

STATE WATER CONSERVATION COMMISSION  
 Minutes of Meeting  
 Held in Office of State Water Commission in  
 Bismarck, North Dakota  
 August 7, 1958

A regular meeting of the North Dakota State Water Conservation Commission was called to order on August 7, 1958, in 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

Honorable John E. Davis, Governor and Ex-officio Chairman  
 Earle F. Tucker, Vice Chairman, Bismarck  
 Oscar Lunseth, Member from Grand Forks  
 A. M. Christensen, Member from Minot  
 Einar Dahl, Member from Watford City  
 Math Dahl, Commissioner of Agriculture & Labor, Bismarck  
 Milo W. Hoisveen, Secretary & Chief Engineer, State Engineer, Bismarck  
 Fred J. Fredrickson, Planning Coordinator, Washington, D. C.

OTHERS PRESENT

Messrs. Swanson and Brandt of the Oak Creek Water Conservation District arrived at the Commission office one and one-half hours after the scheduled appointment. They represented the Lake Metigoshe interests.

The meeting was called to order at 9:30 a.m. by Vice Chairman Tucker with Commissioners Oscar Lunseth, A. M. Christensen, Einar Dahl, Math Dahl and Secretary Hoisveen present.

It was moved by Commissioner Einar Dahl and seconded by Commissioner Math Dahl that the reading of the June 12, 1958, Minutes be dispensed with and that the same be approved. All members voted aye and said motion carried.

It was moved by Commissioner Math Dahl and seconded by Commissioner Einar Dahl that the Financial Statements for June and July, 1958, be approved and filed in the office of the State Water Conservation Commission. All members voted aye and said motion carried.

Governor Davis entered the meeting and assumed the chair.

A resolution from the City of Max, North Dakota, requesting a groundwater survey was read by Secretary Hoisveen. Secretary Hoisveen stated that the drill crew is presently working below Jamestown on a county-wide survey. It is anticipated that the initial phase of this survey will be completed on or about August 15th. The drill crew will then proceed to explore the ancient channel of the Missouri River. Secretary Hoisveen stated that the Cities of Berthold and New England have also requested groundwater surveys and that the City of Minot has requested an extended groundwater survey to complement the other groundwater surveys in the area. It was moved by Commissioner Einar Dahl and seconded by Commissioner A. M. Christensen that the State Water Conservation Commission cooperate in groundwater surveys for the Cities of Max, Berthold, New England and Minot, contingent upon their deposit of the municipalities'

share of said survey with the State Water Conservation Commission. The priority date of said surveys shall be determined by receipt of said deposit in the office of the State Water Conservation Commission. Upon roll call all members voted aye and said motion carried.

Mr. Fred J. Fredrickson, Planning Coordinator for the State Water Conservation Commission, Washington, D. C., stated that he felt that the water program of the State had had a very satisfactory year. In reviewing congressional hearings he stated that he believed much of the success in obtaining appropriations was due to the interest shown by the Governor in attending said hearings. He stated that the Public Works Appropriation Bill was still in conference but that he was sure the same would soon be signed and the State of North Dakota would receive an adequate amount. He also stated that he felt that the Kansas City meeting was most successful. A committee was appointed by the Executive Committee of the Mississippi Valley Association to review the legislative and fiscal needs of the Garrison Diversion Unit with the hope of arriving at a definite recommendation that could be proposed to the Mississippi Valley Association at its next annual convention relative to the Association's approval of the Garrison Diversion Project. The committee meeting is to be held in Sioux City, Iowa, in early September.

Commissioner Tucker inquired if anything further had been heard from the Milwaukee Railroad relative to the easements necessary for the flood protective project. Secretary Hoisveen stated that Governor Davis had written the President of the Milwaukee Railroad relative to said easements and that he had heard, although not formally, that the easements had been forwarded upon receipt of the Governor's letter. A telephone call from John Amundson, attorney for the district, substantiated this statement.

The proposed budget for the 1958-1960 biennium was presented to the Commissioners. Secretary Hoisveen illustrated by use of a chart the increased amount of work which the Commission was performing in comparison to former years. The headings of the chart were (1) Dam Maintenance and Expenditures; (2) Water Rights Processed and Certificates of Completion Issued; (3) Surveys and Investigations; and (4) Flood Control and Irrigation Districts formed. There was a very apparent indication as to the growth and expansion of the water program. An increase of \$68,000 is being requested to aid in maintaining the efficiency of the department. The Commissioners unanimously agreed that said requested increase was justified.

Governor Davis left the meeting and Vice Chairman Tucker assumed the chair.

The Multiple Purpose Fund was further discussed among the Commissioners. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that the Multiple Purpose Fund request for appropriations be increased to \$300,000 in view of the expanded water program and that the same be approved. Upon voice vote all members voted aye and said motion carried.

