STATE WATER CONSERVATION COMMISSION Minutes of Meeting Held in Office of State Water Commission in Bismarck, North Dakota October 17, 1957

A regular meeting of the North Dakota State Water Conservation Commission was called to order on October 17, 1957, at the State Water Conservation Commission office in Bismarck, North Dakota, to consider routine business matters. The following were present:

MEMBERS OF THE STATE WATER CONSERVATION COMMISSION

Governor John E. Davis, Chairman
Earle F. Tucker, Vice Chairman, Bismarck
William W. Corwin, Member from Fargo
Oscar Lunseth, Member from Grand Forks
Milo W. Hoisveen, Secretary and Chief Engineer, State Engineer

OTHERS PRESENT AT THE MEETING

Mr. H. J. Josephson, Corps of Engineers, Riverdale Mr. J. L. Burgum, Corps of Engineers, Riverdale

The meeting was called to order at 10:00 o'clock A.M. by Governor Davis with Commissioners Tucker, Corwin, Lunseth and Secretary Hoisveen present.

It was moved by Commissioner Lunseth and seconded by Commissioner Corwin that the Minutes of the September 9th meeting be approved, and that the reading thereof be dispensed with. All members voted aye and said motion carried.

It was moved by Commissioner Tucker and seconded by Commissioner Lunseth that the Financial Statements for August and September be approved and filed in the office of the State Water Conservation Commission. All members voted are and said motion carried.

Secretary Hoisveen stated that Governor Davis had written President Eisenhower recommending the appointment of Major General John S. Seybold as Federal representative on the Little Missouri River Compact. Letters were also written to the Governors of the affected States, Governor Simpson of Wyoming, Governor Aronson of Montana and Governor Foss of South Dakota relative to said recommendation. Letters supporting said recommendation were received from Governor Foss and Governor Aronson. A letter from General Seybold was also received stating that he would be happy to accept said appointment if made.

Commissioner Corwin reported on a Water Right Committee meeting which was held in Fargo on September 25, 1957. Those present were Murray Baldwin, George Anderson, Robert N. Huey, Fred Fredrickson, Iver Acker, Commissioner Corwin and Secretary Hoisveen. The purpose of the meeting was to discuss Fargo's rights to water in the Red River in view of the fact that the City of Moorhead has stated that it may be necessary to draw water from the Red River for municipal purposes. The Committee wished to insure Fargo's right to water for further municipal and industrial purposes. Commissioner Corwin recommended that the Tri-State Compact, which was started in 1937, be reactivated. Secretary Hoisveen read a letter which he had

written to Mr. Joseph Young, Superintendent of the Public Service Department of Moorhead, asking him to contact the proper state agency to revive the compact. It was felt that the request would bear more influence if it came from Moorhead rather than North Dakota. South Dakota has already indicated their desire to cooperate. It was generally agreed among the Commissioners that if said compact could be revived, the water problems of the affected states could be worked out much more amicably.

Mr. J. L. Burgum and Mr. Josephson of the Corps of Engineers, Riverdale, entered the meeting to discuss the Lewis and Clark Project. As previously stated in Commission meetings, the government purchased this land and the people in the Lewis and Clark area are leasing the same and desire to continue the irrigation project. The Corps has assumed the responsibility of constructing Highway #85 at an elevation 10 feet higher than the present elevation which will adequately protect Highway #85. In doing this and removing the siphons that served the lower part of the project, irrigation would be denied that area. Senator Young was successful in obtaining an allocation of \$40,000 of reimbursable money to protect the siphons and thus assure the continuance of the irrigation project. In working with the Corps, it is now indicated that the figure can be reduced to \$19,500 and possibly less. The Corps of Engineers has agreed to loan half of this amount and the people on the project desire the Commission to grant them a loan on the remaining amount. Mr. Burgum stated that the government would be paying the district an additional \$18,000 for property belonging to the district. The Commission members indicated a willingness to cooperate with the district but felt that when said agreement is entered into, that it be on sound business principles and that the \$18,000 be held in escrow as an indication of their good faith.

The Fort Lincoln sewage problem was discussed by Commission members. Secretary Hoisveen read a letter from Mr. Van Heuvelen of the Health Department to Mr. Glen Hopkins of the Public Health Service in Kansas City, urging that action be taken to correct this matter. Secretary Hoisveen also wrote to Colonel Hammond of the Corps of Engineers, Omaha District, stating that he had been informed that Fort Lincoln was now under his jurisdiction and requested that he expedite this matter. It was moved by Commissioner Tucker and seconded by Commissioner Lunseth that we reaffirm the resolution passed by the Commission at their August 1956 meeting urging the Army to abate the condition caused by the discharge of sewage from Fort Lincoln into Apple Creek through the use of some modern suitable system of sewage treatment, and that the same be forwarded to the proper parties.

Secretary Hoisveen read a letter received from Mr. A. W. Wentz, Commissioner of the State Highway Department, dated October 8th, in which Mr. Wentz stated that the Highway Department was constructing a portion of the Interstate route between Jamestown and Valley City. During this construction drainage problems were present on several locations. Mr. Wentz requested the Commission to make an investigation of these locations and advise him accordingly. It was moved by Commissioner Lunseth and seconded by Commissioner Tucker that the interests of the people should be considered and that an inspection be made. The Commission expressed a desire that the rights of the property owners be adequately protected from adverse drainage. All members voted aye and said motion carried.

Secretary Hoisveen stated that he had received a letter from Mr. Arlon G. Hazen, Director of the Agricultural Experiment Station, Fargo, requesting assistance in

drilling test wells on a proposed irrigation experiment farm. The college has now designated two possible sites for an irrigation farm. One located at Riverdale and the other near Carrington. The approximate cost of said survey and drilling is \$3,000.00. It was moved by Commissioner Lunseth and seconded by Commissioner Corwin that the State Water Conservation Commission contribute 50% on the drilling of the test wells. All members voted aye and said motion carried.

A request from Mr. C. T. Jacobson of Max, North Dakota, for a groundwater survey was read by Secretary Hoisveen. Commissioner Corwin moved that we participate with said survey on the usual basis - which is 25% by the City of Max, 25% by the State Water Conservation Commission and 50% by the U. S. Geological Survey. Commissioner Lunseth seconded said motion. All members voted aye and said motion carried.

Secretary Hoisveen stated that the aquifer in the Ellendale groundwater survey is proving to be a very good one. The City of Ellendale has now requested that the State Water Commission conduct a dam foundation survey as they feel a surface dam would insure them of a more adequate water supply as the present source is confined to a narrow groundwater aquifer in a stream bed. Commissioner Lunseth moved that such survey be performed, which motion was seconded by Commissioner Corwin. All members voted aye and said motion carried.

The U.S.G.S. drilling report for August and September, as prepared by Mr. J. W. Brookhart, District Geologist, was made available to all Commission members. Copies of said reports are attached hereto and referred to as Appendix A and Appendix B.

