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**BELLE FOURCHE DAM AND GLENDO DAM
RESERVOIR ROADWAY**

GOVERNMENT

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DOCUMENTS

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HEARING

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BEFORE THE

SUBCOMMITTEE ON
WATER AND POWER RESOURCES

OF THE

COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS

UNITED STATES SENATE

NINETY-THIRD CONGRESS

SECOND SESSION

ON

S. 3223

A BILL TO EXPAND THE GLENDO UNIT OF THE PICK-SLOAN
MISSOURI BASIN PROGRAM TO PROVIDE FOR THE REHABILITATION
OF A ROAD RELOCATED BY THE BUREAU OF RECLAMATION IN THE
VICINITY OF GLENDO DAM AND RESERVOIR, PLATTE COUNTY,
WYOMING

S. 2403

A BILL TO AUTHORIZE THE SECRETARY OF THE INTERIOR
TO CONSTRUCT, OPERATE, AND MAINTAIN A LARGER AND
ADEQUATE SPILLWAY, AND TO IMPROVE THE UPSTREAM
SLOPE PROTECTION ON BELLE FOURCHE PROJECT, BELLE
FOURCHE, SOUTH DAKOTA, AND FOR OTHER PURPOSES

JUNE 13, 1974

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

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1974

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BELLE FOURCHE DAM AND GLENDON DAM-RESERVOIR ROADWAY

THURSDAY, JUNE 13, 1974

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

The subcommittee met at 10 a.m., pursuant to notice, in room 3110, Dirksen Office Building, Hon. Mark O. Hatfield, presiding.

Present: Senators Hatfield and Hansen.

Also present: Jerry T. Verkler, staff director; Daniel Drevfus and Russell Brown, professional staff members.

OPENING STATEMENT OF HON. MARK O. HATFIELD, A U.S. SENATOR FROM THE STATE OF OREGON

Senator HATFIELD. The subcommittee will please come to order.

The purpose of this hearing before the Subcommittee on Water and Power Resources this morning is to take testimony on two measures relating to existing reclamation projects.

The purpose of S. 2403, which was introduced by the Senators from South Dakota, is to authorize the construction of a new and larger spillway and upstream slope protection at the existing Belle Fourche Dam, a feature of the Belle Fourche reclamation development in South Dakota.

The purpose of S. 3223, which was introduced by the Senators from Wyoming, is to authorize the Secretary of the Interior to reconstruct a portion of road which was relocated as a part of the construction of the Glendon Dam and Reservoir and which has deteriorated.

Each of these measures involves work which is of great significance to the localities and to the people who live there. I am hopeful that the testimony presented this morning will provide an adequate record for committee considerations of the bills.

The text of both bills and the reports of the Executive agencies will be included in the record at full at this point.

I have for the record statements by Senator Hansen and Senator McGee in support of S. 3223 which, without objection will appear in full at this point.

I would also like to have inserted in the record the prepared statements of Senator Abourezk and Senator McGovern in support of S. 2403 along with a letter from Governor Richard F. Kneip of South Dakota.

[The bills and executive communications and statements referred to follow:]

93^d CONGRESS
2^d SESSION

S. 3223

IN THE SENATE OF THE UNITED STATES

MARCH 22, 1974

Mr. MCGEE (for himself and Mr. HANSEN) introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs

A BILL

To expand the Glendo unit of the Pick-Sloan Missouri Basin program to provide for the rehabilitation of a road relocated by the Bureau of Reclamation in the vicinity of Glendo Dam and Reservoir, Platte County, Wyoming.

- 1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That, in order to repair and rehabilitate that portion of the
4 road that was relocated in connection with the construction
5 of Glendo Dam and Reservoir, and which road has now
6 deteriorated such that traffic is now confined to a single lane
7 and proper maintenance is no longer feasible, and to provide
8 a safe and durable two-lane highway for public use, the Sec-
9 retary of the Interior is authorized to relocate, reconstruct,

1 and rehabilitate those portions of the relocated road in the
2 vicinity of Glendo Dam and Reservoir which have
3 deteriorated.

4 SEC. 2. There is hereby authorized to be appropriated
5 for the relocation, reconstruction, and rehabilitation of said
6 highway the sum of \$284,000 plus or minus such amounts,
7 if any, as may be justified by reason of ordinary fluctuation
8 in construction-cost indexes applicable to the types of con-
9 struction involved herein: *Provided*, That the funds appro-
10 priated for the purpose stated herein shall be nonreimbursable
11 and nonretrievable.



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JUN 6 - 1974

Dear Mr. Chairman:

This responds to your request for our views concerning S. 3223 a bill "To expand the Glendo unit of the Pick-Sloan Missouri Basin program to provide for the rehabilitation of a road relocated by the Bureau of Reclamation in the vicinity of Glendo Dam and Reservoir, Platte County, Wyoming."

We cannot support enactment of S. 3223 since the road which the bill would authorize funds to relocate and repair is more properly a local rather than Federal responsibility.

The bill authorizes the Secretary of the Interior to repair and rehabilitate a road, which was relocated by this Department's Bureau of Reclamation in connection with construction of Glendo Dam and reservoir and which has become subject to slides, seepage and undue weathering. The bill authorizes appropriation of \$284,000 for this work with certain cost adjustments, on a non-reimbursable basis.

The section of the relocated road that requires rehabilitation is about 1,000 feet of the 16 miles of a former Platte County road, which occupies a sidehill site in the vicinity of the left abutment of the Glendo Dam. Construction of the relocated road was carried out by the Bureau of Reclamation between November 1956 and September 1958. Upon completion of construction, the road was turned over to Platte County for administration and maintenance on September 14, 1958, in accordance with the terms of the relocation contract. On February 6, 1973, the operation and maintenance responsibilities of the Platte County road within Glendo State Park were transferred by a memorandum of understanding to the Wyoming Recreation Commission.

Within a few years after completion of construction weaknesses began to occur in a section of the road on a sidehill location a short distance from the left abutment of the Glendo Dam. The county made repairs to the road in 1964 and again in 1965 which were relatively minor in nature, costing only a total of approximately \$7,000. However, heavy rains in June 1965 caused a major slide on the roadway near the left abutment of Glendo Dam which required emergency repairs. The Comptroller General in Decision B-159372 dated June 28, 1966, approved the expenditure by the Bureau of \$149,000 for these emergency repairs. Subsequently, in 1967 about \$63,000 was spent on repairing the road due to another heavy slide near the left abutment, and other expenditures were made to raise the guardrail at another location and to modify a curve in the road. Additional slides occurred during the spring and summer of 1971 and in the spring of 1973. The recent slides of 1973 have reduced the roadway width to a one-lane traffic way and increased the drainage across the roadway, thereby creating a serious hazard to traffic use and public safety.

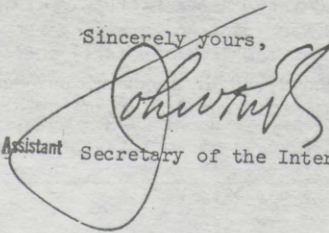
The Bureau of Reclamation in 1973 made studies on four alternate plans for reconstructing the roadway where slides and other weaknesses have been encountered. Estimates of cost for the various plans, which involved extensive relocations of sections of the road, ranged from \$990,000 to \$1,850,000. The Bureau has, however, no authority to spend additional funds of the magnitude necessary to provide a permanent solution to the slide conditions that have occurred over the years.

The Wyoming Highway Department also made a study of the problem and has submitted a proposal to rehabilitate about 1,000 feet of the road through the slide area without relocating any substantial portion of the road. The initial estimated cost to implement the proposal was about \$175,000. This estimate was updated by the Highway Department as of February 27, 1974, to \$236,000. By adding a 20 percent contingency for inflation and administration, that estimate has been increased to \$284,000, the amount stated in S. 3223.

Notwithstanding the fact that the Bureau of Reclamation was responsible for relocating the road in connection with construction of the Glendo Reservoir and has made certain emergency repairs, continuing responsibility for the road properly rests with the State and local governments in accordance with well-established general principles. In light of this, we cannot support enactment of S. 3223.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely yours,


Assistant Secretary of the Interior

Hon. Henry M. Jackson
Chairman, Committee on
Interior and Insular Affairs
United States Senate
Washington, D.C. 20510

93D CONGRESS
1ST SESSION

S. 2403

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 11, 1973

Mr. McGOVERN (for himself and Mr. ABOUREZK) introduced the following bill;
which was read twice and referred to the Committee on Interior and Insular
Affairs

A BILL

To authorize the Secretary of the Interior to construct, operate,
and maintain a larger and adequate spillway, and to improve
the upstream slope protection on Belle Fourche Dam, Belle
Fourche project, Belle Fourche, South Dakota, and for other
purposes.

- 1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That the Secretary of the Interior is authorized to con-
4 struct, operate, and maintain a larger and adequate spill-
5 way, and to improve the upstream slope protection on Belle
6 Fourche Dam, Belle Fourche project, Belle Fourche, South
7 Dakota, in accordance with the Federal reclamation laws
8 (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory

1 thereof or supplementary thereto) and the provisions of this
2 Act and the plan set out in the report of the Secretary on this
3 project, with such modification of, or additions to the works,
4 as the Secretary may find necessary and proper for the pur-
5 poses of meeting flood and emergency conditions which
6 would otherwise result in loss of life or property.

7 SEC. 2. Construction authorized by this Act shall be for
8 flood control and safety of dams purposes and not for the
9 purpose of providing additional conservation storage capacity,
10 or developing benefits over and above those provided by the
11 original dam and reservoir. The costs of construction au-
12 thorized by this Act shall be nonreimbursable and nonreturn-
13 able. Nothing in this Act shall be construed to reduce the
14 amount of project costs allocated to reimbursable purposes
15 heretofore authorized.

16 SEC. 3. There is hereby authorized to be appropriated
17 for the construction of a larger spillway for Belle Fourche
18 Dam and to improve the upstream slope protection on the
19 dam the sum of \$3,250,000 (based upon October 1972
20 prices), plus or minus such amounts, if any, as may be justi-
21 fied by reason of changes in construction costs as indicated
22 by engineering cost indices applicable to the types of con-
23 struction involved.



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JUN 6 - 1974

Dear Mr. Chairman:

This responds to your request for our views concerning S. 2403 a bill "To authorize the Secretary of the Interior to construct, operate and maintain a larger and adequate spillway, and to improve the upstream slope protection on Belle Fourche Dam, Belle Fourche project, Belle Fourche, South Dakota, and for other purposes."

We recommend that the bill be enacted if revised as suggested herein.

The bill would authorize the Secretary of the Interior to construct operate and maintain a larger and adequate spillway and to improve the upstream slope protection on Belle Fourche Dam in South Dakota. Construction would be in accordance with a plan developed by the Secretary for flood control and safety of dam purposes and not for the purpose of providing additional storage capacity or developing benefits beyond those provided by the original dam and reservoir. Costs would be non-reimbursable and a \$3.25 million construction authorization (October 1972 prices) is provided.

A wide variety of circumstances are relevant to determining what the Federal responsibility should be for assuring that dams built or operated by the Federal Government continue to have adequate safety characteristics, after initial construction. Because of this, safety issues such as those presented by S. 2403 must be considered on a case-by-case basis. With respect to the Belle Fourche Dam, we recognize a Federal responsibility to carry out work contemplated by the bill, subject however to sharing such responsibility with project beneficiaries.

Recently developed meteorological techniques, current hydrological data, plus additional years of experience in precipitation and runoff studies, have revealed that the design inflow flood at Belle Fourche Dam is greater than was estimated when the structure was designed and constructed. Based upon this information, it has been concluded that failure of Belle Fourche Dam could result from the occurrence of floods approaching the magnitude of the design inflow flood, or from unusually severe wave action against the concrete slab protection on the upstream face of the dam.

Failure of the dam would cause a major disaster in the area downstream, including possible loss of life. Located within the downstream flood zone are: the town of Nisland, South Dakota; two Indian villages (Bridger and Cherry Creek); and a number of farmsteads and ranch headquarters. These communities would either be partially or completely inundated.

The Bureau of Reclamation is preparing a report on Belle Fourche Dam to indicate alternative solutions, interim operating criteria, an analysis of repayment capability, and possible cost allocations.

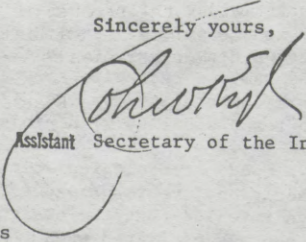
When the report has been completed, it would be desirable if enabling legislation existed to authorize the construction of the facilities necessary to insure the safety of Belle Fourche Dam. We believe that S. 2403 would provide the required authority if it were revised as follows:

1. Page 2, line 2, to read ". . . Act and the plan set out in a report to be issued by the Secretary on this"
2. Page 2, lines 12 and 13, to read ". . . thorized by this Act shall be reimbursable to the extent that the Secretary of the Interior determines to be appropriate. Nothing in this Act shall be construed to reduce the"

These changes will permit the needed work to go forward on an appropriate basis of shared responsibility between the Federal government and project beneficiaries.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely yours,


Assistant Secretary of the Interior

Hon. Henry M. Jackson
Chairman, Committee on
Interior and Insular Affairs
United States Senate
Washington, D.C. 20510

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

JUN 14 1974

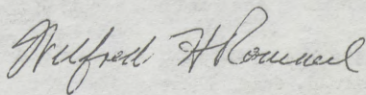
Honorable Henry M. Jackson
Chairman, Committee on Interior
and Insular Affairs
United States Senate
3106 New Senate Office Building
Washington, D. C. 20510

Dear Mr. Chairman:

This is in reply to your request of January 15, 1974, for the views of the Office of Management and Budget on S. 2403, a bill "To authorize the Secretary of the Interior to construct, operate, and maintain a larger and adequate spillway, and to improve the upstream slope protection on Belle Fourche Dam, Belle Fourche Project, Belle Fourche, South Dakota, and for other purposes."

The Department of the Interior, in its letter to your Committee, recommends that the bill be enacted if revised in certain respects. The Office of Management and Budget concurs with the views of the Department and, accordingly recommends enactment of S. 2403 if amended as the Department suggests.

Sincerely,



Wilfred H. Rommel
Assistant Director for
Legislative Reference

STATEMENT OF THE HONORABLE CLIFFORD P. HANSEN BEFORE THE
WATER AND POWER RESOURCES SUB-COMMITTEE.

Mr. Chairman:

The bill before the Subcommittee today, S. 3223, would authorize the Secretary of the Interior to reconstruct a 1,190 feet portion of a road along the east side of Glendo Reservoir in Platte County, Wyoming.

The road was constructed by the Bureau of Reclamation as an access road for construction of Glendo Dam. It is the only crossing in the immediate area of the North Platte River up and down stream and is used as the only practical access road by farm and ranch families, a school bus, a U.S. mail carrier, and recreation and Bureau of Reclamation vehicles. Upon completion by the Bureau of Reclamation in 1958 the Bureau assigned the administration and maintenance of the road to Platte County. The Bureau, however, remained the landowner of the land upon which the road runs. The County made repairs in 1964 and 1965 of approximately \$7,000. On February 6, 1973, Platte County transferred the operation and maintenance by a memorandum of understanding to the Wyoming Recreation Commission.

Since the date of the road's construction in 1956-58 by the Bureau of Reclamation, the road has required a series of repairs. Repairs were required because of seepage from underground water, which flowed down from a source on the side of the steep mountain above the road. The seepage was not apparent when the road was originally constructed but the sources of underground water have now been determined and could be controlled under the proper program. In February 1973, because of seepage a portion of the road again slid into the

canyon and the remaining road is subjected to rock slides. The road now requires major repairs. Due to this condition travel on the road has been reduced to one lane of traffic and conditions on the road make travel hazardous. S. 3223 and H.R. 13589 are bills which would authorize funding for reconstruction so the road would be permanently stabilized.

Alternative plans for reconstruction by the Bureau were considered. The Wyoming Highway Department also made a study and recommended: the realignment of about 1,000 feet of road, a move into the mountain side by eight feet to put the road on solid ground, and stabilization of the down side of the grade along with control of the underground drainage problem for long-term use.

In House testimony the Department commented on this study/stated it, and

Reviewed the plans proposed by the State for eliminating the slides on the roadway and the estimated cost thereof, and believe(s) that they offer the most practical and economical means of resolving the problem and providing a safe and stable road.

They also note:

If funds, as proposed in the subject legislation were made available to the Bureau, we would transfer the funds to the Wyoming Recreation Commission so that it could proceed to accomplish rehabilitation of the road.

The funds in the legislation total \$284,000. The Wyoming Highway Department originally estimated \$236,000. The Commissioner recommended that a 20 percent contingency figure be added to cover possible inflation and administration cost which would increase the estimate to about \$284,000.

I along with the Director and President of the Wyoming Recreation Commission, take the position that because the Bureau is the landowner of the road, it should have the responsibility of reconstructing the road. I realize that the Bureau does not have the funds to proceed. However, this bill will authorize the funds and the Bureau has stated in House testimony that it will transfer funds to the Wyoming Recreation Commission.

I would urge support of this bill because it provides the only practical solution to a hazardous problem on federal land.

Mr. Chairman, I would like to ask that statements in support of this legislation by the President and Director of the Wyoming Recreation Commission and the Superintendent and Chief Engineer of the Wyoming Highway Department be included in the record.

STATEMENT OF SENATOR GALE McGEE (D-Wyo.)

ON S. 3223,

A bill to provide for the rehabilitation of a road located in the vicinity of Glendo Dam and Reservoir, Platte County, Wyoming.

Before the Subcommittee on Water and Power Resources
of the
U.S. Senate Committee on Interior and Insular Affairs
June 13, 1974

Mr. Chairman, S. 3223 was introduced on March 22, 1974, by me and my distinguished colleague, Senator Hansen. Congressman Teno Roncalio of Wyoming has also introduced a companion measure in the House of Representatives so this legislation has the unanimous support of Wyoming's Congressional Delegation. I want to take this opportunity to express my appreciation to the Chairman and the Committee for its prompt consideration of this bill and for scheduling these hearings at this time.

Mr. Chairman, unfortunately the Bureau of Reclamation has taken the position that it has no responsibility in contributing to the repair of this road because of the fact that a State agency, the Wyoming Recreation Commission, has undertaken operation and maintenance responsibilities pursuant to a memorandum of understanding with the Bureau. I cannot accept this position and I feel that very clearly the Department of the Interior, through the Bureau of Reclamation, has a clear responsibility and an obligation to contribute to the rehabilitation of that section of road that is in question here today.

The road in question was originally a county road, which was used extensively by farmers and ranchers, school buses, and other residents of the county. Upon completion of the Glendo Dam and Reservoir, it

became necessary to relocate this public road. The relocation and construction was undertaken by the Bureau of Reclamation between November, 1956, and September, 1958. Upon completion of the road construction project, the administration and maintenance of the road was turned over to Platte County, Wyoming. Subsequently, on February 6, 1973, the Wyoming Recreation Commission assumed the administration and maintenance of that section of the road which lies within the Glendo State Park.

During the intervening years since completion of the relocated road, a number of repairs have been necessary in the area in question. In 1964 and 1965 Platte County made minor repairs in an effort to preserve the deteriorating roadbed. In 1965 heavy rains caused major damage which resulted in a land slide on the roadway near the left abutment of Glendo Dam requiring emergency repairs. The Bureau of Reclamation, pursuant to authority under a decision of the Comptroller General, expended the necessary funds in the amount of \$149,000 to make repairs. Another heavy earth slide occurred in 1967 and the Bureau assisted in making additional repairs. These efforts, however, did not cure the problem and additional slides occurred during the spring and summer of 1971 and again in 1973. The most recent slides have reduced the section of the roadway in question to a width of one lane, thereby creating a serious hazard to traffic use and public safety, including daily use by school buses. The earth slides have created drainage problems, and the existing road continues to deteriorate.

Mr. Chairman, the history of this situation indicates very clearly to me that the basic engineering and road construction which was undertaken and completed by the Bureau of Reclamation was faulty. The Bureau of Reclamation had a clear responsibility to relocate this public road and provide a suitable alternative passageway for the public.

A study was completed by the Wyoming Highway Department, with the assistance of engineers and geologists furnished by the Wyoming Recreation Commission. This study reveals that a slight realignment of the road by moving it into the mountainside eight feet would put the road base on a solid foundation. The study also proposes that the slope of the mountain be stabilized with concrete piles and that the underground drainage problem be corrected and that the downside slope of the roadfill into the canyon be stabilized. The Wyoming Highway Commission, with the concurrence of the Bureau of Reclamation, estimates that the total cost for this work would be \$284,000, the amount to be authorized by S. 3223. The work involves a section in the road consisting of approximately 1,000 feet.

Mr. Chairman, given this set of facts, I believe that the Committee will agree that had the engineering and construction been properly performed by the Bureau of Reclamation on this particular section of the roadway the existing problem would never have occurred, and the Platte County maintenance crews, as well as the Wyoming Recreation Commission maintenance crews, would have the capability of properly maintaining the roadway.

The responsibility, therefore, in correcting this situation, rests with the Bureau of Reclamation, and I most respectfully urge the Committee to approve S. 3223 and promptly report it to the Floor of the Senate. With the cooperation of the Wyoming State Highway Department and the Wyoming Recreation Commission, the total cost, as I indicated earlier, would be \$284,000. Earlier estimates by the Bureau of Reclamation, on the other hand, placed the cost for relocating this section of the roadway at an expenditure of from \$990,000 to \$1,850,000. Therefore, the plan, as envisioned in S. 3223, would result in a considerable savings and would, at the same time, correct the original deficiencies in road construction.

Mr. Chairman, I am also submitting at this time a copy of a letter which I received on January 7, 1974, from Paul H. Westedt, Director of the Wyoming Recreation Commission, together with some photographs of the area and roadway in question. Hopefully, these materials will be helpful to the Committee in considering this matter.

Again, I wish to thank the Committee for their prompt attention to this legislation. I remain hopeful that we can obtain prompt approval for the authority requested in S. 3223.



604 East 25th Street, Box 309, Cheyenne, Wyo. 82002

Telephone: Area Code 307 - 777-7695

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January 7, 1974

The Honorable Gale McGee
United States Senator
Washington, D. C. 20510

SUBJECT: Glendo State Park Slide Area

Dear Senator McGee:

The above subject has become a problem to my department, the Wyoming Recreation Commission. Senator Hansen and Congressman Roncalio have had correspondence from local people and county officials in Platte County.

It is at this time I would like to review the history of this area and apprise you of the situation as well as Senator Hansen and Congressman Roncalio.

In the last several years we have had rocks tumbling down onto the road as well as the road caving away and sliding into the canyon. Every year we have had an emergency to fix this road, and the county, state and Bureau of Reclamation cooperated in taking care of the emergencies. However, this last season the road has slid into the canyon again so we decided to investigate the problem thoroughly.

The State Highway Department, Bureau of Reclamation and my department furnished engineers and geologists to study the problem and make recommendations. The Highway Department came up with a set of plans and the Bureau of Reclamation concurred that a realignment of approximately 1000 feet of the road and move into the mountain side eight feet would put this road on a solid foundation. The proposed work would include stabilizing the slope of the mountain, resolving the underground drainage of water, and stabilizing the down side of the road fill into the canyon. The estimated cost to accomplish this work is \$175,000.00.

The Bureau of Reclamation offered to assist in the project due to the fact that they constructed this road when the Glendo dam was built although they did turn the responsibility of the road over to the county. The County has now turned the road (inside the state park) over to the Wyoming Recreation Commission for operation and maintenance.

In reviewing the responsibility of this hazardous area everyone wanted to assist. The Bureau of Reclamation wanted to provide the funding to accomplish this project; however, they determined that they were unable to provide financial support within their authority.

Attached is a letter from the Regional Director of the Bureau of Reclamation dated October 29, 1973. Attached also are photographs of the area showing the slide problem which is in two separate areas.

This road is used quite extensively by ranchers, school buses and recreationists along the east side of the reservoir. ~~This hazardous situation is of concern to all these people in this locality.~~

With all of the above documentation it is our hope that we could make a request to you to secure federal funds in the amount of \$175,000.00 to resolve this problem.

If the Bureau of Reclamation had the authority and the funding, I am sure we could work with them. If, however, the funding were provided the Recreation Commission, we would get this project completed by working with all agencies.

Should you need further information, please let me know.

Sincerely,



Paul H. Westedt
Director

PHW:jlw
Encl:



United States Department of the Interior
BUREAU OF RECLAMATION

REGIONAL OFFICE, LOWER MISSOURI REGION
BUILDING 20, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

IN REPLY
REFER TO: LM-200
561. Glendo

OCT 29 1973

Mr. Paul H. Westedt
Director, Wyoming Recreation Commission
604 East 25th Street
Post Office Box 309
Cheyenne, Wyoming 82002

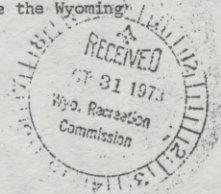
Dear Mr. Westedt:

In accordance with the last paragraph of our letter of August 13, 1973, we advised you by telephone early in September that a decision had not been made as to assistance that could be made available for slide repair work on the county road on the left abutment of Glendo Dam.

