STATE WATER CONSERVATION COMMISSION MINUTES OF MEETING Held In Office of State Water Commission Bismarck, North Dakota May 19, 1960

A meeting of the State Water Conservation Commission was held on May 19, 1960 in the office of the State Water Commission, State Capitol Building, Bismarck, North Dakota, to consider routine matters. The following members were present:

MEMBERS OF THE STATE WATER COMMISSION:

A. R. Weinhandl, Acting Chairman, Minot
W. W. Corwin, Member from Fargo
Einar Dahl, Member from Watford City
Math Dahl, Commissioner Agriculture & Labor, Bismarck
Milo W. Hoisveen, Secretary & Chief Engineer, State Engineer, Bismarck

OTHERS PRESENT:

Fred Hagen, Water Commissioner, Fargo Richard Knapp, City Coordinator, Fargo Henry Steinberger, Donnybrook Murray Baldwin, Fargo L. C. Mueller, Oakes Mayor Harrington, Minot Paul Fredrick, City Manager, Minot H. S. Davies, Minot E. P. Nicolaisen, Minot Oscar Berg, Minot Mr. Bone, Minot

The meeting was called to order by acting chairman A. R. Weinhandi at 2:30 p.m. with Commissioners Corwin, Einar Dahl, Math Dahl and Secretary Holsveen present.

APPROVAL OF MINUTES

It was moved by Commissioner Einar Dahl and seconded by Commissioner Corwin that the minutes of April 22, 1960 be approved and filed in the office of the State Water Conservation Commission. All commission members voted are and themotion was carried.

FINANCIAL STATEMENT April 1960 Commissioner Einar Dahl made a motion that the financial statement for April 1960 be approved. The motion was seconded by Commissioner Math

Dahl. All Commissioners voted aye and the motion was carried.

FARGO LOW HEAD DAM COST PARTICIPATION

Mr. Hagen, Water Commissioner for the city of Fargo, appeared before the Commission in connection with the Commission's participation

In the Fargo low head dam. Mr. Hoisveen stated that the situation that exists is that the Water Commission was to participate in the dam construction.

There were several things to be considered and on which the Commission would eventually get a report. The action of the Commission taken over a year ago was, for some reason, never incorporated in the minutes. It was Secretary Hoisyeen's recollection that the Commission's participation would be around \$24,000 and limited to the construction of the dam.

Mr. Hagen stated that the City of Fargo had deposited \$99,000 with the Corps of Engineers. The Corps ran into complications and asked for another \$12,000. George Lyons of Minneapolis said they would not be able to cite a figure until construction is completed. The city of Fargo has now deposited with the Corps a total of \$112,000.

It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that we grant the City of Fargo 25% of the cost of the dam, not to exceed \$28,000. All Commission members voted aye and the motion was carried.

SHEYENNERIVER DIVERSION FOR FARGO

Mr. Hagen stated that the city of Fargo contemplated a diversion project which included a weir and canal. which would be required for use in diverting water from

the Sheyenne River for municipal water use. The city would like to build the weir and Mr. Hagen indicated that the city of Fargo preferred to have the North Dakota State Water Conservation Commission's engineering force design and constructthe weir. The city of Fargo would reimburse the Commission for the cost. It was Mr. Hagen's opinion that the city of Fargo would save a considerable amount of money If the Commission crew would enter into this type of an agreement. There was discussion as to the ways and means of diverting the stream. Mr. Hagen suggested that he send the plans and specifications to the Commission for study. Secretary Holsveen stated that the Commission was in no way competing with other contractors in the building of the weir. Mr. Hagen averred that it would be a saving of North Dakota mon ey that would otherwise go outside of the state, as North Dakota does not have this type of contractors. Secretary Hoisveen stated that the Commission has issued bids on this type of work for comparison purposes but had been unable to get any bids from local contractors. Mr. Hagen stated that after the Commission has had an opportunity to study the plans and specifications he would again appear before the Commission. Action was deferred until Secretary Hoisveen has had an opportunity to go over the specifications and plans.

Local irrigation enthusiasts have made an attempt ANTLER CREEK DAM to promote an irrigation district whereby the State Water Commissioner would construct a dam on Antler Creek. The needs of the people of that area and those of the irrigation farmer should be correlated. The major portion of the water rises in Canada. This would make an ideal recreational park in connection with the dam. The Antler Creek people desire a combination bridge and dam with the county paying for the bridge and a portion of the dam. A survey has been made but to date no borings or cost estimate have been made. It was suggested that the county commissioners be contacted to see what their Interest may be in developing this p lan. It was moved by Commissioner Math Dahl and seconded by Commissioner Corwin that Mr. Holsveen attend a meeting of the county commissioners of Bottineau County and discuss the feasibility of the const ruction of Antler CreekDam All Commissioners voted aye and the motion was carried.