Secretary Hoiveen read a letter from Mr. John Odegard, Chairman of the Traill County Drain Board, pertaining to Hanson Drain #18 and requesting participation. The estimated cost of said project is \$3495.45. Commissioner Lunseth moved that the Commission pay 40% of the cost of said work, which motion was seconded by Commissioner Corwin. All members voted aye and said motion carried.

An erosion problem on Drain #13 in Pembina County was reported to the Commission. In an investigation report prepared by Mr. Marvin Sheldon, Office Engineer, it was stated that the biggest concern of the drain board at present is the prohibitive cost of building a drop structure and bridge at the present location. The board voted 2 to 1 opposing winter construction and preferred that the construction take place in the summer. It was moved by Commissioner Lunseth and seconded by Commissioner Corwin that a survey and estimate of said Drain #13 be prepared. All members voted aye and said motion carried.

Secretary Hoisveen stated that Mr. Manfred Ohnstad of Fargo was in the office to discuss Cass County drain problems. Considerable erosion is taking place and repair is necessary on Drain #39. The estimated cost of said project is \$13,744.50. It was moved by Commissioner Corwin and seconded by Commissioner Lunseth that an inspection be had on said drain. All members voted aye and said motion carried. Secretary Hoisveen further reported that he had received a long distance telephone call from Mr. Ohnstad relative to Drain #13. Four miles of clean out work is necessary on this drain and the estimated cost is \$11,184. Commissioner Lunseth

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moved that said work be approved contingent upon inspection and the Commission pay 40% of the cost of the same, which motion was seconded by Commissioner Corwin. All members voted age and said motion carried.

A letter from Mr. Richard Oium, Chairman of the Eaton Flood Irrigation District, dated October 6th, was read to the Commission members. They have requested participation in the construction of Headgate #4 and #5. The cost of the gate construction has been estimated to be \$3800 for #5 and \$2900 for #4. Said participation has been approved by Commissioner Christensen, who has been in contact with this group in the field. It was moved by Commissioner Corwin and seconded by Commissioner Lunseth that the State Water Commission pay 40% of the cost of said project. All members voted aye and said motion carried.

A letter from Commissioner Dexheimer of the Bureau of Reclamation pertaining to the exception regarding the acreage limitation of the Garrison Diversion Unit was read to the Commission members. Governor Davis replied to said letter requesting that his approval of the report be recorded with the land limitation, and supported his views relative thereto.

Commissioner Lunseth reported on the dam inspection tour conducted with the Corps of Engineers. Colonel Brown, George Lyons and Robert Calton represented the Corps of Engineers. The group appeared most receptive to ideas obtained in the field and showed much interest in the local sentiments displayed by the residents in the various areas. An inspection was made of Pembilier Dam near Walhalla and the Homme Dam near Park River. A luncheon was held in Langdon at which Senator Young was the featured speaker. A public meeting was held in the Masonic Hall immediately after the luncheon. Commissioner Lunseth conducted the meeting. Representatives of the Corps and the Water Commission discussed the proposed project. One significant statement was made by Colonel Brown at a later meeting held in Grand Forks in which he stated that he thought the Pembilier Dam would be built. It was believed the tour was a good one as it aided the representatives of the Corps in viewing the various problems and permitted them to discuss these problems with the local residents.

The meeting adjourned at 12:00 P.M. and reconvened at 1:30 P.M.

Mr. Fredrickson reported on the progress of the Congressional Hearing to be held at Devils Lake on October 30th regarding the justification of the Garrison Diversion Unit. Much time and effort has been put in the arrangements and preparations necessary for the hearing. Mr. Fredrickson was especially pleased with the enthusiasm and interest displayed by farmers in sending in statements to be used at said hearing. Approximately 50 statements will be presented at the time of the hearing. A tentative itinerary was presented to each Commissioner for his information. A letter from Senator Young dated October 14th, including an exchange of letters with himself and Congressman Wayne Aspinall, was read to the Commission. Senator Young indicated his high regard for Congressman Aspinall and stated that he was one of the best authorities on reclamation matters in Congress.

Commissioner Corwin reported on the Baldhill Dam tour and meeting which was a continuation of the Pembilier Dam tour. The group had lunch in Valley City with the County Commissioners and County Park Board and expressed interest in getting parks, recreational areas and access roads on the reservoir.

A letter from Mr. A. U. Anderson of Crosby commending the State Water Commission crew for work being done on Long Creek Dam was read to the Commission members. The City of Crosby is most appreciative of the work done.

Mr. Ralph R. Johnson, Secretary of the Noonan Park Board, also wrote to Secretary Hoisveen thanking him for the cooperation and service received regarding the repair of the Noonan Dam. Mr. Johnson stated that a very fine job had been done.

Secretary Hoisveen stated that Mr. Earle D. Cypert visited the office relative to the Olson Dam. Secretary Hoisveen informed Mr. Cypert that a dam 14' in heighth could be constructed with the present easements and should the objecting party be later satisfied, the spillway could be raised if easements were made available for the additional area to be inundated. This project is frequently submitted to the Commission on the basis of "What is the Commission going to do about it?" The local proponents are required to obtain the easements and make a contribution in money or labor to the project. As yet they have not been able to deliver in any of the above features.

Commissioner Tucker read a resolution received from the Buford-Trenton Irrigation District requesting the Corps of Engineers to proceed with construction of the bank protection to certain lands in the district. Secretary Hoisveen stated that a copy of said resolution was forwarded to the Commission in view of the fact that the State Water Conservation Commission was instrumental in getting the money necessary to do the job.

A resolution from the Traill County Water Conservation and Flood Control District requesting permission to install flash boards in the dam constructed on the Goose River was read to Commission members. The Traill County District also contemplates making a cash contribution to the project. Commissioner Lunseth moved that the Water Conservation and Flood Control District be permitted to make money available for this purpose and express thanks to them for entering in water projects. All members voted aye and said motion carried.

Secretary Hoisveen reported on the Cartwright test well and said that tests to date indicated that a supply of 1,100 gallons per minute could be obtained from the test well. The Grimshaw Drilling Company of Sioux Falls, South Dakota, was hired to drill the well. It has been proposed that several such wells be located in the project area to furnish water for potential irrigators. Pumps and wells would be less costly than locating a pumping station and intake on the Yellowstone River and, consequently, much interest is being shown by potential irrigators. The well was drilled to bedrock at a depth of 74 feet and an 18 inch casing was installed for the pumping tests. A 38' section of perforated pipe was installed in the water bearing aquifer. See report attached hereto as Appendix C. It was moved by Commissioner Lunseth and seconded by Commissioner Tucker that the Commission continue with exploratory survey work on the Cartwright Irrigation Project. All members voted aye and said motion carried.

