 corn production under irrigation was highly productive and encouraging, and proved beyond a doubt that irrigation, even in a wet season, will increase yields up to 40 percent. However, since late June of 1967, after having produced a record small grain crop, much of the Midwest has been under most severe drought conditions, and here is where water really tells a tale.

While most of the corn in the Oahe project area is in only fair to very poor condition, my irrigated corn has a yield potential of well over 100 bushels per acre. It will yield 20 or more tons of the highest quality silage per acre. On the other hand, dryland corn will yield 3 to 4 tons of fair quality silage and will yield from 10 to 25 bushels per acre of shelled corn.

Tame grass and Sudan pastures could be irrigated to provide sure and dependable pastures for cattle and sheep. Alfalfa could be irrigated to insure a hay crop. The terrible dread of lingering and devastating drought could be nearly a thing of the past.

It is extremely important to me to know that I can produce enough feed each year without too much worry. It will not be necessary with irrigation to wait until the end of the summer to know how many breeding cattle I can carry through the winter or how many cattle can be fattened for market each year.

When considering my own project, I wanted to prove something that is economically important to all landowners and farmers. The fields could be large if designed properly, for more efficiency of operation in the Oahe project. I wanted to prove one could use large, modern farm machinery. I have used all the same equipment as for dryland farming. There may have to be some modifications in time. I have proved that a system can be designed for a minimum amount of labor and attention. I pump water with electricity supplied by Northern Electric Co-op. I use gated pipe, and flood irrigate.

My irrigation project is being used for research by South Dakota State University. Research is being carried on regarding soil deficiency that shows up due to land leveling in the James River Valley, and much of this phase of a whole new era in agriculture will have been studied before irrigation comes. Many people are watching with keen interest and following closely the progress and results of this irrigation project. While it is a private project, it is creating a great deal of interest by the public.

The word that best describes why I am in favor of irrigation is "stability," the doing away with extreme yield fluctuations due to lack of moisture. Stability on the farms will mean stability in our entire area economy.

An important byproduct of the Oahe project will be through the improving of the James River Channel; that is, the deepening, widening, straightening, and shortening of the river from 119 to 54 miles. This will largely end the flooding almost annually of 20,000 acres of rich bottom lands, resulting in an estimated loss of $1,500,000 per year to farmers and businesses in Brown and Spink Counties.

The great and worthy food for peace program in 1967 is a mere infant compared with the giant it will be in the year 2000, only 33 short years away. The Oahe project will be only half completed by that time, and the cry for food then will be deafening unless Congress approves the great Oahe project and many others like it in the very near years to come.

I urge the authorization of this important project so it may contribute to the welfare of present and future generations.

Senator McGovern. Thank you very much, Mr. Gullikson. I think the dramatic story you tell about your own experiences with irrigation represents a compelling argument for moving ahead in other parts of the area. We appreciate your statement very much.

Mr. Gullikson. I would like to add that Dr. Fine is the head of the agronomy department at the State university. He was visiting this field about 10 days ago. He said that it is the best cornfield that he has seen anywhere in South Dakota this year, which I thought was quite a compliment to the irrigation system we are using.

Senator McGovern. It is a good compliment to the operator too.

Mr. Gullikson. Thank you.

Senator McGovern. Our next witness will be Mr. C. G. Bell, president, Spink Electric Cooperative, Doland, S. Dak.

STATEMENT OF C. G. BELL, PRESIDENT, SPINK ELECTRIC COOPERATIVE, DOLAND, S. DAK.

Mr. BELL. Mr. Chairman, my name is C. G. Bell, from Spink County, S. Dak.

I live in Doland, S. Dak., and presently serve as president of Spink Electric Cooperative, headquartered in Redfield, S. Dak.

I have been engaged in dryland farming and ranching for over 40 years. I derived my livelihood from agriculture during the infamous "dirty thirties." I have seen the ups and downs in agriculture that were measured by good and bad crops directly related to adequate and inadequate rainfall.

I am here because I am concerned about the future of the young farmer and the big job he assumes in feeding his fellow Americans and a hungry world.

Because of my retirement from a lifetime in agriculture, the completion of the initial stage of the Oahe unit will not benefit me personally. I am testifying here today because of my concern for the future generations in agriculture.

Declining opportunities in rural America present a bleak outlook for thousands of rural-raised Americans who would like to remain on the land but find it economically unfeasible.

Consequently they migate to our cities, many of them ill prepared to cope with life in an industrial complex.

Authorization of the Oahe project and ultimate completion of this project would, in our area, offer a "new lease on life," a new lease on rural life, if you please, for many of our young people.

The possibility of complementing a dryland operation with an irrigated unit would brighten the prospects of these young people and would go far in encouraging them to remain on the land.

Many farmer friends of mine have sadly seen their sons leave agriculture and turn to other pursuits simply because the prospects of earning a decent living in agriculture were dim, indeed.

I am concerned, too, at the resultant age level of the average South Dakota farmer. It continues to rise as these young people leave our State, convinced that agriculture holds no future for them. What is to become of many of our farming operations when the farmer becomes too old to farm and his sons have long since left and are making their living elsewhere, having lost all contact with farming and all desire to be farmers?

Completion of the entire Oahe project, all 490,000 acres of it, will surely reverse this flow of young people from our area to the urban areas. Completion of the Oahe project will breathe new life and new hope into the future of agriculture in our area and into the ambitions of our young people to stay "where their hearts are," on the land.

We hear over and over again references to a "declining rural America." Here, in my opinion, is a golden opportunity to halt this decline in at least one area of this Nation and bring new hope to our

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young people at the same time. That opportunity is embodied in the Oahe project, and the authorization of that project by this body and by the Congress of the United States.

I would like to thank the committee for this opportunity to testify in support of Senate bill 6.

Senator McGOVERN. We appreciate having your statement, Mr. Bell.

I have a statement here from James L. Grahl, manager of the Basin Electric Power Cooperative for inclusion in the record at this point.

(The statement referred to follows:)

STATEMENT OF JAMES L. GRAHL, MANAGER, BASIN ELECTRIC POWER COOPERATIVE

My name is James L. Grahl. I am the General Manager of Basin Electric Power Cooperative, a wholesale power supplier for 106 member rural electric cooperatives located in North Dakota, South Dakota, Montana, Wyoming, Colorado, Minnesota, Nebraska, and Iowa. It gives me great pleasure to express to this committee, Basin Electric's support of S. 6, the Oahe Irrigation Project.

The Oahe irrigation unit, which will provide water for 190,000 acres of land already in production in Brown and Spink counties in South Dakota and supply at least a dozen cities and towns with municipal water systems, will have a tremendous effect on the economy of South Dakota.

Through the years, South Dakota has suffered periodically from severe drought. Of course, we are all too familiar with the economic losses that results from these conditions. The reduction in agricultural income, which is basic to South Dakota's economy, adversely affects all citizens of the State. Similarily, drought in a feed area often results in disposition of livestock in quantities which have depressing effects on markets. As a result the livestock industry in the Nation as a whole suffers. The development of the Oahe Irrigation unit will have a great impact and stabilizing effect on the economy of South Dakota and other agricultural states.

Mr. Chairman, other benefits will be realized in South Dakota with the passage of S. 6.

Industrial development has often been restricted because of limited water supplies in some of the towns and cities. We all realize that a basic criteria for sound industrial development is the ready availability of an adequate supply of water. With the passage of S. 6, new opportunities will be made available to many businessmen who wish to start new plants or increase the size of existing facilities.

Finally, private development of recreation facilities and the increase of wildlife in the Oahe irrigation area will be available to all citizens of our Nation. People are seeking outdoor recreation and I feel that South Dakota will be able to provide additional opportunities to sportsmen, vacationers, and hunters.

We appreciate the committee's having scheduled this hearing. We urge favorable Committee action on S. 6, the Oahe Irrigation Project.

Senator McGOVERN. Is Art Jones here? I have his name on the list, but I haven't seen him today. We know of his interest in this project.

The next witness will be Mr. Ben Radcliffe, president of the South Dakota Farmers Union, and a former member of the South Dakota State Legislature.

STATEMENT OF BEN H. RADCLIFFE, PRESIDENT, SOUTH DAKOTA FARMERS UNION

Mr. RADCLIFFE. Mr. Chairman, I am Ben H. Radcliffe, president of the South Dakota Farmers Union, an organization of over 14,000 South Dakota farm families, and the largest farm group in our State.

At the outset, I would like to emphasize that the South Dakota Farmers Union is in full support of efforts to bring the Oahe irriga-

tion project to completion. This is a matter of record in our 1966–67 program of policy and action, adopted by delegates to our 51st convention last October. The wording in the adopted program is as follows:

> Because the Oahe Irrigation Project has been found feasible and would bring great benefit to the economy of South Dakota, we urge immediate action by the Administration and Congress for the authorization and appropriation of funds to initiate this project.

We were especially heartened by announcement earlier this month that the Bureau of the Budget has approved the Department of the Interior's favorable report on the Oahe unit, thus bringing this project one big step nearer to reality.

While we welcomed the Budget Bureau's approval of the first stage of the Oahe project, we were disappointed that they refused to go along with preconstruction costs in the main canal. As originally planned, the pumps and the main canal would have been constructed so as to eventually supply the entire 495,000-acre total project. However, the Budget Bureau report calls for holding capacity in the canal and foundations at pumping stations to take care of only the first stage project to irrigate 190,000 acres.

We do feel that this project has been delayed too long already and are happy that it is finally reaching its present stage. With the aid of this committee, I am confident we can continue it to its conclusion.

It goes without saying that not all of our members will share directly in the benefits of the Oahe project, but indirect benefits will also accrue to farmers outside the irrigable area. In a limited rainfall area such as ours, along with our total dependence on adequate feed supplies to carry our livestock operations, like certainty of water in the area insures plentiful amounts of forage and feed being available to surrounding area farmers and ranchers.

Eventual completion of this project, together with the installation of irrigation systems on many acres of our South Dakota farmland, carries a tremendous potential for improvement in the farm sector of the economy. Farmers Union is very hopeful that the Oahe unit, when completed will provide an answer to our State's diminishing farm population and provide an upward stimulus to a declining farm prosperity.

Our organization for many years has been fighting diligently in an effort to halt the exodus of farmers from the land. This also becomes the immediate problem of our towns and small businessmen because, according to the latest farm census, South Dakota lost 6,000 farms during the 1959–64 period, for an average of 1,200 per year. In a like period, 1958–63, as documented by the 1963 Census of Business by the U.S. Department of Commerce, our State suffered a net loss of 1,101 retail business establishments. This represents a ratio of one business place closing its doors for every six farms that disappeared.

I am sure this committee also recognizes the impact this exodus of farmers from the land has on our Nation's metropolitan areas. I feel that indirectly part of the blame for this summer's unrest in our cities can be placed on the mass migration to the cities over the years of thousands of family farmers displaced because of inadequate farm income.

The Oahe project could well be a step in the right direction toward rectifying both problems.

According to the Bureau of Reclamation supplemental report on this first stage of the Oahe unit, completion of this phase would add 500 more farms and 1,700 more farm people. In addition, another 12,300 people would find new opportunity in farm service businesses, new basic agricultural industries, and other services and activities.

It seems only logical to develop our rural areas to open the gates to new industries, higher income, and more employment opportunities to stem the present trend of migrating into our metropolitan centers.

According to the Bureau report, the Oahe unit will result in a total estimated population boost for South Dakota of 14,000 persons.

The Bureau report also estimates that development of this first stage alone will bring in nearly $31.5 million in new wages, profits, and investment earnings. It estimates gross farm income will increase by $30 million.

And certainly, to whatever extent irrigation strengthens the farm economy of South Dakota, the nonfarm economy will benefit from increased farm spending. This investigative report by the Bureau indicates that business activity could increase by more than $71 million, and this increased income is going to mean a bigger tax take for State and Federal Governments—a boost in tax revenue of some $7 million.

When the construction of this needed project gets underway there also will be some increase in job opportunities for construction workers, plus the workers that will no doubt be hired to aid in leveling land, helping prepare feeder canals and drainage ditches on individual farms. All of this activity will produce new jobs for nonfarm people in South Dakota.

It is our hope, given proper economic planning by our own South Dakota leaders, that these job opportunities can continue to grow after construction is completed. If farmers in the potential irrigation area should shift to vegetable crops, sugar beets, or products of that nature, the more perishable crops will require some processing in the communities where they are grown; thus, the shift in the agricultural economy brought about by irrigation could produce a variety of new jobs in the field of processing, storing, and transportation of new commodities.

Farmers Union, as well as other citizens, is also interested in the potential this project offers for developing our hunting and fishing in South Dakota, thus injecting new lifeblood into our tourist industry which brings about an increased local demand for farm produce as well as increasing the number of service jobs connected with tourism.

In summing up, just let me say that the potential gain for the South Dakota farmer would be on two fronts. First, the direct dollar boost to the agricultural producer and the secondary advantage to farmers which would accrue from increased industry and job prospects in our State, all of which will tend to upgrade our economy and enhance farm income.

In view of South Dakota Farmers Union members, the potential for economic and social benefits inherent in the Oahe unit far outweigh the estimated costs. We therefore sincerely urge your favorable consideration of Senate bill 6 and that the Senators on this committee

take whatever steps necessary and practical toward expediting the authorization and eventual completion of this project.

Thank you for giving me this opportunity to express these views.

Senator McGOVERN. Thank you very much.

I notice your concern about the change that was made in the report with reference to building additional capacity to take care of the second stage of the project. I think you heard the Assistant Secretary of the Interior, Mr. Holum, say this morning that in his judgment he does not see that as any real threat to the completion of the project. I think that is the judgment of people all through the administration who have been working on this. I share your concern.

Thank you so much for your statement.

Mr. RADCLIFFE. Thank you.

Senator McGOVERN. Next will be Mr. Mike Cassady, executive vice president of the Mississippi Valley Association.

STATEMENT OF E. MICHAEL CASSADY, EXECUTIVE VICE PRESIDENT, MISSISSIPPI VALLEY ASSOCIATION

Mr. CASSADY. Thank you, Mr. Chairman.

My name is E. Michael Cassady, and I am executive vice president of the Mississippi Valley Association, with headquarters in St. Louis.

I have a prepared statement that I will not take your time to read. I will file it for the record.

I would like to make one comment. I heard one of Senator Jordan's questions here this morning.

I might tell you also for the record that the Mississippi Valley Association is the country's largest water resource development organization. We have membership virtually throughout the United States, but our primary interest is Mississippi and its tributaries from Montana and New York and Canada to the gulf.

As such, we have many of our members whose major interest is in navigation. People in Louisiana, for example, who have an interest in navigation, also have an interest in flood control. They are extremely appreciative of what South Dakota has given up with the main stream reservoirs that keep the water off their back.

Forty-three percent of the rainfall in the United States or the runoff, passes through the State of Louisiana.

I wanted to assure you and the committee that the navigation people that we represent are fully aware of this project. They have supported it for many years and are on record as doing so now, as I mention in my statement.

Thank you very much.

Senator McGOVERN. Thank you for your helpful statement.

(The prepared statement referred to follows:)

STATEMENT OF E. MICHAEL CASSADY, EXECUTIVE VICE PRESIDENT, MISSISSIPPI VALLEY ASSOCIATION

Mr. Chairman and Gentlemen of the Committee my name is E. Michael Cassady and I am Executive Vice President of the Mississippi Valley Association with headquarters in St. Louis, Missouri.

At our last Annual Meeting held in Chicago in February 1967, over 2,000 members in behalf of all Mississippi Valley Association members throughout a 23-state area, unanimously supported immediate authorization and initial construc-

tion funding for Stage 1 of the Oahe James River Irrigation Project. For many years, the Valley Association has stated that this Project is an essential feature of the comprehensive Missouri Basin Development Program.

The people of South Dakota have long supported the comprehensive plan for the multiple purpose development of the Missouri Basin's water resources. At times, the citizens of the state have made decisions which they knew meant great personal sacrifice for South Dakota in order to protect the economic and social welfare of other down-stream states. South Dakotans have given up 509,000 acres of rich Missouri River bottom land for Missouri mainstem dams.

For South Dakota's economy and the national and international viewpoint, this Project is of critical necessity. Historians of the future, according to a group of world food scientists who met in Rome last year, will probably name 1965 as the year in which world famine began. Approximately 2 million persons will die from starvation this year in India alone. Food research experts predict the world's food supply must be doubled between 1965 and 1980. In our own country, population will increase an estimated 50% by the year 2000 or to a total of 300 million persons. In usable land area, the country faces an estimated potential deficit of 50 million acres even if all of the marginal land can be reclaimed and used. This is why the Mississippi Valley Association has stated for many years and once again emphasizes at this time that the Oahe Irrigation Project and other projects of this nature are of critical immediate importance to the welfare of this nation and the world.

Appearing before this Committee today are excellent representatives of the citizens of South Dakota who are competent to explain the Project in detail to the Committee and I do not intend to repeat or elaborate on their testimony.

It is sufficient to say that, because this Project is a part of the over-all comprehensive Missouri Basin Development Program, the several thousand members of our Association staunchly advocate a favorable recommendation by this Committee and authorization by Congress.

Senator McGOVERN. The next witness will be Mr. Walter W. Johnson, secretary, Spink County Irrigation District, living in Frankfort, S. Dak.

STATEMENT OF WALTER JOHNSON, SECRETARY, SPINK COUNTY IRRIGATION DISTRICT BOARD OF DIRECTORS

Mr. JOHNSON. Inasmuch as there are quite a few on the list to testify who follow me, I would like to file my report with the request that it be included in the proceedings.

I would like to make a few statements while I am here, if you please.

Senator McGOVERN. We will be glad to handle it on that basis.

Mr. JOHNSON. Today, as at the hearing at Redfield, last May, there is a considerable amount of information given as to the acceptance of the idea of the Oahe project. That, of course, is included in my report. It is in there for the purpose of indicating that there are people who are really interested in this and in going ahead with this.

I just checked with the local ASC office at Redfield before I came down the day before yesterday. It was to refresh my memory. It seems that the years 1959, 1964 and 1966 were declared feed-and-grazing disaster years. Spink County was in the feed-and-grazing disaster area.

I would also like to point out that our farmers are aware of the need for irrigation, and right now there are about 60 irrigators who have developed some 10,000 to 12,000 acres for irrigation in Spink County where they could get suitable water.

In conclusion, I would like to say that it is the opinion of the board of directors that when the time comes that these contracts will have to be voted upon, they again will vote favorably. We don't anticipate any

trouble in this regard, especially after the report that the Secretary of the Interior Holum gave this morning on the economics of it.

I am sure that these farmers will feel that they are reasonable contracts. We hope there will be no difficulty in this regard.

With that, I will conclude my remarks, unless you have some questions.

Senator McGovern. Living, as you do, in the irrigation area, you are a good person to report on the sentiment of public support for the project. We appreciate your statement.

Mr. Johnson. Thank you.

(The prepared statement referred to follows:)

STATEMENT OF WALTER JOHNSON, SECRETARY, SPINK COUNTY IRRIGATION BOARD OF DIRECTORS

Honorable Members of the Senate Subcommitee, my name is Walter Johnson, a farmer in Spink County, living south of Frankfort, and Secretary of the Spink County Irrigation District Board of Directors. I wish to make the following statements on behalf of the Irrigation District Board and in support of the Oahe Irrigation Development.

We believe that our people are definitely interested in the development of this important project, and that they have taken the necessary steps to indicate this interest, and when necessary, voted favorably by large majorities. I refer particularly to:

1. Formation of the Oahe Conservancy Sub District at the general election of 1960 by an 87% favorable vote—this represents about 22% of both land and people of this state.
2. Formation of the Spink County Irrigation District by special election in January, 1965, by a favorable vote of about 82%. The Board, incidentally, was organized in April of 1965.
3. Granting of Contract Authority to the Board of Directors at the general election in November, 1966, by a favorable vote of 79.6%.

Also, the testimony of numerous area farmers at the recent Senate Subcommittee Hearings held at Redfield, South Dakota, in May would indiacte the interest on the part of our people to get started on this project.

Almost every crop season we experience drought periods of varying lengths and I would like to point out that in the years 1959, 1964, and 1966, Spink County was declared a feed and grazing disaster area by the U.S. Department of Agriculture.

That our farmers are aware of the need for irrigation is evidenced by the fact that about sixty irrigators have (when suitable water has been available) developed irrigation systems on some 10,000 to 12,000 acres in Spink County. Of this number, only three or four of these farms are within the proposed Irrigation District.

If the Oahe development is to become a reality, the next steps are:

1. Congressional approval and authorization for construction.
2. Completion of Master Contracts and Participating Contracts between the Irrigation District and the United States government.
3. Another vote on this contract by the people within the Irrigation Districts directly involved.

We, the members of the Spink County Irrigation Board, firmly believe that the people will again give their support for the irrigation project, and will vote favorably on these re-payment contracts, if they are fair and reasonable.

It is our belief that the development of this project will act as a deterrent to the exodus of farmers and other rural people from this area to ever crowded urban centers.

On behalf of the Spink County Irrigation District, I respectfully urge your favorable consideration and support of this project and its early approval by the Congress of the United States. I wish to thank you for this opportunity to express our support.

Senator McGOVERN. The next witness will be Mr. James Sperry, secretary, West Brown Irrigation District.

STATEMENT OF JIM SPERRY, SECRETARY, WEST BROWN IRRIGATION DISTRICT, BROWN COUNTY, S. DAK.

Mr. SPERRY. Thank you, Mr. Chairman.

I am Jim Sperry, secretary of the West Brown Irrigation District in Brown County, S. Dak. Here with me today are Harold Smith, Virgil Locken, and LaVerne Swenson. All are members of the West Brown board of directors and all of us are also full-time grain and livestock farmers in this irrigation district.

We represent 383 landowners who farm 81,000 acres in the West Brown district. We organized our irrigation district with the intention of doing all we could to facilitate the rapid development of the Oahe unit. As South Dakotans, we contributed 509,000 acres of land to the four reservoirs on the Missouri River, resulting in an economic production loss of $9,213,000 annually, according to the Oahe unit report. We all consider irrigation as an important part of the compensation for these acres lost when the Missouri River reservoirs were created.

We have just completed the most bountiful small grain harvest our area of South Dakota has ever seen. It was a result of plentiful rainfall along with moderate temperatures during the growing season. Our corn crop is not so fortunate, however. It is nearly 2 months now since we have received any general rainfall. As a result, corn yields will be something less than average and in many cases will have values only as silage.

So you see, even in a good year, supplemental moisture can be extremely valuable, and in a normal year our expected yields would be raised considerably by irrigation.

Because of these facts, I am very optimistic about our future prospects as an irrigated area. I feel that the increased productivity, as well as the increased assurance of harvesting a crop will lead to improved income levels for those of us on the farm, as well as our city cousins.

I realize that bringing water here and developing our land to receive it will require much work and planning in addition to large financial investment. As the father of two boys and one girl now attending school, I am willing to help undertake the development of this project which will quite possibly be delivering water here by the time my children are ready to establish homes and begin careers of their own.

I hope that the stimulating effect of irrigation on the South Dakota economy will make it possible for my children, as well as my neighbor's children, to find opportunity here in South Dakota, rather than migrating to more densely populated areas of our country.

In closing, the directors of the West Brown Irrigation District would like to urge approval of the Oahe irrigation project so that the Missouri River development program, started over 20 years ago, may proceed.

Senator McGOVERN. Thank you very much, Mr. Sperry, for your statement.

I understand that Ralph Herseth is not with us, although he is listed as a witness.

Stanley P. Munger will be our next witness. He is the president of the South Dakota Reclamation and Rural Development Association.

STATEMENT OF STANLEY P. MUNGER, PRESIDENT, SOUTH DAKOTA RECLAMATION AND WATER DEVELOPMENT ASSOCIATION

Mr. MUNGER. Thank you, Mr. Chairman. I have written testimony I would like to submit for the record, if I may.

Senator MCGOVERN. It will be placed in the record at the conclusion of your remarks.

Mr. MUNGER. May I just comment on one part of this?

I would like to point out that the credentials of our association were presented to the committee at Redfield, this year, but I would like to add and specifically emphasize that we represent a cross section of the State of South Dakota, both as to vocation and avocation, and that our interests lie primarily with the principle of multiple-purpose development conservation and storage of water.

Because of our diversity in membership, we propose ourselves as a good indication of the very broad interests of the public in South Dakota in this project.

Senator MCGOVERN. I don't think there is any question about that.

Mr. MUNGER. With that in mind, Senator, we would hope for a favorable action on Senate bill 6.

Senator MCGOVERN. Thank you very much. Your prepared statement will be included in full.

Mr. MUNGER. Thank you, sir.

(The prepared statement referred to follows:)

STATEMENT OF STANLEY P. MUNGER, PRESIDENT, SOUTH DAKOTA RECLAMATION AND WATER DEVELOPMENT ASSOCIATION

Mr. Chairman, my name is Stanley Munger. I live at Vermillion, South Dakota, and am engaged in the livestock farming business there. I am serving as President of the South Dakota Reclamation and Water Development Association and am privileged to represent that Organization here, today.

The credentials of the SDRWDA were presented for your records at the Field Hearings held this year in Redfield, South Dakota, so I will only recall for you, now, that our membership represents widely differing vocations and avocations from every section of the State. We are joined together in advocating a Principle . . . . multi-purpose conservation, storage, and use of water . . . . and we are not joined together simply by the economics and geography of an immediate project site.

For this reason, we suggest to you that our voice accurately reflects the public's recognition that approval of the Oahe Unit is needed in the Public Interest and will serve that Public Interest, well.

It has been twenty-three years since the Flood Control Act of 1944 was approved and the irrigation portion of that Act has not been initiated, even in part, in South Dakota.

Meanwhile, South Dakotans have provided over one-half million acres of their best Missouri River bottom lands for generous downstream benefits to navigation, flood control, and power.

Meanwhile, South Dakotans have constituted their State as a Conservancy District.

Meanwhile, South Dakotans of 15½ counties have overwhelming voted in favor of taxing themselves to establish the Oahe Sub-Conservancy District for the purpose of supporting the Oahe project.

Meanwhile, these same people again voted to keep faith with the future by increasing their taxes for the purpose of guaranteeing their obligations to operate and maintain the Oahe Unit.

Twenty-three years is a long time and now, we hope, the "meanwhiles" are over; self-help, self-sacrifice, self-determination have been demonstrated. Engineering feasibility has been demonstrated. Economic feasibility has been demonstrated, therefore, Mr. Chairman, we respectfully ask favorable consideration and approval of the legislation proposed by Senate Bill 6.

Senator McGOVERN. The bell that just rang was that long-awaited rollcall. I would suggest if you can bear with me that you just remain here. I will go and vote and be back within 15 minutes. If there is anyone who cannot wait, we will be glad to have your statement incorporated in the record if you will just stand and give your name.

Well, if not, I will return as quickly as I can. Before recessing, however, at this point in the record I will insert a statement filed with the committee by E. N. Duncan, manager, Agricultural Planning & Development, Great Northern Railway Co., St. Paul, Minn.

Now we will recess and I will return as quickly as I possibly can.

(A short recess was taken.)

(Mr. Duncan's statement follows:)

STATEMENT OF E. N. DUNCAN, MANAGER, AGRICULTURAL PLANNING & DEVELOPMENT, GREAT NORTHERN RAILWAY CO., ST. PAUL, MINN.

The Great Northern Railway has always been a strong supporter of feasible irrigation projects in the territory it serves.

We are advised that the Bureau of Reclamation's studies indicate the annual benefits for the Oahe Unit would exceed the estimated cost in the ratio of 2.5 to 1. This is a desirable project and will increase the economic base for the State of South Dakota. We are advised that the Oahe Unit would irrigate 190,000 acres in the Lake Plain area adjacent to the James River. This development would require an average of 563,900 acre-feet of water annually, most of which would be diverted from the Oahe Reservoir on the Missouri River. Present plans, in addition to irrigation, dictate the Unit would furnish municipal and industrial water supplies for 17 towns and cities in the project area and would provide flood control benefits and increase recreational opportunities, and in general benefit the state of South Dakota.

The Great Northern Railway would like to join its friends in supporting this most worthwhile project. We feel it is worthy of consideration and we would like to be included among those supporting it.

Senator McGOVERN. The subcommittee will be in order, please.

Is Mr. Gary Sharp in the room? Mr. Sharp is from Bath, S. Dak.

STATEMENT OF GARY SHARP, BATH, S. DAK.

Mr. SHARP. Thank you, Senator.

I graduated from Aberdeen Central High School and am now entering my second year at college at Brookings, S. Dak., as an agricultural major. My parents live on a farm located 5 miles east of Aberdeen, in the heart of the newly formed West Brown Irrigation District, so naturally I have been exposed to the many benefits of irrigation.

Two years ago I did some research on water development and the potential of irrigation for our area for a speech class in my high school. Upon the completion of my speech, my fellow classmates and my instructors brought forth a number of questions concerning opportunities derived through this vast project. I attempted to point out a few of the many job opportunities as well as recreational opportunities obtained primarily through water.

Also, as a 10-year 4–H member, I have worked closely with conservation and have done various research projects concerning irrigation. Through my studies and presentations, the same caliber of questions have risen as did in my high school speech class: What opportunities will be available to my generation?

There is nothing I would rather do than go back to the family farm upon my completion of college. The Lord put us on this earth to help others and there isn't a finer way to help others than through farming. Farming is one of the two sources of new wealth known to mankind.

This is the same feeling that is present in the minds of many of my friends and neighbors. But this is not possible unless our fathers can afford to take on a partner. Realistically, we know there isn't enough income on the average farm today to support more than one family. If irrigation comes to our area, a greater income will arise to the small farmers and then my generation will have the opportunity to do the thing that they love the most. We will be able to go back to the farms and ranches where we were raised and raise our own families so they, too, may enjoy the many benefits of being raised on a farm.

As I have tried to point out, the interest and thought is definitely present in the minds of the people of my age. I truly believe that the majority of the people would stay in our area if there would be more and new opportunities available to them. I also believe that water will bring these ifs to a reality.

Our area is one of the finest areas in the world. Why not keep it that way and also better it by keeping our youth here where they are educated?

I, too, urge your strong support for the authorization of the Oahe project. Our future depends on it.

Thank you.

Senator McGovern. I think Gary Sharp is the only student testifying today, and we are happy to have his statement in the hearing record.

Mr. Sharp. Thank you, Mr. Chairman.

Senator McGovern. The next witness will be Mrs. Myles Beckler, Route 1, Aberdeen.

We will be pleased to have your testimony.

STATEMENT OF MRS. MYLES BECKLER, ABERDEEN, S. DAK.

Mrs. Beckler. Mr. Chairman, I am Mrs. Myles Beckler of Route 1, Aberdeen. As a farm wife, mother, and grandmother, I am vitally interested in the agricultural stability that irrigation would provide for our area.

We farm 960 acres about 6 miles northeast of Aberdeen which is in the heart of the West Brown Irrigation District. Our family includes one son who is married and in the service, another son just starting college, a daughter in high school, and a daughter in grade school.

The son in the service has his sights set on coming back to the farm some day in a father-son partnership arrangement. Under present dryland farming conditions, these plans are merely pipedreams, so to speak, as the present farm unit is not large enough to provide two families with an adequate standard of living and additional land is just simply not available in our area.

Our second son, although not interested in staying on the farm, would like to remain in home territory, provided the work for which he plans to qualify himself is available.

Irrigation would mean that our daughters might also remain in our community to raise their families.

In order to provide our family with the kind of living we feel we are entitled to, it has been necessary for me to seek full-time employment outside the home. There are many other farm wives in our area who find themselves in the same position. I'm sure that they would join me in saying that there is nothing we would like more than to devote full time to our most important job as homemaker.

We have good soil. The lone factor that limits the production on our farm is adequate water. Therefore, I urge approval of the Oahe irrigation project so that my hopes and those of hundreds of other mothers in the Oahe project area may be realized.

Senator McGOVERN. Thank you ever so much, Mrs. Beckler. Your statement will fill a needed place in the hearing record. We are glad to have you with us today.

Mrs. BECKLER. Thank you.

Senator McGOVERN. Our next witness will be Homer Engelhorn. Mr. Engelhorn is speaking for the East River Electric Power Cooperative.

STATEMENT OF HOMER M. ENGELHORN, CONSERVATION SPECIALIST, EAST RIVER ELECTRIC POWER COOPERATIVE

Mr. ENGELHORN. Mr. Chairman, my name is Homer Engelhorn. I am conservation specialist for East River Electric Power Cooperative of Madison, S. Dak.

Our cooperative transmits electric power to 23 member systems for resale to nearly 50,000 rural families in the eastern two-fifths of South Dakota and three counties in southwestern Minnesota. To our knowledge, ours is the only rural electric system in the Nation with a full-time conservation specialist.

In this capacity during the last 4 years, it has been my experience to work closely with dozens of dedicated groups and hundreds of dedicated individuals who work ceaselessly for the principle of conservation—the use of all of our natural resources to the extent that man and society get the most benefit from them.

And it is out of this belief that I appear before you today to plead most strongly for the approval of Senate bill 6, the legislation which authorizes the Oahe water diversion segment of the Missouri River Basin project.

The overall project had its legislative origin in the Flood Control Act of 1944. The many benefits of the Oahe project—irrigation, stock water, municipal water, and the rest—were outlined at that time but it was not until recently that final technical plans were worked out.

In the meantime, nearly every other phase of the Missouri River Basin project has moved steadily ahead to the point at which we are seeing large-scale power generation, flood control, recreation, and navigation.

For the first time since the construction of the dams on the Missouri's main stem, water has been loosed this year over the spillways—water

lost forever to the residents of the Missouri Basin who have need for that water.

This water, had we had the pumping and distribution facilities envisioned in S. 6, could have been put to beneficial use instead of being flushed downstream.

What are some of these needs? Municipal water supply is a problem in nearly every community in the Nation. Seventeen towns in the project area would receive an assured, long-term source of water supply if Oahe were real.

The two counties in which irrigation water will be available, Brown and Spink, lost 205 and 198 farm units, respectively, between 1959 and 1964, according to the U.S. Census of Agriculture.

The report which the Department of the Interior has submitted to this committee, which tells the feasibility of this project, states that irrigation in the proposed area can result in 500 additional farms, with 1,700 new people. Such an economic boost can partially reverse the present trend of loss of numbers of farms, with the resulting loss of jobs, business firms, income, and opportunity.

This Nation has been rocked to its very foundations during the past summer by the worst civil disorders in more than a century. There are many who cry that the problem is too-lenient law enforcement, or "outside agitators," but these explanations, even if based on a few shreds of evidence, do not approach the magnitude of the real causes of cities' problems in 1967.

The problem, reduced to its most basic terms, is one of overcrowding and facilities grotesquely overtaxed. The ability of city administrators to cope with layer upon layer of humanity, much of it of sharply differing race and background, has been unable to keep pace.

Approval of the Oahe project will do precious little to end the problem of people streaming from rural areas to the cities. The few dollars involved here, when taken in relation to the total cost of the meaningful reordering of population that is called for, are precious little. But this project and these dollars represent a significant step in the right direction.

Hundreds of Oahe projects and projects of other types will be needed throughout rural America, with associated expenditures measured by the billions instead of millions, to correct the gross inequities which have led to the mass flight of humanity from farm to city.

But the Federal Government can make this investment in the Oahe project a significant token of its determination to reorient the economy to prevent further erosion of rural America and the consequent strain on the facilities of metropolitan America.

Fifteen million Americans have fled for the cities since 1950. It is time to reverse directions.

Ever since 1961, the members of East River Electric have stated unequivocally their support for legislation which would authorize and fund the Oahe unit. They have restated this support at each annual meeting since, and they are, I can say without a quiver of doubt, doing exactly that on this very day at our 17th annual meeting out in South Dakota.

We stated our support to the subcommittee which was chaired by our Senator McGovern at Redfield, S. Dak., on May 22 of this year, at

which dozens of witnesses told dozens of reasons why Oahe should be authorized at this time.

We are happy today to restate our support, and attach herewith for the record a copy of the resolution which is being submitted today for approval of our members at their annual meeting.

Thank you.

(The resolution referred to follows:)

RESOLUTION No. 9 (OAHE IRRIGATION UNIT)

After more than 15 years of study and investigation showing feasibility and desirability of the Oahe Irrigation Unit, the report of the Bureau of Reclamation shows that it is a sound investment for the federal government and necessary for the economic growth and the development of water resources in South Dakota.

The first stage 190,000 acre unit will bring stability to the farmers, municipal water for communities in the area, employment opportunities, stimulate business growth and expand recreational facilities all of which will make for an orderly growth of our state.

Recognizing the immediate need for the production of an adequate food supply for the nation and the world, we urgently request the immediate authorization and funding of the Oahe project by the Johnson Administration in order to proceed with construction at the earliest possible date.

We appreciate the efforts given by the members of the South Dakota Congressional delegation in support of the project and especially appreciate the leadership given by Senator George McGovern in obtaining and holding senate field hearings for the Oahe Unit in South Dakota.

We commend Mr. Fred Holscher, Chairman of the Oahe Conservancy Subdistrict, the board of directors and manager James Lewis for their untiring efforts and insight towards creation of this unit and its development, all of which will build a stronger agricultural economy for South Dakota farmers and provide for a more abundant life for its citizens.

The membership directs East River to continue to work and cooperate with the Oahe Conservancy Subdistrict and to exert every other possible effort to bring about the authorization of the project and make it a reality.

Senator MCGOVERN. Thank you very much, Mr. Engelhorn. The resolution you submitted has been placed in the record. We appreciate your appearance today.

Mr. ENGELHORN. Thank you.

Senator MCGOVERN. The next witness will be Mr. L. J. Maher, editor, Huron Daily Plainsman.

STATEMENT OF L. J. MAHER, VICE PRESIDENT, HURON PUBLISHING CO., ASSISTANT PUBLISHER, DAILY PLAINSMAN

Mr. MAHER. Mr. Chairman and committee members, my name is L. J. Maher and I live in Huron, S. Dak. I am vice president of the Huron Publishing Co. and assistant publisher of the Daily Plainsman, a newspaper that serves all or part of nine of the 15½ counties that make up the Oahe Conservancy Subdistrict.

The city of Huron is just one of 17 cities and towns that will depend upon water from the first phase of the Oahe unit for municipal and industrial use. But our city is unique, because our present municipal water supply is furnished from storage in the James River created by the James Diversion Dam which will be a part of the first phase of the Oahe unit when that project is built.

This dam was built after a study authorized by the Congress in 1961 showed that it would provide a stable water supply for the city of Huron until the year 1970.