It has now been determined that we are unable to provide additional financial support within our existing authority to repair the slide. We have made every effort to develop a satisfactory solution to the problem, but, as you are aware, several times since the county assumed contractual responsibility for the road in 1958, we have provided some financial assistance, and in June 1966, after a major slide, sought a decision from the Comptroller General which permitted the Bureau to enter into an amendatory contract to repair the road. Under the terms of that contract, we have no further authority with which we can fund the large amount of money needed for the work. In addition, the situation is complicated by the fact that recent failures have been aggravated by the lack of materials and equipment on the part of the county to provide adequate maintenance on this portion of the road.

For the above reasons and the length of time that the road has been in service, we feel it is not likely that a favorable decision would be obtained from the Comptroller General permitting us to further enter into an amendatory contract to again repair the road.

Extensive alternate studies for major reconstruction or realignment costing from \$990,000 to \$1,850,000 were studied. Since the Wyoming



Highway Department, by their memorandum of May 9, 1973, as amended on August 1, 1973, considers that adequate repair can be made by realignment, shotcrete protection, and other measures included in that estimate, it is our opinion that the expenditure of one to two million dollars is not justified. Consequently, we support the Highway Department's proposal as having the most merit from the geologic-economic viewpoint.

Allowing for contingencies and increase in price until the work can be gotten underway, Congressman Teno Roncalio has been advised that we believe the repair as proposed by the Wyoming Highway Department can be completed for about \$175,000, and that the Bureau lacks authority to assist in correcting the slide situation. We regret that we are unable to offer you immediate assistance, but will be glad to discuss the matter at any time.

Sincerely yours,

A. W. Watts

Acting for
James M. Ingles
Regional Director

Statement of Senator James Abourezk

To Senate Water and Power Resources Subcommittee
on S. 2403, a bill to authorize the repair and
improvement of the Belle Fourche Dam.

June 13, 1974

I am very pleased to be able to take part in these hearings on S. 2403, a bill to authorize the Secretary of the Interior to construct, operate, and maintain a larger and adequate spillway, and to improve the upstream slope protection on the Belle Fourche Dam, Belle Fourche, South Dakota.

This bill was introduced by Senator McGovern and I on September 11, 1973. The problem, however, goes back much further than that.

This project was one of the first two undertakings by the Bureau of Reclamation. Construction began in 1905 and was finished in 1910. For many years this was the longest earth-filled dam in the world.

Over the years a large number of problems have arisen relating to the design and construction of the spillway and the face of the dam. At the present, the face of the dam desperately needs repair. The mile long face is ripped with flat concrete blocks. During storm periods, strong winds and wave action digs away the area between the blocks until they are weakened and dislodged. Eventually, the water will gouge out the earth fill and chew a hole through the dam.

The spillway, if anything, is even more deteriorated. Bureau of Reclamation engineers have said that it would be more economical to construct a new spillway at another point in the dam. Because the spillway can no longer be used, capacity of the reservoir has been restricted to 24,870 acre feet less than it should be.

This situation has been at near crisis level since 1966. On March 1 of that year, the Board of Directors of the Belle Fourche Irrigation District signed a contract with the Bureau of Reclamation, restricting water storage. The Board of Directors was lead to believe that the spillway would be replaced and the face of the Dam ripped before the contract expired in 1969.

Instead, the Irrigation District had to sign an amendment to the contract extending the agreement until such time as the necessary repairs would take place. Now, five years later, the District feels understandably frustrated that they have filled all terms of the contract, but repairs are not a bit closer than they were in 1966.

And for nearly ten years, the people who live below this Dam have been living with a loaded shotgun at their head. The letter report from the Bureau of Reclamation on this bill states that:

"Failure of the Dam would cause a major disaster in the area downstream, including possible loss of life. Located within the downstream flood zone are: the town of Nisland, South Dakota; two Indian villages (Bridger and Cherry Creek); and a number of farmsteads and ranch headquarters. These communities would either be partially or completely inundated."

Those of us from Western South Dakota have had far too much experience with disastrous floods. Rapid City, site of the devastating 1972 flood, is less than an hour's drive from the Belle Fourche Dam. The memory of that horrible night will not be quickly forgotten.

The Department of the Interior has recommended that this bill be enacted if revised as they suggest. Their two recommendations seem to be simple matters. In fact, they are not.

The first suggestion is that the authority under this bill be carried out under existing reclamation law and a plan "to be issued by the Secretary" on this project. I can certainly understand that any plans that might have been devised eight years ago would need updating. However, I would like to know what has the Bureau been

doing for the last eight years? When will any final plan be completed? What will be the general nature of that plan?

The people in the Belle Fourche Irrigation District have been waiting long enough. I feel that planning should not be an excuse for further delay. Any commitment to a report "to be issued by the Secretary" should include a specific date so that the people can know when the project will continue. Further, there should be some prior indication of the nature of the plan. Without this, the Bureau is selling a pig in a poke.

The second recommendation, however, presents even more serious problems. Again, the Bureau seems intent on selling a pig in a poke. This suggestion recommends that costs of the repair be reimbursable "to the extent that the Secretary of the Interior determines to be appropriate."

I find this recommendation objectionable on two grounds. First it would commit the District to cost payments without their being in a position to determine what that cost share would be ahead of time. Secondly, it would unreasonably diminish Federal responsibility for assuring the safety of this Dam.

This Dam was constructed by the Federal government. The Bureau of Reclamation has constantly acknowledged their responsibility to bring the spillway and the face of the Dam up to present day engineering and safety standards. The unforeseen problems that have arisen through the years have created this situation. The Irrigation District has neither the responsibility nor the means to absorb the financial burden that would result from the repair of this Dam.

The Federal government put that shotgun there in the first place. It loaded it when it failed to properly provide for safety maintenance. Now it is the responsibility of the Federal government to unload it.

I hope that it will be possible for the Committee to act quickly on this bill. I hope that the Committee will pay particular attention to the views of the people from the Board of Directors of the Belle Fourche Irrigation District. These are the people that have been living with that shotgun at their heads for the past eight years. These are the people who know most what is needed and what they can do to help.

They have been carrying out all of their responsibilities. Now it is up to the Federal government to do its part. We can't ask these people to live with an unsafe dam any longer.

Thank you.

FROM THE OFFICE OF SOUTH DAKOTA'S U.S. SENATOR

George McGovern

2313 Dirksen Senate Office Building, Washington, DC 20510 phone: (202) 225-2321

Statement by Senator George McGovern
before the
Subcommittee on Power and Water Resources
of the Committee on Interior and Insular Affairs
Hearing Testimony on S.2403
June 13, 1974

Mr. Chairman, on behalf of the residents of the Belle Fourche Irrigation District, let me thank the Subcommittee for its prompt action on S. 2403, which authorizes repair of Orman Dam. While the Dam is an indisputable source of economic strength to the area, its weakened condition has been a long-term source of concern.

On at least ten occasions, Orman Dam has sustained damage of one kind or another because of wind action. Periodically, throughout the years, cement blocks in the revetment have been dislodged by wave action. After 60 years of service, Orman Dam is showing its age. Eventhough it was a showpiece of sound design when it was constructed in 1906, age and increased demands have created a strain which it can no longer safely bear.

For example, the spillway is too small and it has been severely damaged in 1932, 1943, and 1973.

The dam is faced with concrete slabs which are undermined by wave action during periods of high water.

And because of problems above the reservoir, the reservoir itself must operate at less than full capacity. In a dry year, this lack of capacity would be an economic disaster for the region in spite of supplemental water from Keyhole Rservoir in Wyoming.

Orman Dam is vitally important to the northern Black Hills of South Dakota. In 1973, for example, 420 farmers had 57,000 acres under irrigation. These are, in the main, small, family-operated farms, averaging 535 acres of combined irrigated and dryland acreage. That land produced a gross income of \$5,989,000 or \$14,200 per irrigated farm or \$111 per irrigated acre. The FHA loaned agricultural borrowers in the district more than \$2.8 million, averaging \$36,000 for operation loans and farm purchases.

The Belle Fourche Irrigation Project produces 50,000 to 60,000 tons of alfalfa hay and approximately one million bushels of grain each year. The rest of the area is range country. It produces 500,000 to 600,000 head of cattle and more than a half million head of sheep.

In short, Orman Dam is indispensable to the community. The guaranteed water flow it provides for irrigation attracts capital and confidence in a way that dryland farming cannot match. It provides a haven for outdoorsmen who seek sporting and recreational enjoyment. It enhances a strong family farm and livestock economy which is the real keystone of food and fiber production in this land.

Yet, the dam's present condition makes it a threat to the community itself.

I know that the residents of the area agreed with the Secretary of the Interior when he said:

"Failure of the Dam would cause a major disaster in the area downstream, including possible loss of life. Located within the downstream flood zone are: the town of Nisland, South Dakota; two Indian villages (Bridger and Cherry Creek); and a number of farmsteads and ranch headquarters. These communities would either be partially or completely inundated."

Among all the parties concerned with the future of Orman Dam there is common agreement that the Dam is in need of repair. The delay in accomplishing those repairs appears to hinge solely on the question of payment. The bill I have introduced, S.2403, would authorize the Secretary of the Interior to construct, operate and maintain a larger, adequate spillway, and to improve the upstream slope protection on Belle Fourche Reservoir. The total cost would amount to \$3,250,000. The costs of construction authorized by this Act would be nonreimbursable and nonreturnable. In other words, the cost of repairing the Dam would be assigned to the federal government. It is that provision with which the Department of the Interior takes issue.

In House testimony, the Interior Department took the position that the cost of structural modification should be shared with the water users to the extent of their allocated costs and their ability to repay. The ability of the Belle Fourche Irrigation Project residents to repay is threatened by at least two factors.

First, outstanding obligations on earlier work on the dam costs them \$38,700 a year, every year, until the year 2027, when the adjusted construction charge obligation of \$2,988,200 is finally retired. In addition, emergency work on South Canal will cost \$28,000 a year for five years.

The other factor that makes their ability to pay uncertain is the nature of the economic picture in the area. Sharply higher costs and disastrously lower livestock prices are working a severe hardship on farmers and ranchers alike. Their incomes are subject to market and inflationary pressures that leave them with few things on which they can rely. But one thing they must rely on each day is the safe irrigation of their grazing and farm land by the water behind Orman Dam.

In conclusion, it is clear that the people of the area are already carrying a heavy burden of payment connected with previous work on the Dam. It is also clear that the uncertain market picture makes further out-of-pocket investment a step which mortgages the future of the area on a project the Interior Department is better able to assume.



STATE OF SOUTH DAKOTA

RICHARD F. KNEIP

EXECUTIVE OFFICE

GOVERNOR

PIERRE
57501

May 30, 1974

RECEIVED
JUN 8 1974

SEN. FRANK CHURCH

Senator Frank Church
Chairman, Subcommittee on Water
and Power Resources
Committee on Interior and Insular Affairs
Senate Building
Washington, D.C.

Dear Senator Church:

The rehabilitation of the Orman Dam on the Belle Fourche Irrigation Project in South Dakota deserves your Committee's favorable consideration.

The experiences associated with the June 9-10, 1972, flood in the Black Hills area points up the need to be prepared for similar disastrous conditions throughout Western South Dakota. A similar storm event or even one of much lesser intensity over the Orman Dam drainage area could raise havoc with the project in its present condition. Thus to insure safety to the dam and to downstream residents, rehabilitation work is needed.

The current situation on this 63 year old dam is unacceptable. The reduction in water storage required over the past few years leaves the project without that margin of water that is so urgently needed during dry times. Fortunately the past few years have been rather fortunate with respect to water supply for the project, however, one can look forward to less fortunate years when every drop of water should be stored and conserved for project use.

I urge your favorable action on S.B. 2403 for rehabilitation of Orman Dam, Belle Fourche Project.

Sincerely,

R.F. Kneip
RICHARD F. KNEIP
GOVERNOR

RFK/mrd

cc: Senators McGovern and Abourezk
Congressmen Denholm and Abdnor

Senator HATFIELD. We will call Mr. Gilbert G. Stamm, Commissioner of Reclamation of the Department of the Interior.

Mr. Stamm, if you will please come forward, we will take your comments in response to S. 3223 first.

Now we have your full statement here, Commissioner, and you can either read it or summarize it as you wish. The full statement will be placed in the record. First if you would introduce those who accompany you, we would appreciate it very much.

Commissioner STAMM. I would be glad to do that. On my left, Harry Avery, who is Acting Assistant Commissioner for Resource Development, and on my right, Mr. Dess L. Chappelear, who is Chief of our Division of General Engineering.

My statement is comparatively short, so I think I will read it to you.

STATEMENT OF GILBERT G. STAMM, COMMISSIONER, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Commissioner STAMM. Mr. Chairman and members of the subcommittee, I am appearing before you today to provide departmental views and comments regarding S. 3223, a bill to expand the Glendo unit of the Pick-Sloan Missouri basin program to provide for the rehabilitation of a road relocated by the Bureau of Reclamation in the vicinity of Glendo Dam and Reservoir, Platte County, Wyo.

The Department cannot support enactment of S. 3223 since the bill would authorize funds to relocate and repair a road which is considered more properly a local rather than a Federal responsibility.

This relocated road was built to replace a county road which crossed the Glendo Reservoir area as a part of the Glendo unit, Oregon Trail Division, Pick-Sloan Missouri Basin program.

The county through contract No. 14-06-700-1239 dated November 8, 1956, assumed the obligation for the operation and maintenance of the 16 miles of relocated road after its completion, which took place in 1958. Soon after the relocated road was placed into service about 1,000 feet of the road located on a sidehill near the left abutment of Glendo Dam began to be affected by slides.

The county made minor repairs to the road in 1964 and again in 1965. However, heavy rains in June 1965 caused a major slide which required extensive repairs. To correct this situation, the Comptroller General in decision B-159372 dated June 28, 1966, approved amendment of the contract permitting the expenditure of \$149,000 to make repairs to the road.

Subsequently, in 1967, about \$63,000 was spent for repairs in the slide area. Other expenditures were made to modify a curve and to raise a guardrail in other areas.

This work depleted most of the funds approved by the Controller General decision.

Subsequently, a number of other slides have occurred in the same area which have required emergency repairs. The slide which oc-

curred in the spring of 1973 has reduced the road width creating the present one-lane traffic situation.

The road serves a number of farm and ranch families, a school bus, a U.S. mail carrier, recreation traffic and Bureau of Reclamation vehicles. Traffic counts taken by the Wyoming Recreation Commission indicate that the road averaged less than 100 vehicles a day. However, for those that do use the road, there is no other practical route through the area.

Last year on February 6, 1973, operation and maintenance responsibilities for the relocated road within Glendo State Park were transferred from Platte county to the Wyoming Recreation Commission.

The Bureau of Reclamation in 1973 made studies on four alternate plans for reconstructing the roadway where slides and other weaknesses have been encountered.

Estimates of cost for the various plans, which involved extensive relocations of sections of the road, ranged from \$990,000 to \$1,850,000. Although we believe the four alternatives the Bureau studied would eliminate or effectively mitigate the slide problems, it was concluded the Bureau lacked authority to assist in correcting the situation.

The Wyoming Highway Department also made a study of the problem and proposed to rehabilitate about 1,000 feet of the road through the slide area without relocating any substantial portion of the road. The initial estimated cost to implement the proposal was about \$175,000. This estimate was updated by the highway department as of February 27, 1974, to \$236,000. By adding a 20-percent contingency for inflation and administration, that estimate has been increased to \$284,000, the amount stated in S. 3223.

We reviewed the plans proposed by the State for eliminating the slides on the roadway and the estimated cost thereof, and believe that they offer the most practical and economical means of resolving the problem and providing a stable and safe road.

If funds, as proposed in the subject legislation, were made available to the Bureau, we would transfer the funds to the Wyoming Recreation Commission so that it could proceed to accomplish rehabilitation of the road. A suitable agreement between the Bureau and Commission would provide for the funding transfer and our review of construction plans and activities as they relate to Glendo Dam. The Commission, with assistance from the Wyoming State Highway Department, would implement the highway department's plan.

However, as before stated, several times since the county assumed contractual responsibility for the road in 1958, we have provided emergency assistance as well as seeking in 1966 the Comptroller General's approval to modify the contract.

Notwithstanding the fact that the Bureau of Reclamation was responsible for relocating the road in connection with construction of the Glendo unit and has provided the before stated emergency repairs and assistance, the department does not believe further assistance should be extended.

Senator HATFIELD. Thank you very much, Commissioner.

I have some questions from Senator Hansen I would like to propound to you in his behalf. Senator Hansen is unavoidably detained with an important meeting of the beef industry at this time along with other members of this committee. I would like to ask these questions on his behalf and have you respond to them.

As you mentioned, the Bureau originally designed the road and built it, is that not true?

Commissioner STAMM. Yes, sir.

Senator HATFIELD. When the Bureau repaired the road in 1966, which I believe you have indicated in your testimony, and the Comptroller General's decision was obtained, was not the expenditures for repairs a valid Federal cost?

Commissioner STAMM. Yes.

Senator HATFIELD. Can you supply a copy of this decision for the record?

Commissioner STAMM. Yes, we will be happy to do that.

[Information requested follows:]



United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 200

561.

JUL 10 1974

Honorable Frank Church
Chairman, Subcommittee on
Water and Power Resources
Committee on Interior and Insular Affairs
United States Senate
Washington, D. C. 20510

Dear Senator Church:

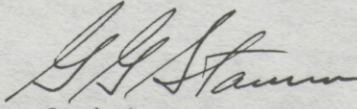
This is responsive to the request for information arising from the hearing on S. 3223, a bill to expand the Glendo Unit of the Pick-Sloan Missouri Basin Program to provide for the rehabilitation of a road relocation by the Bureau of Reclamation in the vicinity of Glendo Dam and Reservoir, Platte County, Wyoming.

The following is enclosed:

1. A copy of Contract No. 14-06-700-1239 with its transmittal letter to the Board of County Commissioners dated December 28, 1956.
2. A copy of the Comptroller General Decision Number B-159372 dated June 28, 1966.
3. A copy of Supplemental Contract No. 1 to Contract No. 14-06-700-1239 dated September 9, 1966.
4. A memorandum dated June 26, 1974, by the Regional Solicitor, Denver, which provides information related to relocation Contract No. 14-06-700-1239, Supplemental Contract No. 1 to Contract No. 14-06-700-1239, the Glendo road ownership, areas of responsibility and the Comptroller General Decision Number B-159372.

Please let us know in the event you need additional information regarding this matter.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "G. G. Hanna". The signature is written in dark ink and is positioned above the printed name "Commissioner".

Commissioner

Enclosures

Form 7, 12-6
(12-54)

Bureau of Information

DEC 28 1946

Board of County Commissioners
Platte County
Wheatland, Wyoming

Gentlemen:

Inclosed for your files is executed duplicate original Contract No. 14-60-700-122, dated November 6, 1944, between the United States and Platte County, Wyoming, for relocation and abandonment of County roads in connection with construction of Glendo Dam and Reservoir, Glendo Unit, Oregon Trail Division, Missouri River Basin Project.

Very truly yours,

R. J. WALTER, JR.

R. J. Walter, Jr.
Director

Enclosure

Blind to: Assistant Commissioner and Chief Engineer, Attention: D-221
Regional Solicitor, Denver Region, Building 53, DFC
Project Manager, Casper, Wyoming, Attention: C-200
Construction Engineer, Glendo, Wyoming, Attention: C-242
(with conformed copy of contract to each)
Project Manager, Casper, Wyoming, Attention: C-300
(with original contract)

JJCram:fkp

OFFICIAL FILE COPY

Date	Surname	Code
12-28	C. J. M.	9-220
12-28	W. J. M.	9-220
12-28	W. J. M.	9-220
12-28	W. J. M.	9-220

Standard Form No. 1036—Revised
Form prescribed by
Comptroller General, U. S.
September 18, 1950
(Gen. Reg. No. 51, Supp. No. 12)

STATEMENT AND CERTIFICATE OF AWARD

No. 14-06-700-1239
(Contract)
Date November 9, 1956

Interior
(Department or establishment)

Reclamation, Region 7
(Bureau or office)

Denver, Colorado
(Location)

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

1. By advertising in newspapers. Yes ☐ No ☒
2. (a) By advertising in circular letters sent to _____ dealers.
(b) And by notices posted in public places. Yes ☐ No ☐

(If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made below.)

ABSENCE OF ADVERTISING

Without advertising in accordance with See Below

(Cite law pursuant to which contract was negotiated and the applicable section and paragraph thereof. If contract was negotiated under a public exigency which would not admit of the delay incident to advertising, or because of it being impracticable to secure competition, state below or on the reverse hereof, the circumstances requiring negotiation.)

AWARD OF CONTRACT

- | | Yes | No |
|--|--------------------------|--------------------------|
| A. To lowest bidder as to price (Expenditures) | ☐ | ☐ |
| B. To highest bidder as to price (Receipts) | ☐ | ☐ |

CERTIFICATE

I CERTIFY that the foregoing statement is true and correct; that the written findings required by law to be submitted with the contract in case of negotiation, upon a determination by the agency head or other authorized official that such method of contracting is necessary, are attached thereto; that the total number of bids received is _____, and that where lower bids (expenditure contracts) or higher bids (receipt contracts) as to price were received, a statement of reasons for their rejection, together with an abstract of bids received, including all lower than that accepted in case of expenditure contracts and all higher in case of receipt contracts, is given below or on the reverse hereof or on a separate sheet attached hereto; that the articles or services covered by the agreement (expenditure) are necessary for the public service; and that the prices charged are just and reasonable.

Reclamation Project Act of August 4, 1939, Ch. 418, 53 Stat. 1187,
43 U.S.C. 485.

/s/ R. J. Walter, Jr.
(Signature of contracting officer)

Regional Director
(Title)

NOTE.—This statement and certificate will be used to support all agreements, both formal contracts and less formal agreements of whatever character, involving the expenditure or receipt of public funds. It must be executed and signed by the contracting officer (unless the award is made by or is subject to approval by an officer other than the contracting officer, when execution and signature may be made by such officer).

14-06-700-1239

SOL Draft 1/10/56

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Glendo Unit
Oregon Trail Division
Missouri River Basin Project

CONTRACT WITH PLATTE COUNTY, WYOMING, FOR
RELOCATION AND ABANDONMENT OF COUNTY ROADS IN
CONNECTION WITH CONSTRUCTION OF GLENDO DAM AND RESERVOIR

THIS CONTRACT, Made and entered into this 8TH day of NOVEMBER, 1956, pursuant to the act of Congress of June 17, 1902 (32 Stat. 353), and acts amendatory thereof or supplementary thereto, referred to as the Reclamation Law, by and between THE UNITED STATES OF AMERICA, hereinafter referred to as the United States, acting for this purpose by the officer executing this contract, and the COUNTY OF PLATTE, a body politic and corporate of the State of Wyoming, acting by and through its duly authorized representatives, hereinafter referred to as the County,

WITNESSETH:

WHEREAS, the United States is constructing Glendo Dam and Reservoir as a part of the Oregon Trail Division of the Missouri River Basin Project, located in part in Platte County, Wyoming; and

WHEREAS, as a result of the construction of Glendo Dam it will be necessary to relocate and abandon certain county roads operated and maintained by Platte County, Wyoming; and

WHEREAS, the County is willing to consent to such changes,

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein contained, it is agreed by and between the parties hereto as follows:

1. The United States agrees at its own cost and expense to relocate and construct county roads shown on Bureau of Reclamation Drawing No. 449-700-43, hereto attached as Exhibit A and by reference made a part hereof. The roads to be relocated and constructed are more particularly indicated as described as follows:

a. Construct a county road from U. S. Highway 87 to Glendo Dam. Standards of construction shall be the Secondary Standards of the Wyoming State Highway.

b. Reconstruct road from Glendo Dam to rock quarry used in construction of Glendo Dam, in SE $\frac{1}{4}$ Section 16, Township 29 North, Range 67 West. Standards of construction shall be those adopted by Platte County, State-County, and County Farm to Market County Roads, 1954.

c. Construct a county road from the said SE $\frac{1}{4}$ Section 16, northerly to the SW corner Section 21, Township 30 North, Range 67 West. Standards of construction shall be those adopted by Platte County, State-County, and County Farm to Market County Roads, 1954.

2. a. The United States agrees to acquire at its own cost and expense rights-of-way for the construction, relocation, and reconstruction of the roads above described, and upon completion of such relocation and construction work shall convey to the County by quitclaim deed easement rights-of-way for said relocated and reconstructed roads: Provided, however, that the United States shall not be required to purchase rights-of-way for the relocated or reconstructed roads where such rights-of-way for the relocated or reconstructed roads already are owned by the County.

b. It is further agreed that the minimum rights-of-way for the above-described roads shall be 60 feet in width, measured 30 feet each way from the centerline.