A letter from Governor Foss of South Dakota to Fred A. Seaton, Secretary of the Interior, expressing his support of the Garrison Diversion Project was made available to the Commission members. A similar letter endorsing the Garrison Diversion Project from Mr. Rocco C. Siciliano, Assistant Secretary of Labor, was also read.

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Secretary Hoisveen stated that Mr. Robert Timm, Assistant State Engineer, had just returned from a work group meeting of the MBIAC in Omaha. Mr. Timm stated that he had held a conversation with Mr. Hershey of the Water Resources Board of Iowa who had discussed with Governor Loveless of Iowa approval of the Garrison Diversion Unit Report. Governor Loveless seemed concerned over the loss of water for irrigation which might otherwise be used for navigation purposes.

Secretary Hoisveen reported on a letter received from Mr. James R. Smith, Vice President of the Mississippi Valley Association, Omaha. Mr. Smith stated that he would be making an appearance in favor of the Garrison Diversion Unit.

The following water rights were considered:

#698. Lester Friese of Leonard, North Dakota, requests the right to divert 758.8 acre feet of water from the Sheyenne River to irrigate 379.4 acres. It was moved by Commissioner Tucker and seconded by Commissioner Corwin that he be granted the right to divert 330.6 acre feet of water to irrigate 264.5 acres and that restrictions on water use be invoked when storage water from Lake Ashtabula is being used. Motion carried.

#739. Groth Brothers of Inkster, North Dakota, request the right to divert 365 acre feet of water from groundwater sources to irrigate 305 acres. Governor Davis recommended that action on this water right be deferred pending further investigation.

#742. City of Finley has requested the right to divert 330 acre feet of water from groundwater sources for municipal use. It was moved by Commissioner Corwin and seconded by Commissioner Lunseth that said amount be granted. Motion carried.

#743. Edgar I. Olson, Harwood, North Dakota, requests the right to divert 198 acre feet of water from the Sheyenne River to irrigate 99.0 acres. It was moved by Commissioner Corwin and seconded by Commissioner Tucker that Mr. Olsen be granted the right to divert 124 acre feet of water to irrigate 99.0 acres of land and that restrictions on water use may be invoked when storage water from Lake Ashtabula is being used. Motion carried.

#744. Mr. H. A. Nelson of Fargo, has requested the right to divert 620 acre feet of water from the Red River of the North to irrigate 309.9 acres of land. It was moved by Commissioner Tucker and seconded by Commissioner Corwin that he be granted the right to divert 387 acre feet of water to irrigate 309.9 acres of land, subject to municipal needs of downstream owners. Motion carried.

Adjournment.

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Respectfully submitted,

Attest:

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UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY University Station Grand Forks, North Dakota September 10, 1957

Mr. Milo Hoisveen, Secretary
State Water Conservation Commission
Capitol Bldg.
Bismarck, N. Dak.

Dear Mr. Hoisveen:

The following is a brief report of our activities for August 1957.

The entire month was spent in test drilling in Traill County and the eastern part of Steele County.

Seventeen holes were drilled. They ranged in depth from 22 to 598 feet and the total footage was 3,332 feet.

Well inventory and geologic reconnaissance continued in Traill County and in a 400-square mile area in Emmons County.

Very truly yours,

Joseph W. Brookhart District Geologist

cc: Chief, Ground Water Branch, Wash., D. C., Code: 4050 0001

W. M. Laird

G. H. Taylor

S. W. Lohman

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UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY University Station Grand Forks, North Dakota October 11, 1957

Mr. Milo Hoisveen, Secretary State Water Conservation Commission Capitol Bldg. Bismarck, N. Dak.

Dear Mr. Hoisveen:

The following is a brief report of our activities for September 1957.

During the month 16 test holes were drilled; three in Traill County, two in McKenzie County, and eleven in Emmons County. The test holes varied in depth from 83 to 210 feet and the total footage for the month was 2,253 feet.

Well inventory in the Strasburg-Linton area of Ramons County was completed and the well inventory of 60% of Traill County was completed.

Very truly yours,

Joseph W. Brookhart District Geologist

cc: Chief, Ground Water Branch, Wash., D. C. Code: 4050 0001

G. H. Taylor W. M. Laird S. W. Lohman

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TO: Members of State Water Conservation Commission FROM: Milo W. Hoisveen, Chief Engineer - Secretary SUBJECT: Cartwright Test Well Operations

On Priday, October 11, 1957, the Grimshaw Drilling Company of Sioux Falls, South Dakota, commenced drilling operations for an irrigation test well on the William Lassee land located on the Cartwright Irrigation Project approximately 4 miles south of Cartwright. The drilling of a test well received favorable consideration by the members of the State Water Conservation Commission at a meeting held in August, 1957.

The crew operating for the Grimshaw Company were efficient operators and sincere in their desire to obtain a good irrigation well. This being a pilot well for the development of a greater area which could result in future business for this firm.

A 30" hole was drilled to a point of contact with gravel at approximately 38' below the surface of the ground. The well was then encased with an 18" 12 gage galvanized casing. Approximately 30' of perforated casing was placed in the well. Operations were resumed through the use of a churn type bail. The materials obtained from the bailing were removed through the casing and the casing was then permitted to follow the drilling operations downward. The gravel materials removed from the well were generally from 1/2" to 3" in size. A considerable quantity of fine material was present in the gravel. This caused some concern in view of the ability of fine material to retard the flow of water to the well.

As we approached the bedrock zone, drilling operations became more difficult. Bedrock was encountered at approximately 74° below the surface. The testing of the well was started Sunday morning at approximately 7:30 A.M. It was continued for a 12 hour period throughout Sunday. The pump was operated at a slow speed for several hours to permit the well to develop. Sand was permitted to flow at a slower rate of speed in this manner and the turbine pump employed in pumping the well removed it at a satisfactory rate of speed. As the quantity of sand diminished the pump rotation was increased and the flow of water was greatly accelerated.

A local farm tractor was used in developing the well. It had a limited speed but the maximum attainable gave us a flow which approximated 980 gallons per minute. This was accomplished with approximately 19° drawdown from the static water level. Thirteen feet of water remained in the well to be pumped. It is quite possible that the well should attain a sustained discharge of 1300 gallons or more per minute. This is based on the fact that 3° increment between drawdown of 57 and 60 feet yielded 125 gallons per minute. The pumping of an additional 6° of drawdown to a point 66° below the surface should easily yield 1200 gallons per minute.

An observation well located 75' from the test well was checked from time to time. It showed a drawdown of 18 inches with the pump operating at a 500 gallons per minute capacity. The change from discharge of 500 gallons per minute to 950 gallons per minute reflect an additional 3" drop in the observation well. This would indicate that the drawdown cone was taking place near the test well. The water recovery in the test well was almost immediate. The original drawdown started from a water surface elevation in the well 41' below the surface. A shutdown after 12 straight hours of pumping showed a recovery from 60' to 44' in a matter of a minute. The following minute brought about anoter 1/2' gain and at 6:29 the water was back to 42.0. At 6:36 it was at 41.7.