In 1962 the city of Huron signed a 20-year repayment contract with the Federal Government to repay with interest the construction costs allocated to municipal water use.

Congress authorized this dam in 1963 and it was completed in 1964. It was assumed at the time that the Oahe unit would be constructed by, or shortly after, 1970 and that greater quantities of water would then be available from this project.

In 1962 the Division of Sanitary Engineering, South Dakota State Department of Health, conducted a study of the public water supplies within the Oahe conservancy subdistrict. On the basis of "1962 Public Health Service Drinking Water Standards" this study showed that 59 of 65 public water sources in the subdistrict have unsatisfactory quality water for general domestic use.

The Oahe unit project would provide an improved water supply for a number of these communities.

As you know, an adequate water supply is essential to the survival and growth of any community.

I sincerely urge your favorable action on Senate bill 6, so that construction can be started as soon as possible.

Senator McGOVERN. Thank you for your statement, Mr. Maher.

I might say, because you are here, that I think one of the unstated reasons why the Oahe project has won the approval that it has at this stage is because of the excellent job of reporting and information, editorializing, which has been provided by your paper and by the Aberdeen American-News, whose editor was here earlier today, with other newspapers in the area, maintaining the best standards of reporting and getting the information out to our people.

That is one of the reasons why this project is now before the committee and in the promising way that it is. It is certainly due to your testimony and efforts over the years.

Mr. MAHER. Thank you.

Senator McGOVERN. The next witness is Mr. Al Schock, Sioux Falls, one of our leading businessmen.

STATEMENT OF AL SCHOCK, PAST PRESIDENT, SIOUX FALLS CHAMBER OF COMMERCE; PAST VICE PRESIDENT, SIOUX FALLS INDUSTRIAL DEVELOPMENT FOUNDATION; PAST PRESIDENT, SOUTH DAKOTA RECLAMATION & WATER DEVELOPMENT ASSOCIATION; PRESIDENT, TERRACE PARK DAIRIES, INC., OF SOUTH DAKOTA; PRESIDENT, NORDICA FOODS CO.

Mr. SCHOCK. Senator McGovern, I represent the business community of South Dakota, the South Falls Chamber of Commerce, and the Sioux Falls Industrial Development Foundation.

I have a two-page statement which I should like to place in the record.

I do wish to read the last two paragraphs, which I would like to comment on. You have been most interested in the Food for Peace and Food for Freedom programs.

I would also like to support the statement entered into the hearing room by Mr. Gullickson.

The United States, operating under the unexcelled free enterprise system, has been one of the most blessed nations insofar as food pro-

duction is concerned. Last year, however, we saw a period when granaries and cupboards were almost bare.

This spring, we saw the threat of a severe drought developing in the "breadbasket area" of mid-America. It was just in the nick of time that the weatherman smiled on us and good fortune again brought us bountiful crops.

Internationally, we are, however, facing a very severe food shortage problem. Each year, this problem steadily worsens. As past director of Lions International, in my work with Care, Inc., in the distribution of food, I am personally cognizant of the fact that many thousands of people die daily, as reported by the World Health Organization, because of either the complete lack of food or insufficient quantities of it.

Time is of the essence in the authorization of this project. Our Nation's No. 1 weapon and asset in fighting the evil forces of the world has been our abundant supply of food. I might add that as I was listening to the testimony today, I calculated that the cost of this project would only be the equivalent of 3 days' fighting in Vietnam.

We should not think so much in terms of national surplus food production as we should think in terms of not producing adequately for the world's needs.

Since there is a period involved, a lag phase so to speak, from the time a project is authorized to the time it can be brought to full production, a period being anywhere from 10 to 20 years, it is the recommendation of the business community of South Dakota that this project receive immediate authorization because it is not only in the best interests of South Dakota and our Nation but of the entire world.

Mr. SCHOCK. That completes my remarks.

Senator MCGOVERN. Thank you so much for your excellent statement, Mr. Schock.

I am glad that you and other witnesses have alluded to this food challenge that faces us around the world. It is one that is going to become more of a challenge and more serious in the years ahead.

(The prepared statement referred to follows:)

STATEMENT BY AL SCHOCK, PAST PRESIDENT, SIOUX FALLS CHAMBER OF COMMERCE; PAST VICE PRESIDENT, SIOUX FALLS INDUSTRIAL DEVELOPMENT FOUNDATION; PAST PRESIDENT, SOUTH DAKOTA RECLAMATION AND WATER DEVELOPMENT ASSOCIATION; PRESIDENT, TERRACE PARK DAIRIES, INC., OF SOUTH DAKOTA; PRESIDENT, NORDICA FOODS COMPANY

Mr. Chairman, I speak in behalf of the business community of South Dakota, the Sioux Falls Chamber of Commerce, and the Sioux Falls Industrial Development Foundation as past president of the South Dakota Reclamation and Water Development Association and as a farmer farming land in McPherson County in northern South Dakota.

Our company employs approximately 400 persons, most of them ex-farm boys, in the state of South Dakota. We purchase milk from approximately 400 Grade A milk producers. We are in very close touch with the economic problems of the state of South Dakota and its economy. The South Dakota business community wholeheartedly endorses the Oahe Irrigation Project.

The other organizations named above have, on many occasions, passed resolutions supporting the project in its entirety. When the big dams were created on the mainstem of the Missouri River, South Dakota gave up much of its most productive land. To date, the big dams have primarily benefited the large metropolitan communities located in the states south of South Dakota along the Missouri and Mississippi Rivers. Prior to the construction of the dams, these communities, on a rather frequent basis, lost millions of dollars worth of property in almost annual flood damage, and on occasion there was the loss of a human life.

When the dams were built, and as compensation for the productive land that South Dakota was contributing, it was promised by the Federal Government that at least equivalent amounts of South Dakota land would be brought under irrigation at as early a date as possible.

The United States, operating under the unexcelled free enterprise system, has been one of the most blessed nations insofar as food production is concerned. Last year, however, we saw a period when granaries and cupboards were almost bare. This spring, we saw the threat of a severe drought developing in the "Breadbasket Area" of mid-America. It was just in the nick of time that the weatherman smiled on us and good fortune again brought us bountiful crops. Internationally, we are, however, facing a very severe food shortage problem. Each year, this problem steadily worsens. As past Director of Lions International, in my work with Care, Inc. in the distribution of food, I am personally cognizant of the fact that many thousands of people die daily, as reported by the World Health Organization, because of either the complete lack of food or insufficient quantities of it.

Time is of the essence in the authorization of this project. Our nation's number one weapon and asset in fighting the evil forces of the world has been our abundant supply of food. We should not think so much in terms of national surplus food production as we should think in terms of not producing adequately for the world's needs. Since there is a period involved, a lag phase so to speak, from the time a project is authorized to the time it can be brought to full production, a period being anywhere from 10–20 years, it is the recommendation of the business community of South Dakota that this project receive immediate authorization because it is not only in the best interests of South Dakota and our nation but of the entire world.

Senator McGOVERN. Mr. J. W. Grimms, executive officer, South Dakota Resources Commission, has been in the hearing room all day today. He told me earlier he would not submit a prepared statement at this time. He might have testimony to offer at a later date.

I might say that we will keep the hearing record open for any additional statements for a week or so. Those of you who want to file statements with the committee will have the opportunity to do so.

I think our final witness is Mr. Hans Jessen, of Tulare, S. Dak.

STATEMENT OF HANS JESSEN, TULARE, S. DAK.

Mr. JESSEN. Honorable Senator, and I will also address you as Mr. Chairman.

I am kind of disappointed in Al Schock. Al Schock is sort of a humorist and I am sure everybody acquainted with him knows that. I thought he probably would inject a little humor into this after all this serious testimony.

I don't know whether I am capable of it or not. Being that Al didn't, I am going to try to. The only thing I am sorry of is that our honorable Senators from North Dakota, our neighboring State, are not here. I was hoping that Senator Burdick would be here. Honestly, I am disappointed that he is not, because I have gotten acquainted with him. I want to compare the two States.

This is off the cuff, by the way. This is not part of my statement.

I want to compare the two States. North Dakota and South Dakota with the exception of the people living in the two States, are referred to as the Dakotas. But when you refer to it as the Dakotas and you are from South Dakota, you say, "No, I am from North Dakota." If you are from North Dakota, you say, "North Dakota."

However, geographically, the two States are split almost in the middle. As far as the highways are concerned, you almost have to go east and west to get through one or the other. On north and south

you have a little tough time getting from one to the other. They don't bother about marking the boundaries because we are so nearly alike.

The people in both States are Anglo-Saxon. Their culture is almost identical. The economy is almost identical.

This is the part I wanted Senater Burdick to hear: South Dakota has a little larger income than North Dakota. Each of us have one major city.

We have an old relic of a Capitol Building. It is sort of a monument. North Dakota built a skyscraper Capitol Building, to where they have to have an elevator in it. We don't have to in our State.

When you visit North Dakota, the North Dakotans will say, "Welcome to our State. Have a look."

When you visit South Dakota, they will take you by the hand and say, "Come on, I will show you the State." So we have a little more to show as far as tourists are concerned than the State of North Dakota.

We compete against one another so much that one night during the dark a group from South Dakota went up and dug up the bones of Sitting Bull that had been buried for approximately 80-some years. Senator Burdick told me, "You didn't get his bones. You got the dog that we buried Sitting Bull with."

I said, "You know something, there is nobody that knows the difference whether we got the dog's bones or the bones of Sitting Bull because we pourned 30 tons of cement around it so that North Dakota can't come back and dig it back up."

Now they are not sure whether we got Sitting Bull's bones or the dog's bones.

I neglected to introduce myself, Senator, and I apologize for it. My name is Hans Jessen. I am a farmer in Spink County, S. Dak. I am the father of six boys and one girl; the grandfather of 18 grandchildren.

My parents immigrated to Redfield 60 years ago, and when my father died at the age of 92 he left for posterity 87 grand- and great-grandchildren.

The population of Redfield, S. Dak., 60 years ago was 3,000. The population of Redfield, S. Dak., today is still 3,000. The population of Spink County today is 5,000 less than 60 years ago.

Once we beckoned immigrants to help us settle the land, and to them the country seemed endless. They came and they left again because of the lack of economic activities. I, myself, have children living in Minnesota, Iowa, and Colorado.

Man is more than animal, and the needs of his life are far more than bread alone. There are the precious intangibles that make life worth living. One of them is to be able to keep his family gainfully employed where he raised them. But with modern farming technique in a semiarid region under strictly dryland farming that becomes impossible.

Eight and seven-tenths million added acres must be irrigated by 1980 to keep our standard of living at its present level.

Why bother with all this? If we are to continue our high standard of living, it will be necessary to develop the water resources as fast as the population growth. Because without water development other economic developments are impossible.

It is an absolute must to have some people dedicated to the future development of our resources for posterity. The problems we undertake will lead to the quality of life we will pass on to our children.

With the exception of 4 years in the U.S. Navy, Spink County has been my home for 60 years. So you must know I like living there, and it has given me a good life. But with the Oahe project a reality it can be a better place to live for more people.

I have been actively engaged in the promotion of the Oahe project since M. Q. Sharpe was Governor of South Dakota some 20 years ago. Matter of fact, Governor Sharpe is the one who explained the economic impact the Oahe project would have on South Dakota and the Nation, and he explained it so well that I hope I will be able to live to see it become a reality.

I want to close with this thought: When I see an irrigation project, big or small, I think of it as "God's beauty parlor."

Senator McGovern. We appreciate your statement.

I notice you say you are the father of six boys and one girl. Are they living in Spink County or in South Dakota?

Mr. Jessen. No. I believe I mentioned that I had them living in Minnesota, Iowa, and Colorado. Did I skip that portion? I might have. Nevertheless, they do.

Senator McGovern. I think I was concentrating on the rest of your statement.

Why did they leave the State? Maybe that will shed some light on why we are losing young people from South Dakota.

Mr. Jessen. There isn't anything I would rather have been able to do than to gainfully absorb my children in my farming operations. But with the larger equipment and each farmworker being able to till more acres, that became impossible. So, it became necessary for them to leave and compete against young people in other areas. Does that answer your question?

Senator McGovern. Yes.

Senator Mundt?

Senator Mundt. I have one question I would like to ask. I am sorry that I had to miss this afternoon's session due to conflicting committee assignments. We happen to have the Deputy Prime Minister of India here visiting our Foreign Relations Committee, and we had some problems to take up with him.

I came away because they told me you were on the stand. I am glad that you are here appearing in the grand finale. I think you have made a fine statement to conclude the hearings.

I was intrigued by the conversation we had at lunch this noon, at our end of the table, when you were regaling us with your experience as an immigrant. You have had tangible experience with what water and sunshine will do on the good earth of South Dakota.

I would like to have you make a short statement, in summary, of the economic experience you have had with irrigation. This, after all, is going to be the final test. How does it work out economically for the farmers, the ranchers, and the townspeople of South Dakota? You have been there. You have had some experience. I would like to have you just summarize your experience like you did at noon at the table.

Mr. Jessen. Thank you.

First of all, Senators—both of you—I want to tell you that I pioneered in irrigation practices. As a matter of fact, the Bureau of Recla-

mation dug a well on my farm 17 years ago, so I am not a beginner at irrigating.

When I first started in irrigating, I did it on land they said was nonirrigable, because of the underlying gravel. My soil is underlain with gravel so shallow that when I dug the basement for my house, I poured the concrete from the diggings. So you know it is fairly gravelly and highly permeable.

Since that time I have learned the technique of applying water to the land, and with the sunshine that South Dakota has, and the two best growing months of the year, July and August, these being the 2 months that we have the least amount of rain during the growing seasons, now I have become so familiar with applying water to the land in our area that I can almost predict, with the exception of hailstorm damage, before I plant the crop what the yield will be. I match the fertility level to the application of the water.

If somebody was to farm my irrigated farm other than my family, and the yield wasn't 125 bushels of corn average, they would be mismanaging the project. If they didn't raise 6 to 6½ tons of alfalfa, and we did it this year with an abnormal spring—we lost 2 weeks because of the late spring and freezing weather ruining the first crop—they would also be mismanaging.

Naturally, the application of water on the various types of soil is technical and I will not go into that technique because that would be a long, long story in itself. But I did mention to you, Senator Mundt, during the noon luncheon that we are accused of being so windy out in that State. I will tell you this: The average wind velocity in South Dakota is two-tenths of a mile less than it is in Iowa or Minnesotea. You can put that on the record in the State house of both States. All you have to do is go to the Weather Bureau and they will confirm it. Of course, we have the wide open spaces and our wind keeps on going where in Minnesota and Iowa it gets stopped by trees or hills.

This might interest you two South Dakota Senators, and I want you to seriously think it over. Try to pick other States in the Nation that have a smaller percentage of wasteland than North or South Dakota. You will find there isn't any.

Senator MUNDT. Thank you, Hans. I think that is very important, to get the proof of the pudding in the record. This is the job all of us have to do together, to convince the farmers and ranchers, the potential irrigators, of its economic advantages.

I think the board might well send Hans as a missionary around the State to talk about his experiences; if you keep him from talking politics and keep him talking about irrigation, I will help subsidize the trip.

Mr. JESSEN. When I was a youngster and in the Navy, my desire was, believe it or not, that I wanted to be a minister. But I couldn't afford it because of the big family that I came from. We were positively poverty-striken.

Later on, when I did have the opportunity, I was surrounded and associated with the type of people that I thought at that time, as a young man, would make fun of that type of association.

By the same token, I didn't become a clergyman. Now there isn't anything that I would rather do today than to promote a well-engineered irrigation project or individual systems. Poorly developed or

poorly engineered irrigation systems will do more to discourage irrigation than it will to promote it.

Senator McGOVERN. Thank you very much, Mr. Jessen. I think you have been a fine concluding witness.

We have had a long day today, but I think an extremely valuable one. We have made a good hearing record. We have had a broad cross section of witnesses. It is my hope, and I know it is shared by my senior colleague, Senator Mundt, that we can move ahead now to take this project authorization to the full Interior Committee, and then take it to the Senate floor to get favorable action on it before we adjourn this fall.

Then if we can move early next year on the House authorization we should be in an excellent position to ask for funding in 1969.

I know it will be a happy, long-awaited day for the people of South Dakota.

I do want to thank you for your patience in bearing with us with these interruptions this afternoon. It has been a long time since 10 o'clock this morning. But I am sure the effort will be well worthwhile.

Senator MUNDT. That summarizes the position as we see it. You have all done a wonderful job. We probably will be calling you back in 1969 when it comes time to ask for the money.

Senator McGOVERN. Thank you very much.

I have a letter here from Louis S. Clapper, of the National Wildlife Federation, for inclusion in the record at this point.

(The letter referred to follows:)

NATIONAL WILDLIFE FEDERATION,
Washington, D.C., September 13, 1967.

Senator CLINTON P. ANDERSON,
Chairman, Subcommittee on Power and Water Development,
Senate Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR MR. CHAIRMAN: The National Wildlife Federation appreciates the invitation to comment upon S. 6, authorizing the Secretary of the Interior to construct, operate, and maintain the first stage of the Oahe unit, James division, Missouri River Basin project in South Dakota.

It is our understanding that the first stage of the Oahe unit would irrigate 190,000 acres of land and provide water supplies for industrial and municipal purposes. Additional benefits would accrue in flood control, fish and wildlife conservation, and recreation development. Facilities of the unit would include the James and Oahe pumping plants, regulating reservoirs formed by dams, and a system of main canals, laterals, etc.

The National Wildlife Federation joins its affiliate, the South Dakota Wildlife Federation, in believing the project is in the best public interest. We are particularly pleased that the plan will bring added water to a State which is an important waterfowl production area in addition to being widely-recognized as a leader in pheasants and other species of farm game. We also are informed that non-Federal interests are committed to administering the land and water areas for fish and wildlife and recreation, and to bearing appropriate shares of the costs of enhancement.

In summary, Mr. Chairman, we hope the Subcommittee sees fit to recommend approval of S. 6.

Thank you for the opportunity of making these remarks.

Sincerely,

LOUIS S. CLAPPER,
Chief, Division of Conservation Education.

Senator McGOVERN. I also have a letter from J. W. Penfold of The Izaak Walton League of America which will be included in the hearing record at this point.

(The letter referred to follows:)

THE IZAAK WALTON LEAGUE OF AMERICA, INC.,
Glenview, Ill., September 26, 1967.

Hon. CLIFTON P. ANDERSON,
Chairman, Water and Power Resources Subcommittee, Senate Committee on Interior and Insular Affairs, New Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: The Izaak Walton League of America appreciates the privilege of submitting a statement for the record on S. 6, authorizing construction of the first stage of the Oahe Unit, James River division, of the Missouri River Basin Project.

We support the fish and wildlife proposals recommended by the Fish and Wildlife Service, U.S. Department of the Interior, and the South Dakota Game, Fish and Parks Department. We understand from various reports that sport fishing opportunities have been negligible in the South Dakota area where the water development project is to be undertaken and we earnestly hope that this project will include some improvement in fish resources for recreation.

Given the considerable wetland acreage to be destroyed by the project, it is imperative that alternative measures be taken to compensate for the loss of waterfowl production areas. We support the plan of the Fish and Wildlife Service which has set aside certain appropriate areas to be either enhanced or developed as a habitat for waterfowl and other wildlife. Without such compensating features, the project would be difficult to justify from a conservation standpoint.

The League also supports the recreation benefits which will result from the project. The increasing demands across the country for leisure-time facilities for fishing, boating, swimming, picnicking, camping, hiking, etc., will unquestionably be evident in the Oahe Unit area as the irrigated lands draw more population.

Respectfully,

J. W. PENFOLD,
Conservation Director IWLA.

Senator MCGOVERN. The committee is adjourned.

(Whereupon, at 4:50 p.m., the subcommittee concluded.)

OAHE UNIT, MISSOURI RIVER BASIN PROJECT

MONDAY, MAY 22, 1967

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER RESOURCES OF THE
SENATE INTERIOR AND INSULAR AFFAIRS COMMITTEE,
Redfield, S. Dak.

The subcommittee met, pursuant to notice, at 9 a.m. in the Veterans of Foreign Wars Building in Redfield, S. Dak., Senator George McGovern presiding.

Present: Senators McGovern, Burdick, and Moss.

Also present: Roy Whitacre, professional staff member, and Benton J. Stong, special assistant.

Senator MCGOVERN. Ladies and gentlemen, Governor Boe, Senator Moss, Senator Burdick. Our hearing will now please come to order.

We are here today for the purpose of starting the legislative processing of a measure that unquestionably is the biggest pending economic development in South Dakota's future, the Oahe irrigation project.

When I first went to the Senate some 4½ years ago, it was my privilege to be assigned to the Committee on Interior and Insular Affairs and the Committee on Agriculture, two committees that I think deal with our major concerns in South Dakota. One is the production of food. The other committee is the principal legislative committee in charge of resource development in our State and across the country.

Those resource development opportunities are all very squarely within the province of the Interior Committee on which I serve with the two Senators present today who are our guests in South Dakota, Senator Moss, of Utah, on my left, and Senator Burdick, from our neighboring State of North Dakota, on my right. Senator Jordan of Idaho was also to have been with us, but illness made it impossible for him to make the trip.

The hearing today is on Senate bill S. 6, a bill authored by your two South Dakota Senators, Senator Mundt and myself.

I am going to read a little later a message that just arrived from Senator Mundt.

The legislation would authorize the Secretary of the Interior to construct, operate, and maintain the initial stage of the Oahe unit, James division, Missouri River Basin project.

Congressmen Reifel and Berry have introduced identical legislation in the House of Representatives.

This legislation provides for the diversion of water from the Oahe Reservoir just north of the city of Pierre through a system of canals, pumping plants, regulating reservoirs, small canals and laterals to reach an area of 190,000 acres of irrigable land that lies primarily in Brown and Spink Counties. Additional purposes include municipal and industrial water supply.

This field hearing is being held at my request primarily to permit persons who cannot find it possible to come to Washington to place their views in the hearing record. Most of our State officials have been asked to appear in Washington at a later hearing rather than to make their principal statements here today.

We are privileged to have our Governor with us this morning and we will hear from him very shortly.

The views of those who will be directly affected by the irrigation project are most important to this committee and although we are going to be pressed, as you can see, for time here today to hear some 78 or 79 people who have been asked to be heard, I think we can surmount that difficulty by using a procedure whereby a number will be asked on a volunteer basis to submit their prepared statements for the hearing records. We can't possibly hear all of the statements of everyone represented in this auditorium today.

I would appreciate, if at all possible, if witnesses would limit oral statements to about 3 minutes. Perhaps you can summarize your prepared statement in that length of time or less and then we'll see that the entire prepared statement is made a part of the hearing record. This is the way most committee business is transacted in these field hearings. There are seldom more than two or three or four members of the full committee present and it is established procedure to take prepared statements, which are then printed. All of the Members of the Senate will have access to that hearing record.

I wish that everyone in the room some time during the course of the day, if you have not already done this, would sign one of the cards that are available from the girls at the registration desk so that we have your name and address. That will be an invitation from you to be sent a copy of the committee hearings when they are printed.

Let me just give you full assurance that your statement will be given just as careful consideration by the committee if you submit it in writing as if you were giving it orally. Mr. Roy Whitacre, the staff member down here at the end of the table, will collect your written statements and we would like to have you report to him if you are willing to have your statement submitted in writing.

When the Oahe project is completed, it will cover some 495,000 acres of irrigable land. We are talking today about the first stage of that project as envisioned in Senate bill 6, which is the first 190,000 acres, or roughly 40 percent of the project area.

The Secretary of the Interior has already approved the first stage project. That approval came in October of 1965, and in 1966 the Secretary recommended that construction be included in the administration's program. The Budget Bureau is now reviewing the project prior to a recommendation to the President and we have been assured that it will be completed with its work just as soon as possible so we can proceed with the hearing in Washington, D.C.

The first witness today is Mayor Gilbertson, of Redfield, who has been given a little precedence as spokesman for our host city. I am going to call on him first, not only because he is the gentleman who will welcome us to Redfield, but because of the nature of his statement and, then, I think, we will call on Governor Boe for his statement.

STATEMENT OF A. B. GILBERTSON, MAYOR OF REDFIELD, S. DAK.

Mayor GILBERTSON. Thank you, Mr. Chairman.

Friends of Oahe irrigation, I am sure that the people of Redfield are very happy to have this meeting here today. You are always welcome to Redfield. I hope that the next time you do come to Redfield that you will be staying longer with us.

As mayor, I am representing the city of Redfield. I am presenting for your consideration the resolutions of the Redfield Business & Professional Womens Club, the Redfield City Council, the Redfield Kiwanis Club, the Redfield Lions Club, the Redfield Junior Chamber of Commerce, the Veterans of Foreign Wars, the American Legion, and the VFW Auxiliary.

All of these organizations strongly endorse the use of Oahe water for irrigation in this area.

The city of Redfield, a city of 3,000 people, is interest in Oahe basin water as a source of municipal water supply as well as water for irrigation to its surrounding farm area.

First, I would like to discuss our present supply of water for municipal purposes. The mineral content of our water supply is perhaps higher than any town or city in South Dakota. This has been a concern of our city council for some time.

Attached is a letter from Dr. E. J. Perry, city health officer, dated July 28, 1966, where he states that the excessive amount of dissolved salts presents problems for patients suffering from heart trouble or disturbances of electrolyte balance. Dr. Perry also states that 1,000 gallons of water would contain approximately 14 pounds of saline-type salts and that a day's supply would contain about 3 tons of the same salts.

Last August, C. M. Woodland, then Redfield mayor, presented a proposal to the council for a water system costing approximately $600,000 for the purpose of processing brackish water. The council turned down the proposal because of the excessive cost for a city of our size.

On January 18, just 18 days after I had become acting mayor, I wrote to Senator George McGovern for help in establishing a saline water plant as a demonstration plant here. Senator McGovern informed me that there was no funds available for this purpose at the present time. A copy of Senator McGovern's letter is attached.

I would also like to comment on the stability of agriculture in our surrounding area. I am in a business of manufacturing feed and a chick hatchery. We employ 20-some people and all but one of these were born and raised on a farm. I am sure that this story is also true for our entire farm area, only that many have not settled in Redfield, but have gone to the cities for a better living.

We have manufactured feed for 10 years and for 3 of those 10 years we have had to purchase our corn supply from approximately 100 miles away. We must purchase our dehydrated alfalfa from out of State. Water for irrigation would give us a sure supply of alfalfa and likely a dehydration plant nearby.

We must stabilize our agriculture and maintain our population through irrigation of our farmlands.

I would like to briefly tell how dry weather has affected my life, as well as many other people in Redfield. Dry weather forced me from the farm to South Dakota State University. During my senior year there, I was in an early afternoon class in soils, when a dust storm struck so intense that all classroom and campus lights were turned on. We could not see campus lights 100 feet away. This is not the only dust storm that I can recall.

Since then, I spent 15 years with the Soil Conservation Service, 12 of those as conservationist of the local soil conservation district. During those 15 years every practice that I encouraged centered around conserving water.

I just stated that in the last 10 years 3 have been near crop failures and certainly the other 7 could have been much more profitable with more water.

The story of my life, then, has almost been a continued battle for more water. We all know too well that this battle will increase as time goes on.

Everyone knows that the prosperity of the Redfield businessman depends upon the crops in the surrounding farm area.

George Washington once said: "The strength of a nation lies very near its soil."

We have the soil—give us the water.

(The resolutions and letters referred to follows:)

THE REDFIELD BUSINESS AND PROFESSIONAL WOMEN'S CLUB,
Redfield, S. Dak., April 17, 1967.

OAHE IRRIGATION PROJECT HEARINGS,
Redfield, S. Dak.:

The executive committee of the Redfield Business and Professional Women's Club, having discussed the matter of the Oahe Irrigation Project, hereby resolve to support the said project and hope for its completion at a nearly date.

As citizens of the Oahe Irrigation District, it is our belief that this project would tend to stabilize the economic conditions of this area, provide fuller employment and through greater economc opportunity, keep the younger citizens from leaving our communities for areas with more potential for advancement.

MRS. JOHN WILCOX,
President.

U.S. SENATE FIELD HEARINGS,
OAHE IRRIGATION PROJECT,
Redfield, S. Dak., May 8, 1967.

GENTLEMEN: Enclosed is a Resolution passed by the Redfield City Council to be entered in the record of the U.S. Senate Field Hearings on the Oahe Irrigation Project. This Resolution was passed unanimously by the Redfield City Council at its regular meeting on May 1st, 1967.

May I take this opportunity to indicate our sincere intent in the proposed Oahe Irrigation project.

The citizens of the City of Redfield are and have been supporting the proposed Oahe Irrigation project with great enthusiasm. We all feel that irrigation of the James River Valley has a great amount of merit and will enable the State of South Dakota to develop its potential and give South Dakota and its citizens a future in this great country.

Yours very truly,

A. B. GILBERTSON,
Mayor.

RESOLUTION OF THE CITY OF REDFIELD, S. DAK.

Whereas, The U.S. Senate is holding field hearings at Redfield, South Dakota on the proposed Oahe Irrigation Project on May 8, 1967, and

Whereas, The City Council of the City of Redfield believes that the development of the Oahe Irrigation Project is in the best interest of the City of Redfield and State of South Dakota, and,

Whereas, The City of Redfield, believes that the Oahe Irrigation Project will be of great benefit to the economy of the City of Redfield; and

Whereas, The City of Redfield is in need of a more dependable and higher quality supply of water and,

Whereas, The City of Redfield recognized that irrigation in the James River Valley will greatly stabilize employment and the agricultural economy of the immediate Spink County Area as well as develop the recreation potential of the area for the citizens of South Dakota.

Now therefore be it resolved as follows:

That the City Council of Redfield hereby request that the United States Senate go on record supporting the Oahe Irrigation Project.

Dated at Redfield, South Dakota, this 1st day of May, 1967.

A. B. GILBERTSON,
Mayor.

Attest:

C. B. CUNNINGHAM,
Clerk.

THE KIWANIS CLUB,
Redfield, S. Dak., May 1, 1697.

To: U.S. Senate Sub-Committee on Irrigation.

GENTLEMEN: We, the members of the Redfield Kiwanis Club, want to go on record as being definitely in favor of irrigation for our area through the Oahe project.

Being a group of business and professional men, who are as most business and professional men in our area dependent on the farmer for our livelihood, we feel that this project can't help but have a tremendous impact upon our economy through the stabilization of the farmer's income.

When we are no longer solely dependent upon rain for our crops, our farmers can make long-range plans and projects come through. If the farmer has a better income, the business and professional man will also profit by this extra income.

Also, we realize that the coming of irrigation will increase the population of our farms, will cause new business to come into our area, and this new business will bring new employees, who will increase our markets for goods and services.

Anything that we can do to expedite the early realization of the Oahe project, we are ready to do. We appreciate you gentlemen taking the time from your busy schedule to come to our city and hear our views.

Yours very truly,

DENZEL F. LONG,
President, Redfield Kiwanis Club.

RESOLUTION OF THE REDFIELD LIONS CLUB

Whereas, the Redfield Lions Club is composed of 63 members representing farmers, business men and professional groups in the Redfield Community; and

Whereas, the members of the Redfield Lions Club, active in many community affairs, realize that the future success of their many activities depends upon the advancement of the Oahe Irrigation Project; and

Whereas, the Redfield Lions Club recognize that the development of the proposed Oahe Project will result in greater opportunities and greater prosperity to the city of Redfield and the surrounding areas; and

Whereas, we recognize the possible benefits of this project that will affect farmers, business men and professional groups in our areas; and

Whereas, we are concerned about the future of agriculture in our country and the state of South Dakota; and

Whereas, we are concerned about the future of agriculture in our community population and how this can affect our entire economy; and

Let it therefore be resolved that the Redfield Lions Club of Redfield, South Dakota, actively support the U.S. Senate Hearing on the Proposed Oahe Project and that this resolution be forwarded to the members of the Irrigation Subcommittee on the day of the field hearing, May 8, 1967.

Dated 2nd day of May 1967.

CYRIL DANGEL,
President, Redfield Lions Club.

RESOLUTION OF THE VETERANS OF FOREIGN WARS, REDFIELD, N. DAK.

Whereas, Paul A. Schleher Post 2755, Veterans of Foreign Wars at Redfield, South Dakota, is composed of 506 members from the city of Redfield, Ashton, Athol, Northville, Mellette, Frankfort, Brentford, Conde and Tulare within Spink County and the rural area therein, and in addition to areas and communities in Hand, Faulk, Beadle and Brown Counties, and

Whereas, the said V.F.W. Post represents both urban and rural members who will be effected by development of the Oahe Irrigation Project, and,

Whereas, the V.F.W. Post has been active in supporting its entire membership area and recognize the benefits to be derived to the veterans on the farm and the enhancement to farm programs they can and will receive, and further recognize that such development will stabilize rural economies and bring business interest into this State, and,

Whereas, many of our youth have very limited opportunities without such development and thus move from the State of South Dakota and losing to this State its greatest asset, its youth, and,

Whereas, we recognize the need for food development for future needs for both domestic and foreign use and to ease world hunger,

It is therefore resolved, that V.F.W. Post 2755 of Redfield, South Dakota, strongly endorse its support to the Oahe Irrigation Project and request the early development of the Project by the Congress of the United States, and that copies of this resolution be forwarded to the Senate Feld Hearings to be held in Redfield, South Dakota, on May 8, 1967.

The foregoing resolution was adopted at a regular meeting of V.F.W. Post 2755 held at its Post Home Wednesday April 12, 1967.

ROY M. ROBERTSON,
Commander.

Attest:

ROBERT D. GATES,
Adjutant.

RESOLUTION OF THE REDFIELD JAYCEES

Whereas, the United States Senate is holding field Hearings in Redfield, South Dakota, on May 22, 1967, on the proposed Oahe Irrigation Project;

Whereas, the Redfield Jaycees recognize the economic impact that the Oahe Irrigation Project will have on the Spink County area as well as the economy of the State of South Dakota, and

Whereas, the Redfield Jaycees recognize that the City of Redfield may soon be in need of a greater more dependable and higher quality supply of water for its immediate needs as well as economic expansion of the area, and

Whereas, the Redfield Jaycees have a vital interest in the affairs of the City of Redfield and the future of the State of South Dakota,

Now therefore be it resolved, that the Redfield Jaycees hereby endorse the Oahe Irrigation Project and recommend and urge the Senate Field Hearings to do likewise.

Dated at Redfield, South Dakota, this 22nd day of May, 1967.

GALEN G. GILLETTE,
President, Redfield Jaycees.

RESOLUTION OF THE CLAY KISER POST NO. 92, AMERICAN LEGION, REDFIELD, S. DAK.

Whereas, Clay Kiser Post 92, American Legion, Redfield, South Dakota, comprised of 241 members from both the urban and rural areas of Redfield and Spink County, South Dakota, and,

Whereas, said American Legion Post has actively supported all projects or programs from which benefits may be derived by both the past and future Serviceman and his family in its membership area, and,

Whereas, said Post represents both urban and rural members who will be effected by the development of the Oahe Irrigation Project, and recognizes the benefits to be derived by its members from said project, and further recognizes the benefits to be derived by all Servicemen and their families by such a development which will help to stabilize the economy of both the Community and the entire State of South Dakota, and

Whereas, said development will greatly expand opportunities for the youth of our State to enter into and help further the advancement of the State of South Dakota and themselves, and

Whereas, we recognize the need for South Dakota to enter into the program for development of food to ease World Hunger.

It is therefore resolved, that Clay Kiser Post 92, American Legion, Redfield, South Dakota, strongly endorse its support to the Oahe Irrigation Project and requests the early development of the Project by the Congress of the United States; and that copies of this Resolution be forwarded to the Senate Field Hearings to be held in Redfield, South Dakota, on May 8, 1967.

The foregoing resolution was adopted at a regular meeting of American Legion Post 92 held at its Post Home on Wednesday, May 3, 1967.

Attest:

R. E. PEARSON,
Commander, American Legion Post 92.
W.O. LOTHROP,
Adjutant, American Legion Post 92.

RESOLUTION OF THE LADIES AUXILIARY TO PAUL A. SCHLEHER POST 2755, VETERANS OF FOREIGN WARS, REDFIELD, S. DAK.

Whereas, the Ladies Auxiliary to Paul A. Schleher Post 2755, Veterans of Foreign Wars, Redfield, South Dakota, is composed of members representing the Spink County communities and rural areas;

Whereas, the Auxiliary has been active in supporting the entire membership area, and recognizes the benefits to be derived from the Oahe Irrigation Project through greater economic opportunities, and preventing our youths from leaving our communities for areas offering greater advancement.

It is resolved that the Auxiliary to Paul A. Schleher Post 2755, Veterans of Foreign Wars, Redfield, South Dakota, strongly endorses the Oahe Irrigation Project and requests the early development of the project by the Congress of the United States.

Attest:

AUDREY WILSON,
President, Ladies Auxiliary to V.F.W. Post 2755.
ELAINE GATES,
Secretary.

U.S. SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
January 23, 1697.

Hon. A. B. GILBERTSON,
Acting Mayor, City of Redfield, Redfield, S. Dak.

DEAR MAYOR GILBERTSON: Thank you very much for your letter of January eighteenth.

Unfortunately, the Office of Saline Water has a research program on reverse osmosis well under way and says it has no need for additional demonstration plants. It is now putting its emphasis on combined nuclear generating and water purification plants to see if heat costs can be lowered and divided between power and water. These are big plants—too big for our individual communities in South Dakota, they say. But I shall certainly keep Redfield in mind and watch for any development which might help you.

With every good wish, I am

Sincerely yours,

GEORGE MCGOVERN.

JULY 28, 1966.

Mayor WOODLAND,
City Council Members.

GENTLEMEN: In accordance with your request, the following recommendations for treating the Redfield water supply are presented.

You are all aware that the amount of dissolved minerals in 1,000 gallons of Redfield water approximates 14 pounds of the saline type salts. A days average water supply for our city contains about 3 tons of the same salts.

From a medical and health standpoint alone, the excessive amount of dissolved salts presents problems for patients suffering from heart trouble or disturbances of electrolyte balance. The most common effect seen on people not acclimated is extreme diarrhea. To be able to have a water supply with fairly normal mineral content would be a distinct health asset to all in the community.

A second consideration is the economic cost involved in maintaining mains, appliances and household fixtures. It is certainly a desirable asset for any future industry to have an adequate, pure water supply available.

There are many lengthy ramifications that can be discussed and brought forth in this regard, but I would certainly recommend going ahead with the project to acquire a water purification plant as soon as possible.

Respectfully submitted.