FEASIBILITY STUDY LAKE JUANITA

The Board of County Commissioners of Foster County has requested a preliminary survey of Juanita Lake to ascertain the practicability of raising the water

level of the lake. This lake is located near Grace City. It was moved by Commissioner Math Dahl and seconded by Commissioner Einar Dahl that the Commission staff make a survey of Juanita Lake to ascertain the practicability of raising the water level and to make a cost estimate. All commissioners voted aye and the motion was carried.

MAPLE RIVER WATER
CONSERVATION & FLOOD
CONTROL DISTRICT REQUEST
FOR FUNDS

A letter was received from F. J. Woell, Secretary for the Maple River Water Conservation and Flood Control District requesting funds to purchase easements, rights of way and damages for the construction of retention dams and channel improvements

in Cass County. The policy of the Commission has been that it will not participate in the cost of rights of way for either drains or the watershed type of project. It was the concensus of the Commissioners that this matter be dropped in view of the policy of the Commission in the past and that Mr. Woell be so Informed. It was moved by Commissioner Einar Dahl and seconded by Commissioner Corwin that the Commission reject the request of the Maple River Water Conservation and Flood Control District. All Commission members voted aye and the motion was carried.

SIOUX IRRIGATION DISTRICT RESOLUTION RE: INSTALLA-TION OF TEST WELL A resolution, which is Appendix A, was received from the board of directors of the Sioux Irrigation District requesting the State Water Conservation Commission to Install a well at a suitable location.

The resolution also states that the district agrees to pay the Commission for the well casing if the well installed proves satisfactory. Secretary Holsveen stated that the State Water Commission would only put in the test well. The cost would be approximately \$1,200 to \$1,600 but could go up to \$2,000. If the well proves satisfactory the Sioux Irrigation District would pay for the well casing. It was moved by Commissioner Corwin and seconded by Commissioner MAth Dahl that the State Water Commission install a test well within the Sioux Irrigation District, the District to pay for the well casing if the well proves satisfactory, the estimated cost to be between \$1,200 a nd \$1,600. All Commissioners voted aye and the motion was carried.

WASHINGTON FOUNDATION HEARING - June 10, 1960 Secretary Hoisveen stated that the Foundation hearing on the Garrison Diversion Unit would be held in Washington, D. C. on June 10, 1960. The Governor's

Coordinating Committee met at Jamestown on May 12, 1960 to outline the procedure to be followed for this hearing. The Governor is heading the group. Statements will be made by various citizens of the state.

TOWNER COUNTY WATER CONSERVATION & FLOOD CONTROL DISTRICT

A hearing was held at Rock Lake and also at Cando relative to the establishment of a water conservation and flood control district. The county commissioners requested the Commission to hold this

meeting. At Rock Lake, after considerable discussion, a vote was taken as to

whether such a district should be established. The vote was 23 to 1 in favor of the establishment of such a district. At Cando another hearing was held. The voting was rather indecisive. A block of 6 citizens from one township, along with two others, voted 8 to 6 to oppose the establishment of such a district. This block voted solid because they thought such a district would be of no actual benefit to them. Secretary Hoisveen recommended the establishment of a water conservation and flood control district. It was moved by Commissioner Math Dahl and seconded by Commissioner Corwin that the Commission recommend the establishment of a Towner County Water Conservation and Flood Control District. All Commission members voted aye and the motion was carried.

SIBLEY ISLAND BOY SCOUT CAMP WELL

Mr. Alfred Thompson of the Boy Scout Council called the Commission office regarding the drilling of a shallow well. They expressed a desire that the

State Water Commission drill this well. It was the decision of the Commission members that this would be setting a precedent should the Commission drill a well for the Boy Scouts. It was moved by Commissioner Math Dahl and seconded by Commissioner Einar Dahl that the Commission go on record against drilling wells for organizations such as the Boy Scouts, etc. A Commission members voted age and the motion was carried.