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Twelve hours after the pumping operations had ceased the water level had returned to normal in both the test and observation wells.

Some possibility of inferior water quality may exist. Samples have been obtained and are being analyzed. Care will be taken to check and recheck water samples.



GARRISON DIVERSION UNIT NORTH DAKOTA, SOUTH DAKOTA

HEARING

before the

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

of the

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS HOUSE OF REPRESENTATIVES

Eighty-fifth Congress, First Session

on

H. R. 7068

A Bill to Make Certain Provisions in Connection With The Construction of The Garrison Diversion Unit, Missouri River Basin Project, by the Secretary of the Interior.

DEVILS LAKE, N. DAK. October 30, 1957

THE GARRISON DIVERSION UNIT

The diversion of water from the Missouri River into central and eastern North Dakota has been envisioned by many North Dakotans for almost seventy years. Many plans have been proposed to accomplish this feat but no matter what the method, all plans had one objective — to develop the potential benefits available from the Missouri River water through irrigation, lake restoration, improved municipal and industrial water supplies and many other uses.

The dreams of these many pioneers in water resource development in North Dakota were brought a step nearer reality when the Congress of the United States authorized the Missouri-Souris diversion plan in the Flood Control Act of 1944. This plan proposed that water be diverted from the Missouri River below Fort Peck Dam in Montana and delivered through an extensive network of canals to irrigate over 1,000,000 acres of land in northwestern, central and eastern North Dakota. Investigations of the original Missouri-Souris diversion plan indicated that a large block of land in northwestern North Dakota was unsuitable for irrigation because of poor drainage characteristics of the soil. In the course of these investigations additional large blocks of irrigable land not originally considered were found so that the total amount of irrigable land in North Dakota that could be served by a diversion project remained about the same. It became apparent from these investigations and the change in the location of the irrigable lands that it would be more feasible to divert water from the Garrison Reservoir than from below Fort Peck. The Garrison Reservoir point of diversion was advanced as an alternate point of diversion for the Missouri River diversion plan in the Flood Control Act of 1944. From these investigations the Garrison Diversion plan as we know it today evolved. A map depicting the plan is a part of this brochure.

Because of the change in the location of lands to be served under the project, the point of diversion and for other more technical matters projects proponents have determined it advisable to request the Congress of the United States to review the project plan and make certain modifications to the existing congressional authorization.

These needed modifications are incorporated in H. R. 7068 which is under consideration by the Irrigation and Reclamation Subcommittee of the House of Representatives Interior and Insular Affairs Committee today. The legislation under consideration:

- Affirms modification of original authorization for the Missouri-Souris
 project with a change in the point of diversion from below Fort Peck
 Dam to Garrison Reservoir and in the location of the irrigable lands to
 be served.
- Authorizes making provisions for fish and wildlife preservation and propagation and recreation facilities and provides appropriate shares of Federal costs allocated for such purposes shall be non-reimbursable.
- 3. Authorizes purchase of right-of-way for all canals, ditches and drains located west of 100th meridian.
- Provides for the physical and financial integration of the Garrison Diversion Unit with other works constructed or authorized under the Flood Control Act of 1944.

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION of the

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES CONGRESS, HOUSE OF REPRESENTATIVES

SUBCOMMITTEE MEMBERS

MONORABLE WAYNE N. ASPINALL, Colorado, Subcommittee Chairman, Presiding HONORABLE LEE METCALF, Montana HONORABLE A. L. MILLER, Nebraska HONORABLE E. Y. BERRY, South Dakota

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COMMITTEE STAFF

Mr. Sidney L. McFarland, Engineering Consultant, Washington, D. C. Miss Dacne Olson, Reporter, Devils Lake, North Dakota

WITNESSES AND ORDER OF APPEARANCE

- HON. OTTO KRUEGER, Congressman from North Dakota, Introductory Statement
- HON. JOHN E. DAVIS, Governor of North Dakota
- MR. BRUCE JOHNSON, Project Manager, Missouri-Souris Projects Office, Bureau of Reclamation, Bismarck
- Hon. Norman Brunsdale, former Governor of North Dakota
- MR. MILO W. Hoisveen, State Engineer of North Dakota
- MR. Roy A. Holand, of LaMoure, Chairman, Carrison Diversion Conservancy District
 DR. FRED S. HULTZ, President, North Dakota Agricultural College
- MR. EARLE CHAPPELL, of Dickey, Director, James River Irrigation District MR. WILLIAM Bosse, of Cogswell, Director, Dickey-Sargent Irrigation District
- Mr. Earl. Burns, of Tolna, representing the Warwick-McVille Area
- Mr. E. P. Nicolaison, of Minot, representing Souris Loop No. 1 Area Mr. Ed Prau, of Upham, representing Souris Loop No. 1 Area
- STATE SENATOR JOHN LEIER, of Esmond, representing the Harvey-Maddock Area
- Mr. W. M. Harrington, Mayor of Minot, representing Souris Loop No. 2 13. Area
- MR. WALTER Essic, of Lincoln Valley, representing the Sykeston Area L4. 15.
- Mr. Harold Sauer, of Washburn, representing the Colerabor Area Mr. Lawrence Steinbach, of New Rockford, representing the New
- 16. kford Area
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 ALOYSIUS ZIMMERMAN, of Karlsruhe, representing the Karlsruhe Area

 18. ... Howard I. Henry, of Westhope, representing Bottineau County Area

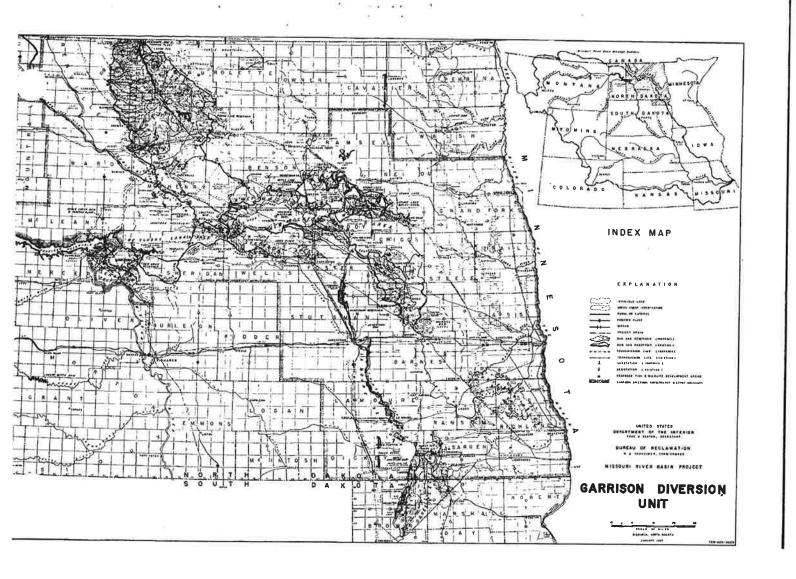
 19. Mr. Reynold Retzlaff, of Binford, representing Baldhill Area