E. J. PERRY, M.D.,
City Health Officer.

CITY OF REDFIELD, S. DAK.

ANALYSIS[1]

COMPOSITE REFLECTION OF SAMPLES FROM BOTH ARTESIAN WELLS

ANALYSIS BY MARLIL LABORATORIES, SAN DIEGO, CALIF.

Hydrogen-ion concentration		8.0
		mg/l
Cations:		
Sodium	Na	750
Potassium	K	6.6
Anions:		
Bicarbonate	HCO_3	260
Sulfate	SO_4	1,100
Chloride	Cl	192
Nitrate	NO_3	2.4
Fluoride	F	2.3
Boron	B	3.5
Iron	Fe	.16
Nitrate	N	.6
Total alkalinity	$CaCO_3$	213
Total hardness	$CaCO_3$	1
Dissolved solids		2,256

[1] This analysis will vary slightly depending on rate of pumping, but in no significant amount.

Note.—Uniform temperature at source: 68° City of Redfield, S. Dak.

Senator MCGOVERN. Thank you very much, Mayor Gilbertson, for your welcome and helpful testimony.

Last night we had a very fine dinner meeting in Aberdeen, which was hosted by the West Brown County Irrigation District in cooperation with the Aberdeen Chamber of Commerce. Some 250 were there and it provided a setting for this crowd that we have assembled in the VFW auditorium in Redfield.

With us last night and again this morning was Senator Moss of Utah and I would like to ask him for a brief comment at this time.

Senator Moss. I simply want to say how proud I am to be here to get the testimony of your people on this most important proposal. The large attendance in the hall indicates the great interest that you have.

I can see from the list of witnesses before me that time is going to run out before we hear everyone or have their testimony and statements filed and, therefore, I will not impose on that time which should be devoted to making the record here.

With the record that we make here together with the future hearings that we have in Washington, we should be able to put together the background material that we need to present a bill on the floor of the Senate.

I congratulate Senator McGovern for his leadership in this matter and for pressing ahead with this important matter.

Senator Burdick is doing the same thing in his State of North Dakota.

As I mentioned last night, I come from a very arid State where we have had to irrigate from the first day we settled there. You people are meeting it in a little different manner, but it is just as important to you to establish your agriculture with irrigation as it is for us to irrigate the whole season along.

I am glad to be here and I am going to listen with great interest.

Senator McGOVERN. Thank you, Senator Moss.

Our other out-of-State guest today is our neighbor from North Dakota, the principal author of the Garrison diversion authorization bill, Senator Quentin Burdick.

Senator BURDICK. George, I am very pleased to be here. I feel kind of a kinship toward this project. As a matter of fact, I feel like a partner in it.

As you know, many aspects are similar to ours in North Dakota. We employ and use the same James River in the project. But your presence here today means more than that. It means that you are identified with a national problem. To deal with a national problem; that is, the problem of water in this Nation. It is a problem in North Dakota, South Dakota, all over the country and we will be directing our attention toward what we can do to bring stability to South Dakota through the use of Missouri River water, what we can do to bring in farming and other enterprises and I am going to look with interest and maybe, prejudice, in part of it, and listen to the testimony particularly on the multipurpose aspects of the project.

This isn't only irrigation, as it is in North Dakota. It is a project that will benefit your municipal and industrial problems, and wildlife, I am sure. This project is a multipurpose attack upon a problem.

I am certainly going to listen with great interest as I follow this program through and I too have to admit that I hear about this project of yours almost daily in the committee. Your member of the committee from South Dakota, George McGovern, keeps us constantly advised of the Oahe project and I must say, it's a privilege to be down here in my neighboring South Dakota.

Senator McGOVERN. Senator Burdick reminded us last night that while North and South Dakota may disagree as to where Sitting Bull's bones seem to be, we don't have any difference on the importance of irrigation.

Senator BURDICK. We don't have time for that, do we?

Senator McGOVERN. But we are very pleased and honored to have with us this morning our Governor, who has been a firm and active advocate of irrigation resource development in our State, and I would like now to call Gov. Nils Boe for any statement he would care to make.

STATEMENT OF HON. NILS BOE, GOVERNOR OF THE STATE OF SOUTH DAKOTA

Governor BOE. Thank you very much, Senator McGovern, Senator Moss, Senator Burdick. First, I should like to take this opportunity to welcome you, Senator McGovern, back home to South Dakota, and you, Senator Moss, and Senator Burdick, as our guests in South Dakota today. And to further express the appreciation of all of the people of the State of South Dakota for your thoughtfulness and

your understanding in making it possible for our people to have this opportunity to testify with what has been referred to as the grassroots level with respect to probably one of the most important projects that we can visualize to befall the State of South Dakota. I by no means would wish to usurp the time of the many persons who are here and who are awaiting the opportunity to testify in person, if at all possible.

As I look around me in this room, I see not only persons who have probably labored their entire lives and devoted time and energy to arrive at this stage, the first hearing in South Dakota with respect to the Oahe project, and I see persons whose parents, and probably grandparents, have also looked forward to a time such as this.

It would be my pleasure, and certainly my purpose, to accompany as large a delegation as possible to Washington when the official hearings are conducted there with respect to the Oahe project.

I would, however, like to urge all of the men and women, gentlemen, who are here today to avail themselves of this fine opportunity that you as a subcommittee of the U.S. Senate are affording to them.

I might say that the Oahe irrigation project in my opinion constitutes the greatest economic impact that could ever be realized upon this State of South Dakota.

I know Senator Burdick is aware of the facts I am referring to, as is our good Senator, George McGovern; but I can think of nothing, no other program, which could give a greater impetus to the growth and development of not only this particular area, but our entire State, than this Oahe irrigation project that we are now considering in Senate bill, S. 6, and in so doing, we are considering utilization in South Dakota of one of our own resources; that is, water, which has been expressed by you, gentlemen, as one of our most precious resources.

I know most of you are familiar with the history of the development and construction of the four main-stem dams upon the Missouri River in South Dakota itself and we had in mind three fundamental purposes; namely, the control of water as it flowed through South Dakota on to the south and into the Mississippi, flood control; we had in mind the generation of hydroelectric power, and, gentlemen, we had in mind irrigation. I would say that flood control now has been successfully accomplished. We have, through the help of the Federal Government, through the Rural Electrification Administration and other agencies of the Government, brought electricity to the rural areas of the State of South Dakota and to the industry and cities and made use of these tremendous investments which have been required in the construction of these dams. But there remains one further ultimate objective, which I know will be given the fullest consideration and every effort made to accomplish it; namely, the development of irrigation in South Dakota.

I would like to say for the record, Senator Burdick, that we certainly appreciate the assistance and cooperation of the people of the State of North Dakota and the help that they have given us in our efforts. The latest bit of assistance has been that of the water resources commission of your State when they passed an official resolution, sent same to your committee, which is on file, urging the implementation of the Oahe irrigation unit. It is for this reason that I would hope that the efforts which you are putting forth in coming to South Dakota

to hear the testimony, to hear the words of our people, will cause you to be able to go back to your committee as a whole and relate the great importance that this project has to our entire State.

I would say that the Federal Government has spent millions and, yes, billions, in helping to develop the economies in the respective areas of our State of South Dakota. I should say the United States of America. To me, I feel that, because of this history and the help that has been given by the Federal Government, every effort and consideration should be made at this particular time to implement the program which, as I said before, will be of the greatest economic impact that could ever be given to our State.

Gentlemen, the land that was taken for the storage of the waters in these reservoirs was paid for, insofar as the individual owners were concerned, but the fact still remains that these storage areas now comprise approximately one-half million acres of land which had been taken out of production. We have a total storage potentiality of water in South Dakota alone of 34 million acre-feet, and annually there is roughly from 17 to 30 million feet of water, of precious water, our greatest resource, that is flowing out of the State of South Dakota into other States and into the Gulf of Mexico.

We are asking that we be able to stake a claim to a portion of this resource, which God, with the assistance of man, has given to us, and we would, therefore, certainly urge that this subcommittee give to us the fullest consideration in making a favorable report back to your full committee with respect to the enactment of Senate bill 6.

I will look forward to the opportunity of testifying at further length before your full Senate hearing at such time as they may be called in Washington.

Thank you so much, gentlemen.

Senator McGovern. Thanks ever so much, Governor, for that excellent statement.

I know your presence here, along with the presence of some of our other fellow citizens, is going to carry great weight with the members of the committee.

I might say that we have enjoyed the closest kind of cooperation among the members of our congressional delegation and our Governor's office and his staff from the very beginning in connection with this legislation. I am sure that is going to continue in the future.

I have a telegram that arrived a few minutes ago from Senator Mundt, which I would like to read into the committee record.

Deeply regret duties in Washington in connection with Senate Appropriations Committee make impossible my attendance at Oahe hearings in Redfield. I join with Senator McGovern in welcoming to South Dakota those committee members in attendance and hope the hearings will provide another forward step in our united campaign to authorize and fund the Oahe irrigation project. Adequate water for farming where we need it and when we need it will contribute greatly to family farm income and to the stabilization of South Dakota's economy in general. Please be assured of my continued support of this important irrigation project.

We also have a brief communication from the adjutant of the local Veterans of Foreign Wars, Robert D. Gates, that I would like to have made a part of the record.

In behalf of Commander Roy M. Robertson and the 512 members of Paul A. Schleher Post 2755, Veterans of Foreign Wars of Redfield, I wish to take this

opportunity to welcome the senatorial delegation, the Oahe board of directors, and the many other South Dakotans who will be taking part or attending the field hearings of the Oahe project.

We hope that the hearings will be beneficial to all participants and that someday in the future you may desire to once again use our facilities.

Again we thank the local VFW for the use of these very fine facilities where we are meeting today.

Also, we have a communication from C. O. Christopherson, the chairman of the Missouri River Committee, from Yankton, in which he pledges the support of the Missouri River Committee for action, and without objection his entire letter will be made a part of the record.

The Missouri River Committee of the Yankton Chamber of Commerce wants this Senate committee and the people of this area to know that we join in asking that favorable and immediate action be taken by Congress to develop the first stage—and subsequent stages—to make this giant Oahe irrigation district a reality. As most of you are quite familiar, the Yankton Chamber of Commerce and the people of Yankton have long supported the various phases of development of the Missouri River. From the experiences in flooding in our area, we supported the flood control program. Likewise the development of hydroelectric power has benefited untold thousands of people. The recreation areas developed through the Missouri River development have provided much enjoyment. Today, of course, we come here as the others do to urge most favorable consideration on the irrigation development.

And while we are remote in miles from this proposed district, we, like the many people attending this hearing today, know that the development of this project will be good for all of South Dakota—in fact, for the entire Midwest. We recognize that what is good for this area here to be included in the Oahe District—is good for southeastern South Dakota as well. Agriculture continues to be—and will always be—the main industry in our State. We feel that this irrigation development is indeed a most important investment into the future of South Dakota. We pledge our support to this committee—and will actively work with you to seek authorization of the project. Further delays means delaying the progress of an entire State.

There are also certain other communications. A letter addressed to Senator Clinton Anderson, opposing the project, and I am sure we will hear both sides of the issues discussed here today.

The committee wants to hear from the critics and opponents of the project or those who have suggestions for changes or modifications in the proposal, just as we want to hear from those who have made up their minds to support it. This letter is from Paul A. Peterson of Mellette. I ask that be made a part of the record.

Also a letter in support from A. D. Schmidt, president of the Northwestern Public Service Co. in Huron, a letter and resolution in support from James H. Hunt, executive secretary for the South Dakota Land Improvement Contractors Association, and several others, that I ask to be printed in full.

(The data referred to follow:)

MELLETTE, S. DAK., *April 20, 1967.*

HON. CLINTON ANDERSON,
Washington, D.C.

DEAR SIR: Today's paper states that you will be taking testimony as to whether or not the people favor irrigation and that both city residents and farmers will testify. Of course people from Aberdeen, Huron, and Redfield will not be irrigating but will favor having it to give them business and let the farmers pay the bill.

I say let them take care of their business and let the farmers take care of theirs. They have been advertising this irrigation so much that outside chain stores have come here and are running local merchants out of business and irrigation would help them even though the farmers lose their land.

An irrigation project is doomed to failure if there is no market for the products produced. Sugar beets are grown on irrigation projects yet how can we compete with sugar selling $1.45 per hundred (world market price)? Belle Fouche failed even with Government supporting the price, and those people were experienced irrigators. If any local farmers want irrigated land let them buy it at Belle Fouche where they advertised it for sale cheap.

We have trouble with the James River flooding our best land and the Government will do nothing to clear the channel as they say it is not economically feasible. This irrigation by itself is not economically sound so you add two minuses and come up with a plus which is screwy arithmetic as I see it. The only way they can get by is to take money from the generation of electricity.

Let them take the water to Texas then you would get the water generating three and four times the amount of electricity and ample water for navigation plus the irrigation for Texas farm lands which has a longer growing season and in the end we would probably get our river bottom land drained. By the way the Government is responsible for a lot of this flooding by building those dams into the James River to store water for Huron which should have been stored beside the river bed.

I will be unable to attend the meeting, so am sending this instead.

Sincerely,

PAUL A. PETERSON.

P.S. If the city residents want to vote for irrigation let them sign the contracts and pay for the cost of all this. Why should we lose our land? Cattle have also been suggested as a source of income and they are today losing $46.00 on every steer sold on account of low prices.

NORTHWESTERN PUBLIC SERVICE CO.,
Huron, S. Dak., April 21, 1967.

MEMBERS OF THE U.S. SENATE,
Subcommittee on Power and Water Resources of the Senate Interior and Insular Affairs Committee, Washington, D.C.

GENTLEMEN: On behalf of my Company, Northwestern Public Service Company, Huron, South Dakota, I would like to file this letter of support of the proposed authorization of the first stage development plan for irrigation in Spink and Brown Counties, South Dakota.

I believe that it is especially urgent that your committee and Congress give early approval of this most important project here in South Dakota. The irrigation that will develop upon completion of the first stage of this irrigation project will greatly enhance the economic welfare of the people of South Dakota and will help to solve several problems that exist in our state and in our country. Economic studies demonstrate that even the first stage of development of this irrigation project will increase the total annual income for our farmers in Spink and Brown Counties by more than $71 million per year. It will also have the additional important effect of providing new sources of tax revenues for our local and state governments. Local agencies of government are finding increasing needs for new sources of tax revenues and it is estimated that this project alone will provide additional taxes in these two counties of more than $2½ million annually.

The Federal Treasury will also benefit because it has been estimated that the increased federal income tax paid by farmers in the irrigation district will amount to more than $3½ million.

When the large multi-purpose dams were constructed on the Missouri River, it was clearly understood by the people of South Dakota that the major benefit for South Dakota would come from the ultimate irrigation development within our state. In return for this assurance, the people of South Dakota gave up hundreds of thousands of acres of our most productive land which subsequently has been inundated by the lakes created behind the dams. This valuable crop land is lost forever and with it the potential agricultural income for these lands. This terrific economic loss to our state can be partially replaced by speedy and thorough irrigation development in the James River Valley. This irrigation proposal has been studied and re-studied by the Bureau of Reclamation, and they find it to be completely economically feasible. This project is important to the people of South Dakota and in the very near future will be an important food supply source for the people of the world.

I respectfully urge that there be no further delay and that Congress give speedy approval to the authorization of this important project.

Respectfully submitted.

A. D. SCHMIDT,
President.

SOUTH DAKOTA LAND IMPROVEMENT CONTRACTORS ASSOCIATION INC.,
Pierre, S. Dak., April 25, 1967.

Senator CLINTON P. ANDERSON,
Chairman, Senate Interior & Insular Affairs Committee, New Senate Office Building, Washington, D.C.

DEAR SENATOR ANDERSON: We are enclosing herewith three copies of a Resolution which was unanimously approved at the 1966 annual membership meeting of this Association.

It is respectfully requested that this Resolution be entered in the record of the public hearing on the proposed Oahe Conservancy Subdistrict which is to be held in Redfield, South Dakota, on May 8, 1967, by the Power and Water Resources Subcommittee of your Committee.

Sincerely yours,

JAMES H. HUNT,
Executive Secretary.

RESOLUTION OF THE SOUTH DAKOTA LAND IMPROVEMENT CONTRACTORS ASSOCIATION, INC.

Whereas, the future economic development of thhe State depends in part upon the wise development of South Dakota's water resources, and

Whereas, the Oahe Unit is a plan to utilize the waters of the Misouri River for irrigation, municipal and industrial water supplies, recreation and the conservation of fish and wildlife, and

Whereas, the development of this Unit will provide a stabilizing effect on the agricultural economy and will stimulate job and business opportunities, now

Therefore be it resolved, by the South Dakota Land Improvement Contractors Association that this association assembled in annual convention at Huron, South Dakota this 10th day of February, 1966, urge the Congress of the United States to promptly approve legislation authorizing the Oahe Unit.

The above unanimously adopted by the membership of the South Dakota Land Improvement Contractors Association, Inc., on February 10, 1967.

JAMES H. HUNT,
Executive Secretary.

Senator MCGOVERN. Now, because of the pressure on his own schedule, I am going to ask the mayor of Aberdeen, Mayor Hurlbert, to give his testimony at this time. I know you have to get away, Mayor, and we will excuse you whenever you have to go.

STATEMENT OF J. CLIFTON HURLBERT, MAYOR, CITY OF ABERDEEN, S. DAK.

Mr. HURLBERT. Senator McGovern, Senator Moss, and Senator Burdick, the city of Aberdeen, S. Dak., wholeheartedly supports the continued development and early completion of irrigation in the Oahe conservancy subdistrict. We believe this should be done at the earliest possible time because—

Our way of life in South Dakota is seriously threatened by the continued economic squeeze that has been placed on our rural area people. The many and increasing number of vacant farm buildings in our area will testify to the failure of the family farmer and the urgent need to bolster our economy immediately.

The coming of irrigation will again give many people the opportunity to make a living off the land. The increase in rural population and rural income will bring new lifeblood to the faultering economy of our urban areas.

A guaranteed water supply for the city of Aberdeen will allow for industrial and economic expansion. Expansion to process the agriculture products produced in our own area. An increase in our economic position will lead to more recreation, better schools, better churches, improved water and sewer facilities, community pride, and overall a better way of life.

Irrigation in the Oahe Conservancy Subdistrict could lead our proud State into a position of being able to give more to our national economy than we receive from the Federal Government through the many governmental programs, thus reflecting to the betterment of our Nation.

The following service clubs have asked that their voices be added to those who believe that irrigation should come to our area: Kiwanis, Cosmopolitan, Sertoma, Lions, and Zonta. Their letters are attached.

We commend you, the members of the Senate Water and Power Resources Subcommittee, for the progress you have made, and urgently request that you continue your efforts to bring an ample water supply to our district to assure us of irrigation in the Oahe conservancy subdistrict.

(The resolutions referred to follow:)

KIWANIS CLUB OF ABERDEEN,
Aberdeen, S. Dak., May 12, 1967.

To Members of the U.S. Senate,
Water and Power Resource Subcommittee:

The members of the Aberdeen Kiwanis Club wish to take this opportunity to urge authorization of the Oahe Irrigation Project at the earliest possible date.

We realize that agriculture is the main industry in the area and that the overall economy depends heavily on the agricultural situation. The irrigation development will improve and stabilize the economy of our area. This and many other factors will mean further development of Aberdeen and we give the project our wholehearted support.

The above statements were approved by action of the Board of Directors of the Aberdeen Kiwanis Club on May 3, 1967.

E. R. WILLIAMSON,
Secretary.

COSMOPOLITAN CLUB, INC.,
Aberdeen, S. Dak., May 19, 1967.

MEMBERS OF THE U.S. SENATE,
Water and Power Resource Subcommittee,
Washington, D.C.

GENTLEMEN: The Aberdeen Cosmopolitan Club, representing fifty three business men members, at a recent regular meeting discussed the forthcoming meeting to be held in Redfield and voted to go on record as wholeheartedly supporting the further development of the Oahe Project.

Water is the key to our future on both local and area levels and all future development must be planned with the availability of adequate supplies in mind.

Our area is blessed with ample tillable and productive land and its potential is unlimited when a good water supply is added.

We certainly urge, and support the continuance of, all efforts to provide this supply.

Yours very truly,

GEORGE J. DOYLE,
President, Aberdeen Cosmopolitan Club.

APRIL 28, 1967.

MEMBERS OF THE U.S. SENATE,
Water and Power Resource Subcommittee,
Washington, D.C.

GENTLEMEN: I would like to express support for the Oahe Irrigation Project on behalf of the Aberdeen Sertoma Club. At the Club's weekly meeting Monday, April 24, 1967 it was passed unanimously on behalf of the Club's 52 members to back the Oahe Irrigation Project. The Club feels that not only will adequate water be available for consumption, but it will afford a boon to our prairies in the form of added facilities for recreation and wildlife habitat.

The Aberdeen Sertoma Club also feels the Oahe Irrigation Project could help us retain our young people and stimulate our industrial expansion in the midwest.

The Aberdeen Sertoma Club solicits your support of this important project to the betterment of Aberdeen and the surrounding community. Thank you for your support and study of this fine project.

Sincerely,

ROBERT L. DELL,
President, Aberdeen, South Dakota Sertoma Club.

ABERDEEN AMERICAN-NEWS,
Aberdeen, S. Dak., May 4, 1967.

MEMBERS OF THE U.S. SENATE,
Water and Resources Subcommittee,
Redfield, S. Dak.

GENTLEMEN: At a meeting of the Aberdeen Lions Club Board of Directors Wednesday morning, the May 8th hearing at Redfield was discussed extensively

It was the unanimous opinion of the group that we wanted to go on record as very enthusiastically favoring completion of the Oahe Project. With very little imagination we can see vast benefits to the entire northcentral section of South Dakota. We can see increased rural population and as a result increased urban population to serve them.

We anticipate a more stable economy and greater income originating with the farmers and, of course, spreading to many others who will furnish services and merchandise to them.

There will be a more positive water supply for many communities not only allowing greater water use, by people presently living in these communities but also allowing for the establishment of more industry in the area.

Finally, we can visualize greater and better recreational facilities in the area with better flood control.

Very truly yours,

KENNETH POPE,
President, Aberdeen Lions Club.

ZONTA INTERNATIONAL,
Aberdeen, S. Dak., May 3, 1967.

U.S. SENATE,
Water and Power Resources Subcommittee.

DEAR SIRS: The Zonta Club of Aberdeen urges your favorable consideration of authorization of the Oahe project at the earliest possible date. Brown County area is predominantly agricultural and the economy of the City of Aberdeen, situated in Brown County, is dependent on agriculture.

The future growth of the city and of the economy depends to a great extent upon the development of the Oahe irrigation project; the water will definitely be needed in future years for city and industrial use.

It may also provide more job opportunities for our young people, rather than losing them to areas which now provide a much greater opportunity to them—at the same time these larger centers where our young people are gravitating are experiencing difficulty in absorbing the incoming population. This is related to the field of industry, as well as agriculture, since we are losing our rural population at an increased rate.

Yours truly,

MRS. FRAN COESTER,
President.

Senator McGOVERN. Thank you ever so much, Mayor Hurlbert.

I also understand Mr. Gary Sharp of Brown County has a time problem. We would be glad to hear from Mr. Sharp at this time.

I think Mr. Sharp is enrolled in South Dakota State University, is that correct?

STATEMENT BY GARY R. SHARP, BATH, S. DAK.

Mr. SHARP. Yes.

Honorable Senators, Governor Boe, distinguished guests, ladies, and gentlemen, I am Gary Sharp of Bath, S. Dak. I graduated from Aberdeen Central High School a year ago and I am now completing my first year of college at South Dakota State University as an agriculture major.

My parents live on a farm which is located 5 miles east of Aberdeen in the heart of the newly formed West Brown Irrigation District. So, naturally I have been exposed to the aspects of the many benefits of irrigation.

Two years ago, I did some research on water development and the potential of irrigation for our area for a speech class in my high school. Upon the completion of my speech, my fellow classmates and my instructors brought forth a number of questions concerning "opportunities" derived through this vast project. I attempted to point out a few of the many job opportunities as well as recreational opportunities obtained primarily through water.

Also, as a 10-year 4–H member, I have worked closely with conservation and have done various research projects concerning irrigation. Through my studies and presentations, the same caliber of questions have risen as did in my high school speech class; what opportunities will be available to my generation?

As I have tried to point out, the interest and thought is definitely present in the minds of the people my age. I believe that the majority of the people would like to stay in our area to make their homes and raise their families, if there would be more and new opportunities available to them. I also believe that water will bring these "if's" to a reality.

Our area is one of the finest areas in the world and why not keep it that way and also better it by keeping our youth here, where they are educated?

I, too, urge your strong support for the authorization of the Oahe project. Our future depends upon it.

Thank you.

Senator McGOVERN. Thank you very much.

Senator Burdick made a very good point last night, I thought. He said one of the inspiring aspects of support for water resource development is that many of our older citizens are doing this not because of any personal benefit that will ever come to them, since water resource development is a long-term proposition, but they are interested in it because of their concern for oncoming generations.

The witness we have just heard from now is one man that looks like he is young enough so he is going to have a good many years to benefit from the irrigation and water development in our State.

The next witness is a man who has played a very important part in the public education on irrigation potential in our State. He is a

member of a group that is of tremendous importance to the progress of our project, the Oahe Conservancy Subdistrict, and I am pleased to call Mr. Fred Holscher now to the witness stand.

He will be testifying much more fully later on in Washington, but he does have a brief statement that he has agreed to give to us today.

STATEMENT OF FRED H. HOLSCHER, FAULKTON, S. DAK., CHAIRMAN, OAHE CONSERVANCY SUBDISTRICT BOARD OF DIRECTORS

Mr. HOLSCHER. Mr. Chairman and members of the committee, my name is Fred H. Holscher. I live in Faulkton, S. Dak., and am chairman of the board of directors of the Oahe Conservancy Subdistrict. I am a lifelong resident of South Dakota and since my boyhood have been engaged in farming in Faulk County.

I would like to take this opportunity to welcome the committee to our State and thank them for arranging to hold this hearing in South Dakota thereby enabling many of our citizens to participate and affording many more witnesses the opportunity to be heard than would otherwise have been the case had they been required to go to Washington. In order to allow the committee ample time to hear these local witnesses the subdistrict's testimony here today will be brief. In the interest of conserving time and with the committee's permission we would like to reserve our major presentation for the Washington hearing.

The testimony today will be concerning Senate bill 6 jointly introduced by both of South Dakota's able Senators, which would authorize for construction the first stage of the Oahe irrigation unit. On behalf of the Oahe Conservancy Subdistrict, I appear before this committee to respectfully ask your favorable consideration of this legislation.

The Oahe Conservancy Subdistrict was established at the 1960 general election when the voters within its boundaries approved its creation by an overwhelming favorable vote of 85.3 percent.

The subdistrict consists of 15½ counties in north-central South Dakota and provides a responsible government entity which represents all people within its boundaries in the planning and development of the area's water resources. This entity was given the authority to levy an ad valorem tax on all property within its boundaries and to contract for certain obligations and responsibilities in connection with the construction and operation of the Oahe irrigation unit and other water resource developments. The subdistrict contains approximately 22 percent of the State's land area and population.

In South Dakota an undependable moisture supply is a natural hazard every farmer must face. Every year this hazard confronts him with an uncertainty as to the production of forage crops, grain, and livestock pastures. Having farmed in South Dakota for over 40 years no one appreciates the seriousness of inadequate moisture better than I. The development of the multiple-purpose Oahe unit would provide this much-needed moisture to those lands proposed for irrigation by the project. This would result in increased, stabilized, and diversified agricultural production not only to the irrigator but to those whose farms surround the unit. This stable diversified agriculture which will be realized through irrigation will also help encourage the State's industrial development. The project will make water available for other purposes which will enhance the lives of many South Dakotans.

Not to be overlooked is the important water supply this project will provide for municipal and industrial use, fish and wildlife and recreation uses.

South Dakota is fortunate to have stored within its boundaries, by four Missouri main-stem dams, thousands of acre-feet of water. The storage of this water has, however, inundated more than 500,000 acres of land. South Dakotans have long counted upon the construction of the Oahe unit to replace the production from these lands lost as a result of the construction of these reservoirs. These dams are now almost complete and we are looking forward to the realization of the vast irrigation potential they make possible.

The importance of the Oahe project to the State is tremendous and I am pleased to report to you that this project has the strong support of almost all of the people in the subdistrict area. This support has been evidenced in a number of ways. Initial support was demonstrated in 1960 when the subdistrict was formed, thus creating an organization with taxing power capable of contracting to assume a portion of the costs associated with the development of the Oahe unit. As stated earlier the subdistrict was created as the result of a favorable vote in excess of 85 percent.

In 1965 farmers directly concerned indicated their desire to proceed with the development of the project when they formed two irrigation districts. These two districts, located in Brown and Spink Counties, included the irrigable land proposed for the first-stage development. The organization of these two districts was approved by a favorable vote in excess of 80 percent of the people owning land within their boundaries.

At the 1966 general election local people again demonstrated their support when they granted the subdistrict the authority to enter into contracts with the United States and others to actually assist with the continued development of the Oahe unit and other water resource projects within its boundaries. The question of whether or not this authority should be granted was decided by every voter qualified to vote at the general election within the entire 15½ counties which comprise the subdistrict.

Voters approved the granting of such authority by an overall majority of 75.1 percent. The granting of this authority authorized the subdistrict board of directors to make a further general tax levy, not to exceed 1 mill, on all taxable property within the subdistrict in support of water resource projects. In my opinion the results of this and the other two referendums previously mentioned expresses better than words the local support and interest in the development of the Oahe unit and in water resource development in the subdistrict.

The Oahe conservancy subdistrict sincerely appreciates the opportunity to appear before this committee in support of the early development of the Oahe irrigation unit and urges your approval of Senate bill 6 so that construction of the Oahe unit can begin at an early date.

Mr. Chairman, I would once again like to express our appreciation for your coming to South Dakota and holding this hearing. It is our hope that this hearing will speed early authorization of the Oahe unit.

Thank you.

And also, Mr. Chairman, I have with me several statements and resolutions supporting the development of Oahe irrigation unit, from

different organizations, and these organizations have asked that the subcommittee present them to the committee, and with me I have a statement from the Associated General Contractors of South Dakota, Inc.; resolution adopted by the Hand County Soil and Water Conservation District; statement from the Hand County Board of County Commissioners; a statement signed by the Hand County State Bank and Farmers Home Administration and Land Bank Office, all of Miller; statement from Hand County Farmers Union; statement from South Dakota Ready Mix Association; resolution adopted by the Farmers Elevator; resolution adopted by the South Dakota Water and Waste Water Conference; statement from the Soil Conservation Society of America of South Dakota Chapters; resolution adopted by the South Dakota Coordinating Committee, and one from the South Dakota and Rural Appraisers; resolution from the South Dakota Engineering Society, and one from the South Dakota Land Improvement Contractors Authority, and also from the South Dakota Wool Growers Association.

I would like to file these.

(The resolutions referred to follow:)

THE ASSOCIATED GENERAL CONTRACTORS OF SOUTH DAKOTA, INC.,
BUILDING CHAPTER,
May 16, 1967.

Senator CLINTON ANDERSON,
Chairman, U.S. Senate Power and Water Resources Committee,
Senate Interior Committee,
Washington, D.C.

DEAR SENATOR ANDERSON: The Building Chapter of the Associated General Contractors of South Dakota, Inc. at their December 2, 1966 meeting, held in Huron, South Dakota, Discussed in detail, the Oahe diversion unit for South Dakota.

The Building Chapter represents 120 South Dakota contractors and associate members and a unanimous decision was made by the group in attendance to give the organizations whole hearted support to the Oahe diversion project. Many legitimate reasons could be offered for this support, but the AGC feels the following paragraph more than justifies our decision.

The area involved would be transformed from a dry-farming area, devoted mainly to small grain crops, to a more diversified type farming, thus increasing the cash income for the farmers of South Dakota. The project would increase much needed job opportunities for our State. The increase in the economy and the opportunity would certainly assist in maintaining and keeping our most precious possession in South Dakota, namely our young people.

The above factors, we believe, more than justify the Oahe project for our State and we, the Building Chapter of the Associated Contractors of South Dakota, urge expediting of this program.

Respectfully submitted,

R. M. SWIFT, *President.*

HAND COUNTY SOIL AND WATER CONSERVATION DISTRICT,
April 27, 1967.

At their regular meeting on April 27, 1967 the Hand County Soil and Water Conservation District Supervisors, who represent 720 cooperators and operating units in Hand County, adopted a resolution in favor of early authorization of the Oahe Irrigation Project.

WM. O. KOST, *Chairman.*

To Senate Interior and Insular Affairs Subcommittee:

We favor expedient development of the Oahe Irrigation Project. This is a needed project to insure stable feed supplies and adequate water reserves for the area.

HAND COUNTY BOARD OF COMMISSIONERS,
JIM BEATTY.
GOTFRIED, REIMAN.
TLYAN O. TITUS.
GEORGE MELKER, JR.
FREDDIE SCHMIDT.

This statement is in behalf of the following institutions:

The First National Bank of Miller
Hand County State Bank of Miller
Farmers Home Administration
The Federal Land Bank Office in Miller

The largest single limiting element of our local agricultural economy is lack of water. When moisture is inadequate, liquidation sales force prices lower, resulting in deficits concerning loan repayment, sometimes to the jeopardy of future credit. Our agricultural land is utilized to the point where lateral expansion for more total production is not possible; therefore, vertical expansion is necessary. We have the soil. We have the peole with a need and a desire to live here and develop the possibilities that may be offered by the development and water dispersion of the Oahe Canal.

Decentralization of agricultural services, including technology, has been curtailed by the intermittent production and money flow caused by unstable moisture supply. If a stable water supply is available, the agricultural field would provide employment and opportunities for our increasing population right in our immediate area.

The City of Miller has been somewhat girdled by skepticism regarding results in case of an area drought. An improved water supply for the city would provide both attraction and contentment, which would stabilize values.

With irrigation, each acre would have over three times more average production, with the side benefits of a much increased money flow and increased prosperity. In short, a very favorable benefit to cost ratio.

—. —. ————,
President, the First National Bank of Miller.
S. HART,
President, Hand County State Bank of Miller.
JACK LYNASS,
Supervisor, Farmers Home Administration.
ROBERT R. ROBERTS,
Manager, the Federal Land Bank Office.

To Senate Interior and Insular Affairs Subcommittee:

We believe irrigation is a must for Hand County. The water from the reservoir will do this quite efficiently. The important thing is the stabilizing effect it will have on the entire farming and business community. Corn, alfalfa and cattle are our main crops. In July and August, when rain fall is scarce, irrigation water at this time would not only double but triple the yield of corn as well as give several cuttings of alfalfa. There are times, when a drought occurs, it is hard to get enough feed gathered to maintain a foundation herd of livestock through the winter or until grass starts to grow the next spring. This has happened to not only myself in the past but to scores of other farmers.

We believe that water brought into this area from the Oahe reservoir will be the greatest thing that could ever happen to insure a stable income to the farmer.

HAROLD E. CARR, *President,*
HAND COUNTY FARMERS UNION.

SOUTH DAKOTA READY MIX CONCRETE ASSOCIATION,
Huron, S. Dak., May 16, 1967.

OAHE CONSERVANCY SUBDISTRICT,
Huron, S. Dak.

GENTLEMEN: The South Dakota Ready Mix Concrete Association, representing the producers of ready mix concrete in this state; wish to go on record as whole heartedly supporting the Oahe Irrigation Project.

We feel that completion of the project will result in a more diversified type of farming, a more stable farm income for the district, and the creation of more job opportunities for our people, thus benefitting the whole economy of our state.

Yours truly,

C. W. LARSEN, *President.*

FARMERS ELEVATOR ASSOCIATION OF SOUTH DAKOTA,
Aberdeen, S. Dak., May 4, 1967.

Mr. JAMES L. LEWIS,
Oahe Conservancy Sub-District,
Huron, S. Dak.

DEAR MR. LEWIS: It will not be possible for us to be represented at the Committee Hearing at Redfield on May 8th.

Would it be possible for you to file the Resolution adopted by this Association, as part of the written testimony? A copy is attached for this purpose.

Sincerely yours,

FARMERS ELEVATOR ASSOCIATION OF SOUTH DAKOTA.
CLIF ANDERSON.

* * * * * * *

IRRIGATION

This Association favors the stabilization and improvement of the agricultural economy in South Dakota and the development of more jobs and better opportunities for this State's young people.

As a means to this end, we urge Congressional action to authorize the development of the Oahe Irrigation Unit at the earliest possible date.

* * * * * * *

AMERICAN WATER WORKS ASSOCIATION, SOUTH DAKOTA SECTION; SOUTH DAKOTA WATER & SEWAGE WORKS CONFERENCE; WATER POLLUTION CONTROL FEDERATION, SOUTH DAKOTA ASSOCIATION,
Pierre, S. Dak.

The South Dakota Water and Wastewater Conference being vitally interested in the development of our water resources and realizing that water quality is of vital importance to the communities both within the Oahe Unit and the State, resolve that the Oahe Unit Irrigation Project with its considerations for multipurpose water uses be authorized and developed at the earliest possible date.

The South Dakota Water and Wastewater Conference at its Thirty-first Annual Meeting September 15-16-17, 1965, in Sioux Falls, South Dakota, discussed and approved the above resolution at the annual Conference business meeting on September 17, 1965.

CHARLES E. CARL,
Secretary-Treasurer, South Dakota Water and Wastewater Conference.

THE SOIL CONSERVATION SOCIETY OF AMERICA,
May 8, 1967.

SENATE SUBCOMMITTEE FOR RECLAMATION AND IRRIGATION,
Redfield, S. Dak.

HONORABLE SENATORS: We South Dakotans are proud that your distinguished Committee has taken time to hold a hearing regarding a subject important to all of us.

The Soil Conservation Society of America, South Dakota Chapter, wishes to take this opportunity to express our continued support for the Oahe Irrigation

Project. Our group first indicated its wholehearted support for this project through a resolution to the Directors of the Oahe Conservancy Sub-District. This resolution was adopted at our annual meeting in November, 1965.

Our SCSA South Dakota Chapter has a membership approaching 300. Our membership is composed of technical personnel and conservation minded individuals. They represent numerous Federal and State Agencies, plus interested educators, businessmen, and farmers. All support water and soil resource development. Because of our members' backgrounds, our Chapter is hopeful that the Oahe Irrigation Project will become a reality in the immediate future.

Very truly yours,

WALTER N. PARMETER,
Chairman, SCSA, South Dakota Chapter.