BURLEIGH COUNTY GROUND WATER SURVEY

A resolution, which is appendix B, was received from the Board of County Commissioners of Burleigh County requesting a ground water survey for the

County, such survey to extend over a four year period. The cost of such a survey would be between \$48,000 and \$50,000. Burleigh County would contribute one-fourth, the Commission one-fourth and the U. S. Geological Survey the rest (50%). It was moved by Commissioner Corwin and seconded by Commissioner Math Dahl that the State Water Conservation Commission make a ground water survey of Burleigh County, as requested by the Board of County Commissioners to extend over a four year period, Burleigh County's cost participation to be as described above. All Commission members youed aye and the motion was carried.

CITY OF WALHALLA REQUEST FOR GROUND WATER SURVEY

A request was received relative to the Commission making a ground water survey in the vicinity of Walhalla. If a check is received from the City

ofWalhalla they will be given priority. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that the Commission approve a ground water survey for the city of Walhalla contingent upon the receipt of a check from that city in the amount of \$1,500 to care for their cost participation. All Commission members voted aye and the motion was carried.

CITY OF LANKIN REQUEST FOR A GROUND WATER SURVEY

A letter was received from the City of Lankin inquiring about a ground water survey for that city. It was moved by Commissioner Einar Dahl and seconded

by Commissioner Math Dahl that the State Water Conservation Commission conduct a ground water survey for the city of Lankin when we receive a check in the amount of \$1,500 to care for their cost participation. All Commissioners vote aye and the motion was carried.

REPAIR - GRAFTON RAILWAY DAM

A letter was received from the Mayor of the City of Grafton relative to possible aid in the repair of the Grafton Railway Dam. This dam was turned over

to the City of Grafton by the Great Northern Railway Company. The estimated cost of repairs would be between \$12,000 and \$16,000. The participation cost of the Commission would be 50%, as the Game and Fish Department would not participate in a project of this nature, as it is used for municipal water supply. It was moved by Commissioner Corwin and seconded by Commissioner Math Dahl that the State Water Conservation Commission participate in the repair of the Grafton Railway Dam up to 50% of the cost, not to exceed \$15,000. All Commission members voted aye and the motion was carried.

LAKE METIGOSHE BASIN IMPROVEMENT SURVEY REQUEST A letter was received from the Lake Metigoshe Improvement Association enclosing a resolution passed by the Association that the Oak Creek Water Conservation District, North Dakota State Game and

Fish Department and the North Dakota State Water Conservation Commission each consider participating equally in the financing of Project 1, to obtain additional drainage to better maintain the level of Lake Metigoshe and to receive the full benefit of runoff water in the area. Mr. Hoisveen stated he had received complaints that there was no water in the Sharpe Lake Reservoir. He also stated that a week ago he had occasion to be in that area and checked the situation and found that there was plenty of water, approximately 6 feet of water being stored above the flow elevation. This comprises about 4,500 acre feet of storage. It was thought the Commission could provide the Association with a cost estimate. It is possible that several control structures could be installed on some of the lakes to aid in maintaining the present level of Lake Metigoshe. The construction would cover a three year period. The first stage would cost approximately \$15,000. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that the Commission make a survey of Lake Metigoshe Basin. All Commissioners voted aye and the motion was carried.

DUES - N. D. WATER USERS ASSOCIATION

Mr. Mueller, Mr. Baldwin and Mr. Steinberger appeared before the North Dakota State Water Conservation Commission on behalf of the North

Dakota Water Users Association relative to the Commission's dues to this Association. Secretary Hoisveen stated that the Commission had contributed \$1000 to the Missouri-Souris Projects Association and \$600 to the State Reclamation Association. These organizations have now been amalgamated as the North Dakota Water Users Association. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that the State Water Conservation Commission pay as dues to the North Dakota Water Users Association the sum of \$1,500. All Commission members voted aye and the motion was carried.

T. V. PUBLICITY

The North Dakota Broadcasting Company through its president, Mr. John W. Boler, has offered the Water

Commission free television time to present a series of educational programs on water resources and related subjects. Secretary Hoisveen stated that in discussing the matter with various persons it was thought it would be best to start such a series after July 1st. A committee will work up a program with the television station.

INTERNATIONAL JOINT COMMISSION MEETING

Governor Davis has extended an invitation to the international Joint Commission to meet in the proposed Pembilier Dam area. The Governor would like

the State Water Commission to assume the responsibility for making the necessary arrangements for the meeting of the International Joint Commission. Such a meeting would be held late in July or early August.

Commission stressed cooperation with the National Defense people.