3. Upon completion of the work involved herein, the officer of the Bureau of Reclamation in charge of the Glendo Unit of the Missouri River Basin Project shall notify the County in writing that such relocation and reconstruction work has been completed. Unless written notice to the contrary is received from the County within

30 days thereafter, such work shall be conclusively presumed to be accepted by the County as satisfactory. After the completion and final acceptance of the work as hereinabove provided, the said relocated roads and reconstructed roads, including roadway across Glendo Dam and dikes, shall be maintained by the County at its sole cost and expense.

4. The County agrees that it will, as soon as practicable after the execution of this contract, vacate and abandon all county roads located in the Glendo Reservoir area which otherwise would be inundated by the filling of Glendo Reservoir: Provided, however, that the county road at the corner common to Sections 19, 20, 29, and 30, Township 30 North, Range 67 West, shall not be abandoned. The County further agrees to convey to the United States rights-of-way for said abandoned roads. The County agrees that it will salvage, without cost to the United States, for its own use all usable roadway materials such as culverts, bridge materials, snow fences, guard posts and rails, and guide posts which it may desire or which, in the opinion of the contracting officer would interfere with the construction and/or operation and maintenance of Glendo Dam and Reservoir.

5. The highways described in Article 1 hereof shall be constructed in accordance with specifications to be issued by the Bureau, reference to which is hereby made. It is agreed that the specifications shall include the following plans and standards of construction:

a. For state secondary roads, 60 feet of right-of-way shall be provided. Construction shall consist of a 26-foot wide roadway and 22-foot wide surfacing. Surfacing shall consist of 3-inch base course, topped by a 1-1/2-inch oil mat. Roadway side slopes on fills shall be as follows: 3:1 for 0 to 3 feet, 2:1 for 3 to 6 feet, and 1 1/2:1 for over 6 feet. Culverts shall be galvanized corrugated metal pipe and shall be without headwalls and of a sufficient size to accommodate drainage properly. Clear width of any new bridges shall be 22 feet and designed for AASHO H-15 loading and shall be of timber construction in conformance with state secondary standards.

b. For the county highway system, 60-foot right-of-way shall be provided. Construction shall consist of 22-foot wide road-bed and 20-foot wide gravel surface, 3-inch maximum thickness.

Roadway side slopes on fills shall be shaped in similar manner as for state secondary roads. Culverts will conform to the state secondary road standards. Any new bridges shall have a clear width of 20 feet and designed for AASHTO H-15 loading and shall be of timber construction in conformance with state farm-to-market roadway standards.

6. In connection with the construction, reconstruction, and relocation of county highways, it is agreed that the United States shall not be obliged to apply the oil mat to the county highway extending from U. S. Highway No. 87 to Glendo Dam until after completion of Glendo Dam and Power Plant.

7. Upon the performance of this contract by the United States according to the terms and conditions thereof, the County hereby forever releases and discharges the United States from all liability for damage resulting from the relocation, construction, or reconstruction of county roads as a result of the construction of Glendo Dam and Reservoir which necessitated said relocation, construction, and reconstruction.

8. The County agrees that the United States and its successors and assigns shall have a right to cross, at its own expense, the said relocated and reconstructed roads with canals or water conduits of any kind, or with other roadways, transmission and distribution lines or telephone, telegraph and electric or other power or irrigation works, or works for the development of power which may now exist or in future be constructed and owned by the United States along or across said roads; said crossing structures shall be constructed and maintained by the United States, its successors and assigns in such a manner that they will not interfere with the use of said roads nor constitute or become a safety hazard on said roads: Provided, That in the event said crossing structures shall be conveyed or transferred for operation and maintenance purposes to a project water users' association, conservancy district, or other organization, the obligation of the United States to maintain said crossing structures, as and when the same may be conveyed or transferred, shall terminate, and thereafter the responsibility for maintaining such crossing structures shall be assumed by the water users' association or other transferee.

9. Whenever any notice is required to be given by one of the parties to the other pursuant to the terms of this contract, such notice shall be effected by the regular mailing thereof, in case of notice to the County, addressed to the Board of County Commissioners of Platte County at Wheatland, Wyoming; and in case of notice to the United States to the officer of the United States in charge of the Glendo Unit, Bureau of Reclamation, Casper, Wyoming.

10. The liability of both the United States and the County under this contract is contingent upon the necessary appropriations and reservation of funds being made therefor.

11. This contract shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

12. The County warrants that it has not employed any person to solicit or secure this contract upon any agreement for a commission, percentage, brokerage, or contingent fee. Breach of this warranty shall give the United States the right to annul the contract or in its discretion to deduct from the contract price or consideration the amount of such commission, percentage, brokerage, or contingent fees. This warranty shall not apply to commissions payable by contractors upon contracts or sales secured or made through bona fide established commercial or selling agencies maintained by the County for the purpose of securing business.

13. No Member of or Delegate to the Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefits that may arise herefrom, but this restriction shall not be construed to extend to this contract if made with a corporation for its general benefit.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first above written.

THE UNITED STATES OF AMERICA

By /s/ R. L. WALTER JR
Regional Director, Region 7
Bureau of Reclamation

COUNTY OF PLATTE, WYOMING

(SEAL)

Attest:

/s/ LYLE B. CLAY

By /s/ RALPH ALLISON

/s/ JOHN A. BALLARD

/s/ ROBERT S. TRENHOLM



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

EGG

B-152372

JUN 28 1966

Dear Mr. Secretary:

By letter dated June 7, 1966, with enclosures, Deputy Assistant Secretary George E. Robinson requested our decision as to whether contract No. 14-06-700-1239 dated November 8, 1956, between the Bureau of Reclamation and the County of Platte, Wyoming, may be amended to provide for additional road construction and the purchase of snow removal equipment for the county.

The contract, among others, covered the construction of a county road about 16 miles in length in replacement of an east-west county road of about 8 miles in length which formerly cut through the reservoir area approximately 3 miles north of Glendo Dam and Reservoir, Oregon Trail Division, Missouri River Basin Project. It is stated that the purpose of the proposed amendment (supplemental contract No. 1) would be to remedy deficiencies in the relocated road as constructed by the Bureau and to acquire for the county maintenance and snow removal equipment which is required because of certain objectionable conditions prevailing on a portion of the alignment of the relocated road that were not present on the road in its original location.

During the negotiations and prior to execution of the contract, the county was advised by the Bureau that the new relocated road, though considerably longer, would be at least as good as the one it replaced in the reservoir area. The new relocated road was transferred to the county on September 15, 1958, for use and maintenance in accordance with the provisions of the relocation contract. Articles 3 and 7 of the contract provide:

"3. Upon completion of the work involved herein, the officer of the Bureau of Reclamation in charge of the Glendo Unit of the Missouri River Basin Project shall notify the County in writing that such relocation and reconstruction work has been completed. Unless written notice to the contrary is received from the County within 30 days thereafter, such work shall be conclusively presumed to be accepted by the County as satisfactory. After the completion and final acceptance of the work as hereinabove provided, the said relocated roads and reconstructed roads, including roadway across Glendo Dam and dikes, shall be maintained by the County at its sole cost and expense.

* * * * *

"7. Upon the performance of this contract by the United States according to the terms and conditions thereof, the County hereby forever releases and discharges the United States from all liability for damage resulting from the relocation, construction, or reconstruction of county roads as a result of the construction of Glendo Dam and Reservoir which necessitated said relocation, construction, and reconstruction."

The problem areas on the alignment of the relocated road and the justifications for execution of the proposed amendment are explained in the June 7 letter as follows:

"During 1964, a 100-foot section along the centerline of the road was involved in a landslide whereby the fill portion of the roadbed slid toward the river, leaving approximately one-half of the roadbed located in side hill cut on firm ground. The county restored the roadway by replacing the fill on the downhill one-half of the roadbed at a cost of approximately \$3,000. A similar slide occurred in June 1965 on an adjacent section of roadway. This, too, has been repaired by Platte County at a cost of approximately \$4,000. * * *

"Survey cross sections of the slide slopes on the river side of the roadway taken April 2, 1966, establish the fact that the fill section has not stabilized and further serious subsidence is in evidence. * * *

"Problem Area No. 2 concerns the steep uphill grade (7.75 percent) contiguous with the south or right abutment of the dam. This grade, approximately 1,800 feet long, is located on a northerly slope which causes it to retain ice and snow on the roadway surface during the winter months. * * * County officials state that frequently vehicles, including school buses, must put chains on to negotiate this grade.

"Problem Area No. 3 concerns the alignment of the relocated road approximately 3 miles south of Glendo. At this point, the road alignment traverses the centerline of a series of

three dikes which were constructed as a part of the project to retain the water in the reservoir when it is at maximum levels. A short radius curve in the roadway alignment forms the connection between road sections located on the crests of two of the dikes and numerous vehicles have left the road at this point, even though guard posts have been erected. * * *

"As a result of the difficulties the residents of the county have encountered in the use of the new road, private citizens and the Platte County Board of Commissioners have, on numerous occasions, complained that the Government did not keep its promise to construct a road that was as good as the original one that was inundated by the reservoir. In addition to being longer and more costly to maintain, it is more susceptible to adverse weather conditions, more accidents have occurred due to a deficiency in alignment, and a portion of the roadbed is located in an unstable foundation, the continual restoration of which is beyond the county's physical plant and financial capability.

"The community's dissatisfaction was voiced to Bureau of Reclamation representatives of the Project Manager's office, Casper, Wyoming, on August 12, 1965, in a meeting attended by local residents, school officials, and the Platte County Board of Commissioners. At this meeting, it was pointed out that the county was again having to repair the roadway at the slide above the left abutment of the dam. They felt that they were only able to perform a temporary repair, and the problem here would recur. They requested that adequate measures be taken as soon as possible to correct all three of the deficiencies in the relocated road noted above so that it would be at least as good as the road previously used before construction of Glendo Dam.

* * * * *

"Notwithstanding the previous position taken by representatives of the Bureau of Reclamation that the road was constructed to standards set forth in the 1956 agreement, it

is the determination of the Regional Director, who is the contracting officer under the relocation contract, that as a matter of fact both parties to the contract erred, and construction of the road was deficient in the following respects:

- "1. The Government erred in not properly evaluating the geologic conditions in trying to locate the roadway above the left abutment of the dam on a transverse cut and fill side hill section.
- "2. In locating the roadway on a steep grade above the right abutment on a northerly sloping hillside, neither party realized that during the winter months it created a maintenance problem that is beyond the county's capability to correct with its existing equipment.
- "3. In designing the road, the Government proposed, and the county accepted, plans with a 25 degree curve between Dikes No. 1 and 2, three miles south of Glendo, Wyoming. Surfacing materials were not placed on the road until construction of the dam was complete since this part of the county road was also used as a construction access road. After the Government paved the road with bituminous surfacing materials, traffic speed increased, and the sharp curve at this location became an obvious traffic hazard."

It is reported that the total cost for correcting the road deficiencies is estimated at \$149,000, \$12,000 of which represents the cost of the maintenance and snow removal equipment to be furnished to the county. In further justification for the expenditure represented by the proposed amendment, it is stated that:

"It was the intention of both the county and the Government that a road of equivalent standards, safe for operation of vehicles, be provided by the relocated road constructed by the Government. While the county was responsible and did review the plans and specifications, .

they, because of their limited knowledge and unfamiliarity with the intricacies of proper design for the construction required, relied on the Government's engineering judgment in a field which was the Government's forte. It is the determination of the contracting officer that mutual mistakes of fact occurred and existed as to the perplexing geological conditions encountered, the failure to foresee the snow and icing problem, and the inherent danger of the short radius curve. The true physical facts were not known, or their significance not appreciated, by either the Government or the county at the time the relocation contract was executed and the work performed. In order to correct the results of these mutual mistakes, it will be necessary to enter into a supplemental contract to reconstruct the two segments of the road and provide snow removal equipment as outlined above. The county feels that they can assume all future maintenance and annual operating costs if the deficiencies in the three problem areas are corrected. It is determined to be in the best interest of the United States to correct these construction deficiencies.

"The situation in this case, involving as it does unsatisfactory geological and design conditions which were not foreseen at the time the contract between the United States and Platte County was consummated, and which have resulted in failure and hazards to public safety, is similar to that covered in Comp. Gen. B-151280, May 6, 1963."

The evidence as heretofore set forth reasonably establishes that the parties were mutually mistaken as to the unusual geographic conditions inherent in the construction of the relocated road and that the design engineering used by the Bureau did not take into consideration the perplexing geographic conditions that would be encountered during construction. Apart from this, although the road was accepted by the county, it appears that after using the road defects appeared which were not apparent at the time of acceptance and, therefore, the Government failed to meet its obligation to construct a road of equivalent standards that would be as good as the road it replaced, and that the standards of construction used did not fairly comply with State-County standards. See B-156391 dated April 19, 1965.

Concerning the legal effect of article 7, above, on the proposed amendment, we note that after article 7 came into force and effect the conduct of the parties was such as would evidence an intention that they never construed the article as precluding the eventual execution of the amendment or that corrective action by the Government would be necessary. That being the case, we do not believe that article 7, per se, legally precludes execution of the proposed agreement. See Winn-Genter Construction Co., et al. v. United States, 110 Ct. Cl. 34; J. G. Watts Construction Company v. United States, 161 Ct. Cl. 801, 807.

However, the furnishing of maintenance and snow removal equipment to the county as part of the consideration of the proposed contract amendment would not be proper. The parties to the contract--which covered only the relocation and abandonment of county roads--cannot by amendment or modification transform the existing contract into a new or different one. The proposed amendment as drafted would have the effect of altering an obligation to relocate roads as good as the former roads to one which would provide the county with physical assets not originally contemplated or contracted for. This is contrary to the legal theory and basis of contract modification and/or amendment which imply change or variance in some particular of an already created or legally existing right; that is, in this situation, a properly constructed relocated road. See Schneider v. United States, 19 Ct. Cl. 547, 551; Board of Directors, Etc. v. Board of Education, Etc., 97 N.W. 2d 166, 167; 19 Comp. Gen. 632, 636.

Subject to the foregoing, we would have no objection to the proposed amendment. See B-151230, May 6, 1963, cited in the Deputy Assistant Secretary's letter. As requested, the files transmitted with the letter of June 7 are returned herewith.

Sincerely yours,

FRANK H. WEITZEL

Assistant

Comptroller General
of the United States

Enclosures

The Honorable
The Secretary of the Interior

*Supplemental Contract No 1 to
Contract No 14-06-700-1239*

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Glendo Unit
Oregon Trail Division
Missouri River Basin Project

SUPPLEMENTAL CONTRACT NO. 1 TO THE CONTRACT BETWEEN THE UNITED STATES AND
PLATTE COUNTY, WYOMING, FOR RELOCATION AND ABANDONMENT OF COUNTY ROADS IN
CONNECTION WITH CONSTRUCTION OF GLENDO DAM AND RESERVOIR

THIS SUPPLEMENTAL CONTRACT, Made and entered into this 9th
day of September, 1956, pursuant to the Act of Congress
of June 17, 1902 (32 Stat. 388) and acts amendatory thereof or supple-
mentary thereto, referred to as the Reclamation Laws, and particularly
the Act of August 4, 1939, Section 14 thereof (53 Stat. 1187), between
THE UNITED STATES OF AMERICA, hereinafter referred to as the United States,
acting for this purpose by the officer executing this contract, and the
COUNTY OF PLATTE, a body politic and corporate of the State of Wyoming,
acting by and through its duly authorized representatives, hereinafter
referred to as the County,

WITNESSETH:

WHEREAS, the parties hereto did, on November 8, 1956, enter
into a contract entitled "Contract with Platte County, Wyoming, for relo-
cation and abandonment of county roads in connection with construction of
Glendo Dam and Reservoir," which said contract is now in full force and
effect; and

WHEREAS, it is the determination of the contracting officer that
the said relocated county road constructed under Bureau of Reclamation
Specifications Nos. DC-4255, DC-4852, and 700C-477, and formally accepted
by the County, contained certain construction deficiencies subsequently
discovered by the County and the United States which led to extraordinary
maintenance and safety problems that the County would not otherwise exper-
ience. These construction deficiencies are mutually recognized and identi-
fied as follows:

1. Severe slide areas on county road leading from left abutment of
Glendo Dam will require relocating existing roadway into thorough
cut from Station 8+30 to Station 17+60.
2. Serious ice problem on steep grade approaching right abutment of
Glendo Dam from Station 1+00 to Station 23+00 because the portion of

the road is sheltered from the winter sun and remains icy all winter, causing extremely hazardous conditions. This will require raising the existing guardrail approximately 15 inches to meet standards now used by the Wyoming State Highway Department to facilitate snow removal.

3. Sharp highway curve between Dikes No. 1 and 2 causes numerous accidents and will require a new spiraled curve alignment between Station 8+83.08 and Station 14+73.08 which will include 590 linear feet of metal plate guardrail.

WHEREAS, the County is financially unable to continue to operate and maintain the county highway in a safe and satisfactory manner because of the said construction deficiencies; and

WHEREAS, it is determined to be in the interest of the United States to amend said contract because of said adverse highway conditions and the United States recognizes an obligation for additional construction to provide for safe operating conditions and to eliminate unusual maintenance costs on the terms and conditions hereinafter contained; and

WHEREAS, the County is agreeable to amending this contract as hereinafter provided,

NOW, THEREFORE, in consideration of the premises, it is hereby agreed by and between the parties hereto as follows:

1. The following provisions to provide for safe highway operating conditions and to eliminate unusual highway maintenance costs are included as a part of the said contract:

a. The United States agrees at its own cost and expense to reconstruct certain reaches of the county road identified on Bureau of Reclamation Drawing No. 449-707-99 and in the manner as shown on Bureau of Reclamation Drawings No. 449-CPR-72 and 449-CPR-81, hereto attached as Exhibits B through D, inclusive, respectively, and by reference made a part hereof. The reaches of county road to be reconstructed are more particularly indicated and described as follows:

- (1) Reconstruct into thorough cut the existing county road from Station 8+30 to Station 17+60 that leads eastward from the left abutment of Glendo Dam in the manner and on the alignment shown on Exhibit D hereof.
- (2) Reconstruct the sharp highway curve between Dikes No. 1 and 2 to a new spiraled curve alignment between Stations 8+83.08 and Station 14+73.08 in the manner as shown on

Exhibit C hereof. This will include the installation of 590 linear feet of metal plate guardrail.

- (3) Between Station 1+00 and Station 23+00 of the steep grade approach to the right abutment of Glendo Dam, raise the existing guardrail approximately 15 inches to meet standards now used by the Wyoming Highway Department to facilitate snow removal.

2. In consideration of the herein-identified county road reconstruction as herein provided, the County agrees to forever release and discharge the United States from all liability for damages resulting from the said relocated county road.

3. All other terms and conditions of the contract dated November 8, 1956, between the parties shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first herein written.

THE UNITED STATES OF AMERICA

E. E. MERMAN

By _____
Director, Region 7
Bureau of Reclamation

COUNTY OF PLATTE, WYOMING

(SEAL)

By (S) M. Ray Howard

ATTEST:

By (S) George R. Mitchell

(S) D. K. Purcell

By _____

STATE OF WYOMING)
) ss
 COUNTY OF PLATTE)

Be it remembered that on this 9 day of Sept,
 1966, before me, a Notary Public in and for the county and state afore-
 said, came M. Ray Howard, George R. Mitchell,
 and _____, to me personally known to be the sole
 members of the Board of County Commissioners of Platte County, Wyoming,
 and the said M. Ray Howard, George R. Mitchell,
 and _____, duly acknowledged the foregoing
 instrument was signed, sealed, and delivered as their own free act and
 deed in behalf of Platte County, Wyoming, and acknowledged the said
 instrument to be the act and deed of said County for the uses and purposes
 therein set forth.

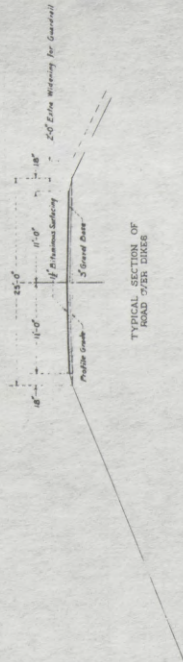
In testimony whereof, I have hereunto set my hand and affixed
 my notarial seal the day and year last above written.

(s) D. K. Purcell
 Notary Public

(SEAL)

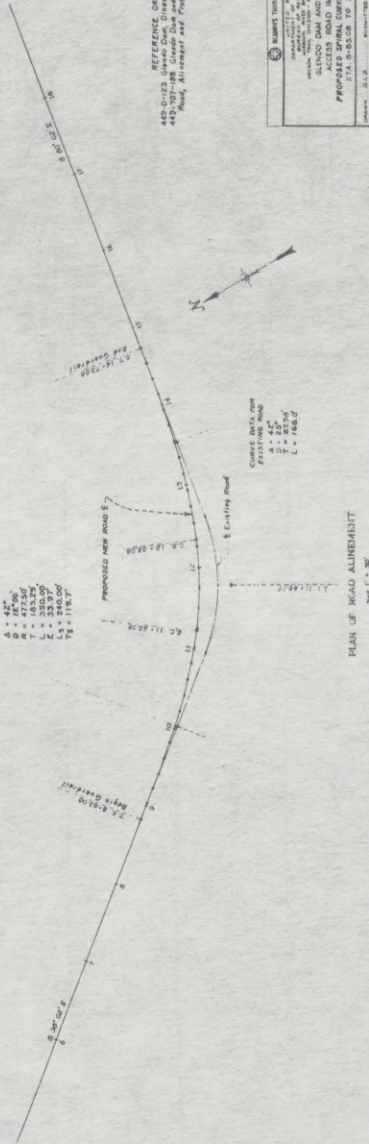
My commission expires:

11/1/67



CURVE DATA FOR
PROPOSED NEW ROAD

A	= 42'
E	= 100'
R	= 47.75'
T	= 53.33'
L	= 53.33'
TS	= 110.37'



REFERENCE DRAWINGS
445-0123, Grade, Drain, Ditch, Pipe and Services
445-0124, Right of Way, Easements, Utility, Survey
Road, Alignment and Profile

FOR THE SAFETY

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]
DATE: 10/15/2008

PROJECT: 445-0123, Grade, Drain, Ditch, Pipe and Services
445-0124, Right of Way, Easements, Utility, Survey
Road, Alignment and Profile
ACCESS ROAD IMPROVEMENT
PROPOSED SPUR ROAD, ELEVATIONS DIMS 1 and 2
SCALE: 1" = 40' HORIZ. 1" = 5' VERT.

DATE: 10/15/2008
DRAWN BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]



United States Department of the Interior

OFFICE OF THE SOLICITOR

DENVER REGION
P.O. BOX 25007
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

JUN 20 1974

OFFICIAL FILE COPY		
at Recl.		
Region LM		
JUN 26 1974		
To	Surnames	Date
200	Reiffen	

Memorandum

To: Regional Director, LMR, Reclamation, Denver

From: Regional Solicitor, Denver

Subject: Request by Senate Subcommittee on Water and Power Resources for Information Related to the Road Relocated by the Bureau of Reclamation in the Vicinity of Glendo Dam and Reservoir, Platte County, Wyoming

On November 8, 1956 the United States Department of Interior Bureau of Reclamation entered into a contract with Platte County, Wyoming for the relocation and abandonment of county roads in connection with construction of Glendo Dam and Reservoir. Pursuant to this contract, the United States in Paragraph 2(a) agreed to acquire at its own expense all necessary rights-of-way and property in order to relocate and reconstruct the road for the County. It also agreed that upon completion of the relocation and the necessary construction the United States would convey to the County by Quit Claim Deed an easement for all rights-of-way necessary for the relocated and reconstructed roads.

The State of Wyoming by Quit Claim Deed dated November 15, 1962, conveyed subject lands, in addition to others to the United States (Reclamation). These lands were selected by the State of Wyoming as lieu lands. The conveyance from the State of Wyoming to the United States reserved to the State all oil, gas and minerals lying in or under the lands with the right of the State or any person authorized by it to prospect for, mine and remove any oil, gas or other minerals, and subject to any existing easements and rights-of-way for public roads. The Deed also provides that the exercise of such rights shall be in a manner as not to interfere with the construction, operation and maintenance of the Glendo Unit, MRBP, and that good miner-like methods will be employed and that no pollution of water stored in said Glendo Unit will result from such operation.

On December 12, 1957 the United States executed and delivered a Quit Claim Deed to the Platte County Commissioners who accepted the Deed on the same day. This instrument was recorded in Platte County on April 3, 1958 and is recorded in Book 111 on Page 97.

Assuming that the United States obtained the fee title to this property from the former owners, the Deed conveys the fee title to the County not merely an easement as provided for in the contract. The language in the Deed is as follows:

. . . the United States . . . does hereby convey and QUITCLAIM unto the County of Platte, in the State of Wyoming, the following-described land situated in the County of Platte, State of Wyoming, . . .

* * *

TO HAVE AND TO HOLD, the premises above described, together with all tenements, hereditaments, and appurtenances thereunto belonging unto the County of Platte, in the State of Wyoming, and its assigns forever.