Secretary Hoisveen stated that the State Water Conservation Commission has been requested to assist in the construction of the Ray Dam in Williams County. He stated that Ray Dam is located several miles South of the City of Ray and that he felt this was an ideal location to experiment with the modified glory hole type spillway. In view of this, the Commissioners believed the Commission would be authorized to participate to a larger extent than the usual one-third or one-half percent. A successful installation of this type spillway could increase materially

STATEMENT OF R. G. HARENS,

EXECUTIVE MANAGER, NORTH DAKOTA ASSOCIATION OF RURAL ELECTRIC COOPERATIVES

TO THE COORDINATING COMMITTEE

FOR MISSOURI RIVER MAIN STEM RESERVOIR OPERATIONS

My name is R. G. Harens. I am executive Manager of the North Dakota Association of Rural Electric Cooperatives, with headquarters in Bismarck, North Dakota.

I would like to present our stand on the matter of water regulations for the Missouri River. I suppose we could call it the "Golden Rule" of water useage. That is, we are willing to cooperate with all interests as long as:

1. The water needs for human, animal and plant life are taken care of first, and
2. We don't waste water!

For the above uses there can be no substitute. Power can be generated by other means and transportation can be provided by other methods. Certainly, hydro-power is lower cost and to be striven for much the same as water transportation is cheaper in some cases than any other means. But water for plant and animal life has to come first.

Of the two uses in question, I believe we can show that the generation of power can be quite compatible with the two principles. For instance, power can be produced and sold for firm rates during the winter when the water releases are needed down stream for municipal purposes and during the critical period for Mississippi navigation. Likewise, the flow can be reduced in the summer when the power needs are less. So, until the time comes when the entire area reaches the stage of summertime peak, we feel that water should be stored during that time.

This leads us to the matter of cold economics. We know that power is expected to subsidize irrigation, for instance, but, so far, we have heard no complaints on that score. Irrigation farming can only lead to more stable economics and an agricultural state like North Dakota certainly can use stability.

We know that power is expected to pay more than its share of the cost of the dam and we haven't heard too much griping on that either. According to a Bureau of Reclamation Summary dated April 1955, we find that the Federal Government will have a little over five billions of dollars invested in the Basin. Three and one half billion dollars is scheduled for repayment. Irrigation will carry only \$385,500,000 of this and power is expected to repay \$3,036,405,000 or about three-fifths of the total cost. It is interesting, also, to note that the irrigation costs are \$2,235,000,749 while the total power costs are \$1,144,238,000 or about two to one. Still, like I said, we aren't complaining. We do question, a little, the wisdom of the Missouri River navigation arrangement. We have heard complaints over the fact that some water is being run past the turbines and too much power is being sold for secondary and dump rates. This appears to be mainly for the purpose of maintaining a nine foot channel on the Missouri River where the value of navigation is questionable. If this should become an economic factor, then why not consider the matter of spending a little more money to make slack water navigation possible so that water can be conserved at the same time.

According to a quotation from the Corp of Engineers, about September last year, there had been less than 150,000 tons shipped over these waters. I suppose you could say about three thousand carloads of freight. That isn't very much.

The Missouri Basin Survey Commission found that the cost to the four main stem dams allocated to navigation was \$136,100,000, which was to be amortized over a fifty year period at interest rate of 2 1/2 per cent, a yearly cost of \$5,052,000 was arrived at. Added to that cost was a figure of \$793,000 for operation and maintenance. Thus we have a rather costly item which is drawing down on our economics in two ways. First, the hauling is costly and, secondly, the water is being released for this operation when power produced sells at a rate of about one-half that of firm power rate. These are conditions that appear to be existing today and, of course, the next year's operation are being considered at this time.

A second point is the matter of efficiency. Water should be stored in all of the reservoirs up to the stage where the most efficient operation of the turbins can be affected. Hydrological reports show that the high elevation in April 1956, for the Garrison reservoir, was 1,783.9 feet above sea level. The high for 1957, 1,806.4 feet in the month of July, while the present level is at 1,802.7 feet.

Fort Peck has gained a little by filling from 2,177.0 feet above sea level a year ago to 2,190.0 feet at this time. We hope the reservoirs downstream are gaining, also.

The flow at the Garrison Dam last week was averaging about twenty thousand cubic feet per second and the power was being clocked at 187,000 kilowatts. This power was coming from 240,000 Kw's of installed capacity. Under these conditions, it seems wasteful to run any water through the dam without it being needed for municipal or power uses down stream.

In conclusion, may I repeat what I said at the start: Don't waste water! And to emphasize this point just a little, I would like to quote a brief statement from the Missouri Basin Survey Commission report on land and water. The heading of the item is made up of these words: "Water is the Key". The opening statement has this to say:

"Above everything the basin's crucial problem appears as primarily a struggle to conserve, control and use water of which the region has not enough." Going on a little further, the concluding paragraph says this:

"The Basin's history has been written by water or the lack of water and its future depends vitally on the proper conservation and use of this asset. Good use of water is the mainstay of the Basin's productivity and the answer, as well, to the question whether the Basin shall advance or decline in well being. With proper development and conservation of water resources, it may count on stable and increasing prosperity. Mainly, therefore, this report emphasizes the relationship that should subsist between the basin's water resources and its climate, physical and economic characteristics."