 20. Mr. Mark Andrews, of Mapleton, representing Sheyenne Delta Area

 21. Mr. Kenneth L. Morgan, of Walcott, representing Sheyenne Delta Area

 22. Mr. Howard Bye, of Gilby, representing Grand Forks County Area

- 23. Dr. I. G. Bue, Commissioner, North Dakota State Game and Fish Department
- Hon. MATH DAHL, Commissioner, North Dakota Department of Agriculture
- 25. Mr. J. W. Grimes, of Pierre, Chief Engineer and Executive Officer, South Dakota Water Resources Commission
- MR. JAMES R. SMITH, of Omaha, Nebraska, Vice President, Mississippi Valley Association, Missouri River Division
- 27. Mr. C. N. NELSON, State Forester and President, North Dakota School of Forestry
- 28. Mr. R. L. Dushinske, of Devils Lake, President, Missouri-Souris Projects Association . .
- 29. Ma. S. W. Thompson, of Warwick, Secretary, North Dakota Reclamation Association
- MR. HOMER W. LUDWICK, of Fargo, Executive Vice President, Greater North Dakota Association
- Mr. Gilman Wastvedt, of Hatton, President, North Dakota County Commissioners Association
- Mr. Berr Hill, Esmond, representing the North Dakota Farm Bureau
- Ms. Henry J. Steinberger, of Donnybrook, representing the North Dakota Association of Soil Conservation Districts
- MR. JOE MILTON, of McLeod, President, North Dakota Stockmen's Association
- STATE SENATOR RAYMOND G. VENDSEL, of Carpio, President, Mouse River Cattlemen's Association
- 36. Mr. Clyde Barks, of Egeland, President, North Dakota Crop Improvement Association
- 37. Mr. A. L. Garnaas, of Sheyenne, Vice President, North Dakota Bankers Association
- Mr. S. Hugh Farrington, of Harvey, representing North Dakota Press Association
- Mr. Roy Zweigle, of Harvey, representing North Dakota Dairy Industries
 Mr. Telford Anderson, of Watford City, President, North Dakota Association of Rural Electric Cooperatives
- 41. Mrs. Oscar N. Johnson, of Velva, Vice President, North Dakota Homemakers Council
- Mr. Robert Askew, of Casselton, representing North Dakota 4-H Clubs
- Mr. Maynard J. Iverson, of Mohall, President, North Dakota Future Farmers of America
- 44. Mr. ART THARALDSON, of Grand Forks, President, North Dakota Wildlife Federation
- Mr. Oscar Lunseth, of Grand Forks, representing North Dakota League of Municipalities
- Mr. L. W. Veicel, of Dickinson, President, North Dakota Water and Sewage Works Conference
- 47. H. R. MORGAN, Bismarck, Special Field Representative, National Wildlife Federation
- J. C. Eaton, Denbigh, Representing Souris Loop No. 2 Area
- MR. E. N. DUNCAN, of St. Paul, Director, Industrial and Agricultural Development Department, Great Northern Railway Company
- 50. Mr. Henry H. Westlie, of Minot, Director, Soo Line Railroad



WITNESSES STATEMENTS TO BE FILED

NORTH DAKOTA FARMERS UNION
JOHN W. HAW, St. Paul, Minn., Director, Agriculture Development
Department, Northern Pacific Railway Co.
CENTRAL POWER ELECTRIC COOP., Minot, North Dakota
HAROLD BRAEGER, Fessenden, North Dakota, Farmer
FYLLIS BURTHOLD, Pekin, North Dakota, Farmer
JAMES HATLESTAD, Warwick, North Dakota, Farmer
WARREN HART, Chaseley, North Dakota, Farmer
RICHARD LOFTHUS, McVille, North Dakota, Farmer
ALEX J. MILLER, Manfred, North Dakota, Farmer
HOWARD PARE, Tolna, North Dakota, Farmer
JACOB QUANBECK, Aneta, North Dakota, Farmer
EDWARD REEVES, Warwick, North Dakota, Farmer

STATEMENT OF HON. JOHN E. DAVIS, GOVERNOR OF NORTH DAKOTA Mr. Chairman and Members of the Committee:

I am John E. Davis, Governor of North Dakota.

First of all, let me say that I am highly pleased and honored to extend to each of you the most cordial greetings of my people, and a very hearty welcome to our State. The overriding importance of the legislation which you will be considering here, and our genuine appreciation of your coming to North Dakota are best expressed by the unusually large attendance of farmers, business and professional people, public officials and others from all sections of the States

I do want to sincerely thank you for arranging to hold this hearing in North Dakota, thereby enabling many hundreds of our citizens to participate therein and affording many more witnesses an opportunity to be heard than would otherwise have been the case.

The testimony today will be concerning, and in support of, H. R. 7068, introduced by our able Congressman, the Hon. Otto Krueger, and deals with the proposed Garrison Diversion Unit. Please do not let the long list of witnesses alarm you. Whenever the committee feels that it is becoming we and would like to adjourn the hearing, we shall be glad to arrange to comply your wishes.

Before assuming the governorship the first of this year, I was for a good many years actively engaged in ranching and in the operation of a country bank in my home town of McClusky, in Sheridan County.

The uncertainty in the production of grain and forage crops and the recurring shortage of grazing grass because of undependable moisture have

been natural hazards with which I have lived since boyhood. As a consequence, I have become intensely interested in the irrigation potentials under the Garrison Diversion Unit as planned by the Bureau of Reclamation and approved by the Cretary of the Interior. Although no part of our holdings are in any irrigable a of the Unit, I am, nonetheless, highly enthusiastic concerning the benefits which can reasonably be expected to accrue therefrom.

The plan report on this million-or-more-acre development recommends that it be constructed in stages. It is estimated that more than 60 years will be required for its ultimate completion. Segments can be built at a rate adjusted to best meet the increase in population and consequent growing food requirements.

) In order to assure that an adequate supply of water will be available for the full development, the North Dakota State Water Conservation Commission, of which I am chairman, has reserved and withdrawn from appropriation 2,640,000 acre-feet of Missouri River water. Notice of such withdrawal has been given to all affected States and interested Federal Departments and agencies.

Essentially, the project would replace the more than half million acres of fertile bottom lands and high quality grazing lands which are being inundated by the huge Garrison and Oahe projects on the Missouri River. Such replacement is a part of the agreement between the Missouri River Basin States and is basic to the provisions of the 1944 Flood Control Act. Although it was understood that the reclamation development in North Dakota should proceed at the same rate and concurrently with the progress of the Garrison Dam and Reservoir construction, reclamation has been permitted to lag far behind and is now delayed many years from the original schedule.