CIVIL DEFENSE PROGRAM

Secretary Hoisveen stated that Victor Ziegler, Investigation Engineer, has been giving consideration to a civil defense program relative to water supply in case of a radioactive fall out resulting from enemy bombing and chemical warfare. The Commission's well drilling equipment might be made available for emergency operations should such an attack occur. The Commission is in a position to make equipment available which can be transported where needed. It was also suggested that The Commission investigate the possibility of obtaining funds from the Civil Defense Program relative to determining where aquifers are to be found in case of attack. No action was taken other than that the members of the

CORPS OF ENGINEERS RE: MINOT SURVEY TO DETERMINE FLOOD PROTECTIVE MEASURES REQUIRED ON SOURIS RIVER

Mayor Harrington, City Manager Paul Fredrick, H. S. Davies, E. P. Nicholaison, Oscar Berg and Mr. Bone appeared before the State Water Commission meeting. Mayor Harrington stated that shortly after the hearing at Tolley, North Dakota regarding the

Upper Souris flood conditions as it pertained to flood control on the Tolley Flats, the Corps of Engineers decided that all further work should be discontinued. There was considerable discussion as to the precarious situation Minot is in If a flood condition should develop. The present dam on Lake Darling is not safe under the standard flood projection formula used by the Corps of Engineers. Immediate consideration should be given to make the necessary flood control features available to the city of Minot against flood conditions. The situation was dangerous in 1956 and is much worse now, in view of the fact that this flood plain has become a residential district and over 500 houses have been constructed in this area.

Paragraph #62 of the Report of the Board of Englneers for Rivers and Harbors, Washington, D. C. on January 28, 1957, was called to the attention of the Minot delegation. Copies of this had previously been made available to the various officials of the city of Minot. An appropriation has been made for this study by the Corps of Engineers, but little or nothing has been done to date as the Corps indicates that their present capability is low. The U. S. Geological Survey has made numerous quad sheets of this area which be made available to the Corps.

Commissioner Corwin moved that the Secretary of the State Water Commission be instructed to contact the Corps of Engineers at St. Paul and the members of the congressional delegation by letter and telephone urging immediate consideration be given this particular problem and also an explanation as to why something has not been done relative to this matter, and a resolution be drafted incorporating #62. The motion was seconded by Commissioner Einar Dahl. All Commission members voted aye and the motion was carried. The resolution is Appendix C.

Secretary Hoisveen called Colonel Brown during the commission meeting. He informed the Colonel that a delegation from Minot had appeared before the Commission stating that action on the Minot situation be taken without delay, as there is not only the possibility of a financial loss but also the loss of human life. The Colonel stated that the appropriation was not sufficient to carry on such a survey and that no appropriation would be available until late fiscal 1961. It was suggested that Senator Young, Mr. Aandahl and other Washington officials be contacted by the various organizations of Minot. M r. Oscar Berg stated that he would get in contact with the county officials, and have them send a resolution to Washington. It was thought advisable to write direct to Mr. Seaton, with a copy for Mr. Aandahl. The Commission stimulated immediate action.

PROPOSED LEGISLATION AND ATTORNEY GENERAL

Secretary Holsveen stated that a meeting had been TEMPORARY SPECIAL ASSISTANT held at Grand Forks on April 28, 1960 and between 40 and 50 representatives from the flood control districts, drainage districts and county commis-

sions had attended such meeting. This delegation came up with specific recommendations relative to drainage problems and the need for legislation to correct these problems. Secretary Holsveen is to appoint a committee from this group who will correlate the legislation necessary.

Mr. Holsveen stated that Mr. Acker, special assistant attorney general, had had a slight stroke. It was not known when he would be able to return to work. In view of the need for the preparation of legislation for the next session of the legislature, it was suggested that the Secretary contact Mr. Burgum, Attorney General, relative to assigning an assistant attorney general to the State Water Commission, on a temporary basis, until Mr. Acker's return. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that the Secretary contact the Attorney General relative to a temporary appointment of an assistant attorney general to the State Water Commission, to act until Mr. Acker's return. All Commission members voted age and the motion was carried.

The Commission members discussed the advisability of IRRIGATION WELL STANDARDS setting up standards and legislation for well drilling operations, especially where private well drillers or out of state well drillers are hired to dig wells. Such legislation would give the State Water Commission an opportunity to inspect the work of these drillers and avoid possible future trouble. Such legislation was agreeable to the Commission members.

STATION WAGONS-PURCHASE OF NEW CARS Secretary Hoisveen stated that it was going to be necessary to replace the station wagons. There was discussion as to the type of cars best suited for

the needs of the Commission staff. The Commission members generally agreed that the cars and vehicles should not be traded at the end of the initial year. The Commission members took no other action.