The United States reserved a right to cross the relocated and reconstructed road with canals, water conduits or other roadways, transmission and distribution lines for telegraph, telephone, and electric or other power or irrigation works and so forth. It also reserved unto the United States all minerals together with the right to prospect for, mine or remove them. The reservation the United States provided in the Deed to the County would appear to have no validity since the State of Wyoming exercised such rights in its conveyance to the United States (Reclamation). This reservation is therefore in conflict with that in the Deed from the State of Wyoming to the United States.

Therefore, assuming that the United States acquired a fee title interest from the previous owners of the property over which the road crosses, I conclude that the United States has conveyed a fee simple interest to the County of Platte, Wyoming and now reserves only the right to prospect for and mine listed minerals and to cross the existing road without the necessity of acquiring any additional right or title from the County of Platte the right to cross for irrigation, power facilities or other roads.

Paragraphs 1(a), (b) and (c) of Contract No. 14-06-700-1239 signed November 8, 1956 provides that the United States agrees at its own expense to relocate and to construct roads shown on one of the exhibits. The road in question was to be constructed to the secondary standards of the Wyoming State Highway Commission in effect at the time this contract was signed. Other roads to be constructed to the standards adopted by Platte County for County Farm to Market County Roads as of 1954.

Paragraph 3 of the Contract provided that:

Upon completion of the work involved herein, the officer of the Bureau of Reclamation in charge of the Glendo Unit of the Missouri River Basin Project shall notify the County in writing that such relocation and reconstruction work has been completed. Unless written notice to the contrary is received from the County within 30 days thereafter, such work shall be conclusively presumed to be accepted by the County as satisfactory. After the completion and final acceptance of the work as hereinabove provided, the said relocated roads and reconstructed roads, including roadway across Glendo Dam and dikes, shall be maintained by the County at its sole cost and expense.

Paragraph 5 provided more detailed standards by which the roads referred to in Article 1 were to be constructed.

Paragraph 7 of the Contract provides that:

Upon the performance of this contract by the United States according to the terms and conditions thereof, the County hereby forever releases and discharges the United States from all liability for damage resulting from the relocation, construction, or reconstruction of county roads as a result of the construction of Glendo Dam and Reservoir which necessitated said relocation, construction, and reconstruction.

Based upon this Contract, the United States proceeded to relocate the County roads in question and the County was advised by letter dated December 17, 1957 that the road construction was completed. Thereafter, the County inspected the road and refused to accept the road until the

gravel surfacing from the Glendo Dam to a point 9/10 mile beyond the Bureau of Reclamation rock quarry had been constructed to the contract requirements. On April 11, 1958 County officials signed a letter agreement which provided that the United States would agree to perform remedial construction that was necessary to remedy the objections made by the County officials. Presumably, at this time the remainder of the road was accepted by the County. However, there is no provision in the letter agreement of April 11, 1958 to this effect.

At some time after this agreement was entered into between the Platte County and the United States, serious problems were encountered with the access road to Glendo Dam. These problems consisted of slides and serious ice problems located on an approach of the right abutment of the Glendo Dam. There was also a sharp highway curve which had been the scene of numerous accidents. Much discussion was held between the officials of the Bureau of Reclamation and the County officials concerning whose responsibility it was to remedy these defects. The position taken by the Bureau of Reclamation officials was that the road had been accepted by the County as having been constructed to the specifications stated in the contract and that therefore there was no further obligation on the part of the United States.

Thereafter, the United States reconsidered its position and agreed to prepare a draft of a contract whereby the United States would undertake to perform certain changes to the road in order to remedy some of the conditions complained of by the County Commissioners. The justification for entering into this contract which was subject to approval by the Comptroller General of the United States before it would be executed by the parties was that the roads as constructed contained deficiencies which had not been apparent at the time of acceptance by the County but was subsequently discovered. The deficiencies resulted from construction that was not in accordance with the standards prescribed in Contract No. 14-06-700-1239 for relocation of the County roads. However, no itemization of the deficiencies is included in the files. Generally the basis for the contract was the statements of Bureau of Reclamation officials to county officials prior to the entry into the relocation contract whereby the Bureau officials had promised the County officials that they would receive a road equal to or better than the road that was being replaced.

This draft of contract was submitted to the Comptroller General of the United States and on June 28, 1966 the

Comptroller General approved with one exception the entry into this contract by the United States and Platte County. The decision number is B-159372. The Comptroller General disapproved the acquisition of additional snow removal equipment to be used by the County. In approving the supplemental contract, the Comptroller General stated:

The evidence as heretofore set forth reasonably establishes that the parties were mutually mistaken as to the unusual geographic conditions inherent in the construction of the relocated road and that the design engineering used by the Bureau did not take into consideration the perplexing geographic conditions that would be encountered during construction. Apart from this, although the road was accepted by the county, it appears that after using the road defects appeared which were not apparent at the time of acceptance and, therefore, the Government failed to meet its obligation to construct a road of equivalent standards that would be as good as the road it replaced, and that the standards of construction used did not fairly comply with State-County standards. See B-156391 dated April 19, 1965.

Further the Comptroller General goes on to deal with Article 7. This is a so-called release paragraph and the Comptroller General construes this as stating that neither party has construed Article 7 as precluding eventual execution of amendments or the taking of corrective action to remedy the deficiencies in the highway as constructed by the United States.

Thereafter on September 9, 1966 the United States entered into supplement contract No. 1 whereby it agreed to remedy the problems caused by the severe slides encountered on the road, serious ice problems on the steep grade approaching the right abutment of the dam, and the sharp highway curve located between Dikes No. 1 and No. 2.

Paragraph No. 2 of the supplement contract No. 1 provides as follows:

Severe slide areas on county road leading from left abutment of Glendo Dam will require relocating existing roadway into thorough cut from Station 8+30 to Station 17+60.

It should be noted that this paragraph is similar to Paragraph 7 of the original contract although the only difference appears to be that it is much shorter.

On July 7, 1967 in a memorandum to the Regional Director, Region 7, the Regional Director was advised that to the extent that an additional slide on the left abutment of the access road to Glendo Dam can be traced to original construction deficiencies. The Bureau of Reclamation is in a position to perform the necessary maintenance work without regard to the prior acceptance by Platte County. Support for this contention was found in the Comptroller decision of June 28, 1966, decision No. B-159372. On January 29, 1973 the Regional Solicitor reaffirmed the earlier opinion by Mr. Don C. Young of July 7, 1967 with the limitation that to the extent that the amount of money is necessary to affect the repairs is reasonably within the range of the estimated cost as reported to the Comptroller General that there is legal authority for the expenditure of funds to prepare the present existing slide.

From the above, I conclude that the United States is still responsible and obligated to correct deficiencies in the relocated County road on the abutments of Glendo Dam to the extent that it can be traced to deficiencies in the original construction of the road pursuant to the agreement that the United States would replace the County roads before Glendo Dam was constructed by roads equally as good as those that existed before the construction of Glendo Dam. If present deficiencies and problems in the road cannot be traced to the construction deficiencies but have resulted from conditions occurring subsequent to the original contract and the construction of the road, then the United States would have no further obligation to the County in order to repair current problems on the road. Such obligations ceased as of the acceptance by the County in 1958.

NOTICE
If you detach enclosures, please
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Enclosures

George Longstreth
George Longstreth
For the Regional Solicitor

Senator HATFIELD. What is the relationship between the Bureau and the Wyoming Recreation Commission? You mentioned that operation, maintenance, responsibilities are now in the Wyoming Recreation Commission. Is the Bureau still the owner of the road?

Commissioner STAMM. I am not sure about ownership. I am sure we had the right-of-way to construct the road originally on its new location.

The customary practice when it is necessary to relocate a road in connection with construction of a reclamation project is for us to bear the cost of relocation as part of the construction cost and also frequently to bear the cost of maintenance and operation for a period of years, until we are sure we are past the period of any abnormal maintenance costs. Then the responsibility is transferred to a State agency for operation and maintenance thereafter, and we no longer bear any legal responsibility for the work.

That situation prevailed here. The road was transferred to the county and the county transferred it to the Wyoming Recreation Commission. So it currently has responsibility for maintenance of the road.

Senator HATFIELD. Just to make sure I understand. When you mention these transfers, the road itself is not being transferred but the responsibilities for maintenance is being transferred from one agency to another agency, is that correct?

Commissioner STAMM. Yes.

Senator HATFIELD. I wonder if you would have your legal counsel review the question in order to get a very definite and definitive answer on the question of where the ownership now resides for that road?

Commissioner STAMM. We will check that out and let you know whether the right-of-way for the road is currently in the United States or in a State agency. (See pp. 130, 131.)

Senator HATFIELD. If you would please. Is the needed repair for reconstruction of the road considered in this legislation any different in nature except the cost factor of any previous repairs? Such as the one listed in June 28, 1966, for \$149,000?

Commissioner STAMM. I think it is similar. The difference is primarily in time and in the transfers that have taken place in the interim period.

Senator HATFIELD. As far as those precedents are concerned, those precedents are no different than the one that is requested today?

Commissioner STAMM. I think there is a similarity, yes. The fact we had to have a modification of the contract in order to permit the expenditure of the funds previously indicated at that time we had possibly reached the limit of our legal authority within our contractual arrangements, and the contractual arrangements were modified.

Now again we have reached the limit of our legal authority unless we have legislative or other authority to do the work.

Senator HATFIELD. In other words, you do not see the contractual authority under which you gave these other repairs as a continuing

authority that would permit you now to undertake a relocation according to the State highway commission's recommendation?

Commissioner STAMM. That is correct.

We do not have authority to proceed with it now. We have, as a matter of precedent, not retained an obligation for operation and maintenance of relocated works. On the long haul we usually specify the time we will carry that responsibility.

Then, at the designated time the responsibility is transferred to a State or county organization.

Senator HATFIELD. You are moving from contractual authority to responsibility. At what point did the responsibility end on this project?

Commissioner STAMM. It was transferred to the county for operation and maintenance in 1958.

Senator HATFIELD. But you continued responsibility though by the subsequent projects, did you not? In those projects did you not acknowledge certain Federal responsibilities?

Commissioner STAMM. The fact that we expended Federal funds to do some corrective work, I suppose implies a recognition of some Federal responsibility.

Senator HATFIELD. I don't think we would be expending funds for those projects for which we had no responsibility.

Commissioner STAMM. I am sure you are right.

Senator HATFIELD. Again, at what date did the Federal responsibility cease?

Commissioner STAMM. I believe the Federal responsibility ceased at the time we completed the work under the amendatory contract which was approved by the Comptroller General's decision.

Senator HATFIELD. Then in your statement, I am interpolating here, but correct me if I am wrong, in the last paragraph of your printed statement, page 4, you refer back to the Comptroller General's approval to modify the contract in 1958 and 1966. You say:

Notwithstanding the fact that the Bureau of Reclamation was responsible for relocating the road in connection with construction of the Glendo Unit and has provided the before stated emergency repairs and assistance, the Department does not believe further assistance should be extended.

Now, what is the criteria upon which you make that conclusion? These were previous emergencies in which you acknowledge responsibility but you say the present emergency does not carry with it further responsibility and I am trying to distinguish between these previous projects and the present one.

Commissioner STAMM. It is difficult to establish a formula for that kind of determination. Initially in relocation of a highway, if it is through precarious country, we provide for the Federal Government bearing the cost of unusual maintenance for a period of time after completion of construction.

We establish by contract the extent of our obligation and the cut off date.

If unusual circumstances develop thereafter that no one anticipated, the department might decide that such circumstances would justify the department supporting legislation or other measures

to authorize work beyond the cutoff date. In this case we did do work beyond the original cutoff date.

Now, we have reached the limit of our authority under the extended cutoff criteria. So we have to consider the problem again on its merits, which the department did, and this time the department feels it has carried the emergency repairs and assistance program as long as it should, and the cost should now be carried by the State.

Senator HATFIELD. Once again, would you indicate for the record what was the original cutoff date?

Commissioner STAMM. The original cutoff date was the date of the original transfer which was 1958.

Senator HATFIELD. Then the continued involvement was based upon special authorization by the Congress.

Commissioner STAMM. We had a contract which provided for the relocation of the existing county road and upon completion of the construction, the road was transferred to the county for operation and maintenance. We had to obtain the approval of the Comptroller General to modify that contract to permit us to expend more money.

His approval came in June of 1966, with a ceiling of \$149,000. That ceiling has been nearly reached. So not only have we transferred the road but we have spent most of the money we are authorized to spend under the amendatory contract.

Senator HATFIELD. Then, as I understand, the Comptroller General gave you the authorization for that contractual responsibility that you had beyond your 1958 contract date?

Commissioner STAMM. Yes. We do not normally have authority to amend contracts without—we have to demonstrate there is justification for the amendment. Generally speaking, the amendment must not be disadvantageous to the United States. If there is any question about who benefits and what the obligations might be, we obtain the approval of the Comptroller General before we proceed.

Senator HATFIELD. Commissioner, I get a little bit confused on the difference between contractual responsibilities and other continuing responsibilities.

In the first part of your statement on page one, you indicate that you do not support S. 3223 since the bill would authorize funds to relocate and repair a road which is considered more properly a local rather than a Federal responsibility. Then, on page three you say if funds proposed in the subject legislation were made available to the Bureau, we would transfer the funds to the Wyoming Recreation Commission so that it could proceed to accomplish rehabilitation of the road.

Would you comment a little bit on those conflicting statements?

Commissioner STAMM. There have been cases, Senator Hatfield, where the committees of Congress did not follow precisely the recommendations of the department. I think all we are saying here, even though the department does not support this bill, nevertheless if funds were made available or authority and funds were made available, we are outlining to you the procedure we would follow in getting the repair work accomplished.

Senator HATFIELD. I guess it would be much more clear to me if or when we get your legal counsel's response to the question of where

the ownership of this road really rests. I think that would clear up a lot of the fuzziness that I feel I have on this as to where the responsibility for this repair and the continuing maintenance of that road really rests.

Would you agree, if your legal counsel indicates the ownership of the road is still in the Federal title, that there would be some implication at least of the responsibility on the part of the Federal Government?

Commissioner STAMM. If the right-of-way is in fact in the United States, and I am not sure that it is, we would also have to look at the transfer agreement with the county and determine whether the county under the transfer arrangement has full responsibility for operation and maintenance even though the right of way remains in the United States.

It is possible the agreement transferred the right of way as well, but we will check that out for the record.

Senator HATFIELD. If, hypothetically, that transfer was made for maintenance responsibility, if not the title, what would be the consideration in such a contract? The use of the road?

Commissioner STAMM. On both sides, yes, sir. I would presume it would become a public road for the use of the public.

Senator HATFIELD. Perhaps you might ask your legal counsel to check that out, too.

Now in your technical opinion is the authorized \$284,000 sufficient to provide a real or permanent solution for this problem?

Commissioner STAMM. Yes. We think so. It is based on an updated estimate by the Wyoming Highway Department as recently as February of this year. We have added a 20 per cent contingency. It would depend on how much time might elapse between now and the time the work was actually undertaken. If there were a long delay, of course, inflation could well cause that figure to become inadequate.

Senator HATFIELD. In other words, your estimate costs are as of February, and if we go on a one per cent per month construction cost increase, we would have to add these percentages in to make the money current to the time it is made available?

Commissioner STAMM. And frequently the Congress does just that, it provides for indexing of the cost estimate.

Senator HATFIELD. The staff has just pointed out to me there is an escalation clause in the bill.

Commissioner STAMM. Yes, in section II.

Senator HATFIELD. So the \$284,000 estimate, then, is based on the February 1974 date, the base date would be February 1974?

Commissioner STAMM. Yes, sir.

Senator HATFIELD. Thank you very much. Commissioner, let's move now to S. 2403, since Senator McGovern is not here yet, he may have questions to submit to you later on the basis of your testimony. Absent Senators may wish to ask you additional questions and we would request that you respond.

Commissioner STAMM. We would be happy to do so.

If we can shift gears now, and go on to S. 2403.

Senator HATFIELD. We are happy to have you, gentlemen, with us this morning.

Commissioner STAMM. Mr. Chairman and members of the Subcommittee on Water and Power Resources. We are appearing here today to present our views on S. 2403, a bill to authorize the Secretary of the Interior to construct, operate, and maintain a larger and adequate spillway, and to improve the upstream slope protection on Belle Fourche Dam, Belle Fourche project, Belle Fourche, S. Dak., and for other purposes.

We recommend enactment of the bill, subject to certain revisions which we have recommended in the Department's letter of June 6, 1974.

Belle Fourche project, in western South Dakota, northeast of the Black Hills, supplies water to irrigate more than 57,000 acres of land in the vicinity of Newell and Belle Fourche, South Dakota.

The project was authorized by the Secretary of the Interior on May 10, 1904, and the original project construction completed in 1914. The Bureau of Reclamation operated the project until January 1, 1949, when operation was transferred to the Belle Fourche irrigation district.

Belle Fourche Dam is on Owl Creek, approximately 10 miles northeast of Belle Fourche, S. Dak. The earthfill dam is 122 feet high and has a crest length of 6,262 feet, the upstream slope of the dam is protected by precast concrete slabs 6 inches thick, 6 feet 6 inches long, and 5 feet wide, bedded on a layer of gravel. The spillway is at the left abutment and discharges into a series of channels and structures leading to Owl Creek. Belle Fourche Reservoir has an active capacity of 185,200 acre-feet.

Through the utilization of modern meteorological and hydrological techniques, plus additional years of experience in precipitation and runoff studies, we have determined that the inflow design flood at Belle Fourche Dam is greater than was estimated when the structure was designed and constructed. The new maximum probable flood has a peak flow of 41,500 cubic feet per second and a five-day volume of 105,000 acre-feet. Routing this flood through the reservoir would result in a spillway discharge of 15,200 cubic feet per second, which is nearly 5 times the design capacity of 3,100 cubic feet per second.

Use of the spillway in 1965 revealed major deficiencies which would cause the structure to fail at spill rates considerably less than its design capacity. Under maximum probable flood conditions, water would overtop the walls of the spillway chute causing undermining and failure of that structure. This could lead to a series of failures resulting in complete failure of the dam and rapid emptying of the reservoir.

Damage to the precast concrete slab protection on the upstream slope has occurred on the average of once every 8 years, the latest occurrence was in June 1973.

The damage is caused by wave action generated during high-velocity windstorms; one storm dislodged 366 concrete slabs.

Breaks in the concrete protection are repaired temporarily during the storm, if possible, by placing wooden and steel mats over the breaks. More permanent repairs are completed after the storm subsides.

Vigilance has prevented serious damage to the dam. Occurrence of unusually strong and prolonged wave action when the reservoir water level is high, particularly at night when damage detection and repair are very difficult, could result in slab displacement and erosion of the embankment at a rate beyond the district's ability to perform temporary repairs.

In such circumstances, the dam embankment could then be breached by the wave action, with subsequent complete failure of the dam.

If the dam should fail, the peak flow of the resulting flood downstream is estimated at 800,000 cubic feet per second. The volume of the flood is estimated at 300,000 acre-feet. Failure of the dam would cause a major disaster downstream, including possible loss of life. The town of Nisland, S. Dak., two Indian villages—Bridger and Cherry Creek—and a number of farmsteads and ranch headquarters are located within the downstream flood zone; these communities would be either partially or completely inundated.

At present, the Department of the Interior's policy regarding existing Interior dams is to insure the safety of those dams having inadequate spillways, and includes the study of alternative structural or operational solutions, cost-sharing with project water users, and use of temporary operating restrictions until a permanent solution is completed.

Reclamation's plan of action for its dams includes:

1. Early completion of permanent structural or operational changes to permit passage of the inflow design flood without failure of the dam.

2. The cost of structural modifications is to be shared with the water users to the extent of their allocated costs and their ability to repay.

3. Operating criteria will be modified to provide increased safety until structural modifications can be completed. The risk of failure is to be weighed against the adverse impacts on project functions.

4. Water users, public officials, and downstream residents are to be notified of the risks remaining after the operating restrictions have been implemented.

5. Where appropriate, warning procedures are to be adopted so that downstream residents can be alerted or evacuated in the event a major flood threatens security of the dam.

Belle Fourche Dam is one of the reclamation dams needing early corrective work. To reduce the risk of failure on an interim basis until corrective work has been completed, the allowable storage in Belle Fourche Reservoir has been reduced approximately 25,000 acre-feet—from 185,200 to 160,300 acre-feet.

This reduction in storage provides only partial protection for the dam and is not considered to be a satisfactory long-range solution. It may be necessary to reduce further the allowable storage unless the corrective construction can be scheduled within a reasonable time.

Under temporary arrangements, uncommitted water in Keyhole Reservoir, Wyoming, is used to supplement the resulting deficient supply of irrigation water in Belle Fourche Reservoir.

However, the water supply from Keyhole Reservoir is not sufficient to meet the requirements of Belle Fourche irrigation district on a long-term basis in lieu of the corrective work needed on the spillway.

S. 2403 would provide \$3.25 million for corrective work at Belle Fourche Dam. The work would include riprap protection on the upstream face of the dam, a dike to block the existing spillway channel, and a new spillway near the right abutment of the dam.

At present, we are conducting studies to determine if alternative measures can be taken to reduce the cost of construction.

The total cost of the Belle Fourche project was \$5,778,000. Repayment of the irrigation project cost was initially provided under contract dated July 16, 1923. The 1923 contract subsequently was amended by contract dated November 29, 1949, to provide for an adjusted construction charge obligation of \$2,988,200 to be repaid at the rate of \$38,700 per year. Payout of the current unmatured obligation is scheduled for completion in the year 2027.

In addition, the district assumed a construction obligation of \$60,000, payable in 40 equal installments of \$1,500 per year, beginning in 1963, when it entered into a contract on January 2, 1963, for supplemental water from Keyhole Reservoir.

At present, the district is negotiating terms of a contract for the emergency repair of a portion of South Canal. The reach of the canal requiring repair consists of 1,600 feet of a badly deteriorated concrete bench flume, a 1,300-foot-long concrete-lined tunnel, and approximately 3,400 feet of canal which is half-lined with concrete. The need for this work is critical because failure of the tunnel or the downstream reach of canal would cause a loss of irrigation service to about one-third of the more productive lands in the Belle Fourche Project.

The emergency work on South Canal is expected to be completed in the spring of 1975 at a cost of \$140,000. The repayment contract now being negotiated specifies five equal annual payments of \$28,000.

The project payment capacity is relatively low, primarily because two-thirds of the project lands are class three and four soil having low productive capabilities.

However, the district should be able to make some payments toward the cost of repairs at Belle Fourche Dam, particularly when repayment for the emergency work on South Canal is completed in about 1982. In addition, the annual cost of maintaining the upstream slope protection has averaged \$4,000 during the period since the dam was built. A significant portion of this amount would be available for repayment, because of reduced maintenance expense.

The Bureau of Reclamation is preparing a report on Belle Fourche Dam consistent with the current Department of the Interior "safety of dams" policy. The report will indicate alternative solutions, interim operating criteria, an analysis of repayment capability, and possible cost allocations. We expect that the report will be completed in November 1974.

Because the dam is owned by the Federal Government, there is a Federal responsibility to see that corrective action is taken to

make it safe. We believe it is reasonable to expect the Bell Fourche Irrigation District to pay a portion of the cost of the corrective action, within its payment capacity. Therefore, we suggest that the bill be revised to provide for cost-sharing by the project beneficiaries.

Specific language for our suggested changes may be found in the Department's report. These changes will permit the needed work to go forward on an appropriate basis of shared responsibilities between the Federal Government and project beneficiaries.

Thank you.

Senator HATFIELD. Thank you very much, Commissioner. I am very pleased to see the philosophy expressed there on the question of ownership, that the dam is owned by the Federal Government, that there is a Federal responsibility, a responsibility by the Federal Government to make it safe.

That would apply to roadside paths as well, to make it safe.

Now you indicated in your report the district should be able to make some repayment toward the cost of repairs, rather than 100 percent Federal funds or financing.

Can the Bureau provide the committee with the recommendation as to what the cost-sharing provision should be, and if there is a particular guideline or criteria that should be written into the bill to assure that is carried out.

Commissioner STAMM. We are in the process of making a study which will take into account an analysis of the district's repayment capability and possible cost allocations. We don't expect that report to be completed until November of 1974.

Senator HATFIELD. Is there any preliminary finding or report this committee could have?

Commissioner STAMM. I do not believe that we have made any determination regarding how much the district ought to repay.

I did make some reference to the fact the district has some short-term emergency obligations which it has agreed to pay. Reclamation believes that after those short-term obligations are paid off, there ought to be some ability to pick up a part of the new costs. The language we are suggesting pertains to cost-sharing, and provides that costs shall be reimbursable to the extent the Secretary of the Interior deems appropriate. Normally under the 1939 Reclamation Act we determine water user repayment ability pursuant to detailed farm budgets which take into consideration all items of expense and all items of income of the farmer.

Of the residential income we allow up to 25 percent for incentive to the water user before estimating repayment capacity.

Senator HATFIELD. Commissioner, if I were on the other side of that contract, namely, the local representative, I would be a little concerned about the word "appropriate". That is pretty open ended.

As you define that in your statement this morning, you are obviously focusing upon the word "ability". I would think there would be a little more feeling of security on the other party to this project if the word "appropriate" could perhaps be eliminated and some idea conveyed as you have conveyed it in the explanation of the ability of this district to participate in cost-sharing.