Such delay is of considerable concern to us. Our contribution of reservoir les has adversely affected our tax structure. The reduction in taxable property and consequent loss of income from property lost occur at a time when we are confronted with rising costs of State and local governments. The orderly construction of the irrigation development will eventually more than compensate for such loss, but it should be undertaken with the least possible delay.

The proposed irrigation will be integrated into North Dakota's agricultural economy. It will not bring any new land into production. That the farmers want irrigation is indicated by the tremendous sign-ups petitioning the creation β organization of local irrigation districts. Since June 12, 1957, when the Secretary approved the Bureau's plan report, two irrigation districts, containing 58,000 acres, have been formed by farmer mandate.

A balanced industrial development in the State will depend in large part on a stable diversified agricultural output. The best diversification can be realized through irrigation and will in turn do much toward stabilizing our farm economy.

Irrigation in North Dakota will provide a new frontier for our youth who otherwise must go elsewhere to earn their income. Our young people are our

greatest resource. Unless there are additional opportunities, such as this development will provide, they will continue to leave the State.

Then, too, the construction of this large project would offer materially increased employment opportunities in an area where they are now limited

The project plan is balanced in that it provides for industrial, municipal, and stock water supplies of a large area. It also includes enhancement of fish and wildlife resources and offers unusual recreational opportunities in regions where there now are relatively few.

I do not wish to discuss the details of the provisions and modifications proposed in H. R. 7068. Witnesses more technically qualified will go into these at the hearing today or at a later time. I do, however, want to generally indicate what is sought by the legislation proposed by the bill.

First, it would authorize the construction, operation, and maintenance of the eastern portion of the then-called Missouri-Souris unit, Missouri River Basin project, contained in section 9 of the Act of December 22, 1944, as modified by and depicted generally on Bureau of Reclamation map numbered 769-603-3003 dated January, 1957, and entitled "Missouri River Basin project, Garrison Diversion Unit" and, as so modified, would be affirmed.

Second, the Secretary would be authorized to make provision for the preservation and propagation of the fish and wildlife resources of the area, including the relocation of existing refuges and the provision of new facilities to compensate for loss of nesting and feeding locations arising from construction of works, the drainage of lands, and the cultivation of the area and to improve nesting and feeding opportunities. The Secretary would further be authorized to provide, or arrange for the provision of, recreation facilities. Local contributions would be required in connection with some of these provisions.

Third, notwithstanding the existence of any reservation of right-of-way for canals under the Act of August 30, 1890, the Secretary would be authorized to pay just compensation to the owners of private lands west of the 100th meridian across which canals of the Garrison diversion unit may run.

Fourth, the Garrison diversion unit would be integrated physically and financially with the other Federal works constructed or authorized to be constructed under the comprehensive plan approved by section 9 of the Act of December 22, 1944, as amended and supplemented.

May I say again, Mr. Chairman, that we are indeed grateful for your coming to North Dakota for holding this hearing, rather than making it necessary for us to go to Washington. Holding the hearing here serves us in many ways. One of the important aspects of this hearing is the opportunity afforded the great number of visitors here today to witness and hear living democracy in action.

Thank you, gentlemen.

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF OCTOBER 31, 1957 1957-1959 APPROPRIATIONS

ad	Available July, 1957	Expended Sept 30'57	Expended to Oct 1, 1957	Balance Oct 31'57
Commissioners, Per Diem and Expenses	6,000.00	295.95	85.25	5,618.80
Administration	47,000.00 14.58	5,242.29	478.98	41,293.3
Maintenance of Dams	105,000.00	24,489.02	18,576.97	61,934.01
International and Interstate, Commissioners' Conference Expenses	8,000.00	893.26	372.78	6,733.96
Topographic Surveys, Cooperation with U.S.G.S	30,000.00			30,000.00
Hydrographic Surveys, Cooperation with U.S.G.S	27,500.00		3,470.36	24,029.64
Engineering and Geological Surveys and Demonstrations.	37,500.00	3,958.18	2,882.19	30,659.63
Cooperation with U. S. Departments and for Organizing Conservation & Irrigation Districts	50,000.00	1,922.08	596.35	47,481.57
Small Projects, Investigations, Surveys, Etc	118,000.00	17,708.50	6,848.84	93,898.81
Administration of Water Laws	6,000.00			6,000.00
OASIS Refunds	_3,800.00	7.E.	1,322.92	2;477.08
	\$439,270.73	\$54,509.28		\$350,126.81

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF OCTOBER 31, 1957 1955-1957 APPROPRIATIONS

Fund No.		Available July, 1955	Experded Sep 30'57	Expended to Oct 1, 1957	Balance Oct 31'57
1.	Commissioners Per Diem and Expenses	6,000.00	4,498.18		1,501.82
2.	Administrations	40,000.00 794.22	40,794.09		.13
3.	Maintenance of Dams	100,000.00	207,173.77	3,977.00	9,443.89
4.	International and Interstate Commission's Conference Expenses	8,000,00 40.60	7,507.37	33.05	500.18
5.	Topographic & Conservation Cooperation with U.S.G.S.	30,000.00	25,514.26	4,485.74	NIL
6.	Hydrographic & Conservation Cooperation with U.S.G.S.	25,000.00	21,795.61	3,204.39	NIL
7.	Engineering & Geological Survey & Demonstrations	35,000.00	32,607.62		2,392.38
8.	Cooperation with U. S. Departments & for Organizing Irrigation & Conservation Districts	40,400.00	39,692,30	,626 . 92	80.78
9.	Small Projects & Investigations & Surveys	106,000.00	114,077.87	8,136.09	3,126.90
10.	Water Right Investigations	12,000.00	11,985.63	<i>y</i> .	14.37
		\$543,170.34	\$505,646.70	\$20,463.19	\$17,060.45

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF OCTOBER 31, 1957 (CONTINUING APPROPRIATIONS)

Appropriation Title	BALANCE July, 1957	EXPENDED TO October 31, 1957	BALANCE October 31, 1957
9	ř.		,
Construction Bond Guaranty Fund	\$70,541.00	NIL	370,541.00
ā	370,541.00	NIL	\$70,541.00
0			
55	9		
Multiple Purpose Fund	\$384,892.93	#8,496.40	\$376,396.53
	\$384,892.93	\$8,496.40	\$376,396.53