WATER RIGHTS

#839

Mr. Hagen, Water Commissioner for the City of Fargo, requested that the Chrisan Company be granted. one acre foot of water per year for the whole project, with the understanding that in the eyent the city of Fargo runs short of water they will shut down their irrigation. (See minutes of April 22, 1960 for approval.)

#849

Ed Ulmer of Elgin requests the right to divert 86.0 acre feet of water from Antelope Creek to Irrigate 43 acres. Due to objections Mr. Ulmer is to be reminded that a substantial flow must be allowed to pass the pump site to supply requirements of riparian users and other prior rights. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that Ed Ulmer be granted the right to divert 28 acre feet ofwater from 'Antelope Creek to Irrigate 28 acres and that he is to permit a substantial flow to pass the pump site to supply requirements of riparian owners and other prior rights. All Commissioners voted age and the motion was

#850

carried.

Robert H. Levis of Sanger requests the right to divert 3856.2 acre feet of water from the Missouri River to irrigate 1928.1 acres of land. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that Mr. Levis be granted the right to divert 3856.2 acre feet of water from the Missouri River to irrigate 1928.1 acres. All commission members voted age and the motion was carried.

Stanley Ripley of Medora requests the right to #853 divert 164.6 acre feet of water from the Little Missouri River to irrigate 82.3 acres of land. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that Mr. Ripley be granted the right to divert 22.5 acre feet of water from the Little Missouri River to irrigate 15 acres. All Commission members voted aye and the motion was carried.

#854 Ernest Tietz of Elgin requests the right to divert 78 acre feet of water from the Cannonball River to irrigate 39 acres. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that Ernest Tietz be granted the right to divert 22.5 acre feet of water from the Cannonball River to Irrigate 15 acres of land. All Commission members voted age and the motion was carried.

Max Borner of Stanton requests the right to divert #855 176.4 acre feet of water from the Knife River to irrigate 88.2 acres. It was moved by Commissioner Corwin and seconded by Commissioner Einar Dahl that Max Borner be granted the right to divert 176.4 acre feet of water from the Knife River to Irrigate 88.2 acres, with the understanding that this is to be reduced to 22.5 acre feet to irrigate 15 acres when water cannot be supplied by back water from the Missouri River.

The meeting adjourned at 5 p.m.

Respectfully submitted,

ATTEST:

Milo W. Horsveen Secretary

SIOUX IRRIGATION DISTRICT BOARD OF DIRECTORS' MEETING CARTWRIGHT, NORTH DAKOTA May 5, 1960 APPENDIX A

The meeting of the Board of Directors of the Sioux Irrigation District was called to order by the chairman, Richard Croy. The following directors were present:

Emil Hartl, Cartwright
Melvin Sandy, Cartwright
Lawrence Croy, Cartwright
Richard Croy, Cartwright
Alfred Gullickson, Cartwright

Others present at the meeting were:

Einar Dahl, State Water Commission Member from Watford City Milo W. Hoisveen, Secretary, Chief Engineer, State Engineer State Water Commission, Bismarck Vernon S. Cooper, Assistant Secretary, State Water Commission, Bismarck

Mr. Lawrence Croy offered the following Resolution and moved its adoption:

WHEREAS, at the request of the Board of Directors of the Sioux Irrigation District the State Water Conservation Commission has drilled several test holes on the lands in this district In an effort to determine if a well could be installed to augment the water supply for the district irrigation system and said investigations have indicated that such a potential well site exists, and

WHEREAS, the State Water Conservation Commission estimates that the cost of developing such a well, including the purchase and installation of pumps and motors will be much less than it would cost the district to lower the pump intake, and

WHEREAS, the State Water Conservation Commission has the equipment and engineering and technical skill to install an experimental well at the best possible location which well would include the installation of casing so that this well can be completely tested and can be utilized in the district irrigation system if satisfacfory.

BE IT RESOLVED that the Board of Directors of the Sioux Irrigation District in meeting duly assembled in Cartwright this 5th day of May, 1960, that this board, in order to provide an assured water supply for the irrigation system of this district, hereby requests the State Water Conservation Commission to proceed with the installation of a well at a suitable location on the project and that this district agrees to pay the State Water Conservation Commission for the cost of the well casing for the well installed proves satisfactory and the district can proceed to develop the well for use in its irrigation system.