Commissioner STAMM. We have had a great deal of experience in determining water user ability to pay under the Reclamation Project Act of 1939. The committee might want to consider modifying the bill to use the words that appear in the 1939 act.

Senator HATFIELD. You would have no objections in terms of your support of the bill under this general condition of cost-sharing?

Commissioner STAMM. As far as I am concerned, speaking for the Bureau of Reclamation, I think our recommendations would come out the same either way, but it might provide additional assurance to the water users to make the change.

Senator HATFIELD. As I understand from your testimony, the estimated costs are on 1972 base. Could you update the cost estimate for this project?

Commissioner STAMM. We have an updated estimate as of April 1974, of \$3,620,000. Whichever figure is used, we would certainly recommend the date be specified in connection with the amount and that indexing language be included.

Senator HATFIELD. A base date of April 1974, then, with an escalation clause?

Commissioner STAMM. Yes, sir.

Senator HATFIELD. Commissioner Stamm, we are grateful for your participation this morning in helping this committee.

Again, this record will be kept open for a period of time for the purpose of further questions that may be raised.

Senator Hansen at this time would like to ask a few questions.

Senator HANSEN. Thank you, Mr. Chairman. First let me express my appreciation to you for having inserted my statement in the record and for having propounded the questions which were prepared by me for presentation to the Commissioner.

I certainly am keenly interested in the question of responsibility for this road that is so much in the minds of Wyoming people.

I, as you know, was attending another meeting this morning, as a matter of fact I have yet another responsibility in the executive session in the Finance Committee, but I did want you to know we are grateful to you and grateful also to my good friend, the Commissioner, for his appearance here and his willingness to give consideration to a proposal that is of great importance to the State of Wyoming.

I would be very keenly interested in learning about your responses.

Commissioner STAMM. Thank you, Senator, and we will be happy to work with you and your staff on any aspect of this that you choose.

Senator HANSEN. Thank you very much.

Senator HATFIELD. I am grateful to Senator Hansen this morning for representing the State of Oregon's concerns in the beef industry today. It is sort of quid pro quo. He is looking after my Oregon interests in the other meeting and I have been sort of substituting for his interests here for Wyoming.

Senator HANSEN. If I might add another word, I hope you have been doing a better job of looking after my interests here than I have in looking after your cattle interests this morning.

[Laughter.]

Senator HATFIELD. I have full confidence in you, Senator.

Thank you, gentlemen. We will now call the members representing the board of directors of the Belle Fourche Irrigation District.

STATEMENT OF WILLIAM KEIRY, PRESIDENT, BELLE FOURCHE IRRIGATION DISTRICT; ACCOMPANIED BY DARYLD WILLIAMS AND HAROLD SKJOLDAL

Senator HATFIELD. We are very happy to have you gentlemen, and for the record, if you will identify yourself. I have down on my list, Mr. Keiry, Mr. Williams and Mr. Skjoldal. I hope I have pronounced those names correctly. I hope I did better than I did on the name of the district.

Mr. KEIRY. I am Mr. Keiry, this is Mr. Williams and Mr. Skjoldal. I might say before we start it is "belle four-she" or "belle foosh," anyway you want to pronounce it. It gets pronounced both ways.

Senator HATFIELD. I was not so far off, was I? You make me feel better. You already have my support for this project.

[Laughter.]

Mr. KEIRY. Mr. Chairman, I am William Keiry, president of the board of directors of the Belle Fourche Irrigation District, with headquarters in Newell, S. Dak. Accompanying me are Daryld Williamson, board member and Harold Skjoldal, project manager. We would like to thank the chairman for calling this hearing on S. 2403 which would authorize funds for building of an adequate spillway and the riprapping of the upstream slope of the Belle Fourche Dam.

We have included for the record short histories of the construction of the Belle Fourche Dam, maintenance problems of the upstream slope, condition of the project structures, budgets showing increased operation costs and statements from some of the area lending institutions regarding the financial condition of the project water users.

On March 1, 1966, the Board of Directors of the Belle Fourche Irrigation District entered into contract No. 14-06-600-8970, with the U.S. Bureau of Reclamation, restricting the water storage to 160,300 acre feet in the Belle Fourche Reservoir, this restriction being due to the deteriorated condition and limited capacity of the existing spillway, as determined by the U.S. Bureau of Reclamation hydrological studies at that time.

We were then led to believe, as evidenced by the correspondence with the U.S. Bureau of Reclamation which is included in this testimony, that the spillway would be replaced and the upstream slope of the dam riprapped before the termination date of the contract on October 31, 1969.

This work was to be accomplished by the U.S. Bureau of Reclamation under the safety of dams program at no cost to the district. This was not done.

On October 7, 1969, the Belle Fourche Irrigation District signed an amendment to the contract entered into in 1966. The amendment extended the original agreement until such time as the spillway would be replaced and the upstream slope of the dam riprapped. Again, we were given the impression that the Bureau would ac-

comply with the repairs as soon as funds became available. The district has complied with the terms of the contract and the contract as amended, but the U.S. Bureau of Reclamation has not fulfilled its commitment to the district.

The board of directors of the Belle Fourche Irrigation District feels that it is of the utmost urgency that the spillway be replaced and the upstream slope of the dam ripped to prevent economic loss to the district and its water users, as well as loss of life and property in event of a washout. The district has a history of water shortage according to project records. Therefore, any water which could be stored would be of great economic value in a period of drought. For example, $1\frac{1}{2}$ acre feet is the normal water allotment, however, in the drought years of 1960 and 1961, seven inches and three and a half inches were allotted respectively.

It should be pointed out that the capacity of the spillway was reduced in the year 1950-51 from 3,500 cubic feet per second to approximately 600 cubic feet per second according to the design of the U.S. Bureau of Reclamation.

The uncontrolled drainage area of the Belle Fourche Reservoir is 170 square miles of heavy impermeable clay soil and should a heavy rain occur in this area, such as the one which occurred in Rapid City on June 9, 1972, extensive loss of life and property would result from the washout of the dam, which would in all likelihood occur.

In our correspondence and verbal discussion with the Bureau they have acknowledged their responsibility to bring the spillway and upstream slope of the dam up to present day engineering and safety standards and no mention was made of cost share until December 7, 1972. Indeed, they have indicated that the Belle Fourche Dam has top priority in the Bureau's safety of dams program. Stopgap measures have proven ineffective in providing a long term solution as well as being an unnecessary maintenance expense to the district, and we certainly concur that the Dam should be brought up to current day specifications.

The dam is owned by the Federal Government. Therefore, there is Federal responsibility to see to it that correct action is taken to make it safe and fully operable to capacity.

Under present day engineering and hydrological studies, the U.S. Bureau of Reclamation realizes that there were mistakes made in the construction of the spillway and its carrying capacity, also in the determination of using concrete blocks instead of rock riprap which has proven through the years to be of inadequate protection of the upstream slope of dam and it has been costly to maintain. We feel that we are being asked by the U.S. Bureau of Reclamation to pay for its mistakes with the cost share provision.

It must be emphasized, however, that this is not a financial responsibility that in any way can be placed on the water users of the Belle Fourche Irrigation District.

The Belle Fourche Irrigation District board of directors and all the water users wholeheartedly supports the passage of S. 2403 so that the safety margin can be widened between the disastrous flood which could result from too much water and the disastrous economic consequences which could result from too little water.

We know that the subcommittee's time is extremely valuable, and have tried to limit our verbal presentation accordingly. We greatly appreciate your attention to our problems, and will be pleased to try to answer any questions you may have.

Senator HATFIELD. Mr. Keiry, the testimony this morning from the Commissioner and now your testimony raises mainly a question in my mind as to responsibilities attendant to cost sharing or to the cost of correcting the dam's safety features.

My first reading in listening to your statement here would imply a contractual responsibility that was not fulfilled relating to the safety problem.

Am I reading this correctly? You said:

We were led to believe as evidenced by the correspondence with the U.S. Bureau of Reclamation, which is included in this testimony, that the spillway would be replaced and the upstream slope of the Dam ripped before the termination date of the contract on October 31, 1969. This work was to be accomplished by the U.S. Bureau of Reclamation under the Safety of Dams program at no cost to the District. This was not done.

Now, have you had legal counsel on this question—good morning Senator McGovern.

Senator MCGOVERN. Good morning.

Senator HATFIELD. I have just started to ask the question about legal counsel and I think they have obtained the finest.

If I may finish this one question, I will be happy to turn to Senator McGovern for his statement.

Has there been any legal obligation you feel assumed by the Federal Government that has not been fulfilled?

Mr. KEIRY. In our contract it says this agreement takes effect upon the day and the year written above and will remain in force until the spillway of the Belle Fourche Dam is replaced but in no event will it be effective after October 31, 1969. This is how we interpret this in our first contract, and we find a new amendment to this, an open-end contract.

Senator HATFIELD. It will help me and I am sure it will be helpful to the committee if you have in your district your legal counsel—do you have legal counsel?

Mr. KEIRY. Yes; we do.

Senator HATFIELD. Could you establish whether or not there is a contractual responsibility unfulfilled on the part of the Federal Government relating to these problems?

If there is a legal question involved, this takes it out of the question of a policy decision. At this point we really do not have a clearly defined policy as to the continuing responsibilities of Federal agencies relating to safety measures. It sort of comes and goes, rises and falls, from time to time. If there is purely a legal question here, it ought to be isolated from the not completely-well defined policy question as to the continuing responsibilities involved.

The staff has informed me that in the past history of the Bureau, where there have been questions raised as to the safety of the project, what work has been done has been done with the ability of recipients or beneficiaries to pay included in the overall cost of correcting or repairing such a project.

So that is why I raise this question in relation to your testimony as to whether or not you feel there is a legal obligation under contract that has not yet been fulfilled. If there is, it might make it a little easier for the committee to resolve it.

If on the other hand, this does not exist, and there is merely the precedent of a cost sharing basis for repairs, what do you think would be the amount or the criteria or formula in which the District could participate within its ability-to-pay capacity?

Mr. KEIRY. We have never really given this any thought as a Board.

Senator HATFIELD. You might give that a thought as a backup position if your lawyers do not establish you well on a point of contractual obligation.

Mr. KEIRY. I might not have said this exactly correct. We have discussed it, but as far as a formal statement—we believe our ability to repay is very small, almost nonexistent, due to several factors. We do have other information with us regarding the condition of our project.

Several years ago, the Bureau gave an estimate of what it would take to put our project back into top operating condition. At that time, it was about \$11 million. It is expenditure over a number of years. We have a number of pictures with us to show the condition of a lot of our structures. We think this money, if we can generate it, should be used in the updating and maintenance of our project.

[The prepared statement of William Keiry together with additional information follows:]

TESTIMONY OF THE BELLE FOURCHE IRRIGATION DISTRICT

ON S. 2403

Before the Senate Water and Power Resources Subcommittee

June 13, 1974

Mr. Chairman, I am William Keiry, President of the Board of Directors of the Belle Fourche Irrigation District, with headquarters in Newell, South Dakota. Accompanying me are Daryld Williamson, Board Member and Harold Skjoldal, Project Manager. We would like to thank the Chairman for calling this hearing on S. 2403 which would authorize funds for building of an adequate spillway and the riprapping of the upstream slope of the Belle Fourche Dam.

We have included for the record short histories of the construction of the Belle Fourche Dam, maintenance problems of the upstream slope, condition of the project structures, budgets showing increased operation costs and statements from some of the area lending institutions regarding the financial condition of the project water users.

On March 1, 1966, the Board of Directors of the Belle Fourche Irrigation District entered into Contract (#14-06-600-8970) with the U.S. Bureau of Reclamation, restricting the water storage to 160,300 acre feet in the Belle Fourche Reservoir, this restriction being due to the deteriorated condition and limited capacity of the existing spillway, as determined by U.S. Bureau of Reclamation Hydrological Studies at that time.

We were led to believe, as evidenced by the correspondence with the U.S. Bureau of Reclamation which is included in this testimony, that the spill-

way would be replaced and the upstream slope of the Dam riprapped before the termination date of the Contract on October 31, 1969. This work was to be accomplished by the U.S. Bureau of Reclamation under the Safety of Dams program at no cost to the District. This was not done.

On October 7, 1969, the Belle Fourche Irrigation District signed an amendment to the Contract entered into in 1966. The amendment extended the original agreement until such time as the spillway would be replaced and the upstream slope of the Dam riprapped. Again, we were given the impression that the Bureau would accomplish the repairs as soon as funds became available. The District has complied with the terms of the Contract and the Contract as amended, but the U.S. Bureau of Reclamation has not fulfilled its commitment to the District.

The Board of Directors of the Belle Fourche Irrigation District feels that it is of the utmost urgency that the spillway be replaced and the upstream slope of the Dam riprapped to prevent economic loss to the District and its water users, as well as loss of life and property in event of a washout. The District has a history of water shortage according to project records. Therefore, any water which could be stored would be of great economic value in a period of drought. For example, $1\frac{1}{2}$ acre feet is the normal water allotment, however, in the drought years of 1960 and 1961, 7 inches and $3\frac{1}{2}$ inches were allotted respectively.

It should be pointed out that the capacity of the spillway was reduced in the year 1950-51 from 3,500 cubic feet per second to approximately 600 cubic feet per second according to the design of the U.S. Bureau of Reclamation.

The uncontrolled drainage area of the Belle Fourche Reservoir is 170

square miles of heavy impermeable clay soil and should a heavy rain occur in this area, such as the one which occurred in Rapid City June 9, 1972, extensive loss of life and property would result from the washout of the dam, which would, in all likelihood, occur.

In our correspondence and verbal discussion with the Bureau, they have acknowledged their responsibility to bring the spillway and upstream slope of the Dam up to present day engineering and safety standards and no mention was made of cost share until December 7, 1972. Indeed, they have indicated that the Belle Fourche Dam has top priority in the Bureau's Safety of Dams Program. Stopgap measures have proven ineffective in providing a long term solution as well as being an unnecessary maintenance expense to the District, and we certainly concur that the Dam should be brought up to current day specifications.

The Dam is owned by the Federal Government. Therefore, there is Federal responsibility to see to it that corrective action is taken to make it safe and fully operateable to capacity.

Under present day engineering and hydrological studies, the U.S. Bureau of Reclamation realizes that there were mistakes made in the construction of the spillway and its carrying capacity, also in the determination of using concrete blocks instead of rock riprap which has proven through the years to be of inadequate protection of the upstream slope of Dam and it has been costly to maintain. We feel we are being asked by the U.S. Bureau of Reclamation to pay for its mistakes with the cost share provision. It must be emphasized, however, that this is not a financial responsibility that in any way can be placed on the water users of the Belle Fourche Irrigation District..

The Belle Fourche Irrigation District Board of Directors and all the

water users wholeheartedly supports the passage of S. 2403 so that the safety margin can be widened between the disastrous flood which could result from too much water and the disastrous economic consequences which could result from too little water.

We know that the Sub-committee's time is extremely valuable, and have tried to limit our verbal presentation accordingly. We greatly appreciate your attention to our problem, and will be pleased to try to answer any questions you may have.

UNITED STATES DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION
849 5th Avenue
Belle Fourche, South Dakota 57717

• Mr. William Keiry, President •
Belle Fourche Irrigation District
Newell, South Dakota 57760

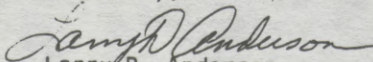
• Dear Mr. Keiry;

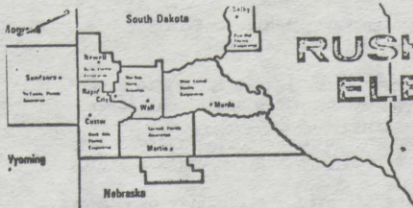
Orman Dam, as a source of water to the Belle Fourche Irrigation system, is very vital to the overall economic soundness of agriculture and business in west central South Dakota.

The typical farmer on the irrigation system operates a small farm with a very limited budget. He is finding it very difficult to expand his operation in order to improve his operating budget. If he finds additional land to operate, he must acquire additional farm equipment because of the large labor requirements his farm demands. This results in a larger investment than he can afford. As a result he is forced to stay with his small operation and limited budget.

In making and servicing loans with many farmers on the Belle Fourche Irrigation District, it is very evident to me that this typical farmer is finding it more difficult each year to produce adequate income to support his family, pay the high operating costs, and to repay the debts he has acquired. In order to stay in business he needs this dependable source of water at a cost that his budget can afford.

Sincerely,


Larry D. Anderson
County Supervisor



RUSHMORE ELECTRIC

POWER COOPERATIVE INC.

• 825 COLUMBUS, SUITE 2, RAPID CITY, SD 57701
PHONE 605/342-4759

June 11, 1974

Mr. William Keiry, President
Board of Directors
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Bill:

Have been hearing recently of your efforts to repair Orman Dam and restore it to full capacity. We certainly want to commend you and offer our assistance in any way possible.

Have been directly involved in agriculture production in Western South Dakota for nearly 25 years and was the local SCS - USDA representative during the development of the Angostura Project in Fall River County. These projects are of tremendous importance to an area covering portions of four or five states. The Belle Fourche project affects the economy of an area extending into at least four states.

It has always been difficult to explain and compare the Belle Fourche Project with other irrigated areas in the United States, basically because of the very different and low margin type of enterprise. But the production on the Project is so basic that its effects are felt in various ways for a great distance.

The repair of the Orman Dam is necessary both from the safety aspect as well as the need for greater water holding capacity. In addition to this emergency repair program another updating or remodeling program involving the canals is needed. Many of these canals are losing 50% of the water before delivery is made due to leaching.

This loss of water through the bottom of these canals not only ruins many acres adjacent to the canals but it contributes to a very inefficient water distribution system.

The ability of the local farmers to assist with the payment of these improvement projects is very limited due to some of the following:

1. Low average crop yields, which reflect back to low land values, as compared to other irrigated lands in South Dakota. These lower average yields are brought about by many different factors:

- (a) Loss of acreages due to high water tables and salt deposits created by water lost from canals.
- (b) Old ditch gates have in many cases leaked enough to cause serious flooding and crop loss on a few additional acres.
- (c) The uncertainty of having enough water during a dry season has discouraged producers from shooting for maximum yields.
- (d) Limited transportation has effected availability of markets for the farm products in the area.
- (e) Small fields which are common in the area does not lend itself to the efficient use of large equipment.

If an efficient Row Crop operation is to survive the operator must have several hundred acres as a unit. The possibility of an operator handling this many acres is difficult due to small fields necessitating smaller equipment, and the need for high labor requirements during irrigation season.

- (f) The farmers responsibility should be the lining of his own irrigation ditches, which will reduce salt deposits and decrease the demand for labor.

This development program will be costly enough to the farmer as it is, since he should not be the victim of a lack of maintenance fund build-up and program over the years. The responsibility for the repair of the face of the dam, the spillway and the lining of the project canals inadequate even in their original state should not be levied against the project operators.

If I can be of any further assistance please let us know.

Sincerely,



John T. Loucks
Director of Development

cc: Art Jones
First National Bank of the Black Hills
Belle Fourche, SD 57717

CONSTRUCTION OF BELLE FOURCHE DAM AND SPILLWAY

In April, 1904, a board consisting of three members examined the Belle Fourche Project and ordered detailed surveys of irrigable land, dam sites and canals.

There were three dam site areas investigated. The one chosen from studies and surveys was the one on Owl Creek in its present location.

On October 26, 1905, bids, four in number were opened, and after reviewing all bids, contract for work was awarded to Orman and Crook.

The first work was some excavation on the South Canal just below the dam on March 1, 1906. Also during the first year, 16 acres of surface was prepared for dam embankment.

Early in the year 1908, Orman and Crook went into voluntary bankruptcy. The work was re-let to Hayes Brothers Company and John W. Peters of Janesville, Wisconsin, which firm took active charge of the work on April 21, 1908.

At the time, Orman and Crook failed, they had done work on the dam to the amount of \$365,531.42, or a little over one third of the estimated total. When contract was entered into with the National Surety Company, a revised estimate of quantities was made and various changes of plans which brought the total contract up to \$750,000 or a total for the dam of \$1,115,531. The time of completion of the dam was extended to December 1, 1910.

The Belle Fourche Dam, which was built by the United States Reclamation Service, when completed, was one of the largest earthen dams in the United States. It was designed to be 6,500 feet long at the crest, 115 feet maximum height, and required for its construction, about 1,6000,000 cubic yards of materials.

The reservoir to be formed above the dam will cover 8,000 acres at high water, and will have an available capacity of about 200,000 acre feet, or 65 billion gallons. With such an enormous storage, and with the attendant possibility of an appalling disaster should a break occur in the embankment, it is essential that the most careful attention should be given to all of the preliminary work of the exploration and examination of the dam site.

Paving the upstream slope of the dam was discussed. There were two options as to what would be used, either stone or concrete blocks. It was decided that concrete blocks, as being somewhat the cheapest, had several decided advantages.

The waste weir and channel, a semi-circular weir, is located a few hundred feet north of the dam. Its crest, 300 feet long, is 15 feet lower than the top of the embankment, and under a little more than two feet of head, was designed to pass floods of 3,000 cubic feet per second. The difference in elevation between the crest of the waste weir and the creek channel below the dam is about 100 feet. In addition to a fifteen foot drop at the weir, this difference in elevation is overcome by an open chute and two drop structures in a channel about one mile long.

The drainage area of Owl Creek above the dam is about 170 square miles. After a severe storm, the creek will flow in a large volume for a short period, dwindling to nothing in a few days.

DAMAGE TO FACE OF DAM - REPAIRS MADE

July, 1913, three blocks in the pavement just below the water line were displaced. These blocks were replaced with blocks made in place during the month of August after the reservoir water had been drawn down. (Maximum wind movement recorded was 51 miles per hour.)

May 10, 1916, wind storm was from a northwesterly direction, and reaching a maximum velocity of 60 miles per hour. The storm caused the displacement of 366 blocks in the revetment of the Belle Fourche Dam, necessitating extensive repairs.

May 12, 1922, a severe windstorm dislodged about eighty pavement blocks on the Belle Fourche Dam. In preparation for making permanent repair, the canal gates were opened and an attempt made to lower the surface of the lake as fast as possible.

Repairs to Belle Fourche Dam to December 31, 1922, was \$33,187.93.

August 2, 1931, 100 pavement blocks were dislodged on the Belle Fourche Dam.

October 19, 1932, a severe wind storm caused a break in the revetment of the Belle Fourche Dam, dislodging about fifty blocks. Another storm on the 28th dislodged other isolated blocks in the same vicinity, and also damaged repair work in progress.

In the fall of 1932, a serious break in the revetment

occurred about four feet below the water surface of the Belle Fourche Dam. Temporary repairs were made, and when water receded with irrigation in 1933, it was necessary to make more complete repairs at this point.

May 23, 1933, a severe wind and rain storm opened holes in the facing in three places and other minor damage occurred late in the season.

In 1939, the Belle Fourche Dam was improved to provide greater stability by placing an embankment on the upstream face. Repairs required placing 58,000 cubic yards of earth fill, 72,000 cubic yards of gravel, 21,000 cubic yards rock rip-rap, and drilling 6,100 linear feet of weep holes. Total cost of repair work was \$119,930.

In the year of 1942, about fifteen or twenty concrete blocks were dislodged on the dam. Necessary repairs were made.

April 26, 1943, small breaks occurred in revetment of Belle Fourche Dam during a severe wind storm. Temporary wooden mats were placed over the holes until the water level was lowered by irrigation, and permanent repairs were made in August.

No major breaks or displacement of blocks occurred on the face of Belle Fourche Reservoir Dam until June 18, 1973. Because of a strong wind, about sixteen blocks were undermined and caved in.

Temporary repairs were made, and water in reservoir had receded below break line permanent repairs were made. The total cost of maintenance and repair to Belle Fourche Dam from 1944 through 1973 was \$85,087.74. Total cost of maintenance and repair to Belle Fourche Dam including rehabilitation work in year 1939 is \$243,781.92.

CONDITION OF PROJECT AND STRUCTURES

In 1966, Les Perssons, United States Bureau of Reclamation, Huron, South Dakota, made a survey of project structures. A computation sheet was presented to the Belle Fourche Irrigation District, categorizing structures in groups of 0-5 years, 5-10 years, and 10-20 years. Structures in the 0-5 year category are structures needing immediate attention, 5-10 years showing some damage, 10-20 years estimating a fifty year concrete life. The total estimate made at the time to repair or replace structures was \$2,500,000.

Mr. Perssons, at the request of the Belle Fourche Irrigation District, was asked to hold area meetings with the water users about conditions of some of the systems' structures. Mr. Perssons arrived in Newell January 24, 1967, to meet with water users at three locations designated by the Irrigation District. Meetings were held in Newell, Nisland, and Vale. About 100 water users attended the meetings held in the three locations.

Discussions at these meetings brought out many ideas, and they felt they could double or triple their production by land development and management. The younger or newer group of water users felt that present mortgage and interest payments were eating up the profit and that they couldn't see their way clear to go further in debt for land improvements and modernization, or any increase in assessments to improve project structures.