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION DEPOSITS IN THE BANK OF NORTH DAKOTA OCTOBER 31, 1957

Source of Deposits		***	Transit Number	Amount Deposited	Expended Oct 31'57	Expended Oct 31'5'	
Collections on Yello District 33,500 Warr partial payment of i April, 1953.	ant. Tax collection	ns for		501-118	72,235.68		02,235,68
Contributions to Jan	uary 1, 1957: \$35	,600.10					·
Contributions for Gr	ound Water Surveys:						
Drake	\$ 750 ₄ 00					2	
Lehr	1,000.00						
Hatton	1,000.00						
Ellendale	500.00						
Linton Standard	1,500.00						
Strasburg Hillsboro	1,000.00						
TITIEDOLO	1,000.00	8					
Booklet		*		501-128	\$48,430.60	\$41,139.95	37,290.65
DAMIT OF ICE		197		501-127	2,887.57	2,002.06	385.51
TOTAL OF ALL BANK OF	NORTH DAKOTA DEPOS	ITS AS OF OC	TOBER 31,		.,,		10,411.84

PAYROLL NORTH DAKOTA STATE WATER CONSERVATION COMMISSION OCTOBER 31, 1957

PERMANENT EMPLOYEES

Name	Position	Pay Grade	Salary October	With Tax	Social Security		Savings Bonds	Net Pay	Remarks
Hoisveen, Milo	State Engr	K-10	800.00	117.60	18.00	10.00	30 00	74	
Baesler, Gordon	Draftsman	E-5	298.67	44.00	6.72	10.90	18.75	634.75	Inc April, 1957
Cooper, Vernon S.	Ass't Sec'y	F-4	341.67	62.60	7.69	10.00		247.95	Inc September, 1957
Duppong, Edwin	Driller	B-8	201.29	26.40	4.53	10.90		260-48	Inc.June, 1957
Flinn, Dean	Driller	E-5	300.00	44.00				170.36	Start October, 1957
Fredrickson, Fred	Planning Co.		300.00	24.00	6.75			249.25	Monthly September, 57
Fryer, Eugene	Rodman	B-3	67.10	1.90	6.75			269.25	Inc February, 1957
Gehring, Edna	File Clerk	B-5	186.67		1.51			63,69	Quit October, 1957
Grindberg, Charles	Rodman	B-3	176.67	33.50	4,20			148+97	Start July, 1957
Helphrey, Dave	Rodman	B-3	176.67	22.00	3.98			150.69	Quit October, 1957
Johnson, Lloyd	Const. Fore.		366.67	22,00	3.98	70.00		150.69	Start August, 1957
Karch, Esther	Clerk Typist		226.67	<i>35</i> √50	8.25	10.90		312,02	Inc July, 1957
Krebsbach, Joseph	Instrumentma	- Ω- /ι - π- /ι		30.70	5.10	*		190-87	Inc July, 1957
Putz, Roy	Material Exp		345.17	32.60	7.77	10.90	ω.	293-90	Inc April, 1957
Reimers, Ernest	Rodman	B-8	172.50	11.30	3.88	4.60		152+72	Inc June, 1956
Reiter, Daniel		E-10	200.00	6-40	4+50			189.10	Start September, 57
Sackman, Eugene	Instrumentma		338.67	31.20	7.62		18.75	281,10	Inc July, 1957
Schmitcke, Arnold			322.67	7-83	7.83	10.90		296.11	Inc July, 1957
Schwiegert, Luella	Operator	D-7	265.50	18,20	5+97			241.33	Inc September, 1957
Sell, Nancy		F-2	326.67	58.30	7.27			261,10	Inc July, 1957
	Bookkeeper	C-7	226.67	30.70	5.10	*	18.75	172-12	Inc July, 1957
Sheldon, Marvin	Office Engr	I-8	564.67	62.60	12.71	12.10		477.26	Inc March, 1957
Sims, Dennis	Rodman	B-3	176.67	32-00	3 . 98			140-69	Start August, 1957
Timm, Robert	Ass't St Eng		634.67	61.60	14.28	10.90		547.89	Inc October, 1957
Forvik, Duane	Engineer	H-9	516,67	71.80	11.63			433.24	Inc June, 1957
Vincent, Charles	Rodman	B-3	176.67	22.00	3 ₊98	¥8		150.69	Start August, 1957
Ziegler, Victor	${f E}$ ngineer	H-8	504.17	71.80	11.34	10.90		410.13	Inc June, 1957

PAYROLL
NORTH DAKOTA STATE WATER CONSERVATION COMMISSION
OCTOBER 31, 1957

TEMPORARY EMPLOYEES

Name	Position	Salary October	Tith Tax	Social Security	Net Pay	Rei	marks	
Bothun, Alvin Hanson, Robert Jones, James Knutson, Lewis Lauinger, Joe McMaster, George Nelson, Carl Rufsvold, Linas Thorberg, Robert Torgerson, Thomas	Operator Laborer Laborer Operator Driller Driller Driller Operator Laborer Laborer	333.00 117.50 60.00 183.75 148.50 573.60 402.50 178.20 292.60 266.00	49.60 14.30 4.10 27.80 22.40 84.20 25.60 6.30 41.50 38.20	7.49 2.64 1.35 4.13 3.34 12.91 9.05 4.00 6.58 5.98	275.91 100.56 54.55 151.82 122.76 476.49 367.85 167.90 244.52 221.82	Working "" "" "" "" "" "" "" "" ""		17 19 19 19 19 19

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NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF NOVEMBER 30, 1957-1959 APPROPRIATIONS

und No.		Available July, 1957	Expended Oct 31 '57	Expended to Nov 1, 1957	Balance Nov 30 157
1.	Commissioners, Per Diem & Expenses	6,000.00	381.20	212,10	5,406.70
2.	Administration	47,000.00 14.58	5,721.27	4,413.27	36,880.04
3.	Maintenance of Dams	105,000.00	43,065.99	9,942,19	9,000 51,991.82
4.	International and Interstate, Commissioners' Conference Expenses	3,000.00	1,266.04	519.58	6,214.38
5.	Topographic Surveys, Cooperation with U. S. G. S	30,000.00			30,000.00
6.	Hydrographic Surveys, Cooperation with U. S. G. S	27,500.00	3,470.36		24,029.64
7.	Engineering and Geological Surveys and Demonstrations.	37,500.00	6,840.37	2,722.14	27,937.49
8.	Cooperation with U. S. Departments and for Organizing Conservation & Irrigation Districts	50,000.00	2,518.43	640.52	46,841.05
9.	Small Projects, Investigations, Surveys, Etc	118,000.00 456.15	24,557.34	10,543.09	83,355.72
10.	Administration of Water Laws	6,000.00		40.95	5,959.05
	OASIS refunds	3,800.00	1,322.92		2,477.08
		\$439,270.73	\$87,821.00	\$30,356.76	\$321,092.97

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NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF NOVEMBER 30, 1957 1955-1957 APPROPRIATIONS