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STATEMENT OF THE GARRISON DIVERSION CONSERVANCY DISTRICT

BEFORE

COORDINATING COMMITTEE FOR MISSOURI RIVER MAIN STEM RESERVOIR OPERATIONS

April 30, 1958

The Garrison Diversion Conservancy District was established by the North Dakota Legislature in 1955 to provide a legal entity that could promote the development of the Garrison Diversion Unit in North Dakota and could contract for the construction and operation and maintenance of the facilities of this project. The Conservancy District has actively supported and promoted the early development of irrigation in North Dakota as authorized in the Garrison Diversion Unit and has an interest in all phases of operation of the Missouri River Basin program that will effect this Unit.

The Garrison Diversion Unit is a part of the Missouri River Basin project as authorized in the Flood Control Act of 1944. When developed, it will serve as a partial replacement for the 580,000 acres of rich agricultural bottom land that was taken from North Dakota tax rolls for the mainstem Garrison and Oahe Reservoirs.

The Garrison Diversion Unit is a multiple purpose project with its primary benefit and justification accruing from irrigation. The construction costs of the Garrison Diversion Unit allocated to irrigation, which will include a portion of the construction costs of Garrison Dam and Reservoir, are reimbursable. The repayment to the federal government of these costs of the project will come from two sources: from the irrigators and other project beneficiaries, and from surplus power revenues in the basin account.

The Garrison Diversion Conservancy District wholeheartedly supports the position that the development and use of the Missouri River water should be for all beneficiaries in the Missouri River Basin as was set forth in the Flood Control Act of 1944. An adequate water supply is available in the Missouri to meet these

requirements, however, the wise control and management of this water supply is essential if the basin area and nation are to receive the full benefit from the Missouri River Basin project.

Irrigation development is an integral part of the Missouri River Basin project. In the upper basin states it has not been developed concurrently with other features of the project as was originally contemplated. This situation should be corrected as rapidly as possible. To assure the orderly development of irrigation as proposed and authorized it is apparent that every effort should be made to provide for the maximum production of firm power from the main stem hydro plants. Such production will bring in the maximum revenue in the basin account which in turn will enhance irrigation development.

We do not contend the basic needs of any of the beneficiaries of the Missouri River Basin project be sacrificed to satisfy other demands. We propose, however, that all available water above the minimum requirements for non consumptive use be stored and utilized when it can produce the greatest possible benefit. Such action appears particularly necessary during the early years when the reservoir system is filling.

The operations of the main stem reservoirs should be determined after careful consideration is given to the views of all interested states and groups such as is accomplished through this committee. We believe it essential that all needs and demands be fairly considered if the entire basin is to receive the full benefit from the Missouri River.

STATEMENT OF  
THE LEAGUE OF NORTH DAKOTA MUNICIPALITIES  
BEFORE  
THE COORDINATING COMMITTEE FOR MISSOURI  
RIVER MAINSTEM RESERVOIR OPERATIONS HELD  
IN OMAHA, NEBRASKA, APRIL 29, 1958.

Mr. Chairman and Members of the Committee:

This statement is being made in behalf of the members of the League of North Dakota Municipalities. Our League is much interested in the operation of the main stem reservoirs on the Missouri River. We believe that at least 43 communities, two important air bases, a radar station and some of our largest cities will be obtaining water at some future date through the Garrison Diversion Unit. A cost of \$59,924,000 has been assigned to the Garrison Diversion Unit for its share of construction of the Garrison reservoir. The allocable cost made to municipal and industrial waters from the Garrison Diversion Unit will likely exceed \$25,000,000. As a consequence, our municipalities will be paying their way for the waters used from the Garrison reservoir.

We, therefore, desire to see the reservoirs operated with the greatest possible efficiency in order that the basin power account can be built up substantially to enhance future irrigation project considerations in North Dakota. In order that you might better understand the situation that is confronting many of our cities and communities, I would like to call your attention to the situation that exists in the City of Devils Lake, North Dakota, today. It has been estimated that the lack of good water supply for Devils Lake has resulted in a loss of about \$10,000,000 since 1948 because of retarded growth. The situation at Fargo is critical. This city may be limited to size unless some provision is made to obtain additional water from another source. Moorhead, Minnesota, which is adjacent to the Red River across from Fargo is considering obtaining water from the Red River of the North. This will add to Fargo's difficulty as the river supply is not adequate to meet its requirements. The combined population of these two cities approximates 70,000 people.

The City of Minot, North Dakota, depends upon a limited supply of water from the Souris River and wells. Army air bases are being constructed near Minot and Grand Forks. These will greatly increase the demands on the water supply of both cities within the next few years. In fact, the City of Minot is now considering the possibility of obtaining water from the Garrison Reservoir, some 40 miles distant. Many of our smaller communities are confronted with the problem of importing water by trucks. They likewise are looking forward to obtaining water through the Garrison Diversion Unit to meet their future municipal water requirements. Along with the benefits of the improved water supplies, our municipalities look to the Garrison Diversion Unit as a means to provide water to augment flows of our rivers and streams for pollution abatement purposes.