This survey was made about eight years ago and costs to do repair of project structures have increased by 20 to 30 percent and the net income of the project farmers has not increased 20 or 30 percent because of inflated prices.

COMPUTATION SHEET

GPO 887487

BY _____ DATE _____ PROJECT Belle Fourche SHEET No OF _____
 CHKD. BY _____ DATE _____ FEATURE Reb. loc. JOB No. _____
 OFFICE _____ DETAIL Total Cost Estimate FILE No. _____

	0-5	5-10	10-20
	0-10	10-20	20-30
Diversion Dam	12,200		20,000
Checks	137,000	91,370	111,150
Turnouts	107,170	63,960	62,070
Turnouts Special	7,450	17,670	11,594
Flumes	173,100	118,700	
Pipe line & siphons	77,320	47,000	422,800
Waste ways	106,600	10,000	60,500
Storm culvert	49,000	123,000	172,600
Chutes & drops	26,000	162,000	137,500
	696,180	634,500	1,000,000
Bridges	43,300	43,300	
Drain intakes etc	12,000	12,000	
Drain cleaning	11,000	11,000	
	762,480	700,600	1,000,000

Total 2,463,080
 450 \$2,500,000

Though I have used 0-5 5-10 10-20
 Same time has been estimated to set up
 the program -
 0-5 are structures showing considerable
 damage
 5-10 structures showing some damage
 10-20 estimating a 50 yr concrete life

There are hundreds of smaller lateral
 structures not calculated in the above
 figures. Most are in fair condition. The older ones are
 quite poor.

I would suggest using a 30 yr program
 which with a good preventive maintenance program
 would eliminate some of the 10-20 class which
 in turn would make 15 small structure replacement
 a part of the program.

$$\begin{aligned} 2,500,000 / 30 &= 83,300 / \text{year} \\ 83,300 / 57,092 &= 1.45 / \text{ac} / \text{yr.} \end{aligned}$$

a good portion of the 1.45 is presently in
 their budget.

INCREASED OPERATION COSTS

In 1968 and 1969, the Irrigation District replaced 1200 feet of metal syphon one mile east of Newell, South Dakota, and placed 3,570 feet of buried 30 inch diameter concrete pipe in lateral beginning one quarter mile east of Nisland, South Dakota.

The Directors of the Belle Fourche Irrigation District, realizing the urgency for doing major repair to certain structures on the project, decided to go to the landowners and explain the problems on the project.

On March 20, 1970, a meeting was held in Newell, with 86 landowners and interested persons present. Daryld Williamson, President of the Board of Directors, explained the problem to them and the need to amend Contract No. 11r-1555 and Second Amendatory Contract 14-06-600-6979 between the Irrigation District and the U.S. Bureau of Reclamation. Said amendment sets operation and maintenance charges on the Belle Fourche Project the same regardless of land class, and assesses the amount to meet other obligations on a different ratio than was then in use.

On August 11, 1970, an election was held to decide whether or not to amend Contract as stated above. A majority vote by qualified landowners authorized Contract change.

No change was made in the 1971 assessment. The 1972 assessment was raised fifty-five cents per acre, on class one and two land, sixty-five cents per acre on class three land, and ninety-three cents per acre on class four land. Because inflationary costs have caused a sharp increase in consumer buying, the Directors have again approved a budget increase of about sixty-one cents per acre increase in assessments for the year 1974.

STATE OF SOUTH DAKOTA)
 COUNTY OF BUTTE) SS.
 BELLE FOURCHE IRRIGATION DISTRICT)

DISTRICT OPERATING BUDGET
 FOR CALENDAR YEAR 1971

RESOLUTION

WHEREAS, the terms of Amendatory Contract with the United States, Ilr-1555, dated November 29, 1949, require the District to establish an operating budget for the succeeding calendar year on or before June 1st of each year, as provided in Article 10 (a) of said contract; and

WHEREAS, The Project Manager has submitted the following budget recommendation to this Board for consideration and study:

(1) Annual Construction Charge Obligation	\$ 38,700.00
(2) Annual Obligation, Second Amendatory Contract	1,500.00
(3) Operation and Maintenance Estimate:	
a. Diversion Dam	\$ 3,100.66
b. Storage Dam and Reservoir	3,151.41
c. Canal System	21,682.90
d. Lateral System	48,713.83
e. Drain System	5,059.83
f. Water Delivery	20,646.21
g. Camps and Buildings	2,674.88
h. General Expense	42,609.13
i. Extra Equipment	14,731.97
Total Estimated O & M	162,370.82
(4) Estimated O & M Second Amendatory Contract	500.00
(5) Deferred Payment for Construction	7,740.00
TOTAL OPERATING BUDGET FOR C.Y. 1971	\$210,810.82

WHEREAS, This Board has given careful study to the above proposed budget and deems it to be adequate to cover all anticipated costs for the calendar year 1971.

THEREFORE, BE IT RESOLVED, That the operating budget be submitted to the Secretary of the Interior for approval as provided in Article 10 (a) of Amendatory Contract Ilr-1555.

DATED At Newell, South Dakota, this 5th day of May, 1970.

By Order of the Board of Directors
 BELLE FOURCHE IRRIGATION DISTRICT

David M. Williams
 President

ATTEST:

Alice D. Helmer
 Alice D. Helmer, Secretary

SEAL

STATE OF SOUTH DAKOTA)
 COUNTY OF BUTTE) SS.
 BELLE FOURCHE IRRIGATION DISTRICT)

DISTRICT OPERATING BUDGET
 FOR CALENDAR YEAR 1972

RESOLUTION

WHEREAS, The terms of Amendatory Contract with the United States, Ilr-1555, dated November 29, 1949, require the District to establish an operating budget for the succeeding calendar year on or before June 1st of each year, as provided in Article 10 (a) of said contract; and

WHEREAS, The Project Manager has submitted the following budget recommendation to this Board for consideration and study:

(1) Annual Construction Charge Obligation . . .	\$ 38,700 00
(2) Annual Obligation, Second Amendatory Contract	1,500 00
(3) Operation and Maintenance Estimate:	
a Diversion Dam	3,739.03
b Storage Dam and Reservoir	3,253.12
c Canal System	32,137 53
d Lateral System	52,531 08
e Drain System	7,236 87
f Water Delivery	20,791 06
g Camps and Buildings	3,920 00
h General Expense	46,656 24
i Extra Equipment	14,141 20
Total Estimated O & M	184,406 13
(4) Estimated O & M Second Amendatory Contract	500 00
(5) Deferred Payment for Construction	7,740.00
TOTAL OPERATING BUDGET FOR C.Y. 1972	\$ 232,846 13

WHEREAS, This Board has given careful study to the above proposed budget and deems it to be adequate to cover all anticipated costs for the calendar year 1972.

THEREFORE, BE IT RESOLVED, That the operating budget be submitted to the Secretary of the Interior for approval as provided in Article 10 (a) of Amendatory Contract Ilr-1555.

DATED At Newell, South Dakota, this 6th day of July, 1971.

By Order of the Board of Directors
 BELLE FOURCHE IRRIGATION DISTRICT

Robert L. Donaldson
 President

ATTEST

Alice D. Helmer
 Alice D. Helmer, Secretary

SEAL

STATE OF SOUTH DAKOTA)
COUNTY OF BUTTE) SS.
BELLE FOURCHE IRRIGATION DISTRICT)

DISTRICT OPERATING BUDGET
FOR CALENDAR YEAR 1975

RESOLUTION

WHEREAS, The terms of Amendatory Contract with the United States, Ilr-1555, dated November 29, 1949, require the District to establish an operating budget for the succeeding calendar year on or before June 1st of each year, as provided in Article 10 (a) of said contract; and

WHEREAS, The Project Manager has submitted the following budget recommendation to this Board for consideration and study:

(1) Annual Construction Charge Obligation	\$ 38,700.00
(2) Annual Obligation, Second Amendatory Contract	1,500.00
(3) Operation and Maintenance Estimate:	
a. Diversion Dam	4,454.46
b. Storage Dam and Reservoir	4,383.83
c. Canal System	36,740.34
d. Lateral System	54,531.43
e. Drain System	7,258.94
f. Water Delivery	28,228.07
g. Camps and Buildings	4,024.52
h. General Expense	57,368.86
i. Extra Equipment	1,812.97
Total Estimated O & M	198,803.42
(4) Estimated O & M, Second Amendatory Contract	1,000.00
(5) Rehabilitation and Betterment Contract	28,000.00
Total Operating Costs to be Derived From 1974 Assessment	\$ 268,003.42

WHEREAS, This Board has given careful study to the above proposed budget and deems it to be adequate to cover all anticipated costs for the calendar year 1975.

THEREFORE, BE IT RESOLVED, That the operating budget be submitted to the Secretary of the Interior for approval as provided in Article 10 (a) of Amendatory Contract Ilr-1555.

DATED, At Newell, Butte County, South Dakota this 4th day of June, 1974.

By Order of the Board of Directors
BELLE FOURCHE IRRIGATION DISTRICT

William Feiry
President

Darrell M. Williamson Absent, Clarence Foos

Robert L. Donaldson Absent, Byron Schipke

Attest:

Alice D. Welmer
Secretary
SEAL

STATE OF SOUTH DAKOTA)
COUNTY OF BUTTE) SS.
BELLE FOURCHE IRRIGATION DISTRICT)

CONTRACT AMENDMENT

R E S O L U T I O N

WHEREAS, The United States and the Belle Fourche Irrigation District entered into an Amendatory Repayment Contract Ilr-1555, on November 29, 1949, and Second Amendatory Contract 14-06-600-6979 on January 2, 1963, which covered repayment to the United States of the costs of constructing irrigation works for District lands and other purposes;

WHEREAS, The District shall cause to be levied and collected all necessary assessments, tolls, and other charges, and will use all of the authority and resources of the District to meet the obligations of the District, to make in full all payments to be made, pursuant to these contracts on or before the date such payments become due and to meet its other obligations under these contracts;

WHEREAS, The Board of Directors of the Belle Fourche Irrigation District rescinded action on Resolutions made on July 6, 1967, and June 4, 1968, which Resolutions were for amending certain Contracts with the United States;

WHEREAS, The Board of Directors of the Belle Fourche Irrigation District hereby amend Resolution of January 12, 1970, to read as follows;

NOW THEREFORE BE IT RESOLVED BY THE DIRECTORS OF THE BELLE FOURCHE IRRIGATION DISTRICT:

That the Board of Directors of the Belle Fourche Irrigation District recommends that an endeavor be made to get all land classes to pay a more equitable share of expenses, such recommendation having been based on ability to pay as well.

That the United States Bureau of Reclamation be hereby requested to amend Repayment Contract Ilr-1555 and Second Amendatory Contract 14-06-600-6979 as follows:

Charges to be assessed - Article No. 11. All District assessments for operation and maintenance, replacement and improvements shall be made an equal charge, regardless of land class. All assessments for construction charges due the United States Government, at the date of the approval of this amendment by the Secretary of the United States Department of Interior, for paying the irrigation districts obligations to the United States of America shall be based on the classification of each tract of land under the classification which was approved by the District Board of Directors on December 27, 1948 and thereafter approved by the Secretary of Interior. The above referred to land classification having been filed in triplicate originals, one with the Commissioner, one with the Regional Director, Region 6, and one with the Board of Directors of the Belle

Fourche Irrigation District, said classification by reference herein is made a part hereof. The above referred to classification has in some instances been modified and some tracts of land reclassified and in each such instance the present classification shall be the controlling classification.

All assessments, tolls or other charges against the individual tracts of land in the district made for the purpose of paying the districts construction obligations to the United States of America shall be fixed for the different classes of land at such ratios as may be determined by the districts board of directors from time to time.

All assessments shall be within the percentage ratio as follows:

Class 1	100%
Class 2	65% - 80%
Class 3	10% - 25%
Class 4	1% - 10%

Dated in Newell, Butte County, South Dakota this 5th day of May, 1970.

By Order of the Board of Directors
BELLE FOURCHE IRRIGATION DISTRICT

Daryl M. Williamson
Daryl M. Williamson, President

Harvey Kuntz William Kury Virgil Senell
Earl Capps Louis Holman Byron McHugh

ATTEST:

Alice D. Helmer
Alice D. Helmer, Secretary



United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 430

510. Belle Fourche Project

AUG 3 1973

Mr. Stanton E. Selway
Chairman, Black Hills Area, Resource
Conservation & Development Project
Post Office Box 1692
Rapid City, South Dakota 57701

Dear Mr. Selway:

This is in response to your letter dated July 16, 1973, regarding replacement of the spillway and the upstream slope protection at Belle Fourche Dam in South Dakota.

We have been advised by our Regional Director, Billings, Montana, that the Belle Fourche Irrigation District completed the replacement of the eroded material and the concrete slabs on the upstream slope of the dam on July 24, 1973.

Regarding the existing spillway, we have modified the operating procedures at Belle Fourche Reservoir to preclude the use of the spillway, except under the most extreme conditions. The modified procedures limit the maximum allowable water surface to elevation 2,971.8 feet, 3.2 feet below the top of the conservation pool. Although conservation storage in the reservoir is reduced by about 24,870 acre-feet, the contract with the district provides for replacement storage in Keyhole Reservoir.

We recognize the importance of replacing the spillway and providing permanent protection on the upstream slope and believe that the work should be given high priority. However, before the work can be initiated, a determination must be made of the cost allocations for reimbursable

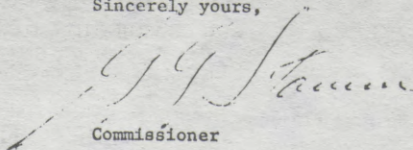


76

Let's Clean Up America For Our 200th Birthday

and nonreimbursable purposes. Contractual repayment agreements must be made for the reimbursable costs. Legislation will be required to authorize the construction.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "J. J. Starn". The signature is written in a cursive style with a long horizontal stroke at the end.

Commissioner



IN REPLY REFER TO: 400

832.-

United States Department of the Interior

BUREAU OF RECLAMATION

Upper Missouri Region
Missouri-Oahe Projects Office
P.O. Box 825
Huron, South Dakota 57350

MAR 6 1973

Mr. Harold D. Skjoldal, Manager
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mr. Skjoldal:

Your letter of February 16, 1973, expresses the concern of the Board of Directors of the Belle Fourche Irrigation District regarding the delay of the proposed modification of the Belle Fourche Dam.

The inflow design flood study for Belle Fourche Reservoir in 1966, based on accumulated hydrologic data, shows the existing spillway facility for the Belle Fourche Dam has insufficient capacity and is structurally inadequate to accommodate the inflow design flood. Consequently, the Bureau established a storage restriction on Belle Fourche Reservoir and as provided for in Contract No. 14-06-600-8970.

The proposed modification for Belle Fourche Dam includes the following:

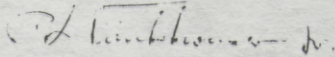
1. Construction of a new spillway facility, consisting of a glory-hole-type intake near the right (south) abutment of the dam with a conduit, chute, and drop structure for discharge into Owl Creek.
2. Placement of 4-foot-thick rock riprap on top of the existing concrete-slab fencing of the dam.
3. Construction of a dike in front of the existing spillway entrance to prevent its further use.

Congressional authorization and funding of the Bureau's Safety of Dams program which could provide for the modification of the Belle Fourche Dam has not yet been approved. It is our understanding that your Directors have met with South Dakota Congressional representatives within the past few months to seek their support for legislation to authorize and to fund the modification of the Belle Fourche Dam.

In view of the inadequate capacity and the unstable condition of the existing Belle Fourche Dam spillway facility, we cannot terminate Contract No. 14-06-600-8970 and Amendment No. 1.

We appreciate the continuing interest and concern of you and the Board of Directors about restoring Belle Fourche Reservoir to its full storage capability and without restrictions. We are hopeful that authorization and funding for the modification can be provided very soon.

Sincerely yours,



Preston L. Funkhouser, Jr.
Project Manager

Copy to: William Keiry, President
Board of Directors
Belle Fourche Irrigation District
Nisland, South Dakota 57762

U.S. DEPARTMENT OF THE INTERIOR
SOUTH DAKOTA
COMMITTEES:
INDIAN AND INSULAR AFFAIRS
JUDICIARY

Congress of the United States
House of Representatives
Washington, D.C. 20515
December 7, 1972

808 CANNON HOUSE OFFICE BUILDING
TELEPHONE: (202) 225-5185

FULL DISTRICT OFFICES:
609 MOUNT RUSHMORE ROAD
RAPID CITY, SOUTH DAKOTA 57701

55 THIRD STREET SE.
HURON, SOUTH DAKOTA 57350

VOLUNTEER SERVICE OFFICES:
LEAD, MORRIDGE, PIERRE, WINNER

Mr. Daryld M. Williamson
President
Board of Directors
Belle Fourche Irrigation District
Newell, SD 57760

Dear Daryld:

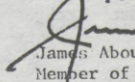
I'm enclosing a copy of a response that I received regarding the matter of spillway repair for the Belle Fourche Dam. I'm not fully satisfied by this response as it does not provide information regarding the progress being made to acquire the data that Mr. Armstrong suggests is needed. You can be sure that I will continue to push this as hard as I can to acquire any needed legislation and to see that the Department does give this matter the high priority that this letter suggests.

I would welcome your thoughts and comments on the matter of the other issues that he raises.

If you have any additional information, please let me know.

With best personal regards, I remain

Sincerely,


James Abourezk
Member of Congress

United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

REPLY

BUREAU NO. 450

Belle Fourche

NOV 30 1972

Hon. James Abourezk
House of Representatives
Washington, D.C.

Dear Mr. Abourezk:

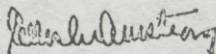
This is in response to your letter dated November 9, 1972, regarding the Belle Fourche Dam spillway and the Belle Fourche Project canals.

We recognize the need for modifying the reservoir spillway and we believe the work should be given high priority. However, before the work can be initiated, a determination must be made of the cost allocations for reimbursable and nonreimbursable purposes, and contractual repayment agreements must be made for the reimbursable costs. Legislation will be required to authorize the construction.

To minimize the probability of spillway use until an adequate spillway can be constructed, we have reserved the top 25,000 acre-feet of reservoir capacity for Owl Creek flood inflows. To provide additional protection, we have established a warning system so that the public can be advised of impending danger of flooding.

Regarding the Belle Fourche Project canals, we are working with Belle Fourche Irrigation District officials to determine the best procedure for taking care of the unsatisfactory conditions and we expect to complete arrangements for this soon.

Sincerely,


Ellis L. Armstrong
Commissioner



United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 450

AUG 23 1971

Mr. Daryld M. Williamson, President
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mr. Williamson:

At the time I met with you on August 17, 1971, you inquired as to the amount of Federal Internal Revenue collections attributable to the Belle Fourche Project.

We have checked our studies and find that our cumulative estimates of Internal Revenue collections for this project, 1940 through 1970, total \$10.9 million. The total project cost is \$5.1 million.

Estimated Internal Revenue collections attributable to the project have averaged \$455,000 annually over the past five years, 1966-1970. The 1970 total was \$501,000.

It is also interesting to note that the cumulative gross value of crops produced on the project from 1908, the year of first crop report, through 1970 total \$91.4 million. The total gross crop value in 1970 was \$2.7 million.

Again, I wish to say it was a great pleasure for me to visit with you and to have been on the project.

Sincerely,

Maurice D. Langley

For Ellis L. Armstrong
Commissioner



IN REPLY REFER TO: 400

United States Department of the Interior

BUREAU OF RECLAMATION

Region 6

MISSOURI-OAHE PROJECTS OFFICE

P. O. BOX 825

HURON, SOUTH DAKOTA 57350

AUG 19 1977

Mr. Daryld M. Williamson, President
 Belle Fourche Irrigation District
 Vale, South Dakota 57788

Dear Mr. Williamson:

We were very pleased that all of the members of the Board of Directors were able to meet with Mr. Langley and Mr. Dolven on August 18. We realize this is a busy time of year for all of you, particularly during this prolonged period of hot and dry weather when irrigation is important.

You may be assured the Bureau will continue its efforts to obtain the necessary funding under the Safety of Dams program for the modification of the spillway facilities for the Belle Fourche Dam and placement of riprap on the face of the dam.

Sincerely yours,

Preston L. Funkhouser, Jr.
 Project Manager

Copy to: Harold D. Skjoldal, Manager, Belle Fourche Irrigation District



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

REGIONAL OFFICE, REGION 6
P. O. BOX 2553
BILLINGS, MONTANA 59103

IN REPLY
REFER TO: 400

APR 11 1968

Mr. Harold D. Skjoldal, Manager
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mr. Skjoldal:

We appreciate your letter of April 8, 1968, notifying us of the water users' concern over storage capacity presently available to the Belle Fourche Project.

You state that the water users are putting pressure on you and the Board to store a maximum of 185,170 acre-feet in the Reservoir. Please refer to Contract No. 14-06-600-8970, Contract Between the United States of America and the Belle Fourche Irrigation District for Operation of Belle Fourche and Keyhole Reservoirs, dated March 1, 1966. The contract provides for storage in Keyhole Reservoir to replace to the extent possible the 25,000 acre-feet to be left empty in Belle Fourche Reservoir. The contract provides, as Project Manager Martin H. Oleson, Jr., reminded you in his letter of January 2, 1968, storage space in both Keyhole and Belle Fourche Reservoirs totaling 195,170 acre-feet, or 10,000 acre-feet more than if the water users had only Belle Fourche Reservoir to draw on. The arrangements for this greater amount of storage to be provided until an adequate spillway can be constructed, were made after thorough discussion between the Directors and officials of the Bureau of Reclamation. The minutes of the meeting we held with the Board in Billings on December 6, 1965; Chairman of the Board Donaldson's letter of January 10, 1966; and, the resolution of the Board attached to Contract No. 14-06-600-8970, all confirm this.

The old spillway was put out of use by the large and prolonged discharges that went through it in May and June 1965. The Chief Engineer of the Bureau of Reclamation has determined, after extensive surveys, that it is not practicable to repair the old spillway because of its limited capacity of 600 second-feet. A new spillway, with adequate capacity, constructed on the site of the old spillway would be more expensive than a glory-hole spillway at the south end of the Dam such as is proposed.

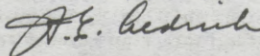
The temporary lack of a spillway in Belle Fourche Dam and the consequent limitation of storage in the Reservoir to 160,300 acre-feet has not reduced the storage space for water to supply the Project; rather, because of the 24,870 acre-feet of replacement space provided in Keyhole Reservoir plus the 10,000 acre-feet there provided by the terms of Contract No. 14-06-600-6979, the total storage space available is even greater than what it was in the spring of 1965, before the spillway failed and storage in Belle Fourche Reservoir had to be limited.

Preliminary plans for a new spillway are complete. We explained those to you when you were in Denver in November 1966. The spillway will be built when construction funds become available. Legislation is under consideration within the executive department of the Government and we are hopeful of favorable action soon.

Actually, the position of the water users on the Belle Fourche Project, insofar as real storage space available for irrigation water is concerned, is better than it was for many years. We recommend that you more broadly publicize, through the Directors, ditchriders, and the local papers, the amount of the actual storage space available. On April 1, 1968, there was more water in storage in both Reservoirs and available to the Project than there has been on that date in the average year.

The water users may be apprehensive because they have not been made adequately aware of the factual situation. Please feel free to call on Manager Oleson of our Missouri-Oahe Projects Office in Huron for any help you need to get the facts before the public.

Sincerely yours,



Regional Director

cc:

Chief Engineer, Attn: D-400
Project Manager, Huron, South Dakota
Commissioner, Attn: 400



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

IN REPLY
REFER TO: 400

REGION 6
MISSOURI-OAHE PROJECTS OFFICE
P.O. BOX 825
HURON, SOUTH DAKOTA 57350

JAN 2 1968

Mr. Harold Skjoldal, Manager
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mr. Skjoldal:

Your letter of December 20, 1967, indicates there may not be a complete understanding among all the water users on the Belle Fourche Project concerning the provisions of Contract No. 14-06-600-8970.

The contract limits the maximum water surface elevation in Belle Fourche Reservoir to 2971.8 feet m.s.l. and 160,300 acre-feet of reservoir storage. The contract further provides for temporary replacement storage space of 24,870 acre-feet in Keyhole Reservoir at no cost to the District, in addition to the 10,000 acre-feet of space provided for in Contract No. 14-06-600-6979. Thus, the District has a total storage space in Keyhole Reservoir of 34,870 acre-feet. The total storage space in the two reservoirs that is available to the District is 195,170 acre-feet. There has merely been a transfer of 24,870 acre-feet of storage space from the Belle Fourche Reservoir to the Keyhole Reservoir until the Belle Fourche Reservoir spillway has been repaired or replaced.

Our recent hydrologic studies show that with the existing spillway facilities on Belle Fourche Dam, space must be provided in the reservoir for possible stormflows in the Owl Creek drainage area in order to provide the necessary margin of safety to adequately protect the Belle Fourche Dam. A space of about 25,000 acre-feet is considered adequate to provide this safety margin. This space cannot be used until suitable spillway facilities for the Belle Fourche Reservoir have been provided.