RESOLUTION URGING CONGRESSIONAL APPROVAL OF THE OAHE UNIT AS SET FORTH IN THE BUREAU OF RECLAMATION REPORTS OF MAY 1965 AND JUNE 1965

Whereas, the Oahe Irrigation Project will provide for the irrigation of 495,000 acres in North Central South Dakota, and

Whereas, the Oahe Unit will provide a plentiful supply of good quality water for municipal and industrial use in many areas within the Oahe Conservancy Sub-District that are now faced with serious water problems including quality and quantity, and

Whereas, the Oahe Unit represents a feasible plan to help stabilize the agricultural and business economy of the State, now

Therefore be it resolved, That the South Dakota Agricultural Coordinating Committee urges Congress to approve the Oahe Unit as set forth in the Bureau of Reclamation reports of May 1965 and June 1965.

The above resolution was approved at the regular quarterly meeting of the South Dakota Agricultural Coordinating Committee meeting at Huron, South Dakota, on April 17, 1967.

EDWIN JENISON,
Secretary-Treasurer, South Dakota Agricultural Coordinating Committee.

SOUTH DAKOTA SOCIETY OF FARM MANAGERS AND RURAL APPRAISERS,
January 7, 1966.

Be is resolved by the South Dakota Society of Farm Managers and Rural Appraisers assembled in Annual meeting that:

1. We fully support the Conservancy Districts and State of South Dakota in their request to the U.S. Congress for funds to construct the Oahe Irrigation Project as soon as feasible.

2. Completion of the Oahe Project is urgently needed to more fully develop the economy of the area and State particularly to stabilize and increase incomes and production as they are affected by extreme year-to-year variation in rainfall.

3. Irrigation will slow down the rapid migration of our young people from farms and small towns as farms decrease in number and small town businesses decline.

4. Irrigation development will partially offset the adverse effects on our farms and ranches of withdrawal of substantial acreage of rich bottomland inundated by Missouri River main stem reservoirs.

TRACY S. WALSETH,
President.

SOUTH DAKOTA ENGINEERING SOCIETY,
April 20, 1967.

U.S. SENATE SUBCOMMITTEE ON IRRIGATION AND RECLAMATION,
Senator GEORGE MCGOVERN
(In care of).
Mr. JIM LEWIS,
Oahe Conservancy Subdistrict,
Huron, S. Dak.

GENTLEMEN: On November 20, 1965 the South Dakota Engineering Society at its annual convention passed the following resolution:

"Whereas, the development of the Oahe Irrigation Unit will provide economic benefits to the State, region and nation; and

"Whereas, the South Dakota Engineering Society recognizes the importance of these economic benefits to the welfare of the State,

"Therefore, be it resolved, by the South Dakota Engineering Society to support the early development of the Oahe Unit and urges the Congress of the United States to pass legislation authorizing early construction."

As President-Elect of the South Dakota Engineering Society, it is my purpose through this letter to inform the subcommittee of our continued interest in this project and urge that the committee give its wholehearted support to this project. The South Dakota Engineering Society will be happy to supply further information and support if the committee feels this support is required.

Development of the Upper Midwest will provide local opportunities for rural people presently migrating to the already heavily-populated urban areas. It represents a real opportunity to provide useful development of an area which can easily absorb this type of progress.

Sincerely yours,

PAUL L. KOEPSELL, P.E.,
President-Elect, S.D.E.S.

SOUTH DAKOTA WOOL GROWERS ASSOCIATION,
Minneapolis, Minn.

To Whom It May Concern:

Whereas, the South Dakota Wool Growers Association, an organization consisting of 6,907 farmers and ranchers producing sheep, lambs and wool in the State of South Dakota, recognizes the immediate need for the continued and orderly development of the region's water resources, and

Whereas, the construction of the Oahe Irrigation Unit will result in development, a water resource project, of utmost importance to the people of South Dakota which will provide a stabilizing influence to that State's chief industry—agriculture, now

Therefore be it resolved, by the Board of Directors of the South Dakota Wool Growers Association, that this organization make known its support for the early development of the Oahe Irrigation Unit an integral part of the Missouri River Basin Project.

LLOYD EIKUM, *Secretary.*

(The resolution of the South Dakota Land Improvement Contractors Authority is printed on page 106.)

Senator MCGOVERN. Thank you very much, Mr. Holscher, and would you wait 1 minute?

Senator BURDICK. In your statement, you referred to the fact that you have lost more than 500,000 acres of land for reservoir purposes on these main-stem dams, whereas the Governor has pointed out that the landowners were paid for this land, of course, but the other losses are in great amounts. For example, do you have any figures now that you can submit to the committee for what the losses are of real estate and personal property taxes and other taxes?

Mr. HOLSCHER. These are the taxes that we are losing, real estate taxes from the loss of this land. I don't know whether Mr. Lewis, our manager, has those figures or not. I do not have them at the present time. If you wish, I would like to have Mr. Lewis answer that if he could.

Senator BURDICK. I would hope that either the amounts or approximate amounts be placed in the record, either here or at Washington, and No. 2, do you have an economic loss in addition to those tax losses? Now, I understand that it is hard to evaluate, but if you can give us some estimate what that loss will be, I would appreciate it.

Mr. HOLSCHER. Real good. I will try to get them for you.

Senator MCGOVERN. I know the work of Fred Holscher and his fellow conservancy subdistrict members has had a great deal to do with the success and referendum to which he referred. Of course, those

overwhelming votes will also carry considerable weight with members of the committee and also with the administration.

Senator BURDICK. Mr. Chairman, in view of that question, I'd like to explain, whereas, we have developed these main-stem dams for the flood protection principally for the lower reaches of the Missouri River, that we by our dedication to flood control, I say we, North Dakota and South Dakota, should get some consideration up here for the natural flows.

Senator MCGOVERN. I think that is a good point. We have contributed a great deal to security and well-being of the downstream States and now we are going to call on them for some cooperation and support.

I think before we proceed with our next witness, we might take a few minutes to ask if there are people in the room who would simply like to file their statement, either because of your own personal schedules that make it impossible for you to stay longer, or in order to conserve time. If there are, and you would stand and give us your statements, we can then pick up your statements and see that they are made a part of the record. We will keep the committee hearing record open for several days, so anyone who is unable to get his statement prepared today, if you would see that it is submitted as soon as possible to our committee office in Washington, or submit it to me or some other member of the committee, we will see it is made a part of the record. I am going to ask Mr. Roy Whitacre to go back to the table, the registration table, and if, without interrupting our hearings, those of you who have asked that statements be filed would see that he gets them either now or sometime during the course of our deliberations this morning or during the noon break, if that is just as convenient for you, we would be glad to receive those statements.

I think, now, we will proceed with our next witness, who is Mr. L. J. Maher from Huron. He is not only the assistant publisher of the Huron Daily Plainsman, but he speaks for the South Dakota Reclamation and Water Development Association, and we are happy to have him as a witness.

STATEMENT OF L. J. MAHER, VICE PRESIDENT AND ASSISTANT PUBLISHER, HURON DAILY PLAINSMAN, AND PAST PRESIDENT, SOUTH DAKOTA RECLAMATION AND WATER DEVELOPMENT ASSOCIATION

Mr. MAHER. My name is L. J. Maher. I live in Huron, S. Dak. I am vice president and assistant publisher of the Huron Daily Plainsman.

I represent the South Dakota Reclamation and Water Development Association as a past president. This is a statewide voluntary membership, nonprofit organization. Its purpose is to actively foster, promote, and support the orderly execution of any program or project for the development and beneficial use of water resources of South Dakota.

The association counts more than 1,200 individuals among its membership, which includes three irrigation districts; five conservancy subdistricts; two soil conservation districts; five investor-owned power companies; two cooperative electric power distribution associations; 23 REA cooperatives; three transportation companies; 11 chambers of

commerce; 41 banks and financial institutions, and the five largest daily newspapers in the State. In addition, the membership includes individual businessmen and farmers, equipment distributors, livestock processing plants, auction sales rings, wholesalers and retailers, active irrigators, and interested individuals.

Our association has maintained an active interest in the development of the Oahe irrigation unit since it was originally authorized in 1944. Although they have waited 23 years for this project to be initiated, our people continue to be enthusiastic about the economic stability it will provide for the entire State.

We wholeheartedly supported the exchange of more than one-half million acres of our best Missouri River bottom land for the promise of much greater economic and recreation benefits that will accrue from the development of the Oahe Reservoir and the Oahe irrigation unit.

Our association supported, and helped write, State legislation that authorized formation of the Oahe Conservancy subdistrict. We helped to explain to the people of a 15½-county area the necessity for the formation of this district. And in 1960 the people demonstrated their understanding of this necessity by an overwhelming 85.5 percent affirmative vote.

We actively supported the organization of irrigation districts in 1965.

Again last fall we assisted in presenting the case for contractural authority for the subdistrict board and an increase in the mill levy within the entire district, to enable the subdistrict to guarantee its obligations to the Federal Government toward operation and maintenance of the Oahe irrigation unit. Again the people responded with an enthusiastic 75 percent yes vote.

In October of 1967 the South Dakota Reclamation and Water Development Association will observe its 30th birthday. We are hopleful that in this anniversary year we may also celebrate the final authorization of the Oahe irrigation unit, the project that has been the major goal of this association during most of its 30-year existence.

I respectfully ask your favorable consideration and approval of the legislation proposed by Senate bill 6.

Senator McGovern. Thank you ever so much.

Senator Burdick has a question.

Senator Burdick. Getting back to the 500,000 acres of land that is taken for reservoir purposes, your statement is that it's for Oahe Reservoir only?

Mr. Maher. No, sir. It was for Oahe Reservoir, but had the reservoir been built at a lower level, it would have precluded the irrigation, the reservoir would not have used so much of this land. It would not have been as high and wide.

Senator Burdick. Are you including acreage for the other three main-stem dams?

Mr. Maher. No, sir.

Senator Burdick. How many acres has been taken for those other three?

Mr. Maher. I don't know, sir.

Unidentified Voice From Audience. 500,000.

Senator Burdick. The total is 500,000.

Senator McGovern. Thank you very much, sir, for your statement.

Is Duane Acker here this morning? Duane Acker is the dean of agriculture at the South Dakota State University at Brookings, and we are happy to have his statement now.

STATEMENT OF DUANE ACKER, DEAN OF AGRICULTURE, SOUTH DAKOTA STATE UNIVERSITY, BROOKINGS, S. DAK.

Mr. ACKER. Senator McGovern, Senator Burdick, and Senator Moss, I speak this morning on behalf of Hilton Briggs, president of the South Dakota State University, Dean Johnson, and our total research faculty of the university.

I would like to outline briefly the past and planned activities of the agricultural experiment station and the South Dakota Cooperative Extension Service of South Dakota State University that pertains to the Oahe irrigation unit.

Completed research undertakings consist of (1) a comparison of incomes under dryland and irrigated conditions as they pertain to the individual farmer and (2) an assessment of the impact of irrigated agriculture on the area and State.

These research project results were made available to the Bureau of Reclamation and were used as part of the basis for the Oahe unit report as published by the Bureau of Reclamation.

Numerous research reports were published as these projects progressed. These reports are available if the committee wishes copies. The final outcome of the total research effort has been summarized, however, by the extension service in a recent leaflet.

This leaflet is about as brief a summary as can be compiled and is attached hereto as a part of my testimony.

Research projects underway but not yet completed that will have direct implications in the Oahe unit area are (1) investigations to determine if tile spacing in the Oahe unit can be safely increased; (2) correlating soil moisture conditions and microclimate with evaporation losses and water requirements of plants in the Oahe area; and (3) correlation of different irrigation and drainage practices, salt accumulations, and soil moisture movement.

In addition to the above, the South Dakota Water Resources Institute has numerous projects that will have implications in the Oahe area although they are not being conducted specifically for the Oahe area.

Other important research that the university hopes to be able to start soon will investigate the feasibility of alternative techniques of irrigation water management in large irrigation projects.

The Oahe Conservancy Subdistrict and other subdistricts in the State have provided the cooperative extension service challenging and rewarding experiences. South Dakota law requires that the creation of taxing entities must be supported by a vote of the electorate.

Each subdistrict covers many counties. It was, therefore, necessary for vast numbers of people to be aware of what was involved in each issue before going to the polls. Cooperative extension assumed this educational task. The issues of subdistrict organization, irrigation district organization, and contracting authority have all been voted upon. Each issue called for another educational program.

Some 27 extension publications have been written and distributed.

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The news stories, circular letters, meetings, radio and television programs handled by extension would number into the thousands.

The task has been a big one, but we do feel that South Dakota people were well and honestly informed when they voted on the issues.

Extension's plans for the future call for creation of at least three irrigation demonstration farms in the Oahe area. One is already operating. The objective of these farms is to demonstrate irrigation techniques, agronomic practices, farm enterprise management, and water management. Only a very limited amount of applied research will be permitted. The objective is to teach through demonstration. The farm operators will be actively assisted by area irrigation specialists of other disciplines. The first area specialist will be added to the staff this year.

Teaching farm management by the farm budget method is also being expanded in South Dakota. Two area specialists have been appointed to date. Three more areas will be established as soon as funds are available. Budget farms are adaptable to either dryland or irrigated farm enterprises or to combined enterprises. The Oahe area will receive particular emphasis on farm enterprise management under irrigated conditions.

May I sum up my remarks by assuring the committee that South Dakota State University will assist Oahe area farmers to make the transition from dryland to irrigation farming in every way possible.

Senator McGOVERN. Thank you very much, Dean Acker.

I see in the audience, and also on the witness list, our former Governor, former Gov. Ralph Herseth, who has been a longtime spokesman in the field of resource development, and Governor we would like to call upon you to testify at this time.

STATEMENT BY RALPH HERSETH, FORMER GOVERNOR, STATE OF SOUTH DAKOTA

Mr. HERSETH. Senators McGovern, Burdick, and Moss, Governor Boe, and members of the press, ladies and gentlemen. I am Ralph Herseth of Houghton, S. Dak. By the way, Senator Burdick, I am only 4 miles removed from the border of North Dakota in one instance, where my business is, and about 14 where my ranch is. So, I feel that you are stating the truth when you speak that you have the kinship feeling toward us. I think that is a reciprocal feeling. We also have that for the State to the north, and we have had good relations with them throughout the years.

My remarks will be brief, both as I have prepared the ad lib portion, and also the portion that I have filed in the form of a paper, and, therefore, I would ask the patience of the committee and the people assembled here to bear with me on both.

I think the meeting in Aberdeen last night provided a very fine prelude to the meeting here today. The distinguished gentlemen of the United States gave us a very fine preliminary hearing as to what the Senate of the United States gave us a very fine preliminary hearing as to what we might expect today.

I also feel that the experience that most of us have had, that we will probably come to the age or the time when the matter that we are here

to meditate today is of great importance. I have gained some impressions over the years and in my lifetime, I think we have witnessed perhaps at least three situations and developments that might be referred to as revelations.

First, I think perhaps we would all agree that the travel by air has transpired in our lifetime to the extent that we are now neighbors to any people in any part of the globe so far as distance and time is concerned.

Certainly, at the present time we are developing atomic energy to the extent that it is affecting everybody's life and it is probably an understatement to say this is a revelation to all of us.

So far as farm life itself is concerned, in my opinion, I think the REA Act of 1935 was probably the greatest revelation so far as the man on the farm is concerned.

Probably the greatest single step of progress that we have witnessed, and now I look anxiously and not with worry, because I have confidence in the Members of the U.S. Congress and especially the committee that is assembled here today—by the way, it is not what I have been, as I would like to say, a host, to Senator Moss as he appeared here some few years back when I was Governor of the State with his distinguished guests from Oklahoma, Robert Kerr, and our late Senator Case from South Dakota.

I have great confidence for these people to work with us and bring us to a successful status as far as the matter before us at the present time is concerned.

The multipurposes that are served by the impalement of the water by the four main stem dams, and by the way, Senator Burdick, I am sure if any information is correct, that South Dakota gave almost the same total of acres, and that is a half million acres, in each case. At least this is what we used to say that South Dakota for the main stem dams, gave 500 and——

Senator BURDICK. I am very familiar with the facts in North Dakota, 560,000 acres.

Mr. HERSETH. I posed the question on purpose because I think we are always interested in having that clarified.

Senator MCGOVERN. Maybe we contributed a little higher quality.

Mr. HERSETH. This, Senator McGovern, and I think we have a little room for levity, was conceded by Governor Davis to me at one time through a heated discussion through the press.

I would also make the observation that there are no people on the face of the earth who have water to waste and since this is controversy and has been controversy between the people who favor navigation and irrigation and hydroelectric and flood control and recreation, I think it is important that I make a statement at this time that the nearer this good fresh water that we have impounded in South Dakota that emanates in North Dakota and Montana, the nearer this water gets to the Gulf of Mexico, the nearer it comes to being wasted as far as good services to mankind is concerned and with that, gentlemen, I would like to proceed with the next part of my testimony today.

I thank you very much and I will file this statement for inclusion in the proper place.

Senator MCGOVERN. Thank you so much for your statement. We especially appreciate that statement from our former Governor, a man

who lives within the proposed irrigation area. Your full statement will be included.

(The statement follows:)

STATEMENT OF RALPH HERSETH, HOUGHTON, S. DAK., FORMER GOVERNOR OF SOUTH DAKOTA

I express sincere appreciation to the honorable United States Senators here present for their indulgence in the proceedings of this assembly of citizens gathered here today. Our purpose is to determine the pulse of our people in this area as it pertains to the intended use of the vast water resources created by the series of dams on the Missouri River. I support unequivocally the intent and purpose of the 1944 Flood Control Act of our Federal Government. I similarly support firmly the 1959 Conservancy District Law of South Dakota, passed by an 81% majority of the legislature then in session. I respectfully refer your attention to the emphatic vote of approval by the people to approve contract authority.

My vigorous support of these principles is not merely recent or temporary. May I submit excerpts from my message on this subject to the 1959 assembly of the South Dakota legislature. Quote: "One of our oldest resources will soon become our newest frontier. As such it offers our State virtually limitless possibilities for power, irrigation, industry and recreation. I refer to what will be when completed one of the largest bodies of fresh water in North America. This chain of lakes in central South Dakota will be formed by the Missouri River dams, stretching in one continuous line from our northern most tip to our southern boundary.

"It is noteworthy that when these reservoirs are filled, South Dakota will rank fourth in the Nation in the amount of usable water in storage. The price we have paid for this is the loss of one-half million acres of agricultural land. Whether or not this sacrifice has been worthwhile will in considerable measure depend on the action taken at this legislative session and upon action taken by this Administration. For simple logic will tell us that there will be a great demand from all the states to our South for the right to use and appropriate this vast water supply. Unless we move immediately and vigorously to lay claim to our rightful share of the river water we will awake one day to find that while we slept our water rights floated downstream.

I therefore earnestly recommend that this Legislature enact permissive water conservancy district legislation to prove unmistakably to Congress, the Bureau of Reclamation and the Department of Interior that we intend to claim and utilize water rights for all of the water we will need in our state. The legislation enacted should be enabling legislation. It should provide a given area or group of people a choice between irrigation or dry-land farming. It should give cities and towns the right to reject or accept municipal water supply from the reservoirs. At the same time it should protect the rights of all the people of our State to use the water for any desirable purpose.

Gentlemen of the U.S. Senate, I contend that the enabling act of 1959 was good legislation, also, that the vote to approve contract authority signaled the voice of free people in the true democratic process of government. I solicit your best efforts in the halls of our National Capitol to aggressively and progressively seek the vote for funds and laws that will refine and further our progress toward a new era in South Dakota. Such an era will invite industry, employ people and enrich the land through the full utilization of an indispensable and often scarce economic item—water.

I commend Senator McGovern for his wisdom and success in sponsoring this forum. I express gratitude to this committee for notable endeavor and success in reclamation and conservation and the emphasis they have placed on the importance of water. I anticipate a fine return to South Dakota from the meditation with you on this day. I regard you, gentlemen, as a liaison between our State and the National Congress. Agricultural and industrial excellence is the ultimate destiny of South Dakota and its neighboring States. We are individually and

collectively committed as a free and vigorous and informed people to take a hand in shaping that destiny. I firmly believe the people are ready and the time is now. We are asking only that which is necessary to proceed from here. I trust we have presented a clear case to you gentlemen. We will require your assistance if we will keep our date with destiny.

Senator McGovern. Mr. Chester Gullikson is the next one on my list from Brown County. Mr. Gullikson, may we hear from you?

STATEMENT OF CHESTER GULLIKSON, FARMER FROM BROWN COUNTY, S. DAK.

Mr. Gullikson. Honorable Senator George McGovern, Senator Burdick, and Senator Moss.

My name is Chester Gullikson from Brown County. My business is the production of polled Hereford cattle for seed stock; the feeding of cattle for market and the production of feed for my cattle operation.

Today is a landmark day. May this be the beginning of the "era of rain and moisture insurance" for this area of northern South Dakota.

After being on at least four irrigation tours in Nebraska, the great advantages of bringing water to the land became readily apparent to me. There seemed no limitation to the potential production of the land where irrigation was being practiced.

The James River runs through my farm. Although it is a rather uncertain supply of water, I decided to try to irrigate from it. In 1965, I leveled 50 acres of land. In 1966, this 50 acres was irrigated with gated pipe along with 15 acres that needed no leveling. Needless to say, my irrigation project is being followed with great interest by both friend and foe of irrigation, and I might add—possibly I am under observation by some, also.

While I was a student at South Dakota State University, the soils professor stated that the James River Valley had one of the three finest soils in the world. With adequate water, it will contribute greatly to the food stocks of the Nation.

The results of the 1966 corn production under irrigation was highly productive and encouraging—and proved beyond a doubt that irrigation, even in a wet year, will increase yields markedly. Even after a hail loss of 30- to 60-percent damage, the irrigated corn yielded 105 to 128 bushels per acre of 13 percent moisture, shelled corn. If this corn would have been harvested for silage, it would have yielded from 18 to 22 tons per acre, whereas, an 8- to 10-ton yield on dry land is considered an excellent yield. In a dry year from zero to 3 or 4 tons an acre can be expected, 40 to 50 bushels of corn per acre on dry land is considered good while the county average is 34 bushels per acre. Dryland yields of 1.5 to 3 tons of alfalfa could be increased to 5 to 7 tons per acre depending on the growing season.

Tame grass and sudan pastures could be irrigated to provide sure and dependable pastures for cattle and sheep. The terrible dread of lingering and devasting drought could be nearly a thing of the past. It is extremely important to me to know that I can produce enough feed each year without too much worry. It will not be necessary with irrigation, to wait until the end of the summer to know how many

breeding cattle I can carry through the winter, or how many cattle can be fattened for market each year.

The word that best describes why I am in favor of irrigation is "stability"—the doing away with extreme yield fluctuations due to a lack of moisture. Stability on the farms will mean stability in our entire area economy.

An important byproduct of the Oahe project will be through the improving of the James River Channel. That is, the deepening, widening, straightening, and shortening of the river from 119 miles to 54 miles. This will largely end the flooding almost annually of 20,000 acres of rich bottom lands resulting in an estimated loss of $1,500,000 per year to farmers and businesses in Brown and Spink Counties.

The great and worthy food for peace program in 1967 is a mere infant compared with the giant it will be in the year 2000, only 33 short years away. The Oahe project will probably be only half completed by that time, and the cry for food then will be deafening unless Congress approves the great Oahe project and many others like it in the very near years to come.

In the name of humanity, I urge the authorization of this important project so it may contribute to the welfare of future generations.

Senator Moss. That was a very elegant and excellent statement.

How often do you irrigate on this experimental farm during the year? How much do you have to irrigate?

Mr. GULLIKSON. Last year was my first experience with irrigation and we had above normal rainfall for the growing season. I irrigated two times on part of the field and three times on another part of the field.

Senator Moss. Which points up the fact that it is really just at critical times that you need this irrigation water, but those times are critical to the end result of the yield on the land.

Mr. GULLIKSON. That is absolutely right.

Senator MCGOVERN. I think Mr. Gullikson made a good point here in reference to our future food demands. One of the arguments we used to run into against reclamation projects was that it was inconsistent to be putting funds in the development of irrigation projects if at the same time we were piling up agricultural surpluses. That never really was a very good argument. There was an answer to it 10 years ago, but it's not a good argument today at a time when the surpluses are gone and all the demands are going to be made on this country for food from places all over the world where they are growing food deficits. I think we are going to have to make the best possible use of our land and water to meet the challenge ahead.

Thank you very much for your statement.

Mr. GULLIKSON. Thank you, gentlemen.

Senator MCGOVERN. I have been told that there were three farmers here from Brown County who must leave before lunch. Mr. Harold Smith, Mr. Alfred Locken and Mr. James Sperry. If they would like to come forward, now, we would be glad to hear from them at this time so they can get away.

I know some people are out planting today, out doing some work in the fields, and we would be happy to have those statements and let you get away as soon as possible.

This is Mr. James Sperry who is testifying now.

STATEMENT OF JIM SPERRY, FARMER IN THE WEST BROWN IRRIGATION DISTRICT

Mr. SPERRY. Chairman McGovern and fellow members of the Senate Water and Power Resources Subcommittee, I am Jim Sperry. I farm in the West Brown Irrigation District. I am very optimistic about our future prospects as an irrigated area. I feel that the increased productivity, as well as the increased assurance of harvesting a crop will lead to improved income levels for those of us on the farm as well as our city cousins. I realize that bringing water here and developing our land to receive it will require much work and planning in addition to large financial investment. As the father of two boys and one girl now attending grade school, I am willing to help undertake the development of this project which will quite possibly be delivering water here by the time my children are ready to establish homes and begin careers of their own. I hope that the stimulating effect of irrigation on South Dakota economy will make it possible for my children, as well as my neighbors' children, to find opportunity here in South Dakota rather than migrating to more densely populated areas of our country.

For these reasons I urge the authorization of the Oahe unit irrigation in 1967.

Senator McGOVERN. Thank you ever so much, Mr. Sperry.

Is Mr. Smith or Mr. Locken here at this time?

STATEMENT OF HAROLD SMITH, FARMER, ABERDEEN, S. DAK.

Mr. SMITH. Members of the U.S. Senate Water and Power Resources Subcommittee, I am Harold Smith of Route 1, Aberdeen, S. Dak. Many of my relatives farm in a pump irrigated area in the Platte Valley of Nebraska. In observing their operations through the years, I can see how irrigation has effectively stabilized their farm income and the overall economy of the area. It has provided them with more consistent and higher crop yields which in turn has resulted in the establishment of numerous crop processing plants and other related agricultural industries.

In the not too distant future we are going to need increased production such as this in many new areas in order that we may adequately feed the people in our country. We have the soil so if we have the water we can do our share.

I urge authorization of the Oahe project at the earliest possible date.

Thank you for this opportunity to appear before you on this important project in relation to our area.

Senator McGOVERN. Thank you very much for your statement.

STATEMENT BY NORBERT MILES, PUBLISHER OF THE TIMES RECORD, DOLAND, S. DAK.

Mr. MILES. Mr. McGovern, I would like to bring up one point that could have been overlooked in Mr. Gullikson's testimony. The question was asked by the honorable Senator as how often this corn crop last year was irrigated. Having spent 10 years in the seed corn company and seeing many operations, I would like to add that he was

listening to a year which South Dakota saw and I won't say "over," but I will say "above" average supply of moisture and it also should be pointed out to the committee that this is generally unusual for the State of South Dakota rather than the farmers of this area witnessing the fact of an overage supply of moisture. We see the under-average supply of moisture more often than we do that he testified to.

Senator McGOVERN. Thank you.

Is Mr. Locken here?

STATEMENT BY ALFRED LOCKEN, FARMER, ABERDEEN, S. DAK.

Mr. LOCKEN. My name is Alfred Locken. I am a farmer, and I live 12 miles southeast of Aberdeen. I was told sometime if I had anything to say on behalf of irrigation, I would not have to go to Washington to say it, I could come down to Redfield. I thought of two reasons why I would rather go to Washington. One is, probably the testimony down here today would be a little bit like something of the sermons we hear in church on Sunday. A lot of times some of the people aren't there that should be hearing it. Another reason is, if I should get off the track here today and get kicked out, I doubt if any of my neighbors would let me back in here; but it seems, or sort of seems, like if I get kicked out of Washington, I might get right back in again. Anyhow, I am down here just to pass a few of the things that my neighbors talked about at different times that pertains to irrigation.

Senator McGOVERN. I might say, that is not the only advantage that Redfield has over Washington.

Mr. LOCKEN. We find that we have some problems to solve which can be solved to a large degree by bringing irrigation into our area. There are some trends existing which should be reversed, and we think this could be brought about by making the proposed Oahe irrigation project a reality.

My farm is quite typical of others in the area so I will explain one of the trends that exist and how it affects my farm. I would like to tell it this way.

I built a silo on my farm in 1951. When I made the deal for the silo, the silo company representative asked me if I wanted my name put on the silo, and if so it should be put on at the factory. I decided I would get a certain amount of satisfaction out of seeing my name on the silo, so I said "Yes" I wanted my name on the silo.

He then asked me just what I wanted put on the silo. I had one son and while he was but a little tyke at the time I thought he would soon be helping me on my farm, and he, too, might get a certain amount of satisfaction in seeing his name on the silo. I decided to have the words, "Alfred Locken and Son" put on the silo.

Future events, blessed and otherwise, soon caused me to realize that I should have the letter "S" put on the end of the word "Son," because eventually I had three sons.

I seriously considered getting the letter "S" put on, but before I got it done a few things started to happen in the community. Some of my neighbors sold out and I soon realized that my farm was not large enough for more than one son and myself anyhow.

I added to the size of my farm at different times, but even then I could not see where it was large enough to be a father-son operation. So today, even though the land which I farm was at one time farmed by four separate farmers, my chief concern is not if it is the size for my sons and myself, but if the present trend continues, how long will it be before somebody comes along and wipes me out so that my name will not be on that silo, either. I think irrigation in this area will reverse this trend.

Another thing my neighbors and I discuss is education and its related problems. Until this past winter, I have been part of a common school district. In 1966 there were 119 children on the school census. These children were of ages 1 through 20. If we were to bring that figure up to represent the number of children being reared in our district in 25 years or a generation, we would have to add about 25 percent which would bring it up to 150.

Assuming that it will take the same number of people to maintain the community in the next generation as it does this one, we will be educating 70 people to maintain the community, and the other 80 would have to go some place else for a living. Now they cannot go into the neighboring district because that district has the same problem as we do. They cannot go into the next county because they also have the same problem.

We are paying for the education of these 80 children, but they are going to some other State or county to make use of it. I feel we are causing these young people to have to leave our State because we are not making full use of one of our natural resources, namely, water from the Missouri River.

We also discuss what is happening to our churches. As the farms get fewer and farther between, it is becoming increasingly difficult for rural and small town churches to operate, because of the declining membership.

These people whose churches are being closed can, of course, go to church in some larger city for instance, but according to our district church president what is happening in a good number of cases is they neglect to go to church any place when the local church has to fold up.

I am of the opinion that if our community and our country is to have continued, sound leadership, it has to come from those with deep religious convictions. I will not say that we cannot get that kind of leadership from a metropolitan based church, but according to the results of a survey conducted sometime ago, 40 percent of the full-time workers in our church came from rural or small town churches, whose roots were in the soil, yet a very small percentage of the total church population belonged to these churches.

So, I am saying it would be very fine if our leadership could come from this 40 percent or slightly below it. Irrigation, if it would come soon enough, should surely help save some of our churches.

These are some of the things I discuss with my neighbors. Now I find that some of my neighbors who agree with me on these things, are some that had their land petitioned out of the irrigation district when it was formed. It seems some did not want to become part of an irrigation district at that time because they did not want to change their method of farming. Others felt they were being rushed into it

too fast, and, of course, there are some who are against any form of organization.

The point I would like to bring out here is that I think when irrigation comes to this area, there will be a lot more than the present 190,000 acres to irrigate.

This concludes my testimony, thank you.

Senator McGOVERN. We appreciated that excellent statement.

I think there are a good many qualities that a person has to have to be a successful farmer, but one of them is a sense of humor, and we are glad to see that demonstrated here by this last witness, Mr. Locken.

We have with us Mayor Lowell Schmidt. We are happy to have him present for this hearing and I think we will call him to the witness stand at this time.

I might tell you, while Mayor Schmidt is making his way to the front of the room, that we also have the basement of this building filled with people who are interested in our hearing. I understand the proceedings are being piped downstairs by means of the amplifying system. That is further indication of the interest in the subject that we are discussing.

Mayor Schmidt, we are happy to have you before the committee.

STATEMENT BY LOWELL SCHMIDT, MAYOR, CITY OF HURON, S. DAK.

Mr. SCHMIDT. Thank you Senator McGovern and members of the committee.

My name is Lowell Schmidt. I am the mayor of Huron, S. Dak., and have served in that capacity since May 3, 1965. This statement is made on behalf of the more than 15,000 residents of the city of Huron, at the request of and with the knowledge and acquiescence of the city commission of Huron as evidenced by a resolution of that body.

Huron is located on the west bank of the James River about 15 miles south of the James diversion dam. Located, as we are, in an area of erratic rainfall, meager precipitation, and consequent erratic streamflow, we are acutely aware of the absolute need of water. We recognize its need for irrigation and industry and in particularly dry seasons, the need for potable water for even basic living. As a consequence, residents of Huron have been among the very first to encourage all forms of water search in this area. We strongly and ardently endorse the Oahe plan as the apparent feasible, large volume producer of sufficient water for this area.

My remarks on behalf of our city, due to limitation of time, will be confined to that portion of the Oahe plant—the James diversion dam and reservoir.

Huron, throughout its history, has been plagued with an inadequate municipal water supply. Studies indicated that proper use of natural James River flow offered the best possibility for relieving the water shortage.

The James diversion dam was constructed appropriate for a stage of Oahe, to provide the city of Huron with a supplemental municipal and industrial water supply. The reservoir was designed as sufficient to

relieve water shortage for the city of Huron through 1970, assuming normal future growth of Huron. Our city now makes yearly payment toward construction and maintenance.

Our experience since completion of this dam has verified the fine benefits to our city and this entire area in municipal water supply, recreation, and fish and wildlife assistance.

We in Huron look hopefully to the Congress for construction of the Oahe project. Not only will the flow of water in the James River then become ample throughout our foreseeable future, but the flood control and irrigation benefits will be the very lifeblood of our growth toward our full potential.

I have also been asked by the board and officers of the South Dakota Municipal League to file their brief statement and resolution in this regard. I will also file on behalf of the Huron Chamber of Commerce, the Northwestern Public Service Co., and the service clubs of Huron, Rotary, Sertoma, Lions, and Optimist Club, varying statements in this regard.

Thank you for your time, yes, and happy to have you here in South Dakota for this event.

Senator ANDERSON. The Northwest Public Service Co. letter is already in the record. The rest will be printed at this point.

SOUTH DAKOTA MUNICIPAL LEAGUE.

RECOMMENDATION OF THE OAHE IRRIGATION PROJECT

At the 32nd Annual Conference of the South Dakota Municipal League, October 2, 1965, Watertown, South Dakota.

It was moved by W. M. Sanford, City Commissioner of Huron and seconded by Elwin Hull, City Commissioner of Pierre that the South Dakota Municipal League urge the development of the Oahe Irrigation Project at an early date. Motion carried.

The Recommendation is as follows:

RECOMMENDATION OF THE OAHE IRRIGATION PROJECT

Whereas, the future economic development of South Dakota depends to a great extent on the availability of a suitable supply of water for municipal growth and industrial use; and

Whereas, many municipalities within the State have long standing deficiencies in the quality and quantity of their water supplies; and

Whereas, the plan of development for the Oahe Irrigation Unit would make an adequate supply of good quality water from the Oahe Reservoir on the Missouri River available to 23 communities and their associated commercial-industrial establishments, now and for future municipal users;

Therefore be it resolved, by the South Dakota Municipal League at its convention duly assembled in Watertown, South Dakota this first day of October, 1965, that this organization recognizes the value of the many benefits that will be derived from the Oahe Unit and urges the development of the Unit at an early date.

/S/ W. M. SANFORD,
President, South Dakota Municipal League.
/S/ R. D. FALK,
Secretary, South Dakota Municipal League.

Dated October 2, 1965.

At the Convention of the Municipal League in Lead, South Dakota on October 6, 1966, the Water Resources Committee once again urged municipalities to cooperate to the fullest extent in the development of the Oahe Irrigation Project.

MILTON E. FISCHER,
Chairman, Water Resources Committee, South Dakota Municipal League.

CHAMBER OF COMMERCE,
Huron, S. Dak., May 4, 1697.

Members of the U.S. Senate, Subcommittee on Power and Water Resources, of the Senate Interior and Insular Affairs Committee, Washington, D.C.

GENTLEMEN: The Huron Chamber of Commerce has a deep and abiding interest in the Oahe Irrigation Unit. Since its authorization in 1944, this Chamber has led the entire state in support of this project.

Members of this Chamber have provided leadership for the State Reclamation and Water Development Association during much of its 30 year existence. They served as directors of the Mississippi Valley Association which has championed this cause through the years. They have served as members of the legislatures which provided the essential state legislation and as directors of the Oahe Conservancy Sub-District which was organized for the purpose of developing the project at the local level. The Chamber was one of the most active supporters of the information of the Sub-District itself.

The Huron Chamber of Commerce has worked hard for this cause all of these years because it recognized this great project as the one most important milestone in the development of exciting new economic environment in this section of South Dakota.

The people of Huron and Central South Dakota have waited 23 years for the initiation of the Oahe Irrigation Unit, but their enthusiasm still runs high. In 1960 Huron residents voted by a 92.5 per cent majority to tax themselves to establish the Oahe Irrigation Conservancy Sub-District. Last Fall they again turned out with an overwhelming affirmative vote to increase this tax to enable the Conservancy Board to fulfill their obligations to the Federal Government for the construction of this project.

The Huron Chamber of Commerce stands ready to do anything within its power to help make this project a reality.

Although this city is just beyond the area to be directly effected by irrigation, this Chamber is fully cognizant of the important economic aspects of this development upon this community. Our city depends on the Oahe Unit for a continued sufficient water supply in future years, and is ready to pay for this supply. Return flows from the Oahe Unit and the Garrison Unit in North Dakota will stabilize the flow of the James River, not only through Huron, but through the entire James River Valley, providing for municipal water supplies and possibly more supplemental irrigation for the entire valley.

Processing plants already established are basing future operations on the great potential of the Oahe Unit. Others, not yet here, are anxiously awaiting the start of construction.