Fund No.		Available July, 1955	Expended Oct 31 '57	Expended to Nov 1, 1957	Balance Nov 30 157
1.	Commissioners Per Diem and Expenses	6,000.00	4,498.18		1,501.82
2.	Administration	40,000.00 794.22	40,794.09	17	.13
3.	Naintenance of Dams	100,000.00 120,594.66	211,150.77	8,651.85	792.04
4.	International and Interstate Commission's Conference Expenses	8,000.00	7,540.42		500.18
5.	Topographic & Conservation Cooperation with U. S. G. S	30,000.00	30,000.00		NIL
6.	Hydrographic & Conservation Cooperation with U. S. G. S	25,000.00	25,000.00		NIL
7.	Engineering & Geological Survey & Demonstrations	35,000.00	32,607.62		2,392.38
8.	Cooperation with U. S. Departments & for Organizing Irrigation & Conservation Districts	40,400.00	40,319.22	55.70	25.08
9•	Small Projects & Investigations & Surveys	106,000.00	122,213.96	3,780.41	-653.51
10.	Water Right Investigations	12,000.00 \$543,170.34	11,985.63 3526,109.89	8.60 \$12,496.56	5.77 \$4,563.89

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF NOVEMBER 30, 1957 (CONTINUING APPROPRIATIONS)

Appropriation Title	Balance July, 1957	Expended to November 30, 1957	Balance November 30, 1957
Construction Bond Guaranty Fund	tro ska oo		
construction bond duaranty rund	\$70,541.00	NIL	<u>370,541,00</u>
	\$70,541.00	NIL	370,541.00
9	a ~	<u>.</u>	
Multiple Purpose Fund	\$384.892.93	39.226.40	\$375,666.53
	3384,892.93	\$9,226.40	\$375,666.53

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION DEPOSITS IN THE BANK OF NORTH DAKOTA NOVEMBER 30, 1957

Source of Deposits					Transit Number	Amount Deposited	Expended Nov 30'57	Expended Nov 30 '57
Collections on Yellowstone F District \$3,500 Warrant. Ta partial payment of interest April, 1953. Contributions to January 1,	ax collect and princ	ions for			501-118	\$2,235.68		\$2,235.68
Contributions for Ground Wat	ter Survey	·s:						
Lehr 1, Hatton 1, Ellendale Linton 1, Strasburg 1,	750.00 ,000.00 ,000.00 ,500.00 ,000.00		7	is		* ***		
Booklet TOTAL OF ALL BANK OF NORTH D	DAKOTA DEP	OSITS AS OF	NOVEMBER	30, 1957	501-128 501-127	\$48,430.60 2,887.57	2,002.06	37,290.65 885.51 \$10,411.84

PAYROLL
NORTH DAKOTA STATE WATER CONSERVATION COMMISSION
NOVEMBER 30, 1957

PERMANENT CIPLOYEES

Name	Position	Pay Grade	Salary November	With Tax	Social Security	Hosp. Ins.	Savings Bonds	Net Pay	Remarks
Hoisveen, lillo	State Engineer	· K-10	800.00	117.60	18.00				
Baesler, Gordon	Draftsman	E-5	298.67	44.00		10.90	18.75	634.75	Inc April, 1957
Cooper, Vernon S.	Ass't Sec'y	F-4	341.67	62,60	6.72	30.00		247.95	Inc September 57
Duppong, Edwin	Driller	B-8	243.42	33.90	7.69 5.48	10.90		260.48	Inc June, 1957
Flinn, Dean	Driller	E-5	300,00	44.00	6.75			204.04	Start October 57
Fredrickson, Fred	Plann. Coord.	E-5	300.00	24.00				249.25	Monthly Sept 57
Gehring, Edna	File Clerk	B-5	186.67	33.50	6.75	1, 60		269.25	Inc February 57
Helphrey, Dave	Rodman	B-3	176.67	22.00	4.20	4.60		144.37	Start July, 1957
Johnson, Lloyd	Const Foreman	G-1	366.67	35.50	3.98	30,00		150.69	Start August 57
Karch, Esther	Clerk Typist	C-7	226.67	30.70	8.25	10.90		312.02	Inc July, 1957
Krebsbach, Joseph	Instrumentman	F-4	345.17	32.60	5.10	70.00		190.87	Inc July, 1957
Putz, Roy	Material Exp	A-6	172.50	11.30	7•77 3•88	10.90		293.90	Inc April, 1957
Reimers, Ernest	Rodman	B-8	200.00	6.40	4.50	4.60		152.72	Inc June, 1956
Reiter, Daniel	Operator	E-10	338.67	31,20			30 55	189.10	Start Sept 57
Sackman, Eugene	Instrumentman	E-8	322.67	7.83	7.62	10.00	18.75	281.10	Inc July, 1957
Schmitcke, Arnold	Operator	D-7	265,50	18,20	7.83	10.90		296.11	Inc.July, 1957
Schwiegert, Luella	Chief Steno	F-2	326.67	58.30	5•97			241.33	Inc September 57
Sell, Nancy	Bookkeeper	C-7	226,67	30.70	7.27		-0	261.10	Inc July, 1957
Sheldon, Marvin	Office Engr	I8	564.67	62,60	5.10	22.20	18.75	172.12	Inc July, 1957
Sime, Dennie	Rodman	B-3	176.67	32.00	12.71	12.10		477.26	Inc March, 1957
Timm, Robert	Ass't St Engr	K-4	634.67	61.60	3.98	30.00		140.69	Start August 57
Torvik, Duane	Engineer	H-9	516.67	71.80	14.28	10.90		547.89	Inc October 57
Vincent, Charles	Rodman	B-3	176.67	22.00	11.63			433.24	Inc June, 1957
Ziegler, Victor	Engineer	H-8	504.17	71.80	3.98	70.00		150,69	Start August 57
_ ,		11-0	JUT#11	\T.00	11.34	10.90		410.13	Inc June, 1957

PAYROLL
NORTH DAKOTA STATE WATER CONSERVATION COMMISSION
NOVEMBER 30, 1957

TEMPORARY EMPLOYEES

Name	ne Position		Salary Position November		With Tax	Social Security	Net Pay	Remarks				
Bothun, Alvin Carlson, Harold Christianson, Leslie Dalen, Tayne Knutson, Lewis Lauinger, Joe McMaster, George Nelson, Carl Den, Arthur Russell, Allen Rufsvold, Linas Phorberg, Robert Welch, Lloyd	Operator Laborer Laborer Laborer Operator Driller Driller Laborer Laborer Coperator Laborer Laborer	234.03 299.25 81.25 46.88 429.21 45.00 264.00 192.50 40.63 15.63 143.10 225.75	25.50 44.50 7.70 6.10 63.20 3.50 38.50 11.80 .80 .50 11.90 27.60	5.26 6.73 1.82 1.05 9.64 1.01 5.94 4.33 .91 .35 3.22 5.06	203.27 248.02 71.73 39.73 356.37 40.49 219.56 176.37 38.92 14.78 127.98 193.09	Vorking			Hour " " " " " " " " " " " " " " " " " " "			

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