Included with this statement is a table which depicts the Devils Lake story and exemplifies a situation that will exist in several other North Dakota cities if water is not soon made available through the Garrison Diversion Unit.

We, therefore, urge that the reservoir regulations be carried on with the greatest of prudence to afford us municipal water in the future. We wish also at this time to express our thanks to the Mainstem Reservoir Committee for the consideration shown our several cities obtaining water directly from the Missouri River.



What the lack of good water can cost a city.  
Here are the figures for 1940-50:

City	Population 1940	Population 1950	Increase	Percent Increase
Fargo	32,580	38,256	5,676	17.4
Grand Forks	20,228	26,836	6,608	32.7
Minot	16,577	22,032	5,455	32.9
Bismarck	15,496	18,640	3,144	20.3
Jamestown	8,790	10,697	1,907	21.7
Dickinson	5,839	7,469	1,630	27.9
Williston	5,790	7,378	1,588	27.4
Valley City	5,917	6,851	934	15.8
Average				24.5
Devils Lake	6,204	6,427	223	3.6

If Devils Lake had increased 24.5 percent the 1950 population would have been 7,724 or an increase of 1,520 instead of 223. The added increase would have averaged 130 persons per year in population in the 10 year period. Based on United States Department of Commerce figures the loss of income of the 130 additional persons per year would be as follows:

Year	Average North Dakota per capita income. <sup>1</sup>	Estimated population in- crease based on average of 8 other cities 1940-50.	Loss of income per year due to loss of estimat- ed population increase.
1941	\$ 537.	130	\$ 69,810
1942	741	260	192,660
1943	927	390	361,530
1944	1,075	520	559,000
1945	1,111	650	722,150
1946	1,144	780	892,320
1947	1,582	910	1,439,620
1948	1,514	1,040	1,574,560
1949	1,202	1,170	1,406,340
1950	1,298	1,300	1,687,400
Total			\$ 8,905,390

<sup>1</sup> Survey of Current Business, U. S. Department of Commerce

Assuming that 80 percent of this income would be spent locally the gross loss to the people of Devils Lake in the period 1940-50 was \$7,124,312. Since 1950 the loss has undoubtedly been more than \$1.5 million per year.

There is no other reason that Devils Lake should not have had average growth other than the lack of good water.

Figures taken from North Dakota Economic Studies No. 1, April 1954, Bureau of Economic and Business Research, University of North Dakota School of Commerce. Population figures from pages 45 and 48, income figures from page 149.

the participation of counties in similar projects. The total cost of the project is estimated to be \$25,000. It was moved by Commissioner Einar Dahl and seconded by Commissioner Christensen that the Ray Dam be designated as a metal glory hole pilot project and the Commission would be justified in expending upward to 60% in the reconstruction of said dam. Upon roll call, all members voted aye and said motion carried. Cooperating in the project are the Williams County Board of Commissioners and the State Game and Fish Department.

Secretary Hoisveen stated that Foster County has requested the State Water Conservation Commission to make periodic inspections of their dams and will supply the necessary assurances to participate in dam repair and maintenance. They have selected four dams in the county which they desire to work on. Special attention has been called to Wyard Dam. It is anticipated that the cost of said repairs is \$6,000. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that the State Water Conservation Commission participate to the extent of one-half or 50% of the cost of said repair work. All members voted aye and said motion carried. In commenting on dam inspections, Secretary Hoisveen stated that it is a policy of the Commission to endeavor to make annual inspections on all dams in which they are interested. The inspections are generally scheduled following the spring break up and a follow up is made whenever cloudburst conditions exist in regards to a specific locality.

A request has also been received to participate in the repair of Schlenker Dam in McIntosh County. Secretary Hoisveen stated that the dam has disintegrated during the summer and that there is not too much community interest in the project. The county feels that this is more of a private dam and will not participate in the repair of the same. It was moved by Commissioner Einar Dahl and seconded by Commissioner Lunseth that based upon the recommendation of the State Engineer as to the condition of the dam, that said request be tabled. All members voted aye and said motion carried.

Secretary Hoisveen stated that a request from Brillian Township for a dam repair project was received in the office. The dam was in bad shape and was considered an emergency measure. Cost of said repair was on a one-third basis with the Township, Ward County and the State Water Conservation Commission cooperating. The work was performed for \$1200. It was moved by Commissioner Lunseth and seconded by Commissioner Christensen that said repair job be approved. All members voted aye and said motion carried.

It was reported by Secretary Hoisveen that Cass County has requested State Water Conservation Commission participation in the clean out of Drains #1, #12, #19 and #30. A similar request has been received from the Traill County Drain Board for assistance in Drains #4 and #14. Grand Forks County has also requested assistance in Drain #11. It was moved by Commissioner Christensen and seconded by Commissioner Einar Dahl that in view of the Drainage Rules and Regulations of the State Water Conservation Commission, that the Commission participate to the extent of 40% in the clean-out of the above mentioned drains, if there was no State participation originally. If the State participated in the construction of the original drains, the maintenance of the same is dependent upon the county and the State is not expected to participate. All members voted aye and said motion carried.