We have watched the development of power generation, navigation in the states to the south, and recreation on the Great Lakes of South Dakota. We have watched and waited patiently for the long-awaited benefits of irrigation to this immediate area.

We respectfully urge your favorable consideration of final authorization of the Oahe Irrigation Unit in this first session of the 90th Congress.

Respectfully,

ELLIS ROSS, *President.*
HOMER A. STAVES, *Manager.*

ROTARY CLUB,
Huron, S. Dak., May 4, 1967.

MEMBERS OF THE U.S. SENATE,
Subcommittee on Power and Water Resources of the Senate Interior and Insular Affairs Committee, Washington, D.C.

GENTLEMEN: The Huron Rotary Club includes among its membership some 75 business and professional men from the Huron community.

For years we have looked forward to the ultimate development of the Oahe Irrigation Unit as the single most important project in the future of our city, area and state.

There can be no question of the economic significance of this great project to the future of this entire area. In fact, many of our existing businesses now count upon the eventual development of this Unit in their plans for the years in the immediate future.

Certain processing plants which are now operating here have remained because of the bright promise of the future. Others have selected this location for the same reason.

Huron is well aware of the value of irrigation. We already have nearly 15,000 acres of this type of farming, supplied by underground acquifers and in some instances by surface water from the James River which will carry the return flows of the Oahe Unit.

This good sample may be increased, but it is not enough to support new agricultural crops which will stabilize the economy of the future. Our people have had one experience wih a new crop—and not enough total acreage to support a processor.

Irrigation farmers in Beadle and Spink Counties made substantial investments in equipment to enable them to grow sugar beets a few years ago. But the total acreage available was not sufficient to support a sugar beet refinery and the U & I Sugar Company, which had been buying their production for processing in the Western part of the state was forced to close its South Dakota plant.

This is one company, and only one, which will be looking to this area for a processing plant when sufficient acreage has water available to support a plant.

The city of Huron so depends upon the James Diversion Dam, originally planned as part of the Oahe Project, for its water supply. This dam was constructed by the Department of Interior, now is being paid for by the city of Huron by way of water purchases. But the water supply created by this dam was only calculated to be sufficient for the city until 1970. By that time it was assumed the Oahe Project, of which this small dam will be an integral part, would be under construction and that Huron in future years would be able to purchase water in increasingly larger quantities as it was needed.

The Huron Rotary Club respectfully requests your favorable consideration of Senate Bill Six, which contains essential legislation to authorize construction of this project.

Respectfully submitted.

WILLIAM VAN TASSEL, *President.*

THE SERTOMA CLUB OF HURON,
May 4, 1967.

MEMBERS OF THE U.S. SENATE,
Subcommittee on Power and Water Resources, of the Senate Interior and Insular Affairs Committee, Washington, D.C.

GENTLEMEN: The Huron Chapter of Sertoma International boasts a membership of just under 100 business and professional men all dedicated to service to the community.

In this area, our members have actively supported the planning and development of the Oahe Irrigation unit since its original authorization in 1944.

One of our members, as a Legislator, helped to write the legislation which made the Oahe Conservancy District possible. Others of our group have been active in the educational programs which resulted in a 92.5 per cent affirmative vote for the Sub-District and the project in the city of Huron in 1960.

We are well aware of the problems which face agriculture and the cities that serve agriculture, now and in the years ahead. The one greatest single effort that this community and this state has counted upon to help solve these problems is the development of the Oahe Irrigation unit.

The great economic benefits from this unit will not only stabilize our agriculture, but will supply the impetus for new industry in processing fields and in others not directly allied with agriculture production.

The Sertoma Club has worked hard over the years to make this community a better place to work and live. But the finest living conditions are of no particular value unless employment and job opportunities can be provided as well.

Much has been written in recent years of the problems created by migration from rural areas to the already overcrowded cities. Here, a relatively minor investment could reverse this trend and contribute to a more efficient overall farm production plant for the eventual benefit of the consumer as well.

We know that you are fully aware of the high benefits-to-cost ratio of this project. Benefits which will accrue to the people of this community, this state, this nation, and to the extent that it will increase food production to the peoples of the entire world.

Sertoma International is an organization dedicated to the service of all mankind. We can think of no project which would more nearly accomplish this purpose.

We respectfully urge your favorable consideration of immediate authorization of the Oahe Irrigation Unit.

Respectfully submitted.

JAMES LONG, *President.*

HURON LIONS INTERNATIONAL CLUB,
Huron, S. Dak., May 17, 1967.

Members of the U.S. Senate, Subcommittee on Power and Water Resources, of the Senate Interior and Insular Affairs Committee.

GENTLEMEN: The Huron Lions Club represents approximately 100 businessmen from Huron, South Dakota. The purpose of this organization is to provide leadership through service to build a better community and world.

Although the Oahe Irrigation Unit is located north of Huron, it will have a direct and significant effect on nearly all segments of the Huron community.

Irrigation development of the Oahe Unit will increase and stabilize agricultural production, farm income, and farm expenditures for the irrigation farmers, and for dryland farmers of the area who will have a nearby stable feed base and market for their livestock. The increased and stabilize farm production, income and expenditures will have a concomitant increase and stabilization effect on business and industry of the area. Irrigation development will also increase and stabilize rural population in Huron's trade area.

There is a distinct need for increased and stabilized agricultural production in this area to meet the increasing national and world demand for food and fiber products.

The vast majority of Huron's business and industrial interests are directly related to agriculture. Some examples are: Livestock sales rings; packing plants; livestock feeding lots; grain elevators; seed companies; farm machinery, automobile, and truck sales companies; and many others. Likewise, nearly all other retail, wholesale and service trade businesses in Huron are directly or indirectly dependent on farm income of the area for the major portion of their business.

Irrigation development of the Oahe Unit will increase the size and volume of business for business establishments in Huron and bring new business establishments and industries to Huron.

Increased business for Huron leads to increased population, and a larger tax base which in turn leads to improved education, recreation, religious, transportation and communication opportunities for the area.

This project will make Central South Dakota blossom into a much more fertile agricultural area than is now possible and will also remove forever the fears of returning to the days when this entire area became a huge Dust Bowl due to the lack of water. In the 1930's when the Dust Bowl conditions hit South Dakota, the main people hurt were the local residents; but in our modern economy, if the huge amount of food that is produced in this area at the present time was taken out of the market due to drought conditions, it would affect the price and supply of food in the entire United States.

Another important result of this project will be to make it economically feasible for the small farmer to remain in business. At the present time, the small farmer is moving from the farm to urban areas at an alarming rate. Once in the urban area, they are all too often unable to find work and are added to the growing list of unemployed.

For these reasons, the Huron Lions Club urges you to authorize construction of the Oahe Irrigation Project during this session of Congress.

Sincerely yours,

GEORGE W. CAREY, *President.*

OPTIMIST CLUB OF HURON, S. DAK.,
May 9, 1967.

Members of the U.S. Senate, Subcommittee on Power and Water Resources, of the Senate Interior and Insular Affairs Committee, Washington, D.C.

GENTLEMEN: The Optimist Club of Huron, South Dakota is organized for the prime purpose of developing the youth of our community.

For this reason, we are extremely interested in the ultimate development of the Oahe Irrigation Unit in Brown and Spink Counties in South Dakota.

While this project may well have its greatest impact upon the two counties north of Huron, it will, in fact, stabilize the agriculture of the area immediately around Huron.

When fully developed, this great project will supply water for products not now produce here and will improve production of crops which are now grown. Both will provide opportunity for new industrial operations and for expanded businesses in industries which supply the farmer.

One of South Dakota's greatest problems is the outward migration of our young people. Insufficient job opportunities force many of our best young people to leave this area and the state. Construction of the Oahe Unit and the attendant economic benefits will do much to alleviate this problem for much of northern and central South Dakota and to some extent the entire state.

The recreational benefits that will accrue from the Oahe Unit are not to be ignored. Not only will the added recreation areas provide a healthier environment in which our young people may grow and mature, but they will provide new opportunities for small businesses which cater to the needs of sportsmen to prosper.

The entire membership of the Huron Optimist Club has an active interest in the development of the Oahe Irrigation Unit. We urge you, in the interest of the young people of Huron, the surrounding area, and the entire state and nation, to give favorable consideration to the immediate authorization of this project.

Sincerely,

DONALD G. BRUGMAN, *President.*

Senator MCGOVERN. Thanks to you, Mayor Schmidt, and we see all of those statements are in the record.

I think we will now call the president of the Spink County Irrigation District, Mr. Kenneth Goodwin, if he is here, to make his statement at this time.

STATEMENT OF KENNETH GOODWIN, CHAIRMAN, SPINK COUNTY IRRIGATION DISTRICT BOARD OF DIRECTORS

Mr. GOODWIN. Honorable members of the Senate subcommittee, my name is Kenneth Goodwin, a farmer in Spink County and chairman of the Spink County Irrigation District board of directors. I wish to make the following statements on behalf of the irrigation district board and in support of the Oahe irrigation development.

Irrigation development in this area has traveled a long and complicated route since the original dream set forth in the Pick-Sloan plan for development of the Missouri River Basin.

Many people and agencies of both Federal, State, and local governments have been involved. We are now approaching a start on the realization of one part of that original dream—irrigation.

Of significant important has been the support of a well-informed people, to take each step and, when necessary, vote favorably by large majorities.

I refer to:

1. Formation of the Oahe Conservancy Subdistrict at the general election in 1960 by an 87 percent favorable vote, this represents about 22 percent of both the land and people of this State.
2. Formation of the Spink County Irrigation District by special election in January 1965, by a favorable vote of about 82 percent.
3. Granting of contract authority to the board of directors of the Oahe Conservancy Subdistrict at the general election in November 1966 by a 79.6 percent favorable vote.

We are now awaiting approval by Congress and authorization to start construction of the first stage of the Oahe irrigation project. These hearings are a part of your responsibility to determine if this project is desired by the people directly involved and if it is in the best interests of the people of this area, State, and Nation. We believe it is.

The factual details in support of this irrigation development are in the many reports and are basically covered in the supplemental report on Oahe unit initial stage 190,000 acres prepared by the Bureau of Reclamation.

The most critical steps in irrigation development are now at hand and require:

1. Congressional approval and authorization for construction.
2. Completion of master contracts and participating contracts between the irrigation district and the United States.
3. And, last but not least, another vote on this contract by the people within the irrigation districts directly involved.

We, on the Spink County Irrigation Board, believe the people will again give their support for irrigation, and vote favorably on these repayment contracts if they are fair and reasonable.

Irrigation development will be good for the agriculture of this area. It will not solve the basic problem facing agriculture everywhere, which is rising costs of production and steady or declining incomes received for food and fiber produced.

Agriculture's efficiency of production is surpassed by no industry and the increases have succeeded in freeing the majority of this Nation from the task of food production, thereby resulting in a standard of living equaled nowhere in the world. Ironically, the rewards have gone largely to other segments of the Nation. If this situation continues, we are on a collision course in which farming, as we now know it, will no longer exist, and food will become scarce, with extremely high costs.

People living on the land have two alternatives. One is to produce food and fiber as economically as possible, and then hope that it will sell for enough to continue production. Irrigation is one of the great achievements which, for agriculture, will stabilize and increase production in this area. The other alternative is for the people to leave the land and seek employment in more prosperous areas of endeavor.

We sincerely hope that agriculture may share more favorably in the future of this Nation.

On behalf of the Spink County Irrigation District I respectfully urge your favorable consideration of this project and its early approval by the Congress of the United States.

I have statements of support from the following organizations which I wish to present for your information and record.

Thank you for this opportunity to express our support.

These other statements are from a number of farmers in this area: Robert Ewart, Joe Dvorak, Sr., Otis Hawkins, Clifford Larson, Lloyd Dye, who is superintendent of the irrigation development farm mentioned by Duane Acker; Wendell Miller, who is a farmer; Stewart Benning, a farmer; Lyle Crook, a farmer; the Spink County Extension Board; Spink County Farmers Organization; and from the group of churches represented in Redfield, S. Dak.

Senator McGOVERN. Thank you ever so much for your statement, Mr. Goodwin, and we will see that all of those accompanying statements are made a part of the record.

(The statements referred to follow:)

Honorable Members of the Senate Subcommittee:

My name is Robert Ewart. My land isn't in the proposed irrigation district. I do feed a lot of cattle and hogs and I can't raise enough feed for roughage and grain both. So, at the present time, I buy all the grain I feed and raise all that

roughage. I feel it would be invaluable to me to have the stable corn supply that irrigation would provide. Now we are at the mercy of the weather and in drought years we have to worry about paying the high price of grain that is shipped in from Iowa and Minnesota. Naturally, the acreage of alfalfa and other roughage that would be raised under irrigation would have a real stabilizing effect on the livestock industry of South Dakota.

These are the main reasons that would affect my farm operation, but all the other numerous benefits and advantages of having a stable and abundant water supply in the area are too numerous to mention. I can't help but feel the advantages of irrigation in this area will greatly outnumber the disadvantages, and will be a big boom to the towns and cities as well as rural segments of the area.

Honorable Members of the Senate Interior and Insular Affairs Subcommittee:

My name is Joe Dvorak, Sr. I live five miles northeast of Redfield. I urge the passage of Senate bill No. 6 to permit the irrigation of the Spink and Brown County Irrigation Districts.

I have five of my sons on farms around Redfield. I helped them buy their farms with a down payment. Four of them have off-the-farm jobs to help make payments or they would be losing ground.

I believe that if they had irrigation they would be sure of their crops and would make it alright.

There are many other benefits that the country would have such as help for towns, schools, and economy.

Honorable Members of the Senate Subcommittee:

My name is Otis Hawkins and I am a farm operator and owner in Mellette township, Spink County, South Dakota. I believe in the Oahe Water Development Project as a means of increasing the production of our small farms and to stabilize our income from year to year. A shortage of water can be just as bad to the farmer who farms on the upland, as too much water can be costly to those who have land where it is subjected to being flooded. I believe this project will prove to be a real help to both.

Lack of water to the upland farmer can be a serious limiting factor to the full potential of our land. We strive to keep up with the developments made in moisture conserving machinery, they do help, but can only do so much. We can use credit for fertilizer, and purchasing new releases of improved seed to plant our land, we can specialize or we can diversify, we can use all the knowledge we have acquired from years of experience plus many days and hours of work, and the whole operation can be a total loss, or severely curtailed from the lack of rain or water at the right time.

Problems, I suppose, will spring up but I believe the overall, long range benefits will more than offset them. We will be fitting this area for a place in the future when other generations of farm operators will be looked to for the much needed food and fiber to supply our ever increasing population. We have only so much good productive land, this is a chance to bring it into full and necessary production.

Much more could and will be said for this project and I thank the Senate Committee for allowing me this opportunity to say a few words.

Honorable Members of the Senate Subcommittee:

My name is Clifford Larson and I live five miles south and one-half mile west of Mellette. I own one-hundred sixty acres where I live. Having lived on a farm nearly all my life I have seen what water at the right time can do for crops, even under adverse heat conditions. I helped farm in "the dirty '30's" and also farmed in the late '30's and even four inches of water at that time would have made the difference of saving your life's work and earnings.

In our present day farming, volume is the only way we can buy and pay for the machinery it requires, to farm, and that takes a lot of acres to produce the commodities to maintain our standard of living.

If we can double our production through the use of irrigation I believe it will provide more room for young men to start that have the desire to farm.

At the present time the only way any of my sons can farm is to rent more land and farm with me on a grain basis. If we had surety of water we could have

a diversified operation that would enable them to get started and be independent without increasing our acreage.

I believe irrigation would increase our farm population by providing a good living on smaller acreage; it should bring in new industries which would provide jobs for many more people needed to maintain our schools at a good education level.

Irrigation should bring in more tax money but be a smaller burden on the individual by increased population and new business enterprises.

To me, personally, it could mean that at least one of my sons would have a chance stay on the farm. At present the majority of our young people who graduate from high school or colleges are going to other states and larger cities to earn a living as we do not have any opportunities to offer them in this particular region of South Dakota.

Looking at irrigation from a business as well as a personal attitude, I believe it is a good guarantee of protection of our time, effort and money that we have invested in land and machinery; as we can either utilize the possibilities of new ideas and practices, or if we do not choose to continue farming, this way we have the opportunity to sell and realize our investment back in full.

Honorable Members of the Senate Subcommittee:

I am Lloyd Dye, a native of South Dakota, a farmer, a livestock feeder and irrigator.

I am a member of the staff of S.D.S.U. I am Superintendent at the Irrigation Research and Development Farm which is a part of S.D.S.U.'s Experiment Station. This station is located six miles east of Redfield, South Dakota.

I have held this position since November 1, 1961, prior to which time I was the managing partner operating a combination irrigated-dryland farm in Beadle County, South Dakota.

My first experience with irrigation on South Dakota land came in 1954, since then water for irrigation has been used every year on some of the land for which I have been held responsible.

I have worked with persons in the Bureau of Reclamation, the Geological Survey, the South Dakota Water Resources Commission, the Beadle County Steering Committee for Water Resource Development, and for the past five years with SDSU and the Extension Service.

I have taken advantage of opportunities to attend and be a part of educational promotional and production meetings throughout this fifteen and one-half-county Oahe Sub-District area.

I was given the opportunity to show and tell some of the story about electrical power and irrigation development for South Dakota to State Fair go'ers at the Bureau of Reclamation Booth during the 1960 South Dakota State Fair.

The Field Day at the Research Farm has been very well attended by people interested in irrigation and livestock feeding.

I call your attention to these experiences to assure you that I have visited with hundreds, yes, thousands of South Dakota farmers and ranchers.

It is my sincere belief that an overwhelming majority of these people are in favor of moving ahead as rapidly as is feasible with this great irrigation development.

We have the land, we have the water, we have the farmers and ranchers, good, honest farmers and ranchers.

We need and ask for your help.

Thank you.

Honorable Members of the Senate Subcommittee:

My name is Wendell Miller and my son, John G. and I own and operate a grain and livestock farm in east Faulk County, about thirty-six miles northwest of Redfield. I was born there in 1905 and lived there until 1963. The quarter where our buildings are located was homesteaded by my Grandfather in 1883.

I was married in 1929 and we had bought some additional land . . . the future looked very bright, but little did I know what was ahead. In September, 1930, I lost my father and about a month later the banks all closed. We all know about the rest of the "thirties". In 1932 I raised a good crop but had to almost give it away. We sold rye for eleven cents, wheat for thirty cents and corn and other grain had no value. The rest of the "thirties" we planted a crop every year, some-

times got our seed back, sometimes did not, lost some of the land we had bought, but kept the taxes paid on the original farm and stayed off relief. One good thing happened during this period . . . . we raised a family of three fine children, two girls and a boy, and learned how to live with what we had.

It was during this time I decided we had to have more livestock and not depend on a grain crop if we were to stay in business. Early in 1940, I was able to buy two quarters of rough, hilly land bisected by a creek and by the addition of a dam on a small side draw. We were assured of plenty of stock water. We then increased our cow herd and changed our farming to more corn and feed grain. This way, we raised most of our feeder cattle and kept them on feed until eighteen or twenty months old, when they would sell on the beef market as a choice to high choice grade.

Soon after, the Missouri River Project started. The Bureau of Reclamation went over all the land taking soil samples and when their report came out, the land in our area was said to be unfit for irrigation, due to the heavy clay subsoil so our dream of irrigation ended there.

A year or two later survey crews showed up and they proceeded to stake out a dam across the creek right in the middle of our summer pasture, which would form what is called the Cresbard Reservoir. This will flood about two-thirds of the good bottom land and on top of that, the canal leading in and the one leading out along with access roads, etc., will leave us with a few gravelly hills split up in small pieces, some of which we won't ever be able to get to.

Regardless of what they might pay us for this land, be it $50.00 an acre or $500.00, once it is gone it is gone forever, along with the rich bottoms along the Missouri and we will have to get along without it.

Regardless of these disadvantages to us, I have been a booster for the Project since it started. I have traveled through most of our western states and can see what water can do in areas where rainfall is a problem. I have also visited the experimental farm here, east of Redfield, many times, where water is pumped from the James River and have a mental picture of the thousands of acres in the James River Valley, if they all looked like this.

We have had a problem of over-production for some time but we all know this has to end sometime. I read some time ago, a quotation that went something like this: "God hasn't stopped making babies but he stopped making land a long time ago!".

I hope Congress can authorize this Project at an early date and start construction as soon as possible. We all realize that a project of this size will take many years for completion. If they wait until production is really needed it will be too late.

Honorable Members of the Senate Subcommittee:

My name is Stuart Benning, and I have irrigated out of Turtle Creek for the past six years. Two years ago I ran out of water, reducing a yield potential of eighty to one hundred bushels of corn to a loss . . . so I know the necessity of a sufficient supply of water.

I feel our biggest limiting factor in this area is the lack of water. The results of the limited amount of irrigation that has been carried out in the area has proved the yield potential of feed crops, stabilizing the economy of those with water available.

We have available, in this area, good irrigable land, top extension personnel and successful irrigators for advisors. Above all, a sincere desire by the farmers of this area to have available water—our biggest limiting factor.

We ask you to make water available to us.

Honorable Members of the Senate Subcommittee:

My name is Lyle Crook. I live on a farm outside of the irrigation district in Belle Plaine township.

I have been associated with irrigation all of my life. My father irrigated from a creek during the "30's". It was flood irrigation, mostly potatoes and onions, which was the main source of income during the dry years. In the early 40's he purchased a sprinkler system which at that time was a large unit. It is driven by electricity, one of the first in the state, if not the first. I still use this unit today. I have tried a lot of different crops including sugar beets, which was one of the best, but the refinery had to close leaving me without a market. I now irrigate alfalfa and sorghum.

I believe irrigation is to be a must in the future of our world, if we are going to be able to grow enough food. I believe that this project will be of great benefit to South Dakota. I am sure that with this project there will come industry, such as canneries, sugar refineries, and food processing plants.

I look at irrigation as insurance, when the rains don't come I still have a crop from my irrigated land. I believe what this world needs is insurance against hunger, and I see this as a small policy.

Therefore, I hope the Congress sees fit to go ahead with the Oahe Irrigation Project.

Thank you.

Honorable Members of the Senate Subcommittee:

The Spink County Extension Board presents the following information for consideration by the Senate Sub Committee.

The Spink County Water Resource Board and the Spink County Irrigation Board have requested the assistance of the Spink County Extension Office on educational information pertaining to the Oahe Irrigation Project.

The following information is submitted to show the thinking of the people from Spink County:

A series of five educational meetings were held to explain the proposed Oahe Development. The meetings were attended by both women and men from rural and city areas.

A written survey including the three following questions, was taken at these meetings:

1. Should Spink County have irrigation? Yes, 83%; no, 17%.
2. Do you own land in the irrigated area? Yes, 69%; no, 31%.
3. Do you own land in Spink County? Yes, 80%; no 20%.

The vote for irrigation, after this survey was taken, passed 82.7% yes; showing that the results of the survey were a representation of the people voting.

A survey on the loss of young people in the Redfield trade area was conducted through the Redfield School System. The years, 1945–1956, which includes eleven high school graduation classes, with 594 graduates.

The year 1956 was used as a cut-off date to allow students to attend college and/or serve in the armed services, and have time to return to this area and establish their homes. Results show 68.52% of the 594 graduates have not returned to this area.

The loss of young people to this area emphasizes the lack of jobs in the area. Development of the Oahe Unit will help to provide job opportunities.

During the past fifteen years there has been a loss of 514 farms in Spink County. The loss of these farm units has increased the tax burden on the people remaining in the community. It has also reduced the need for goods and services to supply those farm units.

Regarding the vote on the Oahe Unit Contract Authority:

The total vote for rural and city shows the following results:

Rural: 1278, yes; 464, no; or 73.36% in favor.

City: 1719, yes; 352, no; or 83% in favor.

Combined total: 79.6%, yes.

This vote reflects the thinking of the voters in Spink County concerning the proposed Oahe Irrigation Unit.

Regarding the land owners who have asked to have their land included in the Irrigation District, or to have their land reinstated in the Irrigation District, after they petitioned it out during the hearings:

The Irrigation Boards of Brown and Spink Counties made up a form on which a land owner may signify his intentions to have his land included in the Irrigation District. To date, twelve farms with a total of 3000 acres of land have requested to have their land included in the Irrigation District. These twelve requests are the results of two press releases by the Irrigation Board. Plans are to hold a series of meetings on bringing land into the Irrigation District in 1967 and 1968, with a vote to be held in 1968.

The Spink County Extension Board thanks the subcommittee for the opportunity to present this testimony.

JOHN ELSING,
Chairman of Spink County Extension Board.
MANSFIELD, S. DAK.

MRS. MILFORD NELSON,
Secretary of Spink County Extension Board.
DOLAND, S. DAK.

The Spink Co. National Farmers Organization composed of members and owners of farm land in the proposed Irrigation District and the N. F. O. represents farmers who will be directly affected by the Oahe Irrigation Project and the members have actively supported the Oahe Project and recognize the benefits to be derived by the entire populace of this area through the stability of the rural economy and help provide a better incentive for business interests located in the area and also provide better opportunities for our younger generation to stay in the area and make their homes here. And we also recognize the need for more food and the Oahe Project would help provide for future needs.

Therefore, be it resolved that the Spink County National Farmers Organization strongly endorses its support of the Oahe Irrigation Project and requests the early development of the project by the Congress of the U.S.

JAMES HENZE, *Chairman.*

FIRST CONGREGATIONAL CHURCH,
Redfield, S. Dak.

We, the members of the Spink County Ministerial Association, being interested in the physical, moral and spiritual welfare of our constituency, wholeheartedly support the Oahe irrigation project. Our reasons for this support are:

1. One of the world's greatest needs is for food for the starving millions. We, in this community, would welcome the opportunity to provide a greater share of food and fiber for the world, so that these people might know a better way of life.
2. The Oahe irrigation project would provide a stronger economic foundation and would enable people in this area to develop their cultural interests and abilities leading to a fuller community life.
3. Feeling there is a relationship between working with the soil and the building of character, we are interested in seeing as many people having the opportunity of remaining on the farm as possible.

We, therefore, strongly endorse the Oahe irrigation project, and request the early development of the project by the Congress of the United States.

Rev. ARNOLD LARUE, *President.*
Rev. PAUL M. OPSAHL, *Secretary.*

Senator MCGOVERN. I see in the hearing room, Mr. Al Shock, Sioux Falls Chamber of Commerce president. I think just to move to another part of the State now, for a few minutes, we will call Mr. Shock and take any statement that he would care to make.

STATEMENT OF AL SHOCK, PRESIDENT, CHAMBER OF COMMERCE, SIOUX FALLS, S. DAK.

Mr. SHOCK. I thank you, Senator McGovern, Senator Burdick, and Senator Moss. I speak in behalf of the Sioux Falls Chamber of Commerce and Industrial Development Committee, and also as a member and past president of the South Dakota Reclamation & Development Water Conservancy, and also speak, Senator Burdick, as a farmer of North Dakota. My dad farmed up in North Dakota one year to make enough money to move to South Dakota, and I am also speaking on behalf of the businessmen of Sioux Falls and as president of the Terrace Park Dairy Co.

We employ many farm youth in the State of South Dakota and buy milk from approximately 400 farmers, so we have a very close touch with economic problems of the State of South Dakota and its economy.

We certainly, as business folks, endorse this project, and I might add, the Sioux Falls Chamber of Commerce in many, many past resolutions endorses this project in its entirety.

I would like to make this statement rather brief, because today we are listening to the folks who are going to be the irrigators, but I think this one point should be brought out. Chester Gullikson mentioned it

quite effectively. We are going to face a food problem in the world before very long, and in your book "Freedom From Hunger," Senator McGovern, you pointed out the need for food the world over.

As a farmer and director of Lions International, in our work, working with CARE and distribution of food, we have 10,000 people dying and starving because of malnutrition and time is of the essence. I believe this should be authorized with full steam ahead because it is in the interest of South Dakota and on the national and international level.

I believe I could speak at length in support of this project, but I think you have the feeling that we in South Dakota, and maybe here represents the populace area of the State, the southeast part, are totally in support of this project and we want to encourage you to go back to Washington and talk to a full committee and get this project authorized so we may move ahead.

Thank you very much.

Senator McGovern. We appreciate that statement very much.

It is impossible for me to tell from looking at this witness list who the critics are and who the supporters are, but so far, we have had unanimous support here.

I would like sometime before we break for lunch, to give an opportunity to anyone who is a critic of this proposal to be heard. So, if there is anyone who would like to come forward at this time, we would be glad to put them on. I have developed a new appreciation for the dissenters and critics in the last few months. We would be glad to hear anyone who wishes to be heard on the dissenting side of the issue. No one ready to speak right at this time?

Let us take someone from Pierre. We haven't heard any witness from Pierre.

Mr. Lawrence Snyder from the Hughes County Water Resources Committee. Is he in the room?

While he is making his way to the witness stand, I might say that Mr. Bob Hipple is over here at the press table, and I think everyone familiar with water resource development in our State, and particularly with the Missouri River, knows he is one of the most articulate and consistent champions of sound water development. We are happy to have him here as an editor.

STATEMENT OF LAWRENCE SNYDER, HUGHES COUNTY WATER RESOURCES COMMITTEE, PIERRE, S. DAK.

Mr. Snyder. Senator McGovern, Senator Moss, and Senator Burdick, my name is Lawrence Snyder, my address is Part A, Pierre, S. Dak. I am a landowner of Hughes County and I live approximately 10 miles northeast of Pierre, S. Dak. I am making this presentation in behalf of the Hughes County Water Resource Committee of which I am a member.

Having been born and raised in Hughes County and old enough to remember wiping the dust from the duststorms off my dinner plate prior to eating, many days each year of those trying times, gave me a great respect for water requirements of this country. At that time most

shallow wells dried up and there was little or no surface water to depend on. Now the Pierre Canal of the proposed Oahe irrigation unit will cross our county and give us access to Missouri Basin water for which there is a need and request for today, that will become a requirement and human necessity of the 1970's.

Our committee has observed the need from landowner petitions desiring to irrigate land along the canal for which soil surveys indicate there is better than 7,000 acres within 2 miles on each side of the proposed Pierre Canal, suitable for intensive irrigation. I live approximately 5 miles from the proposed canal in an 8,000-acre area where landowners are proceeding toward the goal of obtaining Missouri Basin water for irrigation and livestock usage.

This total of 15,000 acres would represent a need for only 27,000 acre-feet of water but our committee believes there is a need for at least 6 inches of water per year on another 300,000 acres of grass, tame pasture, and forage production land that would utilize another 150,000 acre-feet of water.

Our committee notes the approximate 3,000 acres of water area such as stock and recreational dams, marsh, and lowland areas that could utilize an average of 5 feet of water per year or 15,000 acre-feet, plus an equal amount for recharging underground water sources.

When the committee allows 20,000 acre-feet per year for municipal and probably industrial uses, we arrive at an estimated total requirement of 227,000 acre-feet per year.

With this in mind, the Hughes County Water Resources Committee requests the Pierre Canal and Blunt Reservoir be so designed, constructed, and operated to allow full season irrigation from the canal and allow a minimum fluctuation in the Blunt Reservoir. We feel this can be accomplished by pumping water into the canal every month from April through October, or using a gated canal design when water is not being pumped. We believe through this type of canal operation that Hughes County will be able to recover from the Missouri Basin some of the tax base and economic losses that were lost through creation of Lake Sharp and Oahe Reservoirs. We wholeheartedly support the Oahe irrigation unit for South Dakota and hope that appearance today can help speed the project toward realization.

I also have a resolution to present to the committee from the Hughes County Commissioners in favor of the project, and also a resolution from the city of Blunt, signed by the mayor of Blunt in favor of the project.

(The resolutions referred to follow:)

RESOLUTION

Whereas, the future economic development of the State depends in part upon the wise development of South Dakota's water resources, and

Whereas, the Oahe Unit is a plan to utilize the waters of the Missouri River for irrigation, municipal and industrial water supplies, recreation and the conservation of fish and wildlife, and

Whereas, the development of this Unit will provide a stabilizing effect on the agricultural economy and will stimulate job and business opportunities, now

Therefore be it resolved, by the Hughes County Commissioners assembled at their monthly meeting at Pierre, South Dakota, this 3rd day of May, 1967, urge the Congress of the United States to promptly approve legislation authorizing the Oahe Unit.

RESOLUTION

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Whereas, the Oahe Unit is a plan to utilize the waters of the Missouri River for irrigation, municipal and industrial water supplies, recreation and the conservation of fish and wildlife, and

Whereas, the development of this Unit will provide a stabilizing effect on the agricultural economy and will stimulate job and business opportunities, now

Therefore be it resolved, by the Blunt City Council assembled at their monthly meeting at Blunt, S. Dak., this 1st day of May, 1967, urge the Congress of the United States to promptly approve legislation authorizing the Oahe Unit.

Mayor CLIFFORD OGAN.

Senator MCGOVERN. Thank you for your statement, and also for those accompanying resolutions.

I would now like to call Mr. LeRoy Wiitala, president of the Brown County Farmers Union, if he is here.

STATEMENT OF LeROY WIITALA, PRESIDENT, BROWN COUNTY FARMERS UNION, FREDERICK, S. DAK.

Mr. WIITALA. Senator McGovern, Senator Burdick, and Senator Moss, I am LeRoy Wiitala, a Brown County farmer and president of the Brown County Farmers Union. I am here today representing the 800 members of our county Farmers Union organization.

We believe that water is the key to a golden future for all of Brown County. The realization of this dream, with the completion of the Oahe irrigation unit, will greatly stabilize farm income probability for farmers in Brown County and throughout the Oahe irrigation area.

Not all of our members will share directly in the benefits of Oahe, but indirect benefits will accrue to all farmers outside the irrigable area. In a limited rainfaill area such as ours along with our total dependence on adequate feed supplies to carry our livestock operations, the certainty of water in the area insures plentiful amounts of forage and feed being available to all of Brown County.

Still fresh in the minds of older farmers are the memories of the "Dirty Thirties," with its devastating drought, bringing untold suffering to man and beast. And history may repeat itself, as evidenced by the patterns of weather over the central and southern Great Plains area the past few years. Furthermore, the continuing shortage of water, via lowered water tables, in the Southwestern United States will bring a gradual reduction of irrigable acres in the next few years.

If this project fails to materialize and in the end we lose prior rights to this great and plentiful resource that flows through our State—then we will have failed future generations of South Dakota farmers.

The Brown County Farmers Union membership and its board of directors have on many occasions discussed this issue. We ask that authorization for the initial stages of the Oahe irrigation unit be approved by the Congress this year.

And I would like to add one more remark to this. We, of Farmers Union have always championed the food-for-peace program sponsored by Senator McGovern, and we firmly believe in the adage, "We are our brother's keeper," and with this irrigation project fulfilled, we will have food production for the people worldwide, for people to keep them alive.

Thank you, Senator McGovern.

Senator McGOVERN. Thank you for your statement.

Is Senator Heidepriem in the room now? Senator, we will be happy to hear from you now. Senator Heidepriem is the senator from Hand, Spink, and Hyde Counties.

STATEMENT OF STATE SENATOR HERBERT A. HEIDEPRIEM, MILLER, S. DAK.

Mr. HEIDEPRIEM. Senator McGovern, Senator Burdick, and Senator Moss, my name is Herbert A. Heidepriem and I am a State senator from the 19th Senatorial District for South Dakota, comprised of Hand, Hyde, and Spink Counties, and appear here today because the people of this district are vitally interested in the development of irrigation in central South Dakota. As an indication of this interest, I can tell you that these counties generally followed the State average of 80 percent favorable vote in approving the recent referendum on contracting authority for the Oahe Conservancy Subdistrict, and that's a landslide in any politician's book.

Spink County, of course, is vitally interested because a substantial portion of the proposed irrigation area is located in this county. Some irrigation is expected in the other two counties also, and many secondary benefits are anticipated.

These counties are classified as semiarid. The favorite diversion during most of the year is gazing at the clouds and speculating on when it will rain and whether the crops can last till it does. It often does, and in good years, this is a leading area in the production of cattle, wheat, and hay.

Nevertheless, the economic plight of the farmer and the townspeople who depend on him in this area is tragic. As a country lawyer, I have occasion to prepare income tax returns for farmers. I see year after year above, hard-working men with substantial investment in land, machinery, and livestock going further behind. Also, in my capacity as country lawyer, I frequently have the dubious pleasure of presiding over the demise of a farmstead—drawing the contracts whereby one neighbor buys out another, leaving one less farm family on the land, a remaining farm family deeply in debt, and another empty set of farm buildings.

Irrigation can change all this. The certainty of moisture can avoid for the farmer the disaster which awaits when the rains don't come. Irrigation can mean smaller units and more farmers remaining on the soil.

I am sure there will be those appearing today who are much better qualified than I to discuss the ramifications of the Oahe project as far as this immediate area is concerned. The thing I would like to emphasize in my remarks to you, is not the benefit of the development of this project to central South Dakota, or to the State of South Dakota, but rather to this country as a whole. The stability which can come to rural America through development of this and similar projects can be the means of saving rural America. And rural America is fast slipping away. Statistics available to me show that 8½ million people have left the farm since 1950, and half of these left since 1960, 750,000

in the past year alone. Some will say that this is an inevitable adjustment. The President himself is authority for the statement that two-thirds of the farmers are not needed. Perhaps this is true. Maybe 4 million farmers can produce the food and fiber now being produced by 12 million. Perhaps we must lose another 8 million farmers. Perhaps our small towns must perish. Perhaps rural areas cannot be saved.

I, for one, believe that the culture that is rural America is important to this Nation. Despite the lower economic status of the people of farm areas, it is a good place to raise families and to live the good life.

Why else is rural America worth saving? If for no other reason than to avoid compounding the critical problems of the great metropolitan areas.

No doubt most of the 8½ million people who have left the farm ended up in large cities. How do you gentlemen feel about an additional 8 million people in the cities? The latest figures available to me show that major crimes per 100,000 people in South Dakota were about one-half of the national average, and one-third of one-fourth of the number reported for some of the most populous States. I read with interest the report of the President's Committee on Law Enforcement and Administration of Justice. Reproduced here is a table from the report which graphically demonstrates how the incidence of major crimes grows in proportion to the density of the population:

TABLE 8.—OFFENSES KNOWN BY CITY SIZE, 1965

[Rates per 100,000 population]

Group	Willful homicide	Forcible rape	Robbery	Aggravated assault	Burglary	Larceny, $50 and over	Motor vehicle theft
Cities over 1,000,000	10	26	221	246	930	734	586
500,000 to 1,000,000	10	20	165	182	1,009	555	640
250,000 to 500,000	7	15	122	142	1,045	550	468
100,000 to 250,000	6	11	73	151	871	556	353
50,000 to 100,000	4	8	49	85	675	492	297
25,000 to 50,000	3	6	33	71	562	443	212
10,000 to 25,000	2	6	19	67	462	309	141
Under 10,000	2	5	12	62	369	236	99
Rural	4	9	10	58	308	176	51
Suburban area	3	10	28	66	545	359	160
All places	5	12	61	107	605	420	251

Source: "Uniform Crime Reports," 1965, table 1, p. 51 and table 6, p. 94.