Mr. Melvin Sandy seconded the motion and on roll call all directors voted aye, whereupon the chairman declared the Resolution duly adopted.

s/ Richard Croy									
Chairman,	Sioux	Irrigation	District						

s/ Alfred V. Gullickson
Secretary, Sioux Irrigation District

RESOLUTION

APPENDIX B

WHEREAS, the welfare, future growth and prosperity of all the citizens of Burleigh County is dependent on the development and utilization of the resources in the county, of which water is of great importance; and

WHEREAS, the water resources of Burleigh County include not only those in the rivers and streams in the county but also those from under ground sources of which very limited information is available; and

WHEREAS, it has come to the attention of the Board of County Commissioners of Burleigh County that the North Dakota State Water Conservation Commission is engaged in conducting ground water surveys throughout the state of North Dakota in cooperation with the U. S. Geological Survey and the counties, cities and towns who have an interest in the information that is available from the survey with the costs of these surveys being shared on the basis of the U. S. Geological Survey furnishing 50%, the State Water Commission 25% and the county, city or town 25%; and

WHEREAS, it is estimated that a county-wide survey of the ground water resources of Burleigh County can be made over a 4 year period and will cost approximately \$48,000 to \$54,000 of which Burleigh County would be required to contribute \$12,000 toward the costs of financing this survey and the State Water Commission and the U. S. Geological Survey furnishing the balance.

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Burleigh County this 5th day of May 1960 that the Board, recognizing the importance and value of a ground water survey of Burleigh County as outlined herein, does hereby agree to enter into a cooperative agreement with the State Water Conservation Commission for such a ground water survey of Burleigh County and does hereby agree to pay up to \$12,000 over a four year period as the County's share of the costs of the survey with \$3,000 to be deposited with the State Water Commission prior to the start of work and \$3,000 each year of the following three years during which the survey is underway, and

BE IT FURTHER RESOLVED that the State Water Conservation Commission is hereby requested to initiate work on this survey as soon as possible.

APPENDIX C

RESOLUTION

ADOPTED MAY 19, 1960 BY THE NORTH DAKOTA STATE WATER CONSERVATION COMMISSION REQUESTING THE CORPS OF U.S. ARMY ENGINEERS TO EXPEDITE THE SURVEY TO DETERMINE THE FLOOD PROTECTION MEASURES REQUIRED ON THE SOURIS RIVER IN THE VICINITY OF MINOT, NORTH DAKOTA

WHEREAS, the Corps of Engineers, St. Paul District Office prepared a report referred to as the Preliminary Examination of the Souris River, North Dakota, For Flood Protection At and In The Vicinity of Minot, North Dakota on July 18, 1956, and

WHEREAS, this report disclosed the following situation as related in Paragraph #62, which states:

Preliminary analyses of the probable effects of major floods on the Lake Darling Dam indicate that the occurrence of the standard project flood (about 45,000 second-feet) would undoubtedly result in failure of the structure. Assuming the reservoir is half full at the start of the flood and allowing for maximum discharge through the gate controlled culvert, the spillway and an auxiliary unprotected overflow area, it was found that the pool elevation would exceed the elevation of the top of the dam. Because of the substantial residential, business and industrial developments in the flood plain at Minot only a few miles downstream, it is apparent that the sudden failure of the dam and release of storage would cause a major disaster. The effects of possible failure of the dam when pool levels attained an elevation within 5 and 3 feet of the top of the dam were also investigated. These studies indicate that peak flows might increase from about 7,000 to 30,000 second feet if failure were assumed to occur when the five foot freeboard level was reached, and from 14,000 to 40,000 second feet with failure taking place when pool levels rose to within 3 feet of the top of dam.

and,

WHEREAS, the citizens of Minot have taken a considerable amount of comfort in the structure known as the Lake Darling Dam, which was constructed by the U. S. Biological Survey in 1935, as it has afforded some flood protection to this city during the past 25 years, and

WHEREAS, that area adjacent to the Souris River, which meanders through the city of Minot previously constituted a flood plain, has now become a thriving residential district thereby increasing the number of residents to dangerous flooding.

NOW THEREFORE BE IT RESOLVED, that the North Dakota State Water Conservation Commission at a meeting held at Bismarck, North Dakota on May 19, 1960, that the U. S. Corps of Army Engineers be requested to expedite this survey so the necessary flood protective works can be installed at the earliest date possible to afford the residents of Minot and rural area in the Souris Valley against impending devastation from the Souris River flood waters.

BE IT FURTHER RESOLVED, that the Secretary of the State Water Conservation Commission mail a copy of this Resolution to each of our senators and representatives in Congress; to the Chief Engineer, Corps of Engineers, Washington D. C.; and to Colonel Desloge Brown, St. Paul District Corps of Engineers.