Secretary Hoisveen read a letter from the City Auditor of Minto requesting participation in the construction of a lagoon drain. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that in view of the fact that there is no provision in the Drainage Rules and Regulations adopted by the State Water Conservation Commission, the Commission is unable to participate in the same. All members voted aye and said motion carried.

Secretary Hoisveen reviewed the Cooperative Agreement to be entered into with the Groundwater Branch of the U. S. Geological Survey. The agreement is for the period of July 1, 1958, to June 30, 1959, and each of the parties agrees to contribute \$47,500.00. In meeting this amount, Secretary Hoisveen stated that \$15,000 still remains in the budget. The authority to use \$15,900 was received from the Commission at a previous meeting. A credit of \$3,000 for last quarter drilling operations and a credit of \$12,000 for future use of the drilling machine will total \$45,900. It will be necessary to obtain \$1600 from the Bank of North Dakota Drilling Fund. There is approximately \$14,100 in the same as of this date. Commissioner Christensen moved that Secretary Hoisveen be authorized to sign said agreement, which motion was seconded by Commissioner Einar Dahl. All members voted aye and said motion carried.

The Cooperative Agreement with the Hydrographic Branch of the U. S. Geological Survey was also reviewed by the Commission members. Said agreement is for the period of July 1, 1958, to June 30, 1959, and each of the parties agrees to contribute \$16,500. This branch of the U.S.G.S. is primarily stream flow measuring. Upon Secretary Hoisveen's approval of said participation, it was moved by Commissioner Christensen and seconded by Commissioner Lunseth that Secretary Hoisveen be authorized to sign said agreement. All members voted aye and said motion carried.

Secretary Hoisveen stated that he has again heard from the Corps of Engineers, St. Paul District, relative to the cleaning and snagging of Sheyenne River below the Bladhill Dam and reservoir. Secretary Hoisveen stated that he has written the affected counties but that they continue to neglect to do anything about it. Mr. Fredrickson urged that something more concrete be done in this regard as he felt neglect on our part to have this matter taken care of could impair future dealings with the Corps. Secretary Hoisveen was directed to arrange a meeting with the County Commissioners and discuss the matter with them.

Secretary Hoisveen discussed the Pembilier snagging and clearing project with the Commissioners. He stated that he had been called to Pembina by Mayor A. J. Christopher and much dissatisfaction had been expressed so far as work performed by the Soil Conservation Service. Secretary Hoisveen wrote the Corps of Engineers, St. Paul District, relative to the matter and set forth certain items of work which the residents desired to have clarified prior to the signing of easements. It is anticipated that this problem will be taken care of.

Secretary Hoisveen advised the Commissioners that the Corps of Engineers proposed a bridge over Pembilier Dam costing \$1,900,000. It was felt that this cost would adversely affect the benefit to cost ratio for the Pembilier Dam. As a consequence, the State Water Conservation Commission was requested to make a survey to see if they could come up with a lower figure. The State Water Conservation Commission reviewed the site of the proposed bridge and proposed an alternate location which would involve the construction of a bridge considerably shorter in span than the

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estimated cost for the bridge at the site proposed by the Corps of Engineers. The Highway Department has prepared an estimate of cost of a bridge for this alternate location at \$1,200,000.

A letter from Mr. Lyness G. Lloyd, State Conservationist, addressed to Secretary Hoisveen was read. Mr. Lloyd expressed appreciation to the State Water Conservation Commission for assistance in obtaining approval of the Elm River Watershed project.

The Walhalla Park Board has requested the assistance of the State Water Conservation Commission in making a survey to determine the possibility of a channel cut-off. Secretary Hoisveen stated that he reviewed the site with a Mr. Fred Radke of the Walhalla Park Board and that there were several cut-off possibilities that would reduce or eliminate bank erosion. It was moved by Commissioner Lunseth and seconded by Commissioner Christensen that Secretary Hoisveen be authorized to make a survey in conjunction with the Park Board. All members voted aye and said motion carried.

A resolution from the Lower Heart Water Conservation and Flood Control District relating to contributions by the State Water Conservation Commission was read by Secretary Hoisveen. The State Water Conservation Commission cooperated with other state agencies in an effort to hold participation on the raising of Highway Bridge #10 to a minimum. However, the Commission agreed that the rules and regulations of the Commission provided for participation in this type of project up to 40% of the construction costs and that the Commission would participate in the cost not to exceed \$40,000 which is indicated in the resolution. It was moved by Commissioner Christensen that said resolution be filed in the office of the State Water Conservation Commission and participation be made in accordance with the resolution. Commissioner Lunseth seconded said motion. All members voted aye and said motion carried. *Passed June 12, 1958. (Christensen)*

Secretary Hoisveen stated that a hearing was held at Wahpeton, North Dakota, on June 13th relative to establishing a water conservation and flood control district for this particular county. He stated that 28 voted favoring the district and 10 voted opposing the same. The opposition vote was cast by husbands and wives and inasmuch as those favoring the district did not have their wives present, the opposition could be considered to be five. Upon recommendation of Secretary Hoisveen, Commissioner Lunseth moved the adoption of the following resolution, which motion was seconded by Commissioner Christensen.