The Bureau does not yet have authority or funds to make the appropriate spillway repairs or modification on the Belle Fourche Dam. This work is a high priority item on the Bureau's program. You can be assured that every effort will be made to complete the needed work as soon as possible when authority has been provided and funds are available.

Please feel free to call on us if you have further questions.

Sincerely yours,

Martin H. Oleson, Jr.
Martin H. Oleson, Jr.
Project Manager

Copy to: Daryld M. Williamson, President, Belle Fourche Irrigation District



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

REGIONAL OFFICE, REGION 6
P. O. BOX 2553
BILLINGS, MONTANA 59103

IN REPLY REFER TO: 400

NOV 6 1967

Mrs. Alice D. Helmer, Secretary
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mrs. Helmer:

A resolution from the Belle Fourche Irrigation District, dated October 19, 1967, requested the Bureau to make the necessary modifications of the Belle Fourche Reservoir spillway by October 31, 1969.

Legislation has been drafted for presentation to the 90th Congress which would authorize the Bureau to modify dams if and when necessary to assure their safety. The Bureau does not have authority to act until the necessary legislation has been enacted into law and funds would be available.

The modification of the Belle Fourche Reservoir spillway facilities is a high priority item on the Bureau's proposed action program. The Board of Directors may be assured that every effort will be made to get the modification work underway as soon as enabling legislation is passed and funds are available.

Sincerely yours,

Martin H. Oleson, Jr.
Project Manager

FINANCIAL CONDITION OF PROJECT WATER USERS

FIRST NATIONAL BANK OF THE BLACK HILLS

Post Office Box 669
Belle Fourche, South Dakota 57717
605/892 2651



June 5, 1974

Mr. Wm. Keiry, President
Belle Fourche Irrigation District
Newell, S. D. 57760

Dear Bill,

In answer to your inquiry about the overall economic condition of the farmers located under the irrigation district...

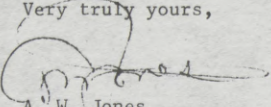
I believe I can say that I have dealt with most of the water users and am well acquainted with their individual operations. I have been a banker in the Newell and Belle Fourche area for the past 28 years. First I want to mention that the irrigation project and the farmers are an important segment of the economy of a large area of three states, South Dakota, Wyoming and Montana.

The local irrigation farmer is required to have a large investment in equipment. It is not unusual for this to approach the medium five figures. He also has a lot of fixed expenses - such as land payments, taxes, water charges, equipment, payments, etc. The margin of profit compared to investment is much lower than for the average farm.

Our experience has shown that our borrower's equity on an overall average is lower with the irrigation farmer. Our ratio of sub-standard loans is also higher with the irrigation farmer than with the dry land farmer or rancher.

It should be remembered that most of these farms are small and for the past 20 years above average management has been required to keep them profitable.

Very truly yours,



A. W. Jones
Vice President and Manager

AWJ:pb

Northwest South Dakota

Dependable Credit for Farmers and Stockmen
in Butte, Harding, Meade and Perkins Counties

PHONE 456-2251: Floyd Wennberg, Office Manager



NEWELL, SOUTH DAKOTA 57760

May 31, 1974

Mr. Wm. Keiry, Pres. Board of Directors
Belle Fourche Irrigation District
Nisland, S. Dak.

Dear sir:

It has been brought to my attention that there are some that feel the water users of the district should repay the government for the cost of repairing the spillway on Orman Dam.

Inflation has resulted in operating costs increasing approximately 20% in the past year. This increase in operating costs plus the sharp decrease in livestock prices has resulted in near financial ruin for many of our borrowers.

There is no doubt that the Irrigation District is also feeling the pressure of increased cost of operation and may find it necessary to pass this increased cost on to the water users. Because of the financial condition of the water users of this district, and the possibility that inflation will continue to increase operating cost, I strongly urge that every effort be made to obtain the funds to repair the spillway with no repayment by the water users.

Sincerely,

Floyd Wennberg
Floyd Wennberg, Manager
Newell Office

FIRST NATIONAL BANK OF THE BLACK HILLS

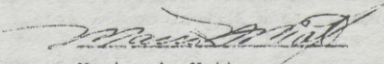
Box 227
Newell, South Dakota 57760
605/456 2693

BANCO

May 31, 1974

The Newell area farmers, ranchers and feeders, many of whom depend on irrigation for their feed, grain, and crops are having an increasingly harder struggle to meet their expenses. With machinery, fertilizer and all production costs up, some over 50%, and livestock, wool and grain prices on a downward trend, many of these farmers and ranchers will not have enough income to meet this years expenses.

From our experience we find that most of our customers have come to a point where without additional income most of them will be unable to handle more operating cost and still stay in business.


Marion A. Matt
Loan Officer & Assistant Mgr.

FEDERAL LAND BANK ASSOCIATION

327 ROUND-UP STREET TELEPHONE 892-4661

LE FOURCHE, SOUTH DAKOTA 57717

CHARLES G. SUTTON, MANAGER



June 6, 1974

Mr. William Keiry, President
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mr. Keiry:

I am writing you regarding my personal feelings as manager of the Federal Land Bank Association of Belle Fourche and as a representative of the Federal Land Bank of Omaha, long term farm and ranch real estate lenders.

The Orman Dam and the Belle Fourche Irrigation District encompasses an area consisting of small operators, yet plays a very important roll in the economy of Butte County as well as Southeastern Montana, Northeastern Wyoming and Northwestern South Dakota. The feed raised under the district irrigation project plays a valuable part in the ranch operations in the area just described.

It is my understanding that the Bureau of Reclamation agreed, at the time of take-over of the irrigation district, that they would re-condition and repair the face of the dam and the spillway. This project has never been undertaken and now a dire necessity for this work is at hand. It is my firm belief that the cost of this repair work should be born entirely by the Bureau of Reclamation since any further burden placed upon the District would follow down and become a burden on the operators, many of whom are just holding their own with only those with top management showing any progress.

If I may be of further assistance in helping to hurry this much needed project, plus convencing Congress and the Bureau of Reclamation that it is their obligation, please contact me.

Very truly yours,

Charles G. Sutton

Charles G. Sutton
Manager



CGS/pl
Dictated but not read.

CONTRACTS BUREAU OF RECLAMATION

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATIONIN REPLY
REFER TO: 400REGION 6
MISSOURI-OAHE PROJECTS OFFICE
P.O. BOX 825
HURON, SOUTH DAKOTA 57350

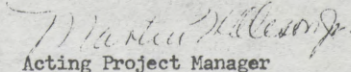
APR 11 1966

Mr. Ralph Greer, Manager
Belle Fourche Irrigation District
Newell, South Dakota

Dear Mr. Greer:

Enclosed for your files are the duplicate original and one copy
of Contract No. 14-06-600-8970 between the United States and the
Belle Fourche Irrigation District for the operation of Keyhole
and Belle Fourche Reservoirs.

Sincerely yours,


Acting Project Manager

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Belle Fourche Project, South Dakota

CONTRACT BETWEEN THE UNITED STATES OF AMERICA
AND THE BELLE FOURCHE IRRIGATION DISTRICT
FOR OPERATION OF BELLE FOURCHE AND KEYHOLE RESERVOIRS

THIS CONTRACT, Made and entered into this 1st
day of March, 1966, pursuant to the Act of Congress
of June 17, 1902 (32 Stat. 386) and acts amendatory thereof or
supplementary thereto, known as the Reclamation Law, between the UNITED
STATES OF AMERICA, hereinafter called the United States, acting through
the Contracting Officer executing this contract, and the BELLE FOURCHE
IRRIGATION DISTRICT, an irrigation district organized and existing under
the laws of the State of South Dakota, having its principal place of
business at Newell, South Dakota;

WITNESSETH, THAT:

WHEREAS, the following statements are made in explanation:

(a) The spillway of the Belle Fourche Reservoir requires replacement or repair and, in its present condition, the reservoir should not be fully filled.

(b) The United States has space available in Keyhole Reservoir to store water for the District.

NOW, THEREFORE, in consideration of the mutual promises herein contained, it is agreed:

1. This agreement takes effect upon the day and year first above written and will remain in force until the spillway of the Belle Fourche Dam and Reservoir is repaired or replaced, but in no event will it be effective after October 31, 1969.

2. The District will:

a. Limit the maximum water surface of the Belle Fourche Reservoir to two thousand nine hundred seventy-one and eight tenths (2971.8) feet m.s.l., which will hold one hundred sixty thousand three hundred (160,300) acre-feet of water in storage;

b. reduce diversions from the Belle Fourche River to current irrigation requirements reduced by the supply of water available from Owl Creek and Crow Creek when Belle Fourche storage is at or above elevation two thousand nine hundred seventy-one and eight tenths (2971.8) feet m.s.l.;

c. maintain suitable lines of communication between the district's headquarters at Newell, South Dakota, the Belle Fourche Dam and the Diversion Dam so as to insure prompt transmittal, reception, and performance of operating instructions.

3. For the purpose of providing service in conformance with Contract No. 14-06-600-6979 between the parties, dated January 2, 1963, and to provide temporary replacement storage space at Keyhole Reservoir in Wyoming until the spillway of the Belle Fourche Dam and Reservoir is repaired or replaced, the United States agrees to operate Keyhole Reservoir in the following manner:

a. Until peak storage at Belle Fourche Reservoir has occurred, or June 1, whichever occurs later, release inflows to Keyhole Reservoir only to the extent required to meet current downstream requirements.

b. Compute credits for water stored in Keyhole Reservoir after storage period is over. Credit Belle Fourche Irrigation District with (A) water stored in Keyhole Reservoir which could have been used by the District or stored in Belle Fourche Reservoir within total capacity of one hundred eighty-five thousand one hundred seventy (185,170) acre-feet. Use 6-day lag time for releases at Keyhole Dam to reach the Inlet Canal, capacity one thousand three hundred (1,300) c.f.s. Credit the District with (B) seven and seven tenths (7.7) percent and the United States with (C) ninety-two and three tenths (92.3) percent of the remainder.

c. For District credits A and B totaling up to thirty-four thousand eight hundred seventy (34,870) acre-feet, make releases as requested by the District.

d. Water credited to the District in excess of thirty-four thousand eight hundred seventy (34,870) acre-feet will be released at rates determined by the Bureau of Reclamation.

e. When District credits A and B total more than thirty-four thousand eight hundred seventy (34,870) acre-feet and Belle Fourche Reservoir peak storage for the season is determined to be less than one hundred thousand (100,000) acre-feet, release that portion of surplus required to bring

storage in Belle Fourche Reservoir to one hundred thousand (100,000) acre-feet. Retain remainder in Keyhole Reservoir and proceed as in item (f).

f. When District credits A and B total more than thirty-four thousand eight hundred seventy (34,870) acre-feet and Belle Fourche Reservoir peak storage for the season is one hundred thousand (100,000) acre-feet or more, retain that water in excess of thirty-four thousand eight hundred seventy (34,870) acre-feet in Keyhole Reservoir until the following storage season. Credit for water in excess of thirty-four thousand eight hundred seventy (34,870) acre-feet is to remain with the District (as reduced by proportionate share of evaporation and seepage losses) but kept in a separate account. If peak storage in Belle Fourche Reservoir the next season is less than one hundred thousand (100,000) acre-feet, release the storage credit in excess of thirty-four thousand eight hundred seventy (34,870) acre-feet to the District; if more than one hundred thousand (100,000) acre-feet, retain until needed in succeeding storage seasons.

g. A total of one hundred eighty-five thousand one hundred seventy acre-feet of concurrent storage in Belle Fourche Reservoir and credit A in Keyhole Reservoir will be permitted regardless of source of the stored water. However, this total will be increased to one hundred ninety-five thousand one hundred seventy (195,170) acre-feet, to the extent that the subsequent storage occurs at Belle Fourche Reservoir and results from water originating below Keyhole Reservoir.

h. Credits to Belle Fourche District in Keyhole Reservoir assume reasonable diversion of available flows to Inlet Canal. Divertable flows which are allowed to pass downstream may act to reduce the amount of District credits in Keyhole.

i. Adjustments in releases from Keyhole Reservoir will generally be made twice each week.

4. The existing contractual relations between the parties hereto remain in full force and effect except to the extent they are temporarily amended by this contract.

5. Equal Employment Opportunity.

(a) During the performance of work under this contract, the Belle Fourche Irrigation District, in this article referred to as the contractor, agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions

may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, That in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

(b) Inclusion of the above nondiscrimination clause in subcontracts may be by reference to Section 202 of Executive Order No. 11246, dated September 24, 1965. Subcontracts below the second tier, other than subcontracts calling for construction work at the site of construction, are exempt from inclusion of the clause.

CIVIL RIGHTS ACT, 1964

6. The District hereby agrees as follows:

(1) To comply with Title VI (Section 601) of the Civil Rights Act of July 2, 1964, (78 Stat. 241) which provides that "No person in the United States shall, on the ground of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance," and to be bound by the regulations of the Department of the Interior for the effectuation thereof, as set forth in 43 CFR 17.

(2) To obligate his subcontractors, subgrantees, transferees, successors in interest, or any other participants receiving Federal financial assistance hereunder, to comply with the requirements of this provision.

OFFICIALS NOT TO BENEFIT

7. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first above written.

THE UNITED STATES OF AMERICA

3-29-66
Mon Self

By *G. H. Hines*
 Acting Regional Director, Region 6
 Bureau of Reclamation
 Billings, Montana

BEULIE FOURCHE IRRIGATION DISTRICT

L.S.

Allen B. Nelson
 Secretary

By *R. J. Donaldson*
 Title *President*

JUL 2 1969

Contract No. 14-06-600-8970
Amendment No. 1

Mr. Daryld M. Williamson, President
Belle Fourche Irrigation District
Newell, South Dakota 57760

Dear Mr. Williamson:

On March 1, 1966, the Belle Fourche Irrigation District and the United States entered into an agreement, Contract No. 14-06-600-8970, to replace unusable storage in Belle Fourche Reservoir with storage from Keyhole Reservoir until the original spillway in the Belle Fourche Reservoir was repaired or replaced, and full storage in that reservoir was again available. The life of the agreement was limited to October 31, 1969.

The spillway has not been repaired or replaced because construction funds have not been available. There is no indication as to when funds will be available, therefore, we recommend that our arrangements for the exchange of Keyhole Reservoir storage space for Belle Fourche Reservoir storage space be continued until all of the storage space in Belle Fourche Reservoir can be utilized.

The terms of the original agreement, Contract No. 14-06-600-8970, are acceptable to us, and if they still are acceptable to the Commissioners of the Belle Fourche Irrigation District, we recommend that the contract continue in force with section 1 amended to read as follows:

"1. This agreement takes effect upon the day and year first above written and will remain in force until the spillway of Belle Fourche Dam and Reservoir is repaired or replaced, unless sooner terminated by the United States."

If the proposed change is acceptable to the Commissioners, please have the President or other authorized official sign both copies in the space provided below.

Please return the Original, with a copy of the resolution authorizing the signature to us, attention 400. The signed Duplicate Original copy in for your files.

Sincerely yours,

J. A. Bradley
Acting Regional Director

*Received
7-1-69*

In duplicate

Belle Fourche Irrigation District

Norvaldon Williams *Oct 2 1969*
President Date

Attest:

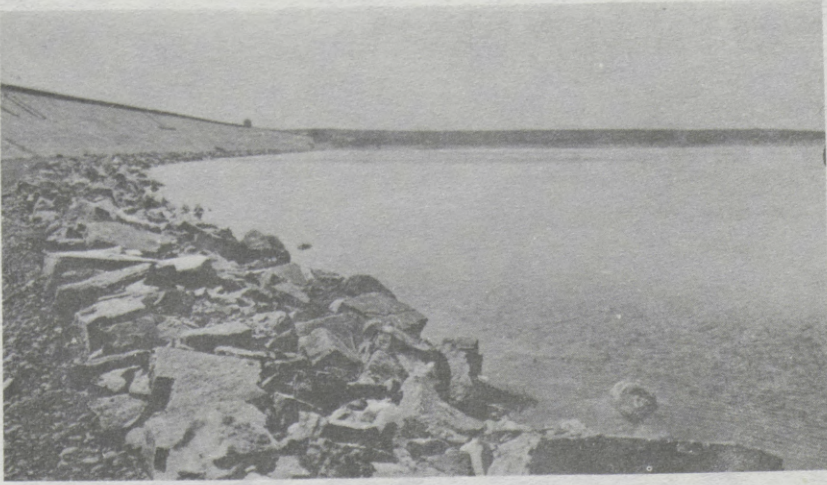
Allice D. Welmer
Secretary

ORMAN DAM



Inspecting storm battered face of dam — 1973

Time for a Face Lifting . . .

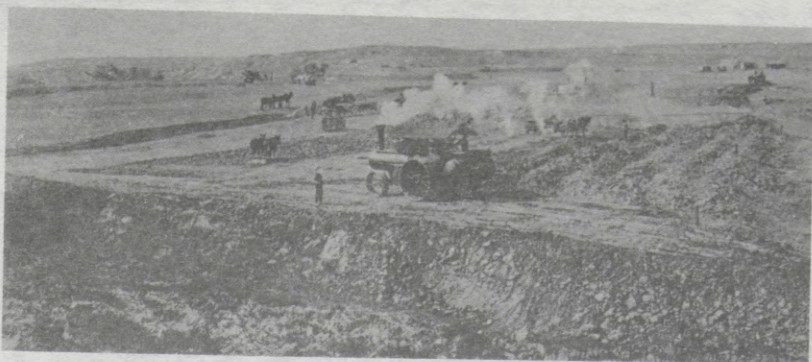


*Yes, the water can get low in Orman –
Another 24,000 acre feet would help!*

A Few Basic Facts About

Orman Dam ^{and} the Belle Fourche Reservoir

- ★ Construction Started in 1906
- ★ Original Cost \$4,230,000
- ★ Potential Capacity – 185,170 Acre Feet
- ★ Restricted Capacity – 160,300 Acre Feet
(Limited because of need for repairs)
- ★ Annual Storage Loss – 24,870 Acre Feet
- ★ Reservoir Covers 8451 Acres
- ★ Reservoir Area is 13.2 Square Miles
- ★ Shore Line is 52 Miles
- ★ Provides Irrigation Water for 57,000 Acres
- ★ Belle Fourche Project is About 25 Miles Long
and 12 Miles Wide
- ★ \$3,500,000 NEEDED FOR BASIC REPAIRS



Construction under way, June 29, 1906.

After 68 Years - Some Background

Orman Dam and its accompanying Belle Fourche Irrigation Project are located in Western South Dakota, just north of the Black Hills, about 25 miles from the Wyoming Line, 35 miles from Montana.

The firm of Orman and Crooke began work on the dam in 1906. It was the second such project undertaken by the Bureau of Reclamation.

Water is diverted from the Belle Fourche River by a diversion dam just north of the city of Belle Fourche and carried to reservoir via inlet canal.

Irrigation began on 4025 acres in 1908. An additional 5613 acres came under irrigation in 1909. By 1920 water was furnished to over 57,000 acres.

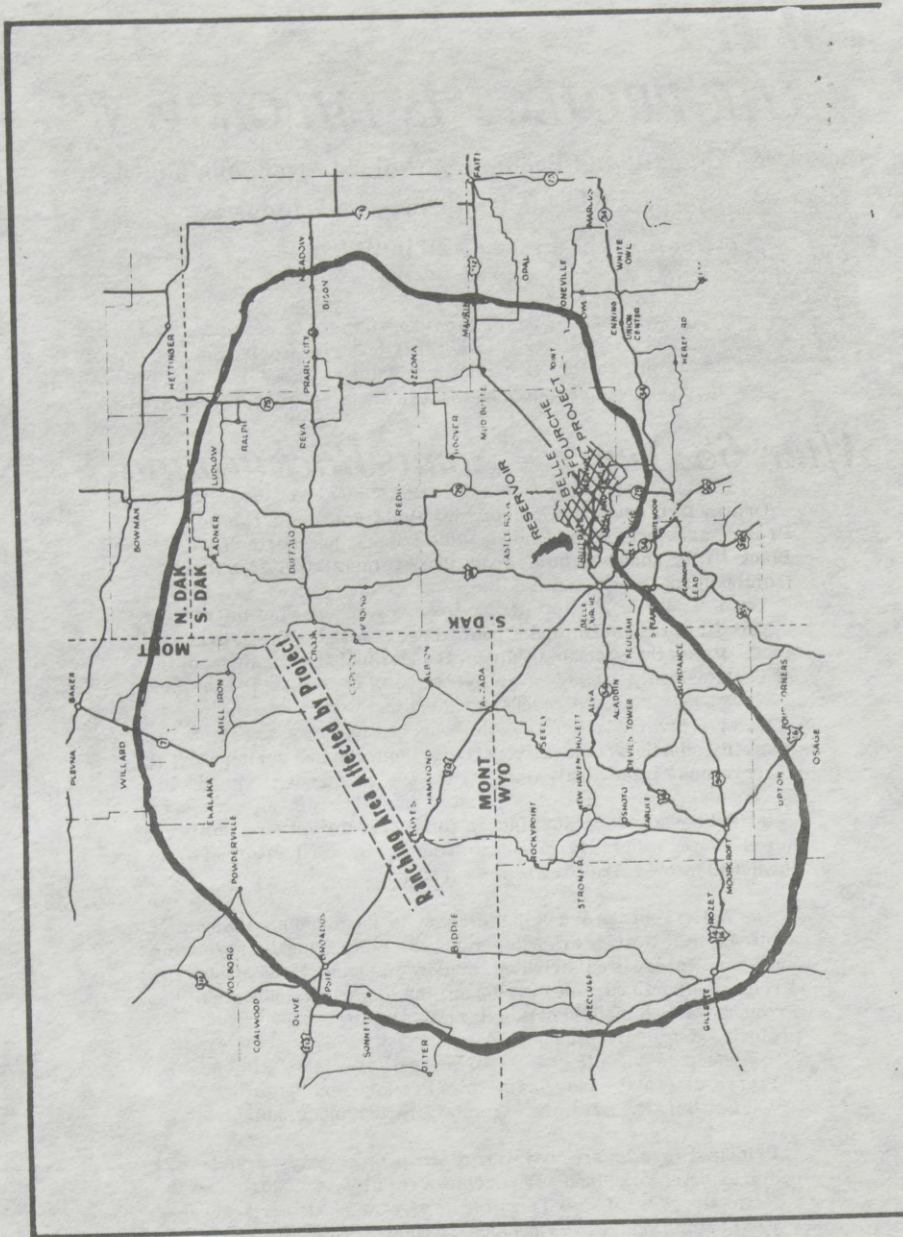
The Belle Fourche Irrigation Project is about 25 miles long, about 12 miles wide, extending along the Belle Fourche River Valley. Water is distributed thru two main canals — one circles the north edge of the project, the other the south edge. From these two main canals, laterals carry water thruout the project. (See map inside book cover.)

Pierre clay and sandy loam soils are found on the project. The clay, locally known as "gumbo" is the most extensive.

Principal crops are hay, corn, oats, barley. Farming operations are combined with livestock feeding.

Project has come to serve an area of almost 10,000 square miles, with 20,000 people, in three states.

Originally operated by the Bureau of Reclamation, the Belle Fourche project became the responsibility of the Belle Fourche Irrigation District in 1949.



WHY

THE PROJECT IS IMPORTANT

- ★ Annual Crop Production Valued at \$3,000,000
- ★ Serving a \$114,000,000 Livestock Industry
- ★ Affecting the Lives of 20,000 People

Originally conceived as an undertaking to provide small farms and a livelihood for several hundred people, the Belle Fourche Irrigation Project has developed into a key part of a unique meat production cycle in an area of 10,000 square miles.

Crops produced on the project are valued in excess of \$3,000,000 annually. This includes 50,000 to 60,000 tons of alfalfa hay and over 750,000 bushels of grain.

During the summer, while crops are raised on the project, livestock is grazed on the surrounding ranges. In the fall and winter a portion of the livestock moves into the project to be fed before being shipped to market. Young breeding stock is also wintered on the project and returns to the range in the spring. The livestock, of course, is fed the hay, corn and grain and roughage raised on the project.

In addition, thousands of tons of hay and grain go out to ranches in the three-state area (see map at left) for supplemental winter feed to maintain basic herds. It's a closed circle, and efficient, since nothing travels very far until the livestock is ready to go to slaughter from the project or to eastern South Dakota and Iowa feed lots.