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF MAY 31, 1960 1959-1961 APPROPRIATIONS

	AVAILABLE FUNDS DISCURSEMENTS FUND CA						-
FUND	APPROPRIATIO	N RECEI	PTS TO DA	ATE MAY'6	O UNEXPEND	ED ENCUMB.	
1. COMM PER DIEM & EXPENSES	4,000.00	.00	2,199.5	2 36 4.25	3,800.43	307.50	3,492.98
2. ADMINISTRATION	49.200.00	294.73	21,412.5	5 2,096.59	28.082.18	381.92	27,700.26
3. MAINTENANCE OF DAMS	115,000.00	67,094.55	144,942.4	1 4,501.95	37,152.14	4,556.73	30.590.41
4. INT'L & INTERSTATE EXP	10,000.00	.00	2,609.0	.00	7,390.94	140.25	7.250.69
5. TOPOGRAPHIC SURVEYS, USGS	30,000.00	.00	10,543.3	00.0	1 9,45 6.20	19.456.20	.00
6. HYDROGRAPHIC SURVEYS, USGS	27.500.00	900.00	1 2,09 8.5	7 3,735.05	1 6,301.43	4,955.80	11,345.63
7. ENGR & GEOL SURVEYS, USGS	57,500.00	.00	17,426.1	1,480.14	40,073.89	15,073.39	25,000.00
8. COOP WITH U. S. DEPT, ETC	57,000.00	.00	1 8,928.5	9 1,833.78	3 ६ 07 1.4 1	2,193.41	35,878.00
9. ENGINEERING INVESTIGATIONS	133,000.00	.00	56,085.2	9 6,472.12	01,914.71	3,774.72	78,139.9 9
O. ADM OF WATER LAWS	6,000.00	.00	823.5	.00	5,176.50	.00	5,176.50
1. OASIS CONTRIBUTIONS	6,500.00	.00	3,211.1	2 .00	3,288.88	.00	3,268.13
20. MULTIPLE PURPOSE "CAR FWD"	178,751.93 200,000.00	4,981.28	9 8,965.6	6 3,013.31	284,767.60	190,209.57	9 4,55 8.03
21. CONST BOND GUAR "GAR FWD"	77,056.64	3,236.60	.0.	.00	30,293.24	.00	30,293.24
	952,508.62	76.507.16	339,246.1	8 23,497.19	645,769.60	243,049.99	402719.61
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## NORTH DAKOTA STATE WATER CONSERVATION COMMISSION MONTHLY REPORT OF APPROPRIATIONS AS OF MAY 3 1 1960 1957-1959 APPROPRIATIONS

	AVAII	DISBU	RSEMENTS	FUND BALANCES			
FUND	APPROPRIATION		IPTS TO DATE		UNEXPENDED	ENCUMB.	UNENCUMT.
I. COMM PER DIEM & EXP	6000.00	.00	6,000.00#	.00	.00	.00	.00
2. ADMINISTRATION	47,000.00	279733	<b>&amp;</b> 49,579.27	.00	218.06	.00	218.26
3. MAINTENANCE OF DAMS	105,000.00	101,910.58	206,910.58	.00	.00	.00	.00
4. INTEL & INTERSTATE EXP	00,000,8	1 4.8 5	7,99733	.00	17.52	.00	17.52
5. TOPOGRAPHIC SURVEYS, USGS	30,000.00	.00	30,000.00	.00	.00	.00	.00
6. HYDROGRAPHIC SURVEYS, USGS	27,500.00	.00	27,500.00	.00	.00	.00	.00
7. ENGR & GEOL SURVEYS, USGS	37,500.00	5,306.81	42,806.81	.00	.00	.00	.00
8. COOP WITH U. S. DEPT, ETO	50,000.00	10.00	50,004.93	.00	5.07	.00	5.07
9. SMALL PROJECTS, ETC	113,000.00	2,374.98	120,374.98	.00	.00	.00	.00
10. ADM OF WATER LAWS	6,000.00	.00	6,000.00	.00	.00	.00	.00
II. DASIS CONTRIBUTIONS	3,800.00 438,300.00		% E,341.24 ) 555,515.14	.00.	.00 240.65	.00	240.65