#### R E S O L U T I O N

WHEREAS, Richland County, North Dakota, acting by and through its Board of County Commissioners, did on the 12th day of May, 1958, file in the office of the State Water Conservation Commission, a petition requesting the establishment of a water conservation and flood control district, embracing within its boundaries the territory contained within Richland County; and

WHEREAS, said petition was accompanied by a certified copy of the resolution of the Board of County Commissioners authorizing and directing the filing of such petition; and

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WHEREAS, a report of the Chief Engineer of this Commission, and the evidence adduced at a public hearing on the petition, held in the City of Wahpeton, North Dakota, on the 13th day of June, 1958, after due notice of such hearing had been given as provided by law, discloses that adequate relief from flood damage can best be had by the establishment of flood preventive works by a water conservation and flood control district, and that Federal cooperation can more readily be secured through the establishment of such district;

NOW, THEREFORE, BE IT RESOLVED by the State Water Conservation Commission this 7th day of August, 1958, that the petition of Richland County be and the same is hereby approved and that the Chairman and Secretary of the Commission are hereby authorized and directed to execute its order establishing a water conservation and flood control district to be designated and known as Richland County Water Conservation and Flood Control District, embracing within its boundaries all of Richland County.

All members voted aye and the above resolution was duly adopted.

Secretary Hoisveen stated that the Senate Subcommittee on Interior Appropriations has authorized the payment of \$12,000 to the State Water Conservation Commission for the construction of suitable culverts in Zeibaugh Pass. The Commission is merely handling the funds and will not participate in the cost of said construction. Secretary Hoisveen requested permission to use his technicians in laying out the job and supervising the same. The supervisory work would be performed through the use of multiple purpose funds. Commissioner Einar Dahl moved that said request be granted, which motion was seconded by Commissioner Christensen. All members voted aye and said motion carried.

A request has been received from residents in the Selfridge area requesting a survey for a dam site. They have little or no facilities in the area for recreation and much interest is being shown in the project. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that said survey be authorized. All members voted aye and said motion carried.

Secretary Hoisveen further stated that he has also received a request for a survey on the shore line of Wood Lake in Ramsey County. Improvement of outlet facilities may be required to prevent water from becoming sufficiently high as to cause bank erosion. There are 40 or more cottages on the lake. It was moved by Commissioner Lunseth and seconded by Commissioner Christensen that said survey be authorized. All members voted aye and said motion carried.

The Commissioners were advised by Secretary Hoisveen that the water truck which is presently in use is rapidly depreciating and is in constant need of repair and, as a consequence, delays the drill crew. Mr. George McMaster, driller, has indicated that he feels a GMC 6x6 truck would be ideal. Mr. Victor Ziegler, Investigation Engineer, has made inquiry concerning such a truck and has received a reply from the Memphis Equipment Company in Memphis, Tennessee. They quote a price of \$3375 for a 2½ ton 6x6 truck with a full 90 day warranty, delivery to be where specified. The trucks were bought out of government storage. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that Vice Chairman Tucker and Secretary Hoisveen check into the matter further and obtain more details concerning the same. Secretary Hoisveen was directed to work with Commissioner Tucker regarding the purchase of a suitable truck. Funds would be obtained from the drilling fund in the Bank of North Dakota. All members voted aye and said motion carried.

Secretary Hoisveen stated that the nucretor has been in use for three seasons and that a new one was almost a necessity. The machine is used for applying concrete pneumatically. The price of a new nucretor is \$7,002.50 and an allowance of \$400 will be made on the old one. Secretary Hoisveen further stated that the old mixer is no longer used because of the concrete plants which are so widely used and that \$1,000 would be allowed on this. This would make a total of \$1400 to be deducted from the cost of the nucretor, plus the discount, and leave a difference of \$5490.00. Commissioner Christensen moved that Secretary Hoisveen be authorized to purchase said nucretor, which motion was seconded by Commissioner Einar Dahl. All members voted aye and said motion carried.

A letter from Senator Young dated August 1st pertaining to the low-head dam survey was read by Secretary Hoisveen. Senator Young enclosed a letter from General Person, Chief of Engineers for Civil Works of the U. S. Army. The General pointed out that it would require them quite some time to make the report available. The Highway Department is desirous to see a bridge go in as soon as possible. They are anxious to start designing the bridge and the delay on the part of the Corps of Engineers is in turn delaying their work. Mr. Bradley of the Highway Department has indicated that if the report from the Corps of Engineers could be expedited, they would go along and contribute \$2500 to a private engineering firm to make an appraisal. It was also indicated that if the Corps had the funds appropriated to them, they possibly would not be adverse to hiring another firm to prepare the survey. This low-head dam would eliminate the proposal of building a 50 foot dam north of Bismarck and would also be an excellent recreational area in the Bismarck-Mandan vicinity. Vice Chairman Tucker stated that the low head dam has been endorsed by the Bismarck Chamber of Commerce and they would assist in any way possible to see its construction. Secretary Hoisveen and Mr. Fredrickson were directed to continue work on the matter and contact the Corps of Engineers and request them to hire a private engineering firm to expedite the survey contingent upon obtaining some funds from federal sources.