I sympathize with Mayor Lindsay of New York in his problems of transportation, and see that he is asking Congress for millions of dollars to revamp his transit system. Rural America has no such problem.

I note the billions which have been spent by the Congress for urban renewal and slum clearance. I have personally observed the projects in Chicago, Minneapolis, Pittsburgh, and Boston. I notice the requests for billions of dollars to finance demonstration cities and model cities. Rural America has no need of appropriations for these purposes.

Constantly in the news media are stories about the problems of pollution, air and water, and of the billions of dollars estimated as needed to control it. Rural America has no air problems, and water pollution is local and comparatively minor.

Drug addiction, prostitution, alcoholism, and many other social problems are much less a problem in the wide-open spaces.

What effect has the migration of 8½ million farm people to the cities had on these staggering urban problems? What effect will eight million more people have? We are told that the multipurpose dams on the Missouri River will eventually pay for themselves from flood control, power, and irrigation. It seems to me that the problems of large metropolitan areas increase directly in proportion to their population and that the first approach ought to be to avoid further acceleration of their growth. Gentlemen, the conclusion appears inescapable that money spent to "keep 'em down on the farm" will be the best possible investment for those who stay, for those who are already gone, and for the well-being of the country as a whole.

Thank you gentlemen for listening. It has been a gratifying experience to me to have the opportunity to air my views before your subcommittee.

Senator McGovern. Thank you for your testimony, Senator Heidepriem.

In about 15 minutes we are going to break for lunch. I think we will have time for maybe two more witnesses before we take our lunch break.

I would like to call Mr. Arthur Svendby to make any statement that he would care to make at this time. He is a longtime champion of water development proposals in our State and as director of the National Reclamation Association. Mr. Svendby comes from Lemmon, S. Dak.

Mr. Svendby. Honorable Chairman and members of the committee, my name is Arthur Svendby. I am a resident of Lemmon, S. Dak., and South Dakota director of the National Reclamation Association. I have been authorized and delegated by Mr. Milo Hoisveen, chief engineer-secretary. North Dakota State Water Commission, to present their statement at this hearing, which reads as follows:

RESOLUTION OF THE NORTH DAKOTA STATE WATER COMMISSION

RESOLUTION 67-3-235

Whereas, construction by the Federal Government of the four dams on Missouri River in South Dakota—Gavins Point, Fort Randall, Big Bend, and Oahe—has resulted in the loss to the State of over half a million acres of valuable agricultural land required for the projects, which loss can be partially mitigated through the irrigation development authorized by the Congress as part of the Missouri River Basin Project in the Flood Control Act of 1944; and

Whereas, proposed legislation pending in Congress—H.R. 27 and 1163, and S. 6—would authorize the Secretary of the Interior "to construct, operate, and maintain . . . the first stage of the Oahe unit, James division, Missouri River Basin project, South Dakota, for the principal purposes of furnishing a surface irrigation water supply for approximately 190,000 acres of land, furnishing water for municipal and industrial uses, controlling floods, enhancing the generation of power, conserving and developing fish and wildlife resources, and enhancing outdoor recreation opportunities, and other purposes"; and

Whereas, the unit report and legislative measures have been developed through exhaustive studies and investigations by the Bureau of Reclamation, South Dakota's congressional delegation, and affected local interests, and all have determined the unit to be engineeringly sound and economically feasible, and a development that will bring many benefits to South Dakota, the region, and the Nation through the balanced and stabilized economy in the area and other benefits which it will provide; and

Whereas, North Dakota as the upstream border state has a common interest with its sister state in the regional economy of the two-state area;

Now, therefore, be it resolved by the North Dakota State Water Commission, meeting in regular session in its office in the State Capitol, Bismarck, North Dakota, March 23, 1967, that it strongly favors and supports the proposed Oahe unit, initial stage, development and does hereby most respectfully urge the Congress to consider and take favorable action upon the aforesaid legislative bills at the earliest practicable date; and

Be it further resolved that the Secretary be and he is hereby directed to transmit a copy of this Resolution to the Honorable Nils A. Boe, Governor of South Dakota; U.S. Senators Karl E. Mundt, George McGovern, Milton R. Young, and Quentin N. Burdick, and U.S. Repersentatives E. Y. Berry, Ben Reifel, Mark Andrews, and Thomas S. Kleppe; Honorable Stewart L. Udall, Secretary, Honorable Kenneth Holum, Assistant Secretary for Water and Power, and Honorable Floyd E. Dominy, Commissioner, Bureau of Reclamation, Department of the Interior.

For the North Dakota State Water Commission:

Governor WILLIAM L. GUY, *Chairman.*

Senator MCGOVERN. Thank you so much, Mr. Svendby, for your statement. We appreciate that.

Senator BURDICK. I consider that right neighborly, don't you?

What is the position of the National Reclamation Association?

Mr. SVENDBY. The National Reclamation Association will present a statement in favor of the Oahe Irrigation District, in Washington, at your hearings at that time.

Senator BURDICK. Do you know the views of any of the lower Missouri associations?

Mr. SVENDBY. I don't know, but I might say, Mr. Perry Moore, who lives in Kansas, attended our meeting of our board of directors in March, and at that time he seemed to be very much in favor of that program.

Senator BURDICK. And we will have a resolution coming forward from the National Association?

Mr. SVENDBY. Yes, sir.

Senator BURDICK. That will be favorable.

Senator MCGOVERN. Our last witness before lunch will be Allen Sperry of Brown County.

STATEMENT OF ALLEN SPERRY, FARMER IN THE WEST BROWN IRRIGATION DISTRICT

Mr. SPERRY. Senator McGovern and Senator Burdick, my name is Allen Sperry. I farm with my son, Jim, in the West Brown Irrigation District.

It was very nearly 10 years ago that I appeared before your committee in Washington to ask your support for continuing the investigation as to feasibility of irrigation for the Lake Plain area in South Dakota. At the hearing I made the statement that I did not know, then, if I wanted irrigation but that I knew that I wanted more facts that we could only receive through a complete study and tests.

Eventually Congress appropriated the money and the Bureau of Reclamation made its report. This report along with a later edition put out in 1965 indicates that we have good irrigable land and a very favorable benefit-cost ratio of 2.5 to 1 for the first stage development of 190,000 acres and 2.8 to 1 for the ultimate stage of 495,000 acres. The reports also indicate that since the economy of South Dakota

is built upon agriculture, to stabilize agriculture will expand and stabilize the entire economy. It is estimated that increased annual gross farm income will be $30,157,000 for the first stage and $78,534,000 for the ultimate stage and increased trade resulting from irrigation will be around $78,534,000 for the first stage and $185,064,000 for the ultimate stage. They even mention increased net farm income which interests me greatly.

The study indicated that increased production of livestock and diversified crops would probably require many new agricultural processing plants as well as increased production in existing plants.

The new plants alone would probably employ about 3,000 more full-time and seasonal employees under the first stage and up to 8,000 in the ultimate stage. Large quantities of industrial water available to cities and towns will certainly stimulate industrial growth.

Development of recreation areas, fish and wildlife, better schools, roads, mail service, and community facilities all appeal to me.

Gentlemen, 10 years ago before your committee, I didn't know if I wanted irrigation or not, but I know now. The sooner it comes, the better.

Since the report on the Oahe unit came from the Bureau of Reclamation in June 1960, we have voted into existence the Oahe Conservancy Subdistrict by a large majority, we have organized irrigation districts, where those opposed to irrigation were permitted to withdraw their land, and at the last general election contract authority was granted to the board of the Oahe Conservancy Subdistrict. The legislature has also approved this action.

Gentlemen, a vast majority of our people want irrigation and we ask your support in getting it.

Senator McGOVERN. Thank you for your statement, Mr. Sperry.

I have a brief note I would like to read from Vera Walker. She says, "My husband, George Walker, and I, live on the shores of Lake Byron, which will be a reservoir. We will gladly give up our precious home instead of going through the 'Dirty 30's' again."

Let me say again, if there is anyone here who would like to make a statement and file it with the committee, if you give it to Mr. Whitacre during the noon break, we will make it a part of the record. Let me just say before we break, we have been moving along so well that we are about two-thirds of the way through our witness list. I think in 2 or 2½ hours after lunch, if we go at our present rate, we ought to be all through.

Senator Burdick and Senator Moss both have to return to Washington this afternoon, I am staying on in the State for several days, so we will go on with our hearing this afternoon as long as we can, but I would imagine that we will try to bring these hearings to a conclusion somewhere around 3:30 or 4 o'clock.

Anyone we haven't reached by then, and I imagine we can get through by then, but if there is anyone we are unable to hear, we will keep the committee hearing record open and you submit your statement to us and we will make them a part of the record.

We will not take our lunch break and reconvene here at 1 o'clock.

(Hearing recessed at 11:30 a.m. until 12:45 p.m. for lunch.)

AFTERNOON SESSION

Senator McGOVERN. Ladies and gentlemen, we are going to start just a little bit ahead of our 1 o'clock time because we have two or three witnesses who are anxious to get away, who have asked to testify now. So, the committee can come to order. We will call to the stand Mr. Dennis Evans of Ashton, S. Dak.

STATEMENT OF DENNIS EVANS, SPINK COUNTY FARMER, ASHTON, S. DAK.

Mr. EVANS. Honorable members of the Senate subcommittee, my name is Dennis Evans. I have been farming in the Ashton, S. Dak., area since 1951. In all those 16 years, there have only been a few years that the need for water was not critical during the cropping season.

With the use of the new high yield seed varieties and new fertilizer techniques, I believe that the lack of water is the only factor that keeps this land from being one of the higher producing areas in our country.

I own 800 acres, but I am presently farming 2,400 acres—all the land is in the irrigation district. I realize that a man will not farm this many acres under irrigation, but I believe that land classified as irrigable, should be in the district.

I believe that irrigation will greatly expand the livestock industry, as well as give a larger variety of crops that can be raised on farms.

I also think that new industries will be built in towns to process the increased production from the farms. Other industries would be built with the available water.

I think that irrigation would increase and stabilize the economy of this area. I would like to see irrigation come to South Dakota for my generation and all the future generations.

Senator McGOVERN. Thank you, ever so much, for your statement, Mr. Evans.

Is Mrs. Frank Swope in the room? Mrs. Swope, we will be glad to hear from you now.

STATEMENT OF MRS. FRANK SWOPE, ORIENT, S. DAK.

Mrs. SWOPE. Senator McGovern and Senator Burdick, I am Mrs. Frank Swope of Orient, S. Dak. Having come from an area in the south where they usually have plenty of moisture, it didn't take me long to understand that the lifeblood of agriculture in this area is water.

I am cochairman of Extension Homemakers Council of Faulk County. One of the anxieties of farmers in the springtime is whether or not it is going to be a season of sufficient moisture for the production of crops, hay, and pastures. A common statement made by farmers in the spring is that they would plan their operations on a higher economic level if they were sure of a year of sufficient moisture to warrant it. So irrigation here would assure of a stability that would definitely accrue to a much higher economic position of our farmers and stockmen, and consequently to growth and betterment of our towns.

It was my privilege and pleasure to represent Faulk County women at an Oahe informational meeting and then to take the information back to the women of the various clubs over the county. In all of the club meetings which I attended over the county to talk about and

discuss the Oahe project. I found the interest very keen and favorable to the development of the project.

I most respectfully submit this report to this hearing.

Senator McGOVERN. Thank you, very much, Mrs. Swope.

Now, we will hear from Mr. Dean Sorenson of the Pierre Chamber of Commerce. Mr. Sorenson is a member of the State House of Representatives for the State of South Dakota.

I think after Mr. Sorenson testifies we will hear from Roy Terwilliger, if he will be ready to go next.

STATEMENT OF DEAN P. SORENSON, REPRESENTING THE PIERRE CHAMBER OF COMMERCE

Mr. SORENSON. Honorable Senators, I am here representing the Pierre Chamber of Commerce and others. I am a representative of Hughes, Stanley, and Sully Counties.

The members of the Pierre Chamber of Commerce fully support the first phase construction of the Oahe irrigation project. We feel that there is a great need for this project. It is our hope and the hope of the landowners in the counties living along the proposed Pierre Canal that these facilities be designed and operated so as to provide water throughout the entire irrigation season. Approximately 80 farmers in this area have signed up indicating their interest in getting water for irrigation. Hughes and Sully County land is marginal. Average rainfall is 16 inches per year, 12 of which occurs during the growing season. Neither county has ever produced a full crop. Soils in the area are fertile and could produce feedstuff on a stable annual basis with the advent of irrigation. This will increase the tonnage of livestock produced in the area. The net effect would be to stabilize the livestock industry in this area and to stabilize the tax base. The availability of water, and the potential that it would create, and the sale of it would do much for the many small communities in this particular area which are almost totally dependent upon agriculture.

Further, a younger generation of farmers is appearing, anxious to adopt new production techniques, to stay on the land, and to maintain the family farm. The effect here would be to stabilize the population of this area.

A great part of the land in use in this area is devoted to the raising of wheat which is a particularly hazardous crop, frequently destroyed by drought. The availability of irrigation would permit the conversion to many of the more "sophisticated" crops of higher value, providing yet another boost to the general economy. For these reasons we urge the initiation of phase 1 of the Oahe irrigation project as soon as it is possible to undertake.

Senator McGOVERN. Thank you Mr. Sorenson, for your statement.

STATEMENT OF ROY TERWILLIGER, EXECUTIVE SECRETARY OF THE SOUTH DAKOTA BANKERS ASSOCIATION

Mr. TERWILLIGER. Mr. Chairman and members of the committee, I am Roy Terwilliger, executive secretary of the South Dakota Bankers Association, which is the organization representing all bankers in the State of South Dakota, both State and National. I appear today to express the complete support of the Oahe irrigation unit by the banking industry of South Dakota.

At our 75th annual convention just concluded Saturday afternoon, May 20, our members again, by resolution, expressed their support of the Oahe irrigation unit and urged the authorization by Congress. A copy of the resolution is attached.

The banking industry of South Dakota stands completely behind the Oahe project and as the principal supplier of agricultural credit in our State, we are fully aware of the great need for this project to improve the stability of our agricultural economy.

At the time of the completion of the hearings in Washington, D.C., we will submit a more expansive and complete statement to the committee indicating the study that we have given to this particular matter.

Thank you for this opportunity to appear before you and on behalf of the banking industry in South Dakota. Might I take this opportunity to urge a favorable report on Senate bill No. 6.

(The resolution referred to follows:)

RESOLUTION OF THE SOUTH DAKOTA BANKERS ASSOCIATION

Whereas, it is the desire of the citizens of South Dakota to develop their state water resources for South Dakota's future development of industry, agriculture, rural and urban growth and the awareness that browth depends upon an abundant, suitable and economical water supply; and

Whereas, the Oahe Irrigation Unit as proposed is of great importance to the economic structure of the state by the irrigation of 495,000 acres in the James River Basin and the Missouri Slope, thereby producing additional municipal and industrial water supplies, conservation, recreation, flood control and pollution abatement thus realizing maximum utilization of land, water and human resources for growth in South Dakota;

Now, therefore, be it resolved: That the South Dakota Bankers Association recognizing the benefits to the entire state of South Dakota through the proposed Oahe Irrigation Unit it hereby supports all groups, associations, agencies and individual citizens in urging that the Oahe Irrigation Unit be authorized by the Congress of the United States; and

Be it further resolved: that copies of this Resolution be forwarded to members of the Congress of the United States on the appropriate committees interested in water resource development and reclamation.

Approved by Convention Assembly.

ROY TERWILLIGER,
Executive Secretary,
South Dakota Bankers Association.

Dated: May 19, 1967

Senator MCGOVERN. Thank you, and we will see that the resolution is made a part of the record.

Is Mr. Wayne Van Winkle here?

Mr. Van Winkle is a Brown County farmer. We are happy to have your statement now, Mr. Van Winkle.

STATEMENT OF WAYNE VAN WINKLE, COLUMBIA, S. DAK.

Mr. VAN WINKLE. I am Wayne Van Winkle of Columbia, S. Dak. My father, my son, and I, representing three generations, operate an 1,800-acre farm on which we have resided for the past 62 years. We raise small grain, corn, and alfalfa with which we produce hogs, sheep, and cattle. We specialize in brown Swiss dairy cattle from which we sell grade A milk to the city of Aberdeen.

Senator MCGOVERN. How many cows do you milk, Mr. Van Winkle?

Mr. VAN WINKLE. Just what my wife can handle.

Our biggest problem has been to raise sufficient feed for our stock each year. In the thirties we had to cut Russian thistles to feed our

dairy cattle, and we learned to process them for about 10 years. That was our main feed, and during that time we lost 320 acres of our land in the drought to insurance companies, and many of our neighbors lost their land due to drought, and at the end of 1940 quite a big majority of the land in our county was owned by insurance companies and it was several years later before the farmers were able to purchase that land back.

And we think that with irrigation made possible, that this will eliminate this problem in the future and we will have a more stable agriculture program. With irrigaiton made possible, we think it would take the gamble out of farming and give assurance of plenty of feed every year. With irrigation, farm condition would become more favorable and South Dakota would be a more or better place to live, or better place for our young folks to grow up in.

I thank you very much for the opportunity in presenting this.

Senator McGovern. Thank you very much. We are glad to find out who the policymaker is in the family and who does the work.

Senator Burdick. I want to now if you consider the following statement to be correct. My father was very active in that period in the 1930's and got used to fields of Russian thistles and he used to make speeches. He said, it was so dry in that period that the fish would kick up dust going around the bend. Is that so?

Mr. Van Winkle. That is very possible. One experience we had, we sowed quite a lot of corn and grain, and by fall those thistles got pretty dry and sharp and we cut our legs out of our overalls, what was left of them, and put them on the horses legs so we could go through those thistles in sewing rye.

Senator McGovern. Senator Moss had to leave to go back to Washington, but he was telling us last night in Aberdeen, for those of you who didn't hear his remarks, that they are so dry in the State of Utah, that there are a good many youngsters that reach full age before they see it rain. An 8-year-old girl walked outside and was so shocked when a raindrop hit her, that it took two pails of dust to revive her.

Well, now we will hear Mr. David Cady from the South Dakota Retailers Association.

I think after Mr. Cady's testimony if Mr. Richard Fisher will be ready to go, we will hear from him.

STATEMENT BY DAVID G. CADY, EXECUTIVE MANAGER OF THE GREATER SOUTH DAKOTA ASSOCIATION

Mr. Cady. My name is David G. Cady, executive manager of the Greater South Dakota Association. Our office is located at 222 East Capitol, Pierre, S. Dak. GSDA is a statewide organization serving as a State chamber of commerce and a manufacturers' association. This association of over 1,000 firms is representative of business, industry, and agriculture.

I am submitting for your consideration in behalf of our membership, a statement authorized by the board of directors of our association.

A subject which we are currently considering is of paramount importance, not only to the Oahe district, but to all of South Dakota. Our Nation is indeed fortunate to have such resources as our agriculturalists, tilling the fertile and rich soil of our great State. South

Dakota has long been a leading agricultural State, and has achieved this standing through the professionals who operate our farms and ranches.

This subject today also has national significance. We believe that it is not only the concern of the people of South Dakota, but to all American citizens. South Dakota is on the threshold of greatness. The degree of success in a large measure, which we are about to witness, will be directly contingent upon the support given to our request, authorizing and funding of the Oahe Irrigation District, by the Congress of the United States. It has been said that the Midwest—and South Dakota being a part of this region—is the breadbasket of the world. If we are to be charged with the responsibility of contributing to the supply necessary to meet the demands of a hungry world, then we must receive congressional support for the Oahe project. Now is the hour for all people to support this measure in its entirety. Based upon the results of other areas which have gone to a program of irrigation, a great economic boom is in store for this area and our great State. South Dakota's future is indeed incalculable, rich, and rewarding, but only if we are to capitalize on our natural resources. It is the aim of the GSDA to do what is necessary and possible to insure the continued economic well-being of our citizens. In order to insure that economic well-being of South Dakota's No. 1 industry, and achieve the goal of maximum return for the investment on the part of the agriculture specialist, it is imperative that maximum production and total utilization be the result of the efforts. Through irrigation, this goal, in part, can be achieved.

If we observe similar projects of other areas, one quickly discovers many significant facts: (1) A stabilization of production and income through crop diversification, greater yields of feed grains, and more livestock production and feeding; (2) a reversal of the trend of people leaving the farms—oftentimes an increase in population and the number of farms in a given area. With such increases in yields, there is increased employment opportunities. The result of this increased investment, increased productivity is an increase in net farm income.

We must also take into consideration the corollary to this development, the additional needs for goods and services to fill the requirements of the agriculturalist will require need for business houses, service centers, and schools to meet the needs of this increase in population.

In addition to improving the economic situation of the agriculturalist, one must be cognizant of the complementary benefits of the project. Among the benefits of the project: (1) Effect on the economic situation of the fringe areas; (2) the increased recreational aspects of the project; and (3) improvement of the municipal, industrial, and domestic water supplies.

This project must be viewed with a great deal of optimism. No longer is farming a haphazard guessing game, it has developed into a highly technical and scientific profession.

South Dakota farmers have shown great resourcefulness in developing the resources through their individual talents to produce vast amounts of food and fiber. No longer can we be entirely dependent

on the whims of nature to supply us with adequate rainfall at the precise moment of need, but, rather though a program such as this, have the assurance of adequate moisture.

GSDA is proud of our State's heritage and most optimistic about our future. We respectfully request that the Congress and the President to act with great dispatch in approving and funding for this project development.

Senator McGOVERN. Thank you for your statement, Mr. Cady.

Mr. Richard Fisher, the next witness, is the president of the South Dakota Wildlife Federation.

STATEMENT OF RICHARD FISHER, PRESIDENT, SOUTH DAKOTA WILDLIFE FEDERATION AND NATIONAL WILDLIFE FEDERATION

Mr. FISHER. As members of the South Dakota Wildlife Federation and the National Wildlife Federation, we are concerned with proper uses of our natural resources. We feel that esthetic and recreational values should have every consideration along with other beneficial uses of water. Many of us have been active in the creation of the Oahe Conservancy Subdistrict and have helped in the planning of the Oahe irrigation unit.

The authorization of the Oahe irrigation unit is vital to the economy of the State of South Dakota and necessary to provide occupations for our well-educated young people so that we may keep them here to help form the future of South Dakota. We need their youth, creativeness, and ability in our communities and in our State government. This project will assure us of retaining at least some of these excellent young people.

We feel the Oahe unit has been well planned, properly supported, and thoroughly studied in order to provide the most in benefits to the largest segment of population concerned.

We feel our State is entitled to the economic and esthetic and recreational replacement this project will provide for the loss of these values to the many acres of fertile land, trees, and wildlife habitat which have been covered by water in the Missouri River lakes.

We appreciate an opportunity to testify in behalf of the early authorization of the Oahe irrigation unit and I have a statement and resolution from my board of directors that I will ask be filed.

Senator McGOVERN. Thank you so much. I know we are all interested in the wildlife and recreational byproducts of this project. We are especially glad to hear from the wildlife committee.

(The statement and resolution follows:)

STATEMENT AND RESOLUTION OF THE SOUTH DAKOTA WILDLIFE FEDERATION

The South Dakota Wildlife Federation, as an affiliate of the National Wildlife Federation, is dedicated to the preservation and wise use of all remaining natural resources; of which fish, wildlife and recreation are a part. We believe that health of mind and body thru recreation is vitally essential to the welfare of our future generations.

The South Dakota Wildlife Federation supports and cooperates with all water resource developments which are multi-purpose in their planning, and take into consideration all the future needs of our people. After a careful appraisal of the organization and planning of the Oahe Irrigation Unit, the officers and di-

rectors of the South Dakota Wildlife Federation unanimously endorsed the following resolution:

"Whereas, The Board of Directors of the South Dakota Wildlife Federation at a meeting in Huron February 19, 1967, received additional information which indicated that in the formation, planning and request for federal authorization of the Oahe Irrigation Unit that consideration is being given to all beneficial uses of water; and

"Whereas, we fully realize the future economic impact on the general public welfare by authorization of the Oahe Irrigation Unit and

"Whereas, we understand and accent our responsibility in the planning, formation and support of the enhancement aspects of beneficial uses of water;

"Now, therefore be it resolved by the Board of Directors of the South Dakota Wildlife Federation that we support the authorization of the Oahe Irrigation Unit."

Senator McGOVERN. Is Mr. Lester Dennis from Spink County here, and also Mr. Otis Hawkins? We will hear him after Mr. Dennis completes his statement.

STATEMENT OF LESTER DENNIS, MELLETTE, S. DAK.

Mr. DENNIS. Honorable members of the Senate subcommittee, I am Lester Dennis of Mellette, S. Dak. I farm in the northern part of Spink County, in the proposed irrigation district. I am in favor of irrigation because it would eliminate one of the problems in farming—the shortage of moisture. This, to me, is a main reason for crop failure in that the moisture doesn't come at the right time or in the proper quantity.

We have a State college in South Dakota that does much to promote advancements in farming. Research is carried on to develop new and better plants, better methods of fertilization applications, and livestock types have been improved.

We have a soil and water conservation service that helps the farmer to prepare his land wisely.

We have new insecticides to kill pests and also weed control products.

We have local banks, PCA, and FHA to help us finance our needs. They can provide many types of insurance. Hail insurance is one example. We also have good soil but we don't have the most important insurance of all—moisture.

Senator McGOVERN. Thank you for your statement, Mr. Dennis.

Now, will Mr. Hawkins, also of Spink County, come forward.

Mr. Hawkins is not here. If he has a statement, we will be glad to see that it is filed later on.

Mr. Alvin Rehfeld is the chairman of the West Brown County Irrigation District. We will be happy to hear from Mr. Rehfeld at this time.

STATEMENT OF ALVIN REHFELD, CHAIRMAN, WEST BROWN IRRIGATION DISTRICT, WARNER, S. DAK.

Mr. REHFELD. Senator McGovern, Senator Burdick, I am sure glad to have this opportunity to meet with you gentlemen.

I noticed in the morning remarks that our former Governor, Ralph Herseth, and Fred Holscher, stated a time or two about the favorable votes we had on our different projects here, and I sure want to urge, and have you fellows notice, how favorable they have been.

It certainly shows a lot of enthusiasm among us up in Brown County.

As you gentlemen motored down here this morning from Aberdeen to Redfield, you traveled through the old Lake Dakota bed and I am sure you noticed all the good, rich, level, fertile land we have on each side of the road and we are proud of this locality.

I'd like to state that for many years I have toiled and tilled the soil and planted my seed and then about all we have to do is get down on our knees and pray we'll get some more rainfall to make it produce and I think now with the abundance of water we have in our backyard, that one of these dreams is coming true.

I would say that perhaps in my last 30 years of farming, there has not been one year that some time or another during the growing season I wouldn't have been glad to open up a valve and turn water loose on my farm. I have been a livestock buyer for shipping associations, and an International Harvester businessman, and sold farm machinery and managed and operated a farm, and so I have been acquainted with all aspects of life on small town business main streets and farming and livestock enterprises. We are coming much more, in South Dakota, livestock minded. We have to grow the feed for this livestock and we know very well that in order to grow these feeds, we must have the good old water.

I think we have soil equal to any spot in the Nation. I don't know where it would be any better. At the present time I would say our land up in Brown County is selling for $150 to $160 an acre and there is only one thing lacking, and that's water. I think then we could have our $400 and $600 land just like they have in Iowa and Illinois. And, of course, something like this is what's going to lead up to enthusiasm for our young boys and girls to stay on our farms in South Dakota.

At the present time they can't see a future with the way things are going. But, with water being talked up, I am sure we are going to have a change of mind of our younger generation. And certainly we know what it is going to do for South Dakota. And business on main streets in our community, our small banks and stores and recreational parlors, and everything will be much better off if we get this moisture.

You have heard many farmers, and I like your statement, Senator Burdick, in regard to all of us working together. Some of us benefit from flood control, and some from recreation. Some of us are interested in the pollution, and others in irrigation. I have a little interest in each one of them. I like to be able to go out and catch a big lunker out at the Missouri Basin and shoot a wild goose once in awhile. And, I'm certainly for irrigation, to be able to produce feed for our country.

I am sure that you gentlemen in your situation understand what it will do for prosperity of South Dakota.

It has been great to say these few words to you.

I have testimony that I will file, to be on record, and thanks a lot for taking your time to come out here and hear us.

Senator McGovern. Thank you, Mr. Rehfeld. Your prepared statement will be included in the record.

(The statement referred to follows:)

PREPARED STATEMENT OF ALVIN A. REHFELD, CHAIRMAN, WEST BROWN IRRIGATION DISTRICT

Water and Power Resource Subcommittee, as chairman of the West Brown Irrigation District may I take this opportunity to draw to your attention the favorable votes we have had to date for Water Reclamation projects here in South Dakota.

1. Contract authority was given by almost 75% favorable vote, when only a simple majority was required.
2. The irrigation district was formed by an 82.2% majority, while a minimum of 60% was required.
3. Sub District was formed in 1960 with over 80% favorable votes.

The above figures, designate a great deal of enthusiasm and a forward look into the future progress of the rich lands in South Dakota.

We are located in the old Lake Dakota bed, where there is an abundance of good, rich land. Power will be available for industry. Our livestock operations depend on feed and water.

For many years I have plowed, toiled, and planted the seed, and then knelt on my knees to pray for rainfall. Water definitely controls the future of South Dakota!

In my 30 years of farming not one year has passed without some time during the growing season I would have opened the water valve and drenched my water thirsty soil.

We have soil equal to any state in the nation, and the water is figuratively in our back yard. It will be a great day for South Dakota when it is made available.

The drain of our young people leaving the state will discontinue because of their enthusiasm for the future in their home communities. Our small main streets will bubble over with the inflow of new cash and business.

Senators, you have heard from many grass root farmers in Redfield today, with their thoughts and views on:

1. Flood control.
2. Wild life development.
3. Water shed development.
4. Water for city and industrial use.
5. Benefits to education.
6. Irrigation.
7. History of dry land farming.
8. Broader taxation.

I am sure you visualize the effects of prosperous farming on our over-all economy. This is the greatest opportunity to produce for the future needs of all men in years to come. We are counting on your full-fledged support.

Senator MCGOVERN. Is Mr. Bernard Beastrom here? He is here with the Hughes County Crop Improvement Association. We will hear him next.

STATEMENT OF BERNARD BEASTROM, CHAIRMAN, HUGHES COUNTY CROP IMPROVEMENT ASSOCIATION

Mr. BEASTROM. Senator McGovern, Senator Burdick, my name is Bernard Beastrom. I live at Pierre, S. Dak., and am chairman of the Hughes County Crop Improvement Association.

I am very much interested in the Oahe irrigation project because I will have 3 miles of canal through my farm.

There are 7,600 acres of irrigable land within 2 miles on each side of the proposed Pierre Canal. The landowners along this canal want to be able to buy water so they can irrigate full-season crops, stabilize their dryland operation, and improve the tax base of Hughes County. Hughes County has already lost 33,933 acres to the Oahe and Big Bend Dams and will lose 1,035 more acres to the canal.

Under the original proposed plan of operation for the Oahe irrigation project, they would pump water every month during the irrigation season; this would give the irrigators in Hughes County the opportunity to irrigate full-season crops. The Blunt Reservoir would be operated at a fairly constant level which would make it useful for recreation facilities. The Hughes County Crop Improvement Association is in support of the original Oahe irrigation project. However, we strongly urge that the original plan of operation be followed, so there will be water in the Pierre Canal for irrigation through the month of August, rather than generating electricity with the No. 7 generating unit at the Oahe Dam.

We sincerely appreciate the opportunity to appear before your committee in support of the Oahe irrigation project. Thank you.

Senator McGovern. Mr. Beastrom, as I understand it, the problem that you are referring to here is the proposal by the Bureau of Reclamation that they utilize the seventh unit at the Oahe Dam roughly during the month of August to generate power rather than divert water into the canal.

Mr. Beastrom. That is right. We understand that No. 7 generating unit would be—the electricity would be generated and sold through the month of August rather than be used for pumping water.

Senator McGovern. I think one of the things we have to keep in mind is that about 85 percent of the cost of the entire project is going to be paid out of power revenue. So, I am sure you would be the first one to recognize there is another side to that issue that we have to keep in balance. But, I think your point is well taken as one we ought to look at thoughtfully. It is a perfect example of the competing claims on the water.

I am sure we are going to have more problems of that kind as we move along and we will try to resolve the various interests the best we can.

Thank you for your statement.

The next witness is Mr. Norman Nystrom of Blunt, S. Dak. Is he in the room? He is with the Hughes County Soil & Water Conservation District.

STATEMENT OF NORMAN NYSTROM, SUPERVISOR, HUGHES COUNTY SOIL & WATER CONSERVATION DISTRICT

Mr. Nystrom. I am Norman Nystrom from Pierre, S. Dak. I have been for 2 years irrigating from Oahe, on land I own along the lake. I believe I know from this experience what irrigation can mean to central South Dakota.

I also own irrigable land along the proposed canal from Oahe to the Blunt Reservoir and would like to be able to buy full-season irrigation water from the canal for this land.

Some question has come up to the fact that there may not be water in this canal during the month of August. From my own experience I know this is the peak period for irrigated crops in central South Dakota, and that is why I say we need full-season irrigation from this canal.

As a director of the South Dakota Irrigation & Hughes County SCS Association, I represent a majority of this organization, and we want

to go on record of being in favor of the Oahe irrigation unit plan, except that we would like to do our best to make sure that those people who provide the land for this canal, and who live along it in this area, could receive full-season irrigation as they so desire, as well as provide water for livestock, recreation, municipalities, and industrial uses as our county requirements increase. Thank you.

Senator McGOVERN. Thank you, Mr. Nystrom.

I have a statement from Elva Frei, also of the Hughes County Soil & Water Conservation District, for inclusion in the hearing record at this point.

(The statement referred to follows:)

STATEMENT OF ELVA FREI, CHAIRMAN, HUGHES COUNTY SOIL AND WATER CONSERVATION DISTRICT

Mr. Chairman, as Chairman of the District I express approval of the Oahe Irrigation Project for the Board.

It is our hope that arrangements may be made through the Oahe Conservancy Subdistrict to provide for the sale of water for domestic supplies and numerous small irrigation (for livestock feed) tracts along the Pierre to Blunt Canal. For this purpose water is needed throughout the entire six month season, May 1 to October 1.

Many of our cooperators are planning on making use of available water supplies for irrigation, for livestock supply and for wildlife purposes. We have assumed that such supplies could be purchased from the Oahe Conservancy Subdistrict. Most of these cooperators have stated their intention in the form of a petition presented to the Chairman of the Oahe Conservancy Subdistrict, Fred Holscher.

Senator McGOVERN. Is Mr. Wilkens, of the Northwestern Public Service Co. here? Do you have a statement you would like to make? Mr. Wilkens is assistant to the president of Northwestern Public Service Co.

STATEMENT OF IVAN STROMAN, MANAGER, HURON DIVISION, NORTHWESTERN PUBLIC SERVICE CO.

Mr. STROMAN. Senator McGovern and Senator Burdick, my name is not Mr. Wilkens, he was unable to be here today.

My name is Ivan Stroman. I am the manager of the Huron Division of Northwestern Public Service Co.

On behalf of my company, I would like to file this letter of support of the proposed authorization of the first stage development plan for irrigation in Spink and Brown Counties, S. Dak.

I believe it is especially urgent that your committee and Congress give early approval of this project here in South Dakota.

The irrigation that will develop upon completion of the first stage of irrigation project will enhance the economic welfare of the people of South Dakota and will help to solve several problems that exist in our State and our country.

Economic studies demonstrate even the first stage of development in this irrigation project will increase the total income for our farmers in Spink and Brown Counties by more than $71 million per year. It will also have the additional important effect of new sources of tax revenues for our local and State government.

Local agencies of government are finding increasing needs of new sources of tax revenues and it is estimated this project alone will provide additional taxes in these two counties of $2½ million annually.

The Federal Treasury will also benefit because it has been estimated that the increased Federal income tax in the irrigation district will amount to more than $3½ million.

When the large multipurpose dams were constructed on the Missouri River, it was clearly understood by the people of South Dakota that the major benefit to South Dakota would come from ultimate irrigation development in our State.

Before we turned to this assurance, the people of South Dakota gave up hundreds of thousands of acres of our most productive land, which subsequently has been inundated by the lakes located behind the dams. This land is lost forever, and with it the potential income from these lands. This terrific loss to our State can be replaced by steady and thorough irrigation development in the James Valley. This has been studied and restudied by the Bureau of Reclamation and they find it to be completely economically feasible.

This project is important to the people of South Dakota and in the very near future will be an important food supply source to the people of the world.

I respectfully urge there be no further delay and Congress give speedy approval to the authorization of this project.

Thank you.

Senator McGOVERN. Thank you, Mr. Stroman.

Mr. Dean Haynes, of the Redfield Chamber of Commerce, is our next witness. We are glad to hear from you, Mr. Haynes, and I want to repeat to you our appreciation of Redfield's fine hospitality today.

STATEMENT OF DEAN HAYNES, PRESIDENT, REDFIELD CHAMBER OF COMMERCE

Mr. HAYNES. Senator Burdick and Senator McGovern, I have filed a resolution from the Chamber of Commerce of Redfield, and I would also like to testify in their behalf.

My name is Dean Haynes. I am president of the Redfield Chamber of Commerce. This organization consists of approximately 195 members who represent businesses of all types which serve the Redfield area.

We are pleased to have the honor of hosting the Senate field hearings in Redfield and to have the distinguished members of the Power and Water Resources Subcommittee of the U.S. Committee on Interior and Insular Affairs in our city to conduct these hearings.

We were very happy as a town to give our firm support and cooperation in implementing the first phase of the irrigation program by obtaining 79-percent-plus vote in favor of contract of authority in the November 8 election.

We realize that a reclamation project cannot be a reality unless it has the solid support of the local people and we feel that we have supported this tremendously important project by this vote.