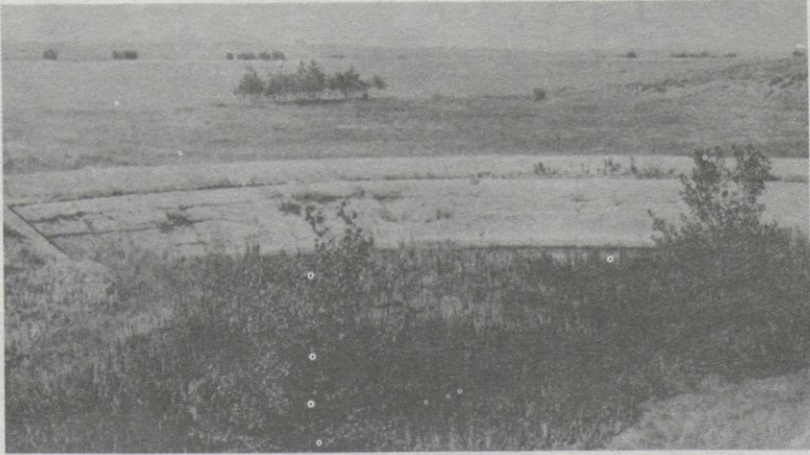
When crop production falls off on the project, the cost of livestock feed zooms, the ranchers cut back their breeding stock, production of beef, mutton and wool falls off and the economy of the area suffers, and the meat markets of the nation are denied a portion of their supplies.

Sheep in the affected area are valued at over \$14,000,000.

Cattle in the area are valued at over \$100,000,000.

Thus, a 57,000 acre irrigation project plays a vital part in a livestock industry worth over \$100,000,000. And the effectiveness of the irrigation project depends on a 68-year old dam that right now needs a \$3,500,000 face lifting.

WHAT'S THE PROBLEM?



Orman Spillway, overgrown with grass and trees, cannot be used.

New Spillway Needed

Bureau of Reclamation Engineers say the present spillway and its outlet channel have deteriorated to the point where it would be more economical to construct a new spillway at another point in the dam.

Capacity of the reservoir is 185,170 Acre Feet. However, because the spillway has reached the point where it can no longer be used, water storage is restricted to 160,300 acre feet. That's 24,870 acre feet of storage loss. In a dry year, 24,870 acre feet of water for a 57,000 acre irrigation project can make the difference between a productive year and economic disaster.

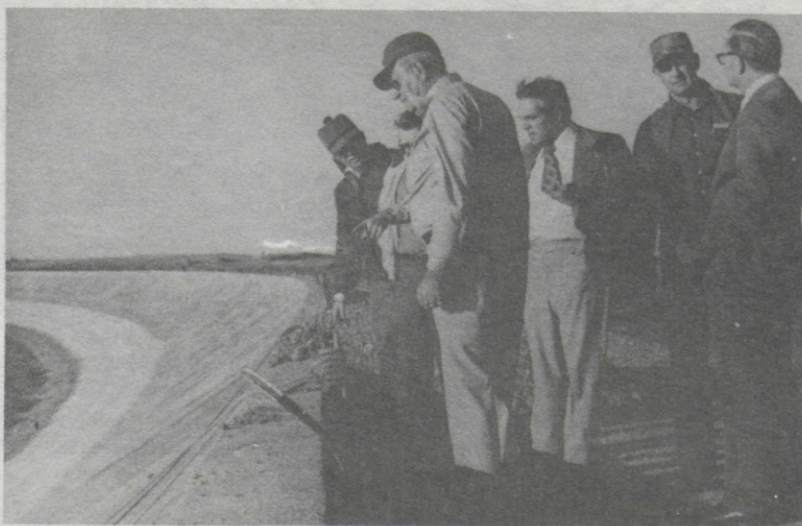
Bills Introduced

To fund the needed repairs, South Dakota's congressional delegation has introduced bills appropriating \$3,500,000 for a new spillway and repair of the dam.

HR10410

S2403

WHAT'S THE PROBLEM?



Portions of dam face were ripped out in 1973. Rep. James Abdnor, center, made a personal inspection, along with Belle Fourche Irrigation District officials.

Dam Face Needs New Rip-Rapping

The face of the 68-year old dam needs repair. The mile-long face is rip-rapped with flat concrete blocks. When strong winds hit the area and whip the water into waves, the powerful waves dig away at the area between the blocks until the support for the block is weakened and the huge block is dislodged. Then emergency efforts are necessary to prevent the water from gouging out the earth and chewing a hole thru the dam.

* * * * *

Owl Creek feeds into the north end of the Belle Fourche reservoir. The creek drains 170 square miles and if a heavy rain should occur, a large amount of water could pour into the reservoir. Since the spillway cannot be used to handle such an emergency, engineers say 24,870 acre feet of reserve must be maintained. Thus a large amount of water is lost to the irrigation project.

(Belle Fourche River Drainage Area 4,310 Square Miles.)



Long Neglected - - But Important

Recreation

When a dam is built today, adequate provision is made in both repayment considerations and planning for recreational services of the project. This was not the case with the Belle Fourche project and recreational development has been something of a step-child.

In recent years, boating enthusiasts in the area have discovered that the 52 miles of shoreline of the Belle Fourche reservoir and the 13 square miles of water area offer unusual boating and fishing opportunities.

Access was difficult for the boaters until a few years ago when thru state and federal funds a boat ramp was constructed at one point on the lake and a parking and picnic area developed. The lake, at one time an ideal place for wall-eyed pike, was subsequently taken over by rough fish. These were then thinned out and the waters are now stocked annually by the Game, Fish and Parks Department.

Efforts are under way by Black Hills area sportsmen's organizations to work out an effective program for the development of recreational facilities in cooperation with state and federal organizations.

Here again, the 24,870 acre feet of water which cannot be put in the reservoir can play an important part in the adequacy of recreational activity.



MONEY MATTERS

Original Cost - \$4,230,000

Paid Back to Date by Water Users - \$2,197,000

Still to be Paid - \$2,033,000

Cost to Water Users

Class 1 Land - \$5.55 per acre per year

Class 2 Land - \$5.05 per acre per year

Class 3 Land - \$3.70 per acre per year

Class 4 Land - \$3.38 per acre per year

Value of Project Production Annually

Estimated in Excess of \$3,000,000

(About Equal to Original Cost of Project)

Belle Fourche Irrigation District

Office at Newell, S. D. 57760

Telephone (605)-456-2791

Project Manager - Harold Skjoldal

Directors:

William Keiry, Nisland, President

Robert Donalson Jr., Newell, Vice President

Byron Schipke, Newell, Assessor

Harvey Knuteson, Newell

Daryld Williamson, Vale

Clarence Foos, Nisland

Earl Capp, Nisland

Sometimes . . . It Hardly Rains

That's When 24,870 Acre Feet of Water Becomes Precious

PRECIPITATION FIGURES

1931-40	1950-59	1960-69	1970-73
1931 — 7.77*	1950 — 11.31*	1960 — 9.91*	1970 — 21.48
1932 — 15.31	1951 — 14.57	1961 — 10.28*	1971 — 20.35
1933 — 12.94*	1952 — 9.91*	1962 — 20.38	1972 — 19.73
1934 — 8.46*	1953 — 15.28	1963 — 17.75	1973 — 18.74
1935 — 10.72*	1954 — 8.77*	1964 — 14.16	
1936 — 8.96*	1955 — 12.48*	1965 — 15.61	
1937 — 16.31	1956 — 10.19*	1966 — 16.92	
1938 — 11.90*	1957 — 16.68	1967 — 14.17	
1939 — 9.35*	1958 — 12.75*	1968 — 15.60	
1940 — 13.14*	1959 — 9.50*	1969 — 14.48	

(*) Below Normal

Normal Precipitation - 13.39

What a Difference a Little Water Makes!

1961 — TOTAL PRECIPITATION 10.28 inches
42,268 Acre Feet of Available Water at Start of Season
Water Allotment Three Acre Inches

PRODUCTION 1961

Hay — 33,367 Tons	Oats — 11,159 Bushels
Sugar Beets — 28,230 Tons	Barley — 13,275 Bushels
Corn — 35,891 Bushels	

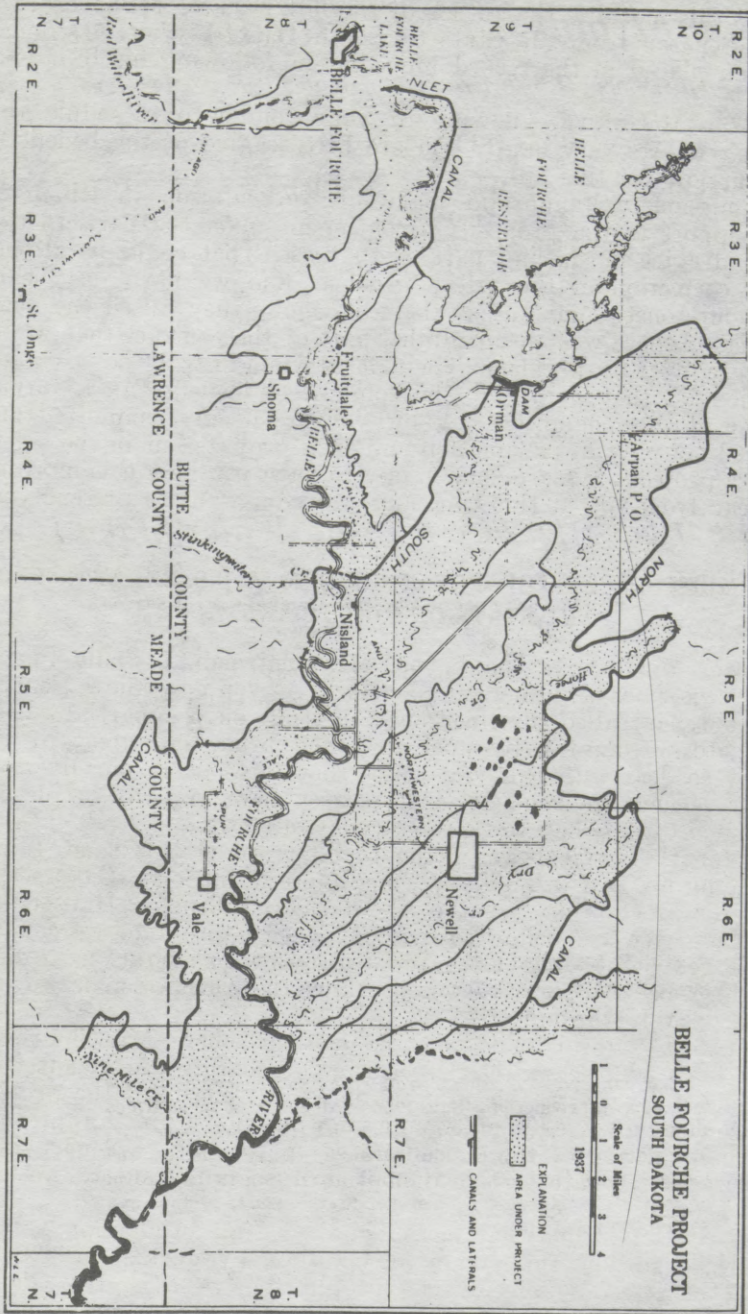
Average Crop Value Per Irrigated Acre — \$35.61

1964 — TOTAL PRECIPITATION 14.16 inches
Peak Storage 185,170 Acre Feet

PRODUCTION 1964

Hay — 46,569 Tons	Oats — 186,707 Bushels
Sugar Beets — 39,461 Tons	Barley — 54,676 Bushels
Corn — 254,104 Bushels	

That can give you some idea of what a full reservoir means in terms of production. Note 1964 produced over seven times as much corn, over 17 times as much barley, 30% more hay. Translate those figures into terms of today's prices and today's need for food. Relate that production to the amount of water in storage. Then relate the entire picture to a \$3,500,000 repair bill.



Senator HATFIELD. Thank you. We are very privileged to have with us this morning the author of the bill, Senator McGovern, the senior Senator from the State of South Dakota, whose testimony has been placed in the record immediately following his bill. (See p. 25.)

Senator McGovern, knowing of your conflict of schedule this morning we are very happy you are here to give us the benefit of your support for this bill.

Commissioner Stamm did make his presentation in which he gave support to the proposition contingent upon the participation by the district in sharing part of the cost. That could be attendant to correction of the safety problem, and we have just heard from your constituents and in their testimony they raised the question that if there was an unfulfilled part of the contract that would take care of this problem. Their legal counsel will be giving a rendition on that point for the committee's benefit. As a former member of this committee I know you are deeply committed and involved not only in reclamation and such projects but in the safety of these projects. We are very happy to have you here this morning and hear from you at this time any way you want to present your case.

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

Senator MCGOVERN. Thank you, Mr. Chairman. I would like to apologize for not being here at 10 o'clock. As you may know, Senator Mansfield has called an emergency meeting on a bipartisan basis of Senators from the livestock and hog producing areas of the country to deal with this real crises that faces us in our livestock industry. There are some 40 Senators over there, you will be pleased to know; I did my best to represent your interests.

Senator HATFIELD. I was going to interrupt at this time, I had been doing my best to represent your interests in South Dakota.

Senator MCGOVERN. Senator Abourezk and Senator Hansen are both there. We are trying to come up with a program we can all stand together on without regard to partisan considerations to deal with this very real crisis that is breaking the backs of many of our livestock and hog producers.

I am very grateful for these three gentlemen here, Mr. Chairman, as you have doubtless already seen they are highly conversant with the scene and very capable in speaking to the merits of the project. The problems involved in answering your questions. And I appreciate the prompt action of the subcommittee on the bill, S. 2403, which authorizes the repair of this dam that it so important to western South Dakota.

This project is one that has an annual crop production valued at some \$3 million. It serves a \$114 million livestock industry and affects the lives of some 20,000 people. The fact is, that dam's condition today is so dangerously weakened it is just not going to last without some immediate attention. On at least ten occasions it has sustained damage of one kind or another, and periodically

throughout the years the cement blocs in the abutment have been dislodged by waves action, so we are faced with a very serious problem.

We don't want to have another dam go out in South Dakota with subsequent loss of life and property. The spillway is too small. It has been severely damaged on at least three occasions, 1932, 1943, and again last year, and because of problems above the reservoir it must operate at less than capacity.

Orman Dam is vitally important to the people in the economy of the Northern Black Hills of South Dakota.

I am not going to go into all of the details but I would like to have my prepared statement included in the record.

Let me just say it is indispensable to the community and to the area. The guaranteed water flow it provides for irrigation attracts capital and confidence in a way that dryland farming cannot match. It provides a haven for outdoorsmen who seek sporting and recreational enjoyment.

This is an area of marginal rainfall and we desperately need the water advantages of this project.

I know the residents of the area fully agree that the Secretary of the Interior when he made this observation, failure of the dam would cause a major disaster in the area downstream, including possible loss of life. He went on to say, located within the downstream flood zone are the towns of Nisland, S. Dak., two Indian villages, a number of farmsteads and ranches, and those communities would be either partially or completely inundated.

Among all of the parties I have talked to who are concerned with the future of Orman Dam, there is common agreement the dam is in urgent need of repair and the delay in accomplishing those repairs seems to hinge solely on the issue of payment. That seems to be the only issue.

The bill before us would authorize the Secretary of the Interior to construct, operate and maintain a larger adequate spillway and to improve the upstream slope location on Belle Fourche Reservoir.

The total cost would amount to \$3.4 million.

Mr. Chairman, when you consider that during the past week we have been voting on military weapons systems, any one of which would cost hundreds of times the amount in this bill, and those things are supposedly done in the security interests of the country. I don't see how we could really challenge a little figure of this kind, \$3 million, that is designed to protect the safety and well being and economy of our own people.

In House testimony, the Interior Department took the position the cost of this project should be shared with the water users to the extent their allocated costs and their ability to repay. The ability of the Belle Fourche project to pay is threatened by two factors.

First of all, the obligations they already have on earlier work on the dam that cost them some \$38,000 a year every year until the year 2037 when the adjusted construction charge obligation of nearly \$3 million is finally retired.

In addition, emergency work on South Canal will cost another \$20,000 a year after 5 years. Mr. Chairman, these are a small number of people who are asked to carry that load.

The other factor is the one that kept Senator Abourezk and I away from the opening part of this hearing and that is we have a serious economic problem in our State, as they do in other livestock producing areas that are working a very severe hardship on farmers and ranchers alike. Their incomes are subject to extreme inflationary pressures and to a soft market for their own products. I think we are going to be lucky to survive out there in that part of the livestock producing areas, with or without this project, just to get through this current economic crisis that is now on us.

It is clear to me the people of the area are already carrying a heavy burden of payment in connection with previous work done on the dam. It is also clear the uncertain market picture makes other out-of-pocket investment a step which mortgages the future of the area on a project the Interior Department is better able to assume.

Mr. Chairman, let me express my appreciation that Mr. Keiry, Mr. Williams and Mr. Skjoldal are here and prepared to testify on this project and also to my colleague, Senator Abourezk, who is a member of this committee who is vitally concerned with this project.

Senator ABOUREZK. I want to compliment my senior colleague from South Dakota for his excellent statement and for the leadership he has given on this piece of legislation. Because I am a member of the committee, I intend to, once he has done this initial work, to pursue as much as I can as the junior Senator from South Dakota.

I also want to say I agree totally with what you have said, Senator McGovern, about where our priorities do lie. We have handed out untold sums of money out of the Federal Treasury to countries overseas for the most dubious reasons, and that is in all parts of the world. We have yet to ask for any kind of cost sharing program from those people. It is money handed out not for agricultural purposes and the production of something, mostly for the destruction of something.

I don't see where, when we talk about priorities in this nation, where the American farmer and American agriculture in general is going to have to take a back seat or sit in the second row to some foreign dictatorship or some foreign country in which we have very little interest so far as spending American tax money is concerned.

That meeting we just attended pointed up very strongly I thought, that if the continual slide in agricultural prices and the destruction of the market system in livestock which we are seeing take place before our eyes, I sincerely believe we are going to see a major part of our agricultural industry go under as a result of what has been happening with the market system and with the need for improvement in irrigation projects such as the one you gentlemen are here for. The American consumer is going to find they are in extreme and serious trouble as a result of the shortages that will be created

by virtue of the lack of irrigation facilities where they are needed and wanted by agricultural people, such as you here, and by virtue of the destruction of the cattle and livestock industry that we are seeing now.

I want to express my gratitude to Senator Hatfield for chairing the hearings for me while we were attending the livestock meeting over in the Senate chamber, near the Senate chamber, this morning.

Well, I am told the testimony has already been finished. Then I would just like to thank all of you.

Senator MCGOVERN. Mr. Chairman, I would like to make one additional observation if I could. I, unfortunately, could not be here to hear Commissioner Stamm's testimony, but I understand the Bureau is asking for authority to determine what would be a fair share for the district to pay in this project cost, and I find that entirely unacceptable.

That leaves us without any certainty at all as to what the eventual cost might be. I know the Commissioner will try to be fair as he sees it. But this is not an expensive project. It is one that is urgently needed. It is one that not only affects the economy of our people but their very lives and safety. It would seem to me the kind of thing where public funds ought to cover the cost.

This is an investment in the future of the country. It is going to benefit generations to come.

I would hope the committee would recognize that this kind of open end authority to let the Bureaus decide what they think ought to be the cost assessed on the users is entirely unacceptable to us.

Senator ABOUREZK. I personally agree with you, Senator. I want to make one other observation before this portion of the hearing is adjourned.

We have seen the last several years a series of promises of money for domestic purposes, through irrigation, we have gone through that in South Dakota, for water and sewer projects nationwide, for a number of domestic items that I believe—and many people share that belief—are badly needed for the benefit of the people of the United States.

I have not yet seen once that any money has been impounded by any Administration for a foreign project, for foreign aid of any kind, or for military aid to some other country. I want to say that for the record. I think it is very pertinent to our discussion here today.

Without objection I would like to insert in the record statements of Marvin Harshman, president of the Wyoming Recreation Commission, Paul H. Webstedt, director of the Wyoming Recreation Commission, and William G. Lucas, superintendent and chief engineer, Wyoming Highway Department.

PREPARED STATEMENT OF MARVIN HARSHMAN, PRESIDENT, WYOMING RECREATION COMMISSION

To the members of the committee, I am Marvin Harshman, President of the Wyoming Recreation Commission, and we are charged with the responsibility of statewide recreation areas and facilities as well as all of the state parks.

The Glendo State Park has been developed on Bureau of Reclamation land and through a Memorandum of Understanding we lease this area for 50 years for public outdoor recreation which includes such facilities as roads, trails, campgrounds, sanitation facilities, and a concession area. This park has heavy state and out-of-state usage especially water oriented activities and good trout fishing. Our planning and development program has supplied a good network of gravel and black top roads to meet these demands; however, on the road near the dam we have a problem caused by underground water seepage from the adjacent mountains. This problem was not apparent in the original construction project when this reservoir was built. We have been watching this hazardous problem develop over the past few years and had to make a decision to resolve it. We believe the Bureau of Reclamation should be given the authority to proceed to carry out this project on their land. We have researched this problem with the aid of engineers and geologists from the Bureau of Reclamation and the Wyoming Highway Department. Their research and investigation, by competent staffs have supplied us with the information to resolve this problem.

The data and specifications have been reviewed by my Commission Members and it is our request to your Committee for financial assistance to resolve this problem.

Our recommendation would be to authorize and provide financial assistance to the Bureau of Reclamation to proceed to resolve this road problem.

The staff that my Commission employs develop, operate and maintain all facilities in our state parks, and Glendo State Park is one of our highest use areas in the Southeast part of our state.

We urge that S. 3223 be given favorable consideration.

PREPARED STATEMENT OF PAUL H. WESTEDT, DIRECTOR, WYOMING RECREATION COMMISSION

To the members of the committee, I, Paul H. Westedt, am Director of the Wyoming Recreation Commission and as such, administer the state parks in the State of Wyoming.

Glendo reservoir is a Bureau of Reclamation facility and the Bureau land surrounding this reservoir is administered by the Wyoming Recreation Commission through a 50-year Memorandum of Understanding. This cooperative arrangement has been very satisfactory and the Wyoming Recreation Commission has developed this surrounding Bureau land into a state park for public outdoor recreation. This Commission develops the facilities and provides all operations and maintenance in these state park areas.

Specifically, I am commenting on S. 3223, relating to the Glendo Dam Road problem. This statement is made in the hopes that a most serious road rehabilitation problem can be resolved so that a safe two lane highway can be used by the public.

This road problem resulted from an underground water seepage which was not apparent in the original construction phase coming from the adjacent mountain side causing the road area to slide away from the mountain. The problem has been of concern for a few years until at this point in time the basis of this problem.

The Wyoming State Highway Department engineers and geologist and the Bureau of Reclamation engineers and geologist studied the area and presented a plan that can resolve this situation. The specifications on realigning 1,190 feet of road along this mountain side has been reviewed by our Commission and they agree that the Bureau of Reclamation should have the authority and funding to resolve this problem.

In my analysis as to the responsibility of this road and its problems, I have discussed with the County Officials, State Highway Department, Bureau of Reclamation and Wyoming Recreation Commission Members and it is the consensus that the landowner, being the Bureau of Reclamation, should be the logical agency to coordinate all these phases for authority and funding to proceed and resolve a most serious and hazardous highway problem.

I would urge the Committee to consider Bill S. 3223.

PREPARED STATEMENT OF WILLIAM G. LUCAS, SUPERINTENDENT AND CHIEF
ENGINEER, WYOMING HIGHWAY DEPARTMENT

To the members of the committee, I, William G. Lucas, am Superintendent of the Wyoming Highway Department and as such have a vested interest in the highway transportation facilities in the State of Wyoming.

It has been noted that there is a cooperative agreement between the Bureau of Reclamation and the Wyoming Recreation Commission for the administration and operation of the Glendo Dam Recreation Area. This particular recreational area is a very definite asset to the citizens of Wyoming and to the tourists who visit this country each year.

The present access road into the Glendo Dam Recreational Area is continually damaged by a slide. This slide has been investigated by the Geologists on the staff of the Wyoming Highway Department and they have made recommendations which I believe, if followed, will result in a permanent repair to the road.

Presently this road serves many people and many purposes, most of which are Interstate in character. The traffic generated on this road for the maintenance of the Dam and its facilities certainly should be considered as Interstate, since the flood control and irrigation benefits cover a much larger area than the State of Wyoming. In addition, the recreational purposes are of a benefit to a much broader geographical area than encompassed by the State of Wyoming. This is pointed out only to emphasize the fact that it is felt the Federal government has a very well defined responsibility to provide financial assistance for the repair and maintenance of this particular road.

The question of whether this road should be placed upon the state highway system, and thereby becoming a responsibility of the State of Wyoming is unrealistic to contemplate for the following reasons. The State of Wyoming, as you well know, has over 50 per cent of its land area under the ownership of the Federal government. To further complicate matters, all highway funding has had little consistency in the release of Federal funds for highway purposes in recent years, particularly those funds which have been impounded and withheld from the Federal-aid system. In addition the amount of funds available for Federal Land Highway projects and the Forst Highway program have been constantly reduced to the point that their effectiveness has diminished beyond any reasonable level for safe travel of the motorist.

There have been estimates prepared on this project, the latest of which is, I believe in the neighborhood of \$284,000.00. If much more delay is encountered in the construction of this proposed project, I would recommend in view of recent inflationary trends, that this figure be revised upwards by an additional 25 per cent.

I urge your Committee to give favorable consideration to this proposed legislation, and I wish to thank you for the opportunity of presenting this testimony.

Senator ABOUREZK. Once again, I would like to thank all of you. The hearings are adjourned.

[Whereupon, at 11:25 a.m., the hearing was adjourned, subject to the call of the Chair.]