Secretary Hoisveen stated that the cut-off channel survey at Jamestown has been accomplished. The estimated cost estimate on the channel cut-off is \$22,000.00, the cost of which is to be borne by the Board of Administration, Stutsman County, City of Jamestown and the State Water Conservation Commission. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that the State Water Conservation Commission contribute 40% of the cost estimate. All members voted aye and said motion carried.

Secretary Hoisveen stated that a request has been received from a group of interested Antler residents to have a dam built in the area. Secretary Hoisveen further said that if a dam is built, it should be with flash boards and the top one and one-half to two feet would be for irrigation and if it gets below the flash board level, it would have to meet the recreational interests. Commissioner Lunseth moved that Secretary Hoisveen be authorized to perform a survey, which motion was seconded by Commissioner Christensen. All members voted aye and said motion carried.

Commissioner A. M. Christensen received a call from Mr. Charles Truax, County Engineer for Ward County, stating that the DesLacs Dam near the City of DesLacs was much in need of repair. The reservoir behind the dam was formerly used as a water supply for the Great Northern Railroad Company. Recently the railroad company gave the property to the City of Des Lacs for recreational purposes. Mr. Hoisveen was directed by the Commission members to make an investigation of the dam and report as to the cost of needed repairs.

The following water rights were considered:

#732. B.P.O.E., Williston, has requested the right to divert 160 acre feet of water out of the Muddy River to irrigate 80 acres of land. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that they be granted the right to divert 120 acre feet of water to irrigate 80 acres of land. Motion carried.

#762. Rudolph Bertsch, Bowman, has requested the right to divert 40 acre feet of water from the Cannonball River to irrigate 40 acres of land. It was moved by Commissioner Lunseth and seconded by Commissioner Christensen that said request be granted. Motion carried.

#763. C. O. Howery, Antler, has requested the right to divert 160 acre feet of water from Antler Creek to irrigate 71 acres of land. It was moved by Commissioner Christensen and seconded by Commissioner Einar Dahl that Mr. Howery be granted the right to divert 90 acre feet of water to irrigate 60 acres of land. Motion carried.

#764. The City of Bottineau has requested the right to divert 1448 acre feet of water from groundwater sources for municipal and industrial use. It was moved by Commissioner Christensen and seconded by Commissioner Lunseth that said request be granted. Motion carried.

#765. Ben T. Nordell, Williston, requests the right to divert 263.4 acre feet of water from the Unnamed Creek to irrigate 131.7 acres of land. It was moved by Commissioner Einar Dahl and seconded by Commissioner Christensen that Mr. Nordell be granted the right to divert 197.5 acre feet of water to irrigate 131.7 acres of land. Motion carried.

Secretary Hoisveen stated that he had been contacted by the Oak Creek Flood Control District relative to assistance from the State Water Conservation Commission in the construction of a dam on Sharpe Lake in Canada. The water impounded through the construction of the dam will be utilized in efforts to stabilize Lake Metigoshe at the approximate spillway level. He stated that the design of the dam as prepared by the Commission would approximate \$10,000 and the total cost of the construction would be around \$21,000 to \$24,000. The project proposal could be performed at a cost below the cost of the project proposed when the Commission met with project proponents at Lake Metigoshe on August 17, 1955. It was anticipated that the Oak Creek group would meet with the Commissioners; however, in view of the fact that they were not available at the specified time, and had not arrived for sometime thereafter, Commissioner Christensen moved that the State Water Commission participate with the Oak Creek Water Conservation and Flood Control District in constructing lake stabilizing structures for Lake Metigoshe by contributing one-third, or not to exceed \$8,000 of the cost thereof. The motion was seconded by Commissioner Lunseth. All members voted aye and said motion carried. The Commissioners regretted that they were unable to continue waiting but in view of previous commitments and appointments, several of them found it necessary to leave. Thereupon the meeting adjourned.