[#] INCL TRANSFER TO FUND #2 -\$523.62

• INCL TRANSFER TO FUND #2 -\$ 97.57

& INCL TRANSFER FROM FUND #1-\$523.62 & FUND #9-\$97.57

7 TRANSFER FROM EMERGENCY COMM -\$4,541.24

### NORTH DAKOTA STATE WATER CONSERVATION COMMISSION PAYROLL - MAY 31, 1960

PER	MANEN	T	<b>EMPI</b>	OYEES
		<u> </u>		

NAME	POSITION GR	PAY RADE	REMARKS	SALARY MAY 60	WITH	SOC.	HOSP.	DONDS,	NET
DISVEEN, MILO W.		0-7	INC JUL' 59		132.00	27.14			PAY.
NDERSON, LARRY	RODMAN	A-9	STA MAR' 60		23.50		1 2.6 0	18.75	714.18
AESLER, GORDON	DRAFTSMAN	F-5	INC JUL' 59			5.55			155.95
OOPER, VERNON S.		M-5	INC JUL' 59		4 4.1 0	10.64			299.93
REDRICKSON, FRED	COORDINATOR	G-3	INC JUL' 59	373.84	71.00	11.22	12.60		279.02
HRING, EDNA	FILE CLERK	0-6	INC JUL 59		39.80	11.66			337.21
RINDRERG ALAN	ENGINEER	H-8	INC JOE 23	220.42	40.00	6.61	5.45		16836
IDT, DARLENE			INC JAN' 60		E1.80	15.12	5.45 5.45		401.80
LAND, LEONE			STA APR' 60	25 7.1 4	35.09	7.71	5.45		208.89
RED SDACH, JOSEPH		1000	STA JUN 59	35 4.6 7	4 4.1 0	10.64	5.45		294.48
SER, IRVIN		F-9	INC MAY 60	392.67	21.30	11.78	12.60		346.99
LSON, C. P.		B-7	STA MAR' 60	196.67	25.60	5.90			
JTZ, ROY	ENGINEER	1-6	STA DEC' 59	535.00	65.40	16.05			165.17
ITER, DANIEL		A-9	INC DEC' 57	185.00	13.50	5.55	5.45	170	453.55
CKMAN, EUGENE		H-1	INC APR 60	416.67	33.80	12.50	12.60	18.75	160.50
INDWICK, HAZEN		G-1	INC MAY 60	366.67	15.60	11.00	12.60	10.75	339.02
HOOK LOPEN		K-6	INC JUL' 59	651.67	68.80	19.55	12.60	7750	327.47
HOCK, LOREN		A-9	STA APR' 60	185.00	23.50	5.55	12.00	37.50	513.22
HULZ, JIM		F-5	INC JUL' 59	35 4.6 7	5 4.1 0	10.64	12.60		155.95
HWINKENDORF, DON	RODMAN	C~9	STA APR' 60	237.67	32.80	7.13	1 2.0 0		27733
MM, ROBERT J.	ASST ST ENG		INC JUL' 59	685.67	76.00	20.57			197.74
LTERSON, HOWARD	FOREMAN		INC APR' 60	416.67	53.80	12.50	12.60		576.50
LTERSON, JEAN		D-4	INC JUL 59	245.25	23.90	7.36	12.60		337.77
EGLER, VICTOR	ENGINEER		INC JAN' 60	594.17	86.20			720 <b>-</b> 0 2 0 2	213.99
EMPORARY EMPLOYEE	Sπ ·			~ · · · · ·	C 6.2 0	17.83	12.60	25.00	452.54
RKHARDSMEIER, A.		2.00	INC APR' 60	416.00	66.50				
GHLY, ERNEST	ASST DRILLER	1.85	STA APR' 60	367.23	56.70	12.48			337.02
HNSOŃ, GEORGE MONI, AHMED	OPERATOR		INC APR' 60	302.10	47.70	11.02			299,51
MONI, AHMED	DRILLER	2.10	STA APR' 60	416.85		9.06			24534
UTSON, LEWIS	ASST DRILLER	2.05	INC JUL' 59	464.33	48.10	1 2.5 1			356.24
UINGER, ANTON	OPERATOR		INC APR' 60	418.28	74.80	13.92			375.61
E, JEROME			INC MAY 60	105.00	6 4.6 0	12.55			341.13
MASTER, GEORGE			INC JUL' 59		17.00	3.15			84.85
WGARD. DENNIS			INC MAY 60	600.23	89.80	18.01			492.42
TERSON, JOHN				31.50	5.00	.95			25.55
ELTZER, VIRGIL			INC MAY' 60	105.45	17.00	3.16			85.29
, vinait	HODWAN	1.00	TEM MAY 60	1100	1.70	33			8.97
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