Redfield depends upon its business from the surrounding rural area and we know that there is a direct relationship between water resources development and community prosperity. With irrigation, Redfield would thrive with progressive businesses, better medical services, fine churches and schools, and other cultural and commercial enterprises.

We would be afforded a stability in our economy in this area which we have never been able to ascertain heretofore.

Because of the lack of industry and commercial enterprises we have been unable to keep our good young people located in this area. There is no future for our young people unless we implement an irrigation program which will in turn create industrial and agricultural jobs to give our young people an opportunity in which to invest their time and talents.

With agricultural and industrial developments, we would increase our annual retail services, wholesales services, and processing of all kinds. We could envision numerous new processing plants to handle agricultural products such as alfalfa dehydration plants, dairy products, canneries, meatpacking plants, locker plants, and numerous other types of businesses. Investments in agricultural processing plants could run into millions of dollars and annual payrolls would run high. There would be a tremendous increase in local and State taxes to broaden our tax base.

Another important part of an irrigation project for this area would be the recreation areas. These areas would be wonderful for the local area residents and would be an attraction for the many tourists traveling through this area. This could be a real boost to business and the economy in the entire area.

We most respectfully urge an early and favorable consideration in regard to the Oahe conservancy project and I would like to thank you on behalf of the Redfield Chamber of Commerce for the opportunity to express the thoughts of this organization and to appear before you today.

(The resolution referred to follows:)

RESOLUTION OF THE REDFIELD CHAMBER OF COMMERCE

Whereas, the Redfield Chamber of Commerce is composed of members from owners and employees of 195 business, professional and service organizations within the city of Redfield, South Dakota, and surrounding communities;

Whereas, the Redfield Chamber of Commerce represents the business and professional members who will be affected by the development of the Oahe Irrigation Project, and

Whereas the members of the Redfield Chamber of Commerce have actively supported the membership area and recognize the benefits to be derived to the entire populace of this area, through the stability of rural economy and bring business to the local concerns and business interests in the area and State of South Dakota, and

Whereas, the limited possibilities as now exist for the younger generation who at present have very limited opportunities, this project would develop and encourage the younger products of our population to stay, and we can conserve our younger generation, our greatest asset.

Whereas, we recognize the need for both domestic and foreign food supplies, and this development would provide for future needs.

It is therefore resolved that the Redfield Chamber of Commerce of Redfield, South Dakota strongly endorses its support to the Oahe Irrigation Projects and request the early developments of the project by the Congress of the United States, and copies of this resolution be forwarded to the Senate Field Hearings to be held in Redfield, South Dakota, May 8, 1967.

ARTHUR G. AAKER,
Secretary, Redfield Chamber of Commerce.

Senator MCGOVERN. Mr. Haynes, I would like to take this occasion not only to thank you for your statement, but beyond that, to thank you and your colleagues in the Redfield Chamber of Commerce again for helping to make this day a success. I know there was a consider-

able amount of effort made by you and other local people here in the community to host our hearings. We are grateful to you.

I know Senator Burdick feels the same way and wishes you would extend our thanks to your colleagues.

Mr. HAYNES. I certainly will do so and we appreciate having you here.

Senator MCGOVERN. Mr. Kenneth Jark, Brown County.

STATEMENT OF KENNETH JARK, PRESIDENT, JAMES RIVER FLOOD CONTROL ASSOCIATION

Mr. JARK. Senator McGovern and Senator Burdick, I am Kenneth Jark, of Stratford, S. Dak.

I am appearing today as president of the James River Flood Control Association. Our membership includes 69 landowners with land in the James River Valley in Brown and Spink Counties.

Our members are not all for irrigation, but we are all in favor of developing a feasible plan that will control the flooding of valuable farmland that occurs almost every year along the James River.

Results of a survey conducted by the Brown County Extension Service showed that in 1966 in Brown County alone that 20,013 acres were flooded. Of this total, almost one-half was good, fertile cropland, with the balance being pasture and hayland. In addition, another 3,545 acres were lost due to seepage, of this amount 2,473 acres being in cropland.

Approximately 10,692 rods of dike were damaged and 20,580 rods of fence were destroyed or damaged.

The Flood Control Association estimated the above losses amount to $1,098,687 in Brown County. In addition to this, a substantial loss, though not as great, was experienced in Spink County.

The losses just mentioned do not include destruction and damage to roads, bridges, wildlife developments, parks, and other public property.

We are hoping that a workable and acceptable flood control plan can be developed at an early date.

Senator MCGOVERN. Thank you for your statement. I know that flooding problem has been a serious one for a good many years. I am trying to work out an arrangement with Senator Burdick to keep that water in North Dakota until we get ready for it.

Is Mrs. Eldon Beckler here? We would be glad to hear from you now, Mrs. Beckler. Mrs. Beckler is another resident from Brown County.

STATEMENT OF MRS. ELDON BECKLER, BATH, S. DAK.

Mrs. BECKLER. Senator McGovern and Senator Burdick, I am appearing here today as a housewife and working mother. We farm 450 acres in the Bath area and our land is included within the boundaries of the West Brown Irrigation District.

Because our farm unit is not of adequate size to provide a satisfactory standard of living for my family, I am working full time as a bank teller in Aberdeen. Needless to say, I would much rather devote full time to my duties as a housewife and mother.

I am confident that irrigation would enable our family, and many other families like us, to substantially increase the income from our farm so that this would be possible, leaving the jobs in town for other people who might need them.

Also, we have a son who is a high school senior this year. We would like to expand our farm business so that he can come back to the farm when he completes his college training, or if he doesn't wish to farm, to an agriculturally related job in this area.

We have good land; we have the manpower; all we need is the water in order that we might do our share in feeding the people in our county, State, and Nation. Thank you.

Senator McGOVERN. Thank you, Mrs. Beckler. I think you have reminded us again of the close relationship between a sound agriculture and sound family life.

Mr. Paul Hofer, is he here? Mr. Hofer is the president of the Spink County Farmers Union.

STATEMENT OF PAUL P. HOFER, PRESIDENT, SPINK COUNTY FARMERS UNION, DOLAND

Mr. HOFER. Senator McGovern and Senator Burdick, and honorable members of this Power and Water Resources Subcommittee of the U.S. Senate, I am Paul P. Hofer, representing the Spink County Farmers Union, an organization of 505 Spink County farm families, 48 percent of our county's farm population.

At our organization's regular meeting on January 29, 1966, a resolution was adopted supporting the early development of the Oahe irrigation unit. A copy of this resolution is enclosed with the testimony I am presenting. Our support for the Oahe project was reaffirmed when the Spink County Farmers Union on April 27 of this year unanimously passed a resolution to that effect.

We have long recognized the need for making use of our water resources and of the necessity for irrigation. We feel that eventual completion of this Oahe project can inject new lifeblood into our State's entire economy, affecting both agriculture and the businesses that are so dependent upon the success of our farming industry.

I have lived in Spink County for 48 years and have witnessed the many vagaries of our South Dakota weather—the intermittent periods of drought, the fluctuations of cold weather and hot, and the hot southwest winds.

Because of the instability of farming, certainly partly due to the risk of drought, farmers have left the land in our country and throughout the State in droves in recent years. We are hopeful that this project can help halt this exodus from the land.

As is pointed out in the resolution which accompanies this statement, the Oahe irrigation unit will not only stabilize our farming operations but it will also enhance the establishment of agriculture processing industries and proved new job opportunities for our youth, many of whom are now leaving the State to find adequate employment.

The farmers of Spink County believe in irrigation and want to make use of our water resources. This is evident just from the numerous farmers in my area alone that have dug irrigation wells in the past 3 or 4 years.

We urge you to give a favorable recommendation for this project and make every effort to expedite its completion.

Thank you for allowing me to appear here today.

(The resolutions referred to follow:)

RESOLUTION OF THE SPINK COUNTY FARMERS' UNION

Whereas, the Oahe Irrigation Unit will provide for the irrigation of land in north-central South Dakota thereby diversifying and stabilizing the production of this land and eliminating the effects of periodic droughts that now adversely affect the dryland farmers in the area, and

Whereas it will enhance the establishment of agriculture processing industries that will increase the economy of the area by providing new markets for South Dakota's farm products, and

Whereas, it will provide new job opportunities for the State's young people who are now leaving the State to find adequate employment, now

Therefore be it resolved, that the Spink County Farmers' Unit supports the early development of the Oahe Irrigation Unit.

PAUL P. HOFER,
County Chairman.
MRS. J. W. KLEINSASSER, Jr.,
Spink County Farmers' Union Secretary.

RESOLUTION OF THE DOLAND COMMUNITY FARMERS UNION LOCAL NO. 1032, DOLAND, S. DAK.

Whereas, the Oahe Irrigation Unit will provide for the irrigation of land in north-central South Dakota thereby diversifying and stabilizing the production of this land and eliminating the effects of periodic droughts that now adversely affect the dryland farmers in the area, and

Whereas it will enhance the establishment of agriculture processing industries that will increase the economy of the area by providing new markets for South Dakota's farm products, and

Whereas, it will provide new job opportunities for the State's young people who are now leaving the State to find adequate employment, now

Therefore be it resolved, that the Doland Community Farmers Union Local #1032 supports the early development of the Oahe Irrigation Unit.

LLOYD BATTEST,
President.
MRS. LLOYD BATTEST,
Secretary-Treasurer.

Senator MCGOVERN. Thank you for your statement, Mr. Hofer.

Mr. Raymond Griess, is he in the room? Mr. Griess is the president of the Brown County Sportsmen's Club.

STATEMENT OF RAYMOND GRIESS, PRESIDENT, BROWN COUNTY SPORTSMEN'S CLUB

Mr. GRIESS. Senator McGovern, Senator Burdick, I am Raymond Griess, president of the Brown County Sportsmen's Club and, in private life, I am a teacher of the South Dakota School for the Blind. I might add also, I am a displaced North Dakotan and my hometown of Oakes is in the center of one of the districts for the Garrison unit.

In South Dakota, one has many reminders of the importance of water to the land; and from the land to that which thrives upon the land and on up to man himself. Man's very existence depends on the supply of water which is readily available. Early travelers in this

area moved primarily along water courses, both as an easy mode of travel and to escape the hostility of the open plains, caused to a large extent by an unpredictable water supply within them.

As the civilization of man advanced in this area, it depended to a large degree on man's ability to control a ready supply of water. His first concern was water for himself and then that upon which his livelihood depended: animals first and then, only if available, plant-life. This priority was used mainly because the amount of water he could control would meet only the needs of himself and animals. If the supply of water gave out, due perhaps to drought or other uncontrollable force, man reacted by moving on and finding a new area to supply his needs. Man now has within his means of control a volume of water unsurpassed in the history of this region.

Man has also expanded on this earth as far as he can go; there is no place else left to go. He must now stop and work with what he now has at his command. Evidence of this is the recent renewal of interest in conservation and the broad fields that it includes: pollution, air and water; recreation in the outdoors; man's return to nature for solace and the relighting of the spark of life, free from the humdrum of the everyday world; a renewed interest in wildlife and the joys it can bring, signified by the call of the Canadian goose overhead in the night, returning to its age-old nesting grounds to renew the thread of life. Man must now live within an environment of his own making and largely under his control. I believe it is to man's best interest to fit into the ecological system of nature as much as possible, rather than attempt to redo nature's handiwork.

Certainly man must feed his ever-increasing masses, but must he do this at the sacrifice of all that adds the little pleasures in life? Must the rasping quack of the mallard in the marsh be stilled? Must the splash of a jumping fish at twilight be lost? With the passing of these, I believe, also goes a part of the good life; a mark is erased on the plus side of the ledger of life itself.

We, as sportsmen, realize that man has not always attempted to fit into the ecological system of nature, he has attempted to modify nature to meet his own needs. Largely this was a result of the philosophy that wildlife could fend for itself; move to a new home, just as man had done; adapt or perish. But now, just as there is no place elese for man to go, there is also no place else for the wildlife populations to go. Man should, man must, provide a place in his environment for everything he holds of value in life. And who among us does not hold dear some short moment in life when nature held his undivided attention, perhaps it was the cackle of a cock pheasant as he burst forth on powerful wings from under our very feet; perhaps it was the thrill of our first fish, pulled still flipping and wet from the stream. These events are treasures we hold within ourselves, as dear as life itself. These experiences we must not, we cannot take from future generations. What we do here and now, we will be judged time and time again by uncounted generations of the future.

Let us then see that we pass on to those generations of judgment the best of all that we have today; not just that which will enliven our dollar economy today, but also that which will enlarge and broaden life to the fullest, the better life which we all wish our children to live.

Rich in the opportunity to visit and communicate with nature as countless generations of man has done in ages past.

We, the sportsmen, have been assured by agencies concerned—namely, the U.S. Bureau of Sport Fisheries and Wildlife, the U.S. Bureau of Reclamation and the South Dakota Department of Game, Fish and Parks—that ample provision will be made for wildlife and wildlife habitat in the development of the Oahe unit. This will be done through construction of new wildlife areas to replace those lost, and improvement of other areas when such is compatible with the overall objective of the unit.

With these assurances in mind, we the Sportsmen's Club of Brown County, Inc., Aberdeen, S. Dak., endorse and urge your support for the authorization of the Oahe unit for construction of the irrigation unit in the State of South Dakota.

Senator BURDICK. You are aware that section 2 of the bill takes care of recreation, fish, and wildlife.

Mr. GRIESS. That is right.

Senator BURDICK. You are satisfied with that section of the bill?

Mr. GRIESS. We are.

Senator BURDICK. And are you in close contact with the Interior Department and Fish and Wildlife Department?

Mr. GRIESS. Yes, we are.

Senator MCGOVERN. Mr. Arthur Jones; is he here? He is also a member of the South Dakota State Senate.

STATEMENT OF ARTHUR JONES, PRESIDENT, EAST RIVER ELECTRIC POWER COOPERATIVE

Mr. JONES. Senator McGovern and Senator Burdick, irrigation and water development promised by the Oahe project is the difference between boom or bust in South Dakota. It's that simple. And that's why I'm here to voice the hope of 50,000 rural families, who make up the organization which I respresent, that the Oahe unit will be authorized, funded, and speedily built.

My name is Art Jones. I am a State senator from Britton, S. Dak., but I am here today in my capacity as president of East River Electric Power Cooperatives of Madison, S. Dak., the wholesale power supplier to people in the area covered by the first stage of Oahe plus most of the rest of eastern South Dakota. Nearly 200,000 people are dependent on electricity from the 23 distribution systems which make up East River. We have an interest in selling a small bit of electric power that must be used for pumping the water involved in the Oahe project, but our interest really is much broader than that.

Our interest really is people. More than selling pumping power, more than providing electric service to the 500 additional farms which Oahe will make possible, we are interested in 500 families and more. We are interested in having an opportunity for those 500 families to make their own choice—whether they want to stay on the land or join the mass exodus to the cities. As it is today, they have no choice—they will joint the 1,200 farmers a year who close up shop in South Dakota.

You have seen copies of the Bureau of Reclamation's report on the Oahe unit. This report covers in detail a few facts which I should

sketch briefly today. In addition to 500 new farms with 1,700 more people on the farm, it will create jobs in the cities and towns to serve these farmers. The town and city population is expected to increase 12,300—the multiplier effect—which grew from the "seed" planted with the 500 new farms. Translate this into the second stage of Oahe and we get new opportunities of staggering proportions.

Our young people are leaving South Dakota at an unprecedented rate. Opportunities for 14,000 more people in South Dakota will again give our young people a choice—whether to stay or go. Today, for many, there is but one choice. There just is not enough opportunity at home.

The Oahe unit can put another $30 million into South Dakota's annual gross farm income. It can mean another $54 million in farm investment and over $14 million in increased farm expense. This money has to be spent somewhere—and much of it will be spent right here on the main streets of Redfield and other similar communities. The estimate of the amount of this trade is over $71 million annually. This means over $31 million in wages, profits, and interest resulting from the development of the Oahe unit. Tax revenues to local, State, and Federal governments likewise will increase, probably by more than $6 million.

The consumer-owned electric industry in the Missouri Basin is vitally concerned with the Oahe project. Revenue from the sale of electric power will repay more than 83 percent of the cost of the project. We who purchase this electric power for use on our farms are more than happy to make this project possible.

Benefits from the Oahe project will be legion. There will be municipal water supply for the people of 17 communities. Recreation, fish, and wildlife will be improved for the people of this area. But perhaps greatest of all will be the benefit of ending, for many, the "boom or bust" cycle caused by wide variations in the patterns of rain and drought. May I cite a few figures developed by South Dakota State University at its irrigation development farm. From 1954 through 1959 in Spink and Beadle Counties, the average corn yield was 19 bushels per acre. This encompasses a high of 27 bushels per acre and a low of only 8 bushels per acre in the extremely dry year of 1959. During this same period of 6 years, corn on the Spink County Irrigation Development Farm yielded 75 bushels to the acre—nearly 4 times greater than the dryland average.

My organization—East River Electric—has been a long and consistent supporter of the development of this project. Our membership unanimously approved a resolution in 1961 which called for development of the Oahe project. We have done so at every annual meeting since that time. I am submitting for the record a copy of our most recent resolution, passed at our 1966 annual meeting. Also attached are copies of the resolutions adopted by 12 of our member cooperatives which also support the Oahe project.

The Senators who are here today, I would like to recognize for the the benefit of the audience, all are from Western States. All of you know fully the value of irrigation in improving the economy of the West. You know the value of stabilization of family-farm agriculture that irrigation can provide. In short, you know the value of the Oahe

unit to South Dakota. You and your staffs have examined the economics of the Bureau of Reclamation proposal in great detail. Senator McGovern has introduced legislation which would authorize this project and it is this legislation which brings you here today. When you return to Washington, I want you to have the clear and distinct impression that the people of South Dakota need this investment in our future. It has been delayed too long already. We urge its immediate authorization and construction.

Thank you.

Senator BURDICK. I might add, at this moment, that we see about as much of this in North Dakota as you do.

We would like for you to come up and make use of this lignite coal of ours.

Mr. JONES. Thank you, Senator. I like that invitation and I will do so.

Senator MCGOVERN. Thank you so much, Senator Jones.

I know Members of the Senate have heard Senator Jones testify over the years and we especially appreciate his appearance here today.

Senator BURDICK. I presume that, when you add *x* number of thousands of farmers to this new area, the load on the REA is going to increase and you have more business.

Mr. JONES. We have the idea that the more farms we have the more load there is on the REA, certainly.

Senator BURDICK. And you are reasonably prepared to make this service when the time comes?

Mr. JONES. They tell me the lignite coal in North Dakota is unlimited, and we are going to use some of it.

Senator BURDICK. I got him to say it.

Mr. JONES. I must say that most of our power presently comes off the Missouri River, but we are happy to be supplementing it now with a very fine resource, which comes, we find, from the adjoining State of North Dakota. The economics of it are just right and consequently we use it.

(The statements and resolutions referred to follow:)

STATEMENT BY THE LAKE REGION ELECTRIC ASSOCIATION, INC., MAY 8, 1967

Lake Region Electric Association, Inc., is a rural cooperative providing electric power to 2,827 rural consumers in Day, Marshall and part of Roberts counties in northeastern South Dakota.

For several years, our members have given their support, in the form of resolutions at their annual meetings, to approval of the Oahe Project. They have directed their board of directors to actively promote and seek authorization of the project.

The first stage of Oahe will not provide irrigation water for our service area. Future development can cover a large area of Marshall County and Day County. However, our area will receive some water from the Garrison Project which will extend from North Dakota into the uppermost extremities of Marshall County.

At the risk of repeating what others testify today, we are convinced that this project can reverse the trend toward fewer farms. Throughout our project there are at least 500 farms that once received electric service from Lake Region which today stand unoccupied. This means the cost of building the line which once served them must be paid for by the members who remain on the farm. From their standpoint, we see a need for stopping this exodus by building the Oahe project.

Corn farmers in our area look at 40-bushel corn crops as a pretty good year.

This happens when the weather cooperates. One irrigator on our system now pumps from a well and regularly gets 80-bushel yields.

The western half of our system contains a large number of livestock feeding operations—some of them pretty good sized. This year and in nearly every past year, some of the feed for those livestock had to be hauled in. In dry years, some feed has to be imported from a great distance.

Because 190,000 acres could be irrigated by the first stage of Oahe, the local source of alfalfa, corn-for-feed, and other feed grains could be assured for the stock growers of Marshall and Day Counties.

Attached herewith are copies of our members' resolution urging immediate authorization and construction of this most important project.

RESOLUTION BY THE LAKE REGION ELECTRIC ASSOCIATION, INC., JUNE 1, 1967

Whereas; Every REA member of Lake Region Electric and of every other REA cooperative in South Dakota as water users of the Missouri River Basin project, has a vital interest in the fullest development of all phases of river development, for all of these many uses of water relate directly to payout of the costs of the development and;

Whereas; Irrigation development like power will benefit the agriculture of South Dakota, and;

Whereas; There are in Lake Region service area some 60,000 acres of potential irrigatable lands, and;

Whereas; the use of electric power is essential and will be greatly expanded for pumping purposes, and perhaps to increase the area on which water may be applied.

Now therefore; We urge the continued cooperation of this cooperative with orderly development of the irrigation projects, Garrison and Oahe.

ARTHUR JONES, *Secretary.*

RESOLUTION BY THE BON HOMME YANKTON ELECTRIC ASSOCIATION, INC.

Whereas, the Oahe Irrigation Unit has been under investigation for approximately 15 years; and

Whereas, this Cooperative believes that such irrigation project will benefit and improve the economy and well being of this State, be it

Resolved: That the Bon Homme Yankton Electric Association, Inc. support the Oahe Irrigation Unit, and we respectfully urge our Congressman to support it, be it further

Resolved: That a copy of this resolution be submitted to the proper authorities and to the Oahe Conservancy Sub District, Huron, South Dakota.

RESOLUTION BY THE SIOUX VALLEY EMPIRE ELECTRIC ASSOCIATION, INC., APRIL 29, 1967

Whereas, if sufficient rainfall was assured, South Dakota could greatly increase its agricultural production, thus, making a larger contribution to the supply of food and fiber, and

Whereas, the requirements for food and fiber for the growing population of both our nation and the world will demand greatly increased agricultural production, both here and abroad, and

Whereas, the multi-purpose development of the water resources of the Missouri Basin provide the impoundments of water needed to support irrigation, and

Whereas, federal revenue from the sale of hydro-power provides a substantial portion of the funds needed to ultimately finance the investment for the Oahe project,

Now, therefore, be it resolved that the Board of Directors of the Sioux Valley Empire Electric Association, Inc., urge the Congress of the United States to approve the legislation authorizing the Oahe Project at the earliest possible date and that construction funds be appropriated as soon as possible thereafter.

DOUGLAS DOGGETT, *Secretary.*

RESOLUTION BY THE CLAY-UNION ELECTRIC CORPORATION, MARCH 17, 1966

Whereas it appears that real progress is being made on the development of the Oahe Irrigation Sub District, and

Whereas it is our belief that this project will be of great value to South Dakota

Now be it resolved that Clay-Union Electric Corporation Board of Directors and management congratulate all of the people responsible for this project and will continue to lend our support to the fulfillment of this project to the best of our ability.

J. E. RASMUSSEN, *Secretary.*

RESOLUTION BY THE TURNER HUTCHINSON ELECTRIC COOPERATIVE, INC., MARION, S. DAK., MARCH 24, 1966

Whereas, water and irrigation is a major key to the much needed economic development within our State; and

Whereas, the proposed construction of the first Oahe Irrigation Unit will have immediate and far-reaching effect on the economic health of our entire State; and

Whereas, our cooperative is directly and vitally interested in economic growth within our region and entire State;

Now, therefore, be it resolved that we favor and strongly urge the Congress of the United States to authorize construction of the 190,000 acre first-stage Oahe Irrigation Project in the Oahe conservancy sub-district in South Dakota.

HERMAN HOLT, *Secretary-Treasurer.*

RESOLUTION BY THE LINCOLN-UNION ELECTRIC CO., MARCH 16, 1966

Whereas, Lincoln-Union Electric Company has always been interested in all types of natural resource and water development programs, and

Whereas, citizens of the State of South Dakota gave up certain of their property to make the Missouri River Basin Project possible, and

Whereas, it is felt that the proposed Oahe Irrigation Unit would benefit the people of this State and the Nation considerably.

Now therefore be it resolved that the board of directors of Lincoln-Union Electric Company does hereby support the proposed Oahe Irrigation Unit and urges the Congress of the United States to appropriate the necessary funds in order that construction of the Unit may get under way in the near future.

VIRGIL FODNESS, *Secretary.*

RESOLUTION BY THE CHARLES MIX ELECTRIC ASSOCIATION, INC., LAKE ANDES, S. DAK., MARCH 10, 1966

A regular meeting of the Board of Directors of the Charles Mix Electric Association, Inc. was held in the office of the Cooperative in the city of Lake Andes, South Dakota March 10, 1966.

Mr. Walters offered the following resolution and moved its adoption which resolution was seconded by Mr. Hansum.

"RESOLUTION

"Resolved, that the directors of the Charles Mix Electric Association, Inc. are full hearty in support of the Oahe Irrigation Unit."

The President put the question and upon roll call, 5 votes were cast for and none against.

Resolution passed and declaration adopted.

FRANK NOVOTNY, *Secretary.*

RESOLUTION BY THE SPINK COUNTY ELECTRIC ASSOCIATION

Whereas, the development of the Oahe Irrigation Unit will provide water for irrigation, municipal and industrial uses, fish and wildlife development, new recreation facilities and pollution abatement.

Whereas, irrigation will help increase farm production and stabilize the declining population of the rural community, and

Whereas, it will provide the opportunity for the establishment of new industry that will, in turn, stabilize and expand the economy of the area, and

Whereas, this overall expanded economy will result in the wider use of electric power in the area, now

Therefore be it resolved, that the Spink County Electric Association endorses the earliest possible development of the Oahe Irrigation Unit.

C. G. BELL, *President.*
HOMER KRENTZ, *Secretary.*

RESOLUTION BY THE SPINK ELECTRIC COOPERATIVE, INC., REDFIELD, S. DAK., JANUARY 17, 1966

Whereas, the development of the Oahe Irrigation Unit will provide water for irrigation, municipal and industrial uses, fish and wildlife development, new recreation facilities and pollution abatement, and

Whereas, irrigation will help increase farm production and stabilize the declining population of the rural community, and

Whereas, it will provide the opportunity for the establishment of new industry that will, in turn, stabilize and expand the economy of the area, and

Whereas, this overall expanded economy will result in the wider use of electric power in the area,

Now therefore be it resolved, that the Spink Electric Cooperative, Incorporated, endorses the earliest possible development of the Oahe Irrigation Unit.

J. G. NEWMAN, Manager.

RESOLUTION OF THE TRI-COUNTY ELECTRIC ASSOCIATION, INC., PLANKINTON, S. DAK., APRIL 18, 1967

Whereas, the development of the Oahe Irrigation unit will provide water for irrigation, municipal and industrial uses, fish and wildlife development, new recreation facilities and pollution abatement, and

Whereas, irrigation will help increase farm production and stabilize the declining population of the rural community, and

Whereas, it will provide the opportunity for the establishment of new industry that will, in turn, stabilize and expand the economy of the area, and

Whereas, the overall expanded economy will result in the wider use of electric power in the area,

Now therefore be it resolved, that the Tri-County Electric Assn., Incorporated, endorses the earliest possible development of the Oahe Irrigation Unit.

LEROY K. GREENWOLD, *Acting Manager.*

RESOLUTION BY THE KINGSBURY ELECTRIC COOPERATIVE, INC., BOARD OF DIRECTORS, APRIL 18, 1967

Whereas, the Oahe irrigation unit will help in the development of providing water for irrigation, industrial, and municipal uses, fish and wild life development, new recreation facilities and pollution abatement and

Whereas, irrigation will help increase farm production and help stabilize the declining population of the rural community and

Whereas, irrigation and the benefits from irrigation will help to establish new industry and expand the economy of the area and

Whereas, this expansion would result in the increased usage of electric power in the East River area, now therefore

Be it resolved, that the Kingsbury Electric Cooperative endorse the earliest possible development of the Oahe irrigation unit.

CARL WEERTS, *President.*
WARREN HANNAH, *Secretary.*

EXCERPT OF MINUTES OF REGULAR MEETING OF DAKOTAS ELECTRIC COOPERATIVE, INC., BOARD OF DIRECTORS, MAY 15, 1967

Resolved, That Directors Merkel and Hausauer attend the meeting to be held on May 20, 1967, at Redfield, South Dakota, and that the following resolution be adopted:

Whereas, Hearings are scheduled to be held by representatives of the United States Congress at Redfield, South Dakota, concerning the appropriation of funds to proceed with the development of the Oahe Irrigation District; and

Whereas, The Cooperative and its members deem it highly beneficial to the economy of the areas served by members of this Cooperative that such construction proceed at the earliest practical date; and

Whereas, Dakotas Electric Cooperative, Inc. and its members are desirous that members of Congress, as well as Federal agencies affected, be advised that such cooperatives are willing and anxious to cooperate in the early construction and development of the Oahe Irrigation District.

Now, therefore, be it resolved, That Dakotas Electric Cooperative, Inc., acting by and through its Board of Directors assembled in regular meeting at Bismarck, North Dakota, this 15th day of May, 1967, does urge the prompt appropriation of funds to proceed with the construction and operation of the Oahe Irrigation District in South Dakota at the earliest practicable date, and

Further resolved, That directors of this Board authorized to attend hearings to be held at Redfield, South Dakota, on May 20, 1967, be furnished copies of this resolution for use at said hearings.

Senator MCGOVERN. Senator Burdick just suggested that if there are witnesses here who have a deadline and are anxious to be heard, we would be glad to give you some priority here.

I think we will make it all through the list here, but if there is someone up against a deadline, give us notice and we will give you that priority. If not, I am going to call on Robert Van Winkle, who is also a Brown County farmer. We heard from his father a little while ago. We will hear from the son now.

STATEMENT OF ROBERT VAN WINKLE, ABERDEEN, S. DAK.

Mr. VAN WINKLE. Honorable Senators, my name is Robert Van Winkle. My grandfather, my father, and I operate a 1,800 acre dairy farm near Columbia, S. Dak. I am at the present time renting 160 acres. I have had college training in the field of dairy science and have returned to the farm where I plan to operate.

College trained boys who return to the farm are often called the "rare breed" for so few are willing to take the risk that farming provided and instead choose a more secure position in the business world. Far too many of our Nation's youths who have a farm background and an opportunity to farm on their own have made the decision to leave the farm and enter other fields. I was confronted with the same problem and considered all the angles before making this important decision. The main factor in my decision to return to the farm was the subject we are now exploring, irrigation. I feel through irrigation, the farmer would become much more stable. Most important he would be reasonably sure of feed for his livestock. His position would be much like that of a manufacturer of goods in that he would have a reasonable idea of how much he could produce and what resources that must be allocated to have that production for his specific needs. I feel irrigation is the answer to this problem and the

sooner it becomes a reality the sooner todays farmer can perform on an even basis with the rest of our economy.

I wish to urge the lawmakers and all others concerned to fully back this project so the farmer of today may become more stable and secure.

Senator McGOVERN. Thank you, Robert. That was a very fine statement and contains much worth thinking about.

Mr. Delbert Frericks of Sping County. Mr. Frericks.

STATEMENT OF DELBERT FRERICKS, SPINK COUNTY, FRANKFORT, S. DAK.

Mr. FRERICKS. Honorable members of the Senate subcommittee, I, Delbert Frericks, a young farmer from area No. 5 of the Spink County Irrigation District, appear before you today to urge your full support in speeding the approval and development of the Oahe irrigation project.

Last year, after having completed my college education in animal science and having served my 6 months tour of active duty under the National Guard program, I chose to return to the farm.

I have now been operating with my father for nearly a year. Ours is primarily a livestock operation—making use of all our home-grown feed grains plus a large amount of grains purchased from other farmers in our community. Any period of drought certaintly would cut deeply into our operations.

Drought would mean that we must either decrease our livestock numbers or haul feed into the farm from some distance. Both alternatives are something we don't want to have to face when we have adequate supplies of very fertile farm ground and our country and world are crying louder and louder for our nutritious products. This is especially true when we know that only 100 miles away we have stored vast supplies of water which could turn drought and despair to harvests and hope.

It is true that I have not experienced extreme drought in my lifetime. But my father has—and he lives in fear of its consequences. Like any father, he wants his sons to lead lives which don't have the rough spots he has experienced.

I am certain that is why he often feels that I should accept one of the many agri-industry job offers that come my way. Perhaps I should, but I feel that the Oahe project holds just as great a promise for those of us who hope to benefit from it. It's also much the old adage of being able to take the boy from the farm, but not being able to take the farm from the boy.

It is my strongest feeling that we can't continue to take the boys from the farms in our area of the district any longer. We need a greater incentive for staying with the land—and farm prices currently aren't providing that incentive. For myself and the other young men of the area, irrigation can and should provide that incentive.

Thus, I strongly urge your support and passage of Senate bill No. 6.

Thank you.

Senator McGOVERN. Thank you for your statement, Mr. Frericks. Mr. Merle Lambert of Spink County, is the next witness.

STATEMENT OF MERLE LAMBERT, SPINK COUNTY, FRANKFORT, S. DAK.

Mr. LAMBERT. Honorable members of the Senate subcommittee, my name is Merle Lambert. I operate a farm in district No. 5 of the Spink County Irrigation District.

I am very much in favor of seeing water from the Missouri River brought into our area for irrigation and industrial uses.

It will, without a doubt, greatly influence and stabilize agricultural income over our present uncertain rainfall.

It will help raise our population through new industries promoting jobs for our young people growing up here. At present we are exporting a large percentage of our youth when they start looking for work.

I have three sons of my own that I hope will benefit from this aspect.

At present we have prospects of getting an alfalfa dehydration plant to build in this area on the strength of land presently being irrigated by subsurface water. Surely, with more widespread irrigation, many more industries will be considering this area to build in, causing our population to grow.

Senator McGOVERN. Thank you for your statement, Mr. Lambert.

Is Mrs. Harry Gunderson here from the League of Women Voters? You are Mrs. Montgomery, but you are speaking for the league.

STATEMENT OF MRS. T. O. MONTGOMERY, WATER CHAIRMAN, LEAGUE OF WOMEN VOTERS OF SOUTH DAKOTA

Mrs. MONTGOMERY. Senator McGovern and Senator Burdick, I am Mrs. T. O. Montgomery, of Aberdeen. I am the water chairman for the League of Women Voters of the State of South Dakota.

The League of Women Voters of South Dakota urges prompt action on the Oahe authorization bill.

For some of our project pioneers, it is already too late to see their "promised land" green with irrigation, but their sons carry on with this Oahe plan begun in 1944.

Today we are asking for speedy passage to authorize only the first 190,000 acres of development in Spink and Brown Counties. The entire project will bring water to 495,000 acres.

Important to the whole State is the potential of reservoir water to recharge the underground water supply. Our State geologist, Duncan McGregor, points out that irrigation possibilities can be multiplied 10 to 100 times through the use of deep wells as well as irrigation ditches.

South Dakotans have made every effort. Homefolks spoke at the ballot box when irrigation districts covering 155,000 acres were formed in January 1955. Brown County landowners approved by 82.2 percent and Spink County by 82.7 percent.

Over three-fourths of the voters in the 15½ counties of the Oahe conservancy subdistrict gave authority to make contracts and to levy 1 mill for project support, at the polls last November.

Our 1966 and 1967 State legislatures passed joint resolutions requesting Congress to authorize the Oahe project at an early date. Governor Boe has endorsed the complete development of 495,000 acres.

South Dakota sent a letter of intent, September 1966, to comply with the Federal Water Projects Recreation Act. Our 1967 legislature passed the enabling act to authorize the South Dakota Department of Game, Fish, and Parks to participate in certain phases of the Oahe project.

The first stage of 190,000 acres has received departmental sanction and executive review. Our State congressional delegation has sponsored identical bills in each House of Congress to authorize the project.

In a geographical area of marginal rainfall, the benefits to our State would be many: Fish and wildlife development is planned for 18 sites; the expanded recreational facilities in five locations will attract tourists and hold them for a few days to increase our tourist income.

A stable supply of clean, fresh water at the head of our streams would reduce the pollution in slow moving waters of the flatland as well as provide enhanced quality and quanitity for industrial and municipal uses for 17 communities. Control of the spring floods in the James River Valley would be aided by the improved channel constructed for irrigation return flow.

We realize that all this will take money—$203.5 million—this includes $11 million for future capacity. This is a cost benefit ratio of 2.5 to 1. We hope the funds will be available at an early date.

But, first of all comes authorization.

The League of Women Voters of South Dakota pleads for immediate action. We promise that South Dakotans will be ready when funds are available, to get on with this long awaited Oahe project, which means so much to our State.

Thank you.

Senator McGovern. Thank you, Mrs. Montgomery, for your statement. The League of Women Voters is doing a fine job of studying and making recommendations on water problems nationally. Your spokesmen appear at our Washington hearings on all water issues. I am glad to see the South Dakota league participating in this work on water resources.

Mr. Montgomery is next.

STATEMENT OF T. O. MONTGOMERY, PRESIDENT, ABERDEEN GARDEN CLUB

Mr. Montgomery. I always have to follow behind my wife.

Senator McGovern. We always intend to give the women the last word.

Mr. Montgomery. She will have it, don't worry.

I represent 94 members of the Aberdeen Garden Club. I have a very short statement to make and it's made by Mr. Paul Underwood, a former Spink County agricultural man, and Maurice Anderson, who happens to be a Federal game, fish, and wildlife man in Aberdeen, and

Mr. W. P. Wells, who is the chemist and the operator of the pumping station at Ordway that supplies Aberdeen with their water.

To: U.S. Water and Power Resources Subcommittee:

The undersigned committee of the Aberdeen Garden Club urges action on the Oahe Irrigation Project at the earliest possible date.

The completion of this project will greatly benefit this agricultural area and aid in lessening the economic problems as they affect the farm income situation. In making more water available, industry will be encouraged to locate in this area and provide good water for cities and towns near the reservoirs and channels.

As representatives of the Aberdeen Garden Club, we are interested in maintaining and increasing the natural beauty of our towns, cities and parks. Water must be available at critical times when not provided by rains to maintain our crops, the health of the people, supporting industry and maintaining the beauty of the area.

Senator McGOVERN. Thank you very much for your statement, Mr. Montgomery.

Is John Sutton, Jr. here? Mr. Sutton is from Sully County.

STATEMENT OF JOHN E. SUTTON, JR., AGAR, S. DAK.