Respectfully submitted,

Attest:

Governor 

  
Secretary

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION  
 MONTHLY REPORT OF APPROPRIATIONS AS OF AUGUST 31, 1958  
 1957-1959 APPROPRIATIONS

Fund No.	Available July, 1957	Expended July 31 '58	Expended to August 1 '58	Balance August 31 '58
1. Commissioners, Per Diem and Expenses . . . . .	6,000.00	1,618.33	41.25	4,340.42
2. Administration . . . . .	47,000.00	24,786.92	1,903.76	22,069.25
Refunds and Deposits . . . . .	1,759.93			
3. Maintenance of Dams. . . . .	105,000.00	83,489.19	5,527.19	51,006.90
Refunds and Deposits . . . . .	35,023.28			
4. International and Interstate, Commissioners' Conference Expenses. . . . .	8,000.00	5,393.56	78.81	2,542.48
Refunds and Deposits . . . . .	14.85			
5. Topographic Surveys, Cooperation with U. S. G. S. . . . .	30,000.00	11,021.77		18,978.23
6. Hydrographic Surveys, Cooperation with U. S. G. S. . . . .	27,500.00	10,717.23	5,583.33	11,199.44
7. Engineering and Geological Surveys and Demonstrations. . .	37,500.00	23,492.86	2,343.55	16,970.40
Refunds and Deposits . . . . .	5,306.81			
8. Cooperation with U. S. Departments and for Organizing Conservation and Irrigation Districts. . . . .	50,000.00	18,607.80	2,136.12	29,266.08
Refunds and Deposits . . . . .	10.00			
9. Small Projects, Investigations, Surveys, Etc. . . . .	118,000.00	74,181.98	5,220.57	40,972.43
Refunds and Deposits . . . . .	2,374.98			
10. Administration of Water Laws . . . . .	6,000.00	1,562.21	541.08	3,896.71
OASIS Refunds. . . . .	3,800.00	3,800.00	341.24	4,200.00
Transfer from Contingency Fund . . . . .	4,541.24			
	<u>\$487,831.09</u>	<u>\$258,671.85</u>	<u>\$23,716.90</u>	<u>\$205,442.34</u>



NORTH DAKOTA STATE WATER CONSERVATION COMMISSION  
 MONTHLY REPORT OF APPROPRIATIONS AS OF AUGUST 31, 1958  
 1955-1957 APPROPRIATIONS

Fund No.	Available July, 1955	Expended July 31'58	Expended August 1'58	Balance August 31'58
1. Commissioners' Per Diem and Expenses . . . . .	6,000.00	5,822.11		177.89
2. Administration . . . . .	40,000.00	42,453.03		41.19
Collections, Refunds, Transfers . . . . .	2,494.22			
3. Maintenance of Dams. . . . .	100,000.00	220,556.13		38.53
Collections and Refunds . . . . .	120,594.66			
4. International and Interstate Commission's Conference Expenses. . . . .	8,000.00	8,040.42		.18
Collections and Refunds . . . . .	40.60			
5. Topographic and Conservation Cooperation with U.S.G.S. .	30,000.00	30,000.00		NIL
6. Hydrographic and Conservation Cooperation with U.S.G.S..	25,000.00	25,000.00		NIL
7. Engineering and Geological Surveys and Demonstrations. .	35,000.00	35,223.93		NIL
Transfer from Number 1. . . . .	223.93			
8. Cooperation with U. S. Departments and for Organizing Conservation and Irrigation Districts. . . . .	40,400.00	40,374.92		25.08
9. Small Projects and Investigations and Surveys. . . . .	106,000.00	125,994.37		NIL
Collections and Refunds . . . . .	19,994.37			
10. Water Right Investigations . . . . .	12,000.00	11,994.23		5.77
	<u>\$545,747.78</u>	<u>\$545,459.14</u>		<u>\$288.64</u>

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION  
 MONTHLY REPORT OF APPROPRIATIONS AS OF AUGUST 31, 1958  
 (CONTINUING APPROPRIATIONS)

Appropriation Title	Balance July, 1957	Expended July 31'58	Expended August 1'58	Balance August 31'58
Construction Bond Guaranty Fund . . . . .	\$70,541.00	NIL	NIL	\$75,758.79
Deposit of Income from Investments Income and Retirement .	5,217.79			
Multiple Purpose Fund . . . . .	\$384,892.93	\$73,463.72	\$33,044.40	\$285,329.32
Collections, Refunds, Transfers. . . . .	6,944.51			

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION  
DEPOSITS IN THE BANK OF NORTH DAKOTA  
AUGUST 31, 1958

Source of Deposits	Transit Number	Amount Deposited	Expended August 31 '58	Balance August 31 '58
Collections on Yellowstone Pumping Irrigation District \$3,500 Warrant. Tax collections for partial payment of interest and principal to April, 1958.	501-118	\$ 2,451.22		\$ 2,451.22
Contributions to January 1, 1957: \$35,600.10				
Contributions for Ground Water Surveys:				
Drake		\$ 750.00		
Ellendale		500.00		
Hatton		1,000.00		
Hillsboro		1,000.00		
Lehr		1,000.00		
Leeds		1,000.00		
Linton		1,500.00		
Strasburg		1,000.00		
Booklet	501-128	48,430.60	\$41,139.95	8,290.65
	501-127	2,887.57	2,002.06	885.51
TOTAL OF ALL BANK OF NORTH DAKOTA DEPOSITS AS OF AUGUST 31, 1958				<u>\$11,627.38</u>

PAYROLL  
NORTH DAKOTA STATE WATER CONSERVATION COMMISSION  
AUGUST 31, 1958

PERMANENT EMPLOYEES

Name	Position	Pay Grade