Mr. SUTTON. Senator McGovern and Senator Burdick.

My name is John E. Sutton, Jr. of Agar, S. Dak. I wish to testify in favor of the proposed irrigation project.

First, and perhaps most important, I, as an irrigator from Sully County, feel that irrigation will work and return dividends in South Dakota. I'm a novice irrigator with 1 year's experience, but in spite of my mistakes, my corn last year produced 1,350 pounds of beef per acre. After subtracting my total production cost of $91 an acre, this left a net return of $246.50 per acre at today's depressed prices. Applying the same figures to my dryland corn last year I had a net return of $96 an acre. Last year's crop was the best we'd ever raised and an average year would have shown a net return of only $44.50 per acre. Of course, these figures do not take into account any of the costs of feeding. You must take into account labor, death loss, veterinary, interest and depreciation on equipment, interest on cattle, taxes, and customary drop in price from lighter to heavier cattle. If these are subtracted, the profit picture becomes smaller. You can see though, that the farmer would have much more left over from the $246.50 than he would from the $44.50. Also, the production costs will probably be less in the proposed irrigation district.

Secondly, I feel that we must strive to maintain a rural population in States such as South Dakota. We must stop the exodus from the farm to the city, and from rural States to the already overcrowded and problem-plagued metropolitan centers. To do this, we must develop and expand our existing industries rather than try to move industry and people from the urban centers to rural areas. I've heard serious proposals ranging all the way from establishing large Government-supported defense plants in such places to actually creating brandnew cities. This would be fine, we have plenty of room, but I feel it would make more sense to develop irrigation so we may expand what we are already blessed with; namely, rich soil, abundant surface water, and brilliant sunshine. This, together with related industries will provide employment for the youth graduating from our high schools and colleges. It will also stabilize and increase the returns that

the farmer may expect so he can contribute more fully to the economy of our rural communities, our State, and our Nation.

Senator McGOVERN. Thank you for your statement, Mr. Sutton.

Is Richard Seaman from Sully County here?

STATEMENT OF RICHARD SEAMAN, ONIDA, S. DAK.

Mr. SEAMAN. Senator McGovern and Senator Burdick. It is my pleasure to be here this afternoon to speak in favor of the proposed irrigation project.

Many figures have been given to you today, of which you will have ample time to consider them, so I will not burden you with more.

I am just a farm boy who grew up on a farm in the thirties and I hope not to see them again. My dad could tell some drought stories that would equal these that have been told today, but I don't care to see them again or to tell them firsthand.

But I would like to challenge you gentlemen, today, with a sentence that we used to type in high school when I was a boy. "Now is the time for all good men to come to the aid of their country."

You, gentlemen, are good men, and I trust that as you go back to Washington that you will come to the aid of our country.

I am a young rancher, farmer, and feeder. I am married with five children. We live on the farm that I grew up on. I now manage the operation which is now known as Seamans Inc., a family corporation, formed for the purpose of making it easier to keep the family farm together as a workable and feasible unit. Stockholders consist of my parents, five brothers, and one sister.

The farm consists of 2,880 acres, 1,900 acres of pasture, tree lots, feedlots, farmstead, and 980 acres of farmland.

We have always operated as a ranching and farming business and throughout the years there has always been the question, "Will we be able to raise enough feed to make it through the winter?"

Usually we make it. Occasionally we even are able to raise enough feed so as to winter the calves hoping to make a little extra profit. There are the other occasions when we are short and even have to sell some of the foundation stock, which in turn hurts the operation because it cuts back on the volume with which we operate.

It was in late 1963 that we investigated and found that we had an underground water supply of sufficient quantity to irrigate a small acreage. So in 1964 we began the first irrigating to be done from wells in Sully County. We now have about 250 acres under irrigation and it certainly has put stability into our operation.

Our production comparison have been about 4 to 1 in favor of irrigating. In other words dry land corn silage cuts approximately 6 tons per acre while irrigated cuts 25 tons per acre. Dryland corn produces 20 to 25 bushels per acre compared to 90 to 100 for irrigated. Alfalfa production is about 1 ton dryland and 5 tons irrigated. I believe that we will be able to increase the yield even more so. I'm really convinced that water at the right time can sure make a great difference.

I believe that farming and ranching are the major industries in central South Dakota and without water in abundance we will be unable to develop this State to its highest and best capabilities.

When we are handicapped by the lack of water, we are unable to utilize all the potential that we have.

If irrigation could become a reality in central South Dakota, there would be a greater possibility of a place for our young people, because the farms would only have to be one-fourth the size they are now to do the same job of providing income and thereby leaving room for more farms and operators.

As it is now, our young people have to leave the State to find employment thus taking with them our future. I believe that if we could develop a sizable acreage under irrigation that we would have the produce to be processed, as well as a need for manufactured material, thus giving a need for factories, canneries, processing plants, packing plants, plastic industries, and other industries which all employ large numbers of people.

It is almost impossible to get a new start in farming here. All available land is being gobbled up by operators wanting to increase their volume and improve their efficiency thus making land prices and rent prices high as well as the price of equipment and labor. By the time you get interest and taxes paid you just don't have anything left on which to live and pay the principal.

What is true in practically all "public works projects" is true also in this proposed irrigation project. Somebody's gain comes at someone else's loss. It's too bad but that's the way it is and progress is necessary to cope with the needs of the world. True, there will be some who will be hurt but the price for progress has always been this way and I see no other way around it.

In the face of world famine it just doesn't seem right to me for us to sit back and quibble about whether to step forward or not in this proposed project when it could very easily make the difference of four times the amount of production that we could be supplied from our acreage. Two hundred fifty to three hundred thousand acres could do a lot of good in helping to feed the world.

I haven't even mentioned the many other benefits which could be realized, such as municipal water supply, recreational provisions, and wildlife habitat and each of these are an industry of its own.

So, in closing, I sincerely hope that you men, that have been interested with finding out the facts of this project, will see the opportunities that lie in store for us here in South Dakota. I also hope you see the need that we have for this project and that you will go back to Washington and do your utmost to convince Congress to appropriate the funds needed so the first stage of this project might get underway.

Thank you.

Senator McGovern. Thank you for your statement. Mr. Harold Currier is next. Mr. Currier is also from Sully County.

STATEMENT OF HAROLD CURRIER, CHAIRMAN, MISSOURI SLOPE WATER DEVELOPMENT ASSOCIATION, ONIDA, S. DAK.

Mr. Currier. Senator McGovern and Senator Burdick, my name is Harold Currier, Onida, S. Dak. I am a farmer. I own 800 acres and rent 480 acres in Sully County. I am here to represent the Missouri Slope Water Development Association. We, as an association, are in the process of forming an irrigation district in Sully County which will consist of around 56,000 acres.

We know that if we get a district formed that we will be in a later stage but we would like to see the first stage approved as early as possible so that our area can become a part of the project.

We think it will be a great benefit to the State of South Dakota as it will give the future farmers a chance to get started in the farming business.

As things are now, there is not a very bright future for our young boys to get started in the farming industry.

We think in another 10 years or so, where there are three operators now, there will only be two left and that is not good for the county, State, or Nation. The way conditions are now, you have to increase your acreage on dryland operation to make a living.

We think that the Oahe project, when fully developed, will have a great economic benefit to the State and Nation.

I have some resolutions and statements here. Here is a resolution from the Onida Jaycees and here is a statement from another one of my neighbor farmers, Clarence Strickland, and I have a statement from the mayor of the city of Onida, and I would like to present these for the record.

Senator McGOVERN. We will see that all of those statements are printed as a part of the record.

Mr. CURRIER. I thank you.

Senator McGOVERN. We appreciate your statement.

(The statements and resolutions referred to follow:)

RESOLUTION OF ONIDA JAYCEES, ONIDA, S. DAK.

Be it resolved by the Onida Jaycees of Onida, South Dakota at a regular meeting as follows:

Now, therefore, be it resolved by the Onida Jaycees assembled in Onida, South Dakota, This 19th of April, 1967 to support the initial development of the Oahe Irrigation Unit.

This organization recognizes the value of the many benefits and supports the First-Stage development and early construction of the initial stages of the Oahe Irrigation Unit.

CLYDE SCHOECK, *President.*

STATEMENT OF CLARENCE STRICKLAND, SULLY COUNTY, S. DAK.

WHY SOUTH DAKOTA SHOULD HAVE IRRIGATION

I think irrigation would improve our economic conditions now, and in the future. It would provide more jobs and more farms for rent, which are now being farmed by the large operators. Irrigation would provide possible operation for new industry, which would be an incentive for our boys and girls to stay in South Dakota and not seek employment elsewhere.

In case of drought it would mean our staying in business, when otherwise we might fail.

I am a farmer and rancher in west Sully County in South Dakota and I think irrigation would be one of the finest things that could come to South Dakota.

STATEMENT OF PAUL KELLOGG, MAYOR OF ONIDA, S. DAK.

I, Paul Kellogg, Mayor of Onida, South Dakota, favor the First Stage development of the Oahe Unit and the ultimate development of the Missouri River Basin Project.

The City of Onida at present, has an adequate supply of water in quantity but of substandard or brackish quality.

An assured supply of good quality water is an attraction and an asset to any community for future development and attraction of industry.

If the first stage of the Oahe Unit is authorized, it is my intention to request the Oahe Conservancy Sub-District to consider plans and a request for delivery of water to Onida for municipal use.

Your consideration and efforts in supporting the First Stage Development of the Oahe Unit, will very definitely make it possible for a beneficial economic impact upon the rural and urban people of this community.

Senator McGOVERN. Mr. Norman Paul is our next witness. Mr. Paul is from Faulk County.

After we have heard from him, we have two Clark County gentlemen, Mr. Jerry Kloster, and Mr. Morgan Tollefson, and if they will be getting ready, we'll hear them immediately after Mr. Paul.

STATEMENT OF NORMAN PAUL, CHAIRMAN, FAULK COUNTY WATER USERS ORGANIZATION, FAULKTON, S. DAK.

Mr. PAUL. Senator McGovern and Senator Burdick, my name is Norman Paul. I am a farmer and chairman of the Faulk County Water Users Organization. My farm is located near and partially within the proposed bounds of the Cresbard Reservoir. My headquarters will be almost completely surrounded by the water in the reservoir. My brothers and I stand to lose a lot of good land by flooding.

I am interested and favor the proposed water development and plan on taking advantage of the water for irrigation. The directors of our organization have devoted many hours toward hastening the day when this proposed project becomes a reality.

From the interest shown at the meetings of our organization many people of this community appear to be anxious for a stable water supply.

Mr. Chairman, at this time I would also like to have some more material and resolutions from the Faulk County Board of Commissioners and I'd like to file them at this time, and from the Faulk County Crop Improvement Association director, and from the Faulk County Users Organization.

Senator McGOVERN. Thank you, very much, for those statements.

(The resolutions follow:)

Whereas, the Oahe Unit Irrigation Project is a plan to ultimately irrigate 495,000 acres in north central South Dakota with Missouri River water; and

Whereas, the project will also provide water for municipal and industrial use, fish and wildlife development, pollution abatement and recreation; and

Whereas, the project will help to stabilize the economy of the area and the State; and

Whereas, it will also help stop the dwindling farm population and outflow of young people from the State by providing new markets for farm products and new job opportunities; now

Therefore, be it resolved that the Faulk County Commission, meeting at Faulkton, South Dakota this 5th day of April 1966 urges Congress to Authorize, as soon as possible, the Oahe Unit Irrigation Project as outlined in the Bureau of Reclamation Reports of May 1965 and June 1965.

FAULK COUNTY BOARD OF COMMISSIONERS,
HERBERT COWHECK, *Chairman.*

Whereas, The Faulk County Crop Improvement Association is a voluntary organization consisting of farmers and residents from every portion of Faulk County, and

Whereas, this organization is vitally interested in the development of South Dakota's water resources and in particular the Oahe Irrigation Unit, and

Whereas, the development of the Oahe Irrigation Unit will provide the possibility of irrigating lands in Faulk County from the main supply works, and

Whereas, irrigation of these lands will help stabilize the agriculture of Faulk County,

Now, therefore be it resolved, that the Faulk County Crop Improvement Association go on record supporting the early development of the Oahe Unit and urge Congress to enact legislation which will permit early construction of the Oahe Unit.

Unanimously adopted at the annual meeting, February 3, 1966.

FAULK COUNTY CROP IMPROVEMENT ASSOCIATION,
ROMAN N. GEBHART, *Director.*

Whereas, The Faulk County Water Users is a voluntary organization consisting of farmers and residents from every portion of Faulk County, and

Whereas, this organization is vitally interested in the development of South Dakota's water resources and in particular the Oahe Irrigation Unit, and

Whereas, the development of the Oahe Irrigation Unit will provide the possibility of irrigating lands in Faulk County from the main supply works, and

Whereas, irrigation of these lands will help stabilize the agriculture of Faulk County,

Now, therefore be it resolved, that the Faulk County Water Users Organization go on record supporting the early development of the Oahe Unit and urge Congress to enact legislation which will permit early construction of the Oahe Unit.

FAULK COUNTY WATER USERS ORGANIZATION,
NORMAN G. PAUL, *Chairman.*

Senator MCGOVERN. Mr. Kloster; is he in the room?

Is Mr. Tollefson here? Mr. Morgan Tollefson from Clark.

If not, we will try to get those statements included in the record at a later time.

Is Mr. Jens Christensen here? Mr. Christensen, we will hear from you now. He is the president of the Beadle County Farmers Union.

STATEMENT OF JENS CHRISTENSEN, PRESIDENT, BEADLE COUNTY FARMERS UNION

Mr. CHRISTENSEN. Senator McGovern and Senator Burdick, ladies and gentlemen, my name is Jens Christensen and I represent the Beadle County Farmers Union, an organization of some 470 farm families or 45 percent of the farmers in Beadle County.

As far back as I can remember people living in this part of the country have off and on been exposed to a dream—a dream of green acres and lush fields right in the heart of drought and semiarid conditions. This dream was so fantastic that nobody but a fool or a person entirely immune to scorn or ridicule would dare to discuss this and then only among his closest friends. To make this dream come true, the plan was to channel water from the Missouri River across country to the broad, flat land of the James River area, where it would be used for irrigation.

At this same time, way back in the golden age of the twenties, another dream equally as fantastic as this first one, was going around. This was the dream of bringing electricity into every farm and ranch home in South Dakota. That dream has already been realized with the help of the Federal Government.

Today we again stand before a committee representing our Federal Government to ask their aid in making this dream for irrigation come

true and to prove to them that such a project is direly needed and wanted. It is now much more than just a dream, for many years of work of surveying and testing the soil plus organizing the State into water conservancy subdistricts and irrigation districts, has been accomplished.

Beadle County Farmers Union has been working for this dream since the idea was first conceived. We have cooperated with the various committees and supported them all the way. When the Oahe Conservancy Subdistrict was former, our Beadle County people voted 86 percent in favor of the proposal and in the last election we gave overwhelming approval to a measure giving the Oahe directors contracting authority.

We believe this project will benefit everyone in our State—either directly or indirectly—by providing a more stable economy, since agriculture is our primary industry and no doubt will continue to be so for many years hence.

We want this water and we want to use it. We are ready to accept the responsibilities and the obligations that go with such a project. We urge this committee to give favorable consideration to Senate bill 6 and to take whatever steps necessary toward expediting the eventual completion of the Oahe irrigation project.

Thank you.

Senator McGovern. Thank you for your statement, Mr. Christensen.

Mr. Allen Haskell is our next witness.

While he is coming up to the table, I might say, we made an effort this morning to encourage at least a few dissenters to speak out. That offer is still open.

We hope if there are people here who want to speak in opposition to the project, they won't hesitate to come forward.

I know of at least one person who feels quite strongly about it, who asked that her statement be filed, and it is a part of the record, but if there is anyone who wants to present anything orally, we invite them to come forward.

Earlier this week we were having hearings in the committee on the dairy control bill and the chairman explained to all the witnesses that we were going to keep an open mind on it and hear people on both sides, which prompted Senator Mondale, to say he agreed we ought to keep an open mind and then pass the bill.

Perhaps that's what some people feel is happening here today. But, we do want you to have the opportunity to come forward.

STATEMENT OF ALLEN HASKELL, FARMER, FRANKFORT, S. DAK.

Mr. Haskell. My name is Allen Haskell. I live in the Frankfort area along the James River. I have five quarters of land in crops, mostly wheat, corn, and sorghum. We also have a beef cow operation and a few hogs.

My wife and I have three children including a boy in high school and one in the grades. I believe irrigation in this area would be a big help in keeping these young boys in the State. With irrigation we could be more assured of a feed grain crop. Cattle and hogs are an important part of farming here as we have large areas unsuitable for

crops along the river. Livestock feeding and more intensified crop farming would assure more of these young men a future in this area.

If the present trend continues, very few people will be left on the land. Large corporations will take over and the small towns and cities, as well as the small farms, will be hard pressed to survive.

I believe that irrigation may be the only hope we have in keeping the small farms and small businesses from disappearing in ever increasing numbers.

I ask you to assist us in moving this work forward.

Senator McGOVERN. Thank you for your statement, Mr. Haskell.

Is Mr. Robert Ewart here? We will put his statement in if he is not here.

Mr. Robert Johnson. Mr. Johnson is speaking on behalf of the Northern Electric Cooperative.

STATEMENT OF ROBERT JOHNSON, GROTON, BROWN COUNTY, S. DAK.

Mr. JOHNSON. My name is Robert A. Johnson, a family farmer, at Groton, Brown County, S. Dak. My farm is 7 miles east of the James River and as of now, I am of out the Oahe Irrigation District. I have the privilege and the pleasure of appearing before your committee as the spokesman for the Northern Electric Cooperative which serves 2,500 member-owners in the northern part of Spink County and all of Brown County.

We directors of Northern Electric have taken the time to study the far-reaching effects of the proposed Oahe Irrigation District, trying to understand how it will mutually affect our cooperative and our owners. Our cooperative, and all of the other rural electric cooperatives east of the Missouri River are pushing the irrigation development, for we are confident that it will improve and greatly stabilize economy of the entire area. It is also important to us because our members will be using energy during the summer periods when electric usage is at its lowest point of the year.

We directors are obligated to have our electric utilities prepared to provide all the additional power needed by our members for irrigation, air conditioning and other uses. Our Northern Electric president, who will be testifying at this hearing, owns land along the James River and last year carried on a very successful irrigation operation on several acres of corn. This year more of our members are planning irrigation plots and will be using more energy to operate the pumps. Confident that interest in irrigation would grow, our cooperative began heavying up our lines several years ago. Our new office building, which is located in the center of our project, is so constructed and designed as to have adequate rooms for a staff ready to give the necessary help to its owners in planning their individual irrigation projects. Our manager, engineer, and directors have approved a low irrigation rate to make it easier to irrigate with electric-powered pumps.

We are grateful to this U.S. Senate Irrigation Subcommittee for coming to our semiarid region which has renewed hope for a great future with early congressional appropriation approval for the Oahe subdistrict. All of you members of this committee are very familiar with this semiarid land of ours, how strikingly different it is from

the humid land of the east and the arid land to the west. These lands offer hope to an overcrowded and hungry world, for they represent potential settlement opportunities and some of the potentially most fertile soils of the globe. But to make possible successful living in this semiarid area requires greater knowledge of our problems and better efforts at solving them than have heretofore been known or made. It has not yet been demonstrated that civilization can thrive in these American plains without subsidy. Especially is this true of a civilization that is shaped preponderantly by humid-area institutions and values. Our climate is more unique than most people realize. Our area is not semiarid in that the climate is halfway between humid and arid. We are not half-dry and half-wet; rather, some years we are dry and even arid; other years we are very wet, and still, in other years, we are wet or dry at the wrong times from the standpoint of agricultural production and yields. However, with the development of the Oahe Irrigation District we can have a new type of stability.

Our area can take on the form of a true "irrigation agriculture economy" rather than that of an irrigated oasis-like development. Irrigation agriculture, rather than serving as an "operational base" for an imported humid-area culture, can be the foundation for a semiarid agricultural economy in our area. By proper integration between dryland agriculture and ranching on the one hand, and irrigation on the other hand, it is possible to bring together the sutland and the yonland of the region, and on this, build a regional economy that will benefit all in our area—dryland farmers, ranchers, irrigation farmers, laborers, businessmen and professional people.

We residents of this area have some of the necessary knowledge, skill, and inventions to produce efficiently under conditions of semiaridity. But, we do not have all the answers to the needs. We, too, must observe and learn. We must have the courageous willingness to experiment in those matters that pertain to fitting our area into a better place to live. The only question that remains is whether there is the will on the part of the people in this region and in the Nation to do these things before it is too late.

In closing, please allow me to tell of my own personal concern. I am one of the directors of the Northern Electric Cooperative that has been watching the development of this irrigation district with great interest. Even though I am out of the district at the present time, I do hope, and I am sure, that as soon as this first phase is projected, more of us on the east side of the river will follow. As an individual, I certainly hope so.

The rest of the Nation and other industry have lured away thousands of our greatest resource—our boys and girls. This much change and the development of this irrigation district will help. This is my own case, certainly no different than hundreds of others: I have five sons, three are attending South Dakota colleges. Two are majoring in law and one in business administration; none of them is attending my old alma mater, South Dakota State College. All three boys liked the farm, but were doubtful of their security on the land. I hope that by the time my two elementary sons are ready for college, this district will be in operation and that my own area will have joined to make it even more successful; so that my two younger sons and many more like them, will have a desire to attend an agricultural college and re-

turn to the business of farming. With the assurance of adequate water to stabilize our feed and grain supply, there will be much more to offer.

It is our opinion that the full development for the use of our water will grow in value and will be as great an asset to our State, to this area, and to Northern Electric as oil is to Oklahoma.

Your help in bringing early needed action for favorable Federal legislation will be greatly appreciated.

Senator BURDICK. You are talking about your sons. Are there any daughters in this State?

Mr. JOHNSON. Yes, sir; one.

Senator MCGOVERN. I might say, we have four daughters in our house and only one son, so we kind of restore the balance here a little.

Mr. Royce Roberts is representing the city of Cresbard. Is that right, Mr. Roberts?

STATEMENT OF ROYCE ROBERTS, PRESIDENT, BOARD OF TRUSTEES, CRESBARD, S. DAK.

Mr. ROBERTS. Yes.

My name is Royce Roberts, president of the Board of Trustees, Town of Cresbard the past 2 years and member of the board since May 1963. I was appointed a member of the Faulk County water resources steering committee on its inception in January 1960. I was elected to the board of directors of the Faulk County Water Users Organization as the member at large when it organized March 12, 1965.

At the November 8, 1960, general election, the Oahe conservancy Subdistrict was voted in with a whopping 85½-percent "Yes" vote. Faulk County led the parade with 92.6 percent and, better than that, Cresbard led all voting districts with a 98½-percent "Yes" vote. The final tally in Cresbard was 140 "Yes" votes and 2 "No" votes. We are still looking for those two voters, but have come to the conclusion that a couple of our senior citizens got their trifocals tipped too low and inadvertently put their X in the wrong spot.

I have been in the grain business in Cresbard since returning from service in the Marines in 1946. I received my training from my father who spent almost 30 years in South Dakota in that field. He always said, "Given the moisture, South Dakota is the garden spot." The moisture can come from the Missouri River in the form of irrigation.

The people in Cresbard and the surrounding area are looking forward to the creation of the Cresbard Reservoir and, of course, the whole Oahe project. I have told my oldest son, age 11, that he will be taking a shower in our home using Missouri River water before he is out of high school. So, in the words of Joe Pyne—Thank you, and straight ahead.

Senator MCGOVERN. You are talking about this election and this ballot. Did you ever hear of that story of the Congressman that decided that we ought to have a new way of electing the President of the United States? He thought we should do it by secret ballot and let each Senator write in secretly who he thought would be the best President, and it turned out that each Senator got one vote.

Mr. ROBERTS. I would like to say, too, Cresbard is not a very big town, according to the 1960 census, but with 142 votes, you see, we had the voters all out, all the adults.

Senator McGOVERN. Is Reverend LaRue of Redfield, here?

Reverend LARUE. Yes.

Senator McGOVERN. I understand he has an oral statement. We would like to hear from Rev. A. E. LaRue at this time.

STATEMENT OF REV. A. E. LaRUE, PRESIDENT, SPINK COUNTY MINISTERIAL ASSOCIATION

Reverend LARUE. Senator McGovern and Senator Burdick, I am kind of curious about that story last night. That preacher wasn't really quite ready for heaven. I don't know whether you should finish it here or not.

My name is Reverend LaRue and I am pastor of the Wesleyan Methodist Church here in Redfield, and president of the Spink County Ministerial Association.

I have already filed my statement, but I did want to have the privilege of expressing my concern personally to you fellows.

We, the members of the Spink County Ministerial Association, being interested in the physical, moral, and spiritual welfare of our constituency, wholeheartedly support the Oahe irrigation project. Our reasons for this support are—

1. One of the world's greatest needs is for food for the starving millions. We, in this community, would welcome the opportunity to provide a greater share of food and fiber for the world, so that these people might know a better way of life.

2. The Oahe irrigation project would provide a stronger economic foundation and would enable people in this area to develop their cultural interests and abilities leading to a fuller community life.

3. Feeling there is a relationship between working with the soil and the building of character, we are interested in seeing as many people having the opportunity of remaining on the farm as possible.

We therefore strongly endorse the Oahe irrigation project and request the early development of the project by the Congress of the United States.

Senator McGOVERN. Reverend LaRue, we appreciate your statement. I think that the statement about the role food can play in a hungry world is one we can't express too much.

That, as you know, is one near my heart. I always thought if we could find some way to remove hunger in the world—that's going to be hard to do—but if working with other countries we could help them to help themselves so the average person in these developing countries had at least some hope for life and some chance of giving his family, at least, the very essentials of life, I don't think we would have to worry about a Communist appeal to those people.

I don't know of any country on earth that has voluntarily turned to communism where the people had a decent standard of life. I think this is the kind of effort most Americans want to see our country making and it's one of the best ways we can advance the cause of peace and freedom around the world.

So, we appreciate your statement.

Senator BURDICK. I appreciate Reverend LaRue's statement for that and another reason.

You alluded to the use of community life. In my State of North Dakota, we have vanishing of church, school, and post office populations. Is that true, you are having this problem with the churches maintaining populations? And, of course, the school reorganization testified as to the loss of school districts. Is that going apace in South Dakota, too?

Reverend LARUE. Yes; it certainly is, and one of our concerns as pastors, is that whenever we lose these young people from the rural areas of our land, they are assimilated into the large cities and are at times lost to the church, lost as far as spiritual teaching is concerned because when they have moved into these large industrial areas, they lose contact with the church.

We all know from a matter of record that the morals of people and problems and social problems of such areas are larger in the cities than they are out here in the rural areas.

Personally, I had an opportunity to move—the pastor relation committee called me just recently offering me an opportunity in a larger area—but I have two children and I like Redfield and I think it has potentiality here.

Senator MCGOVERN. Thank you very much, Reverend LaRue.

Michael Dunn is our next witness.

STATEMENT OF MICHAEL DUNN, PRESIDENT, WHITETAIL BOWMEN ARCHERY CLUB, INC., ABERDEEN, S. DAK.

Mr. DUNN. Thank you Senator McGovern and Senator Burdick.

I am Michael Dunn, president of the Whitetail Bowmen Archery Club, Inc., of Aberdeen, S. Dak. I am representing this club which has a present membership of 121.

We are interested in the effects the Oahe irrigation project will have on the wildlife habitat in the James River Valley and request that provisions be made for the preservation and/or the replacement in kind.

The habitat is supporting a large deer herd and other wildlife which is affording us recreation in the form of bow hunting. This bow hunting is not limited to deer hunting, but a large variety of hunting is being enjoyed. This hunting includes rabbits, squirrels, pheasants, ducks, and predators.

In the past year 1966–67, the club had 31 organized deer hunts amounting to 310 man-days. In addition to this, many of our club members hunted individually.

In the past, the James River Valley has offered the club an invaluable source of recreation. This recreation has not by any means been limited to bowhunters. The club also realizes that in the future the river bottom will become increasingly more valuable.

It is for these reasons the club is concerned with the preservation of the oxbows and other wildlife habitat for the use of future sportsmen.

With the inclusion of a provision for the protection of wildlife habitat the Whitetail Bowmen Archery Club, Inc., would be in concurrence with the Oahe irrigation project.

Thank you.

Senator McGOVERN. Thank you for your statement, Mr. Dunn.

Senator BURDICK. Section 2 of Senate bill 6, reads as follows:

The Secretary is authorized, as a part of the project to construct, operate and maintain or otherwise provide for public outdoor recreation and fish and wildlife enhancement facilities, to acquire or otherwise make available such adjacent lands or interests therein as are necessary for public outdoor recreation or fish and wildlife use, and to provide for public use and enjoyment of project lands, facilities, and water areas in a manner co-ordinated with the other project proposals.

That seems to give you pretty good protection; doesn't it?

Mr. DUNN. Yes. I was under the impression that was going to go to waterfowl and other Federal interests.

Senator BURDICK. Fish and wildlife enhancement. It's beyond fish.

Mr. DUNN. We would definitely be satisfied with this if it would include wildlife to the extent of wildlife such as deer. We were afraid a lot would go to the Federal interests such as ducks, but we were interested in larger game.

Senator BURDICK. I think it's broad enough to take in all wildlife, and I am sure that it's the intention of the committee.

Senator McGOVERN. Thank you for your statement, Mr. Dunn.

Mr. Frank Swope of Orient, S. Dak., and of the South Dakota Crop Improvement Association, has a statement that he would like to make.

Are there any other witnesses now who want to be heard?

All right, we will hear from Mr. Swope and then we will recognize these other people.

STATEMENT OF FRANK SWOPE, ORIENT, S. DAK.

Mr. SWOPE. I am Frank Swope from Orient, S. Dak. I have been a livestock farmer in that area for 43 years, producing, aside from crops, a herd of commercial Hereford cattle and a flock of registered Hampshire sheep.

I have here a resolution which I want to present to you from the South Dakota Crop Improvement Association, of which I have been a member for about 40 years, a director for many years, and past president. And the resolution, which I want to read, is as follows:

Whereas, the development of the Oahe Irrigation Project will bring Missouri River water into north-central South Dakota for irrigation, municipal and industrial use, fish and wildlife development, recreation and pollution abatement, and

Whereas, irrigation will provide the opportunity for more diversified crop production by the introduction of crops that cannot be presently grown in this area of semi-arid climate, and

Whereas, the development of irrigation will help to stabilize and improve the economy of the area and the State by providing new markets for farm products and new job opportunities for the young people who are presently leaving the State in search of employment, now

Therefore be it resolved, That the South Dakota Crop Improvement Association meeting in Brookings this first day of March, 1967, supports the development of the Oahe Unit as set forth in the Bureau of Reclamation reports of May and June, 1965.

Honorable Senators, I respectfully submit this resolution to you.

Senator McGOVERN. Thank you, Mr. Swope, for your statement.

Now, we will take this gentleman. Would you give us your name and any organization you are affiliated with?

STATEMENT OF VERN W. BUTLER, MANAGER-ENGINEER, EAST DAKOTA CONSERVANCY SUBDISTRICT

Mr. BUTLER. Senator McGovern and Senator Burdick, my name is Vern W. Butler, engineer for the East Dakota Conservancy Subdistrict with headquarters in Brookings, S. Dak. I am speaking here on behalf of the board of directors of the East Dakota Conservancy Subdistrict.

East Dakota is one of five such conservancy subdistricts established in South Dakota. We are a sister organization to the Oahe Conservancy Subdistrict, one of the local sponsoring entities for the proposed Oahe irrigation project. Like Oahe, the East Dakota Subdistrict was organized by a favorable vote of the people within its area. As such we are a political subdivision of the State of South Dakota with our own governing body, taxing authority, funds, duties, and responsibilities. Our primary interest is in full multiple-purpose water resources development. The subdistrict is governed by a board of 11 directors, each locally elected for 4-year terms. Certain directors represent urban areas, others represent rural areas.

The area covered by the East Dakota Subdistrict includes 11½ counties in extreme eastern South Dakota—essentially the Big Sioux River drainage. All 11½ counties are outside the immediate area directly affected by the proposed Oahe irrigation project. Unfortunately most of the Big Sioux River Basin lies 400 to 500 feet above the James River Valley so it will be more difficult to get Missouri River water into the Big Sioux River Valley. However, this is a possibility that is not being overlooked.

Although the East Dakota Conservancy Subdistrict covers only 10 percent of the area of the State, approximately 30 percent of the State's people and 29 percent of the State's property tax base are within the subdistrict. The major processing and distributing centers are Sioux Falls and Watertown both of which receive raw products from, and distribute consumer goods to people in the area proposed for Oahe irrigation. Many of the people of eastern South Dakota utilize the existing Missouri River mainstem dams and reservoirs for recreational purposes. Proposed recreation and fish and wildlife developments associated with the Oahe project would also be used by eastern South Dakota people.

Irrigation of large acreages as proposed in the Oahe project would help the economy of South Dakota primarily by reducing the fluctuations of agricultural income. As you know, South Dakota is in an area of sparse rainfall. Some years, when conditions are right, abundant crops can be raised and considerable livestock handled in the James River Valley, but in other years when it doesn't rain much or it doesn't rain at the right times, drought occurs, crop production is cut, and livestock must be sold. This reduces prices and income. Such conditions have a deterrent effect, even on those farmers several hundreds of miles away, as well as on the businessman and supplier of the hard-hit farmer. Developments and investments that will reduce these widely fluctuating conditions are needed. Irrigation is an answer. The stabilization of farm production and prices would do much to upgrade our way of rural life.

South Dakota is just beginning to reap the benefits of Missouri River Basin water development. The bulk of the benefits have been to the areas downstream through reduced flooding, bank stabilization, better water supplies, and navigation. Even power produced within the State is exported to many areas outside South Dakota. South Dakotans have tolerated, and encouraged, the Missouri River Basin development knowing full well that the day would come when our vast irrigation potential could be undertaken. Now, 20 years after this great river basin program was initiated, we are just beginning to see the glimmer of irrigation benefits over the horizon. That horizon is still several years away. Yet we have to ask our people to "mark the X" and "sign on the dotted line" for projects they know will benefit their children and grandchildren much more than themselves. We are asking our farmer friends to make basic decisions—terrifically important decisions—decisions that will change their whole way of life—now, in support of irrigation when we know full well the benefits will not be forthcoming for 7, 10, or even 15 years. This is most difficult for the farmer who must gamble 1 year to the next on the weather, prices, and his ability to meet competition. Yet our farmers have "marked the X," have "signed the dotted line," and have supported efforts to develop our water resources. Witness the vote on conservancy district organization, the irrigation district signup or the contracting authority authorization vote. These folks are ready and willing to take the risk in supporting the Federal Government in good sound resource development investments.

We are proposing investments for concrete, capital producing improvements—something you can get your hands on—reservoirs, canals, powerplants, pumps, pipe—not some abstract, nonincome producing ideal. These are investments in solid works of improvements, designed by the best engineering and technical talent available, to bring returns to the people, to the Government and to the society as a whole.

We in the East Dakota Conservancy Subdistrict stand ready to endorse and support every effort to gain authorization and initiation of the Oahe irrigation unit. Such development will bring both direct and indirect benefits to people within our State through increased economic growth, reduction of fluctuating farm production and the providing of recreational and other water use benefits.

At this time I would like to present the following resolution adopted by the board of directors, East Dakota Conservancy Subdistrict, at its March 1967 meeting.

(The resolution referred to follows:)

RESOLUTION OF THE EAST DAKOTA CONSERVANCY SUBDISTRICT

Whereas, the Board of Directors, East Dakota Conservancy Sub-District, is interested in and supports full multiple purpose water resources development within the State of South Dakota as a whole, and

Whereas, the Oahe Irrigation Unit will provide both direct and indirect benefits to the people of South Dakota through increased economic growth, and

Whereas, considerable indirect benefits will accrue to the people of the East Dakota Conservancy Sub-District through construction and operation of the Oahe Irrigation Unit in our neighboring Oahe Conservancy Sub-District

Now, therefore, be it resolved that the Board of Directors, East Dakota Conservancy Sub-District hereby urges the United States Congress to authorize first

stage construction of the Oahe Irrigation Unit as set forth by the Bureau of Reclamation Report of May and June, 1965, and further urges the full development of the Unit at an early date.

And be it further resolved that this resolution be submitted to members of the South Dakota Congressional Delegation, to the Senate Interior and Insular Affairs Committee and to the House of Representatives Interior and Insular Affairs Committee of the United States Congress.

L. C. SWANSON,
Chairman, Board of Directors.

Attest:

EDWIN L. RUDD,
Secretary.

Senator MCGOVERN. Thank you for your statement, Mr. Butler. We appreciate that.

Now, we will hear from this gentleman right over here.

STATEMENT OF THOMAS McNENNY, PRESIDENT, SOUTH DAKOTA FARM BUREAU

Mr. MCNENNY. Senator McGovern and Senator Burdick. I am Tom McNenny, president of the South Dakota Farm Bureau, and I live out in the west end of our State where we have some irrigation problem.

The first irrigation that was done in this whole area was done in the Belle Fourche area where they built the first dam under the Bureau of Reclamation. We have another dam near Angostura where quite a little irrigation is being done.

I have irrigated from my pumping from the Belle Fourche River for a good many years. Last year I used electric power from West River REA for our pumping.

I also served as a member on the board of supervisors on the soil conservation district for about 10 years. At our last annual meeting, I guess the last two or three meetings, our members have approved the Oahe District.

However, there has been some question among our members as to the cost of irrigation. Do you have anything on the cost of the water to the farmer for irrigation?

Senator MCGOVERN. We are not prepared to give you that now. We will have estimates on that, but we do not have them available today.

Mr. MCNENNY. Not available today. That's one of the questions our members ask and it couldn't be answered and I think if you all realize if the water costs are too high, we cannot use it in irrigation.

Senator MCGOVERN. Staff counsel just reminded me that when the Bureau of the Budget releases the full report, that information will be available, both to the Congress and to the general public. We expect that quite soon. I would say in the next few weeks.

Mr. MCNENNY. Now, there is another question.

Do the acres limitations still apply to this area? That is, 160 acres.

Senator MCGOVERN. It is still in effect. That's a general law.

Of course, in the case of man and wife, that would be 320 acres.

Senator BURDICK. From the 1902 Reclamation Act.

Mr. MCNENNY. I might say, in this Angostura area where they have done a lot of irrigation and places were cut up into 120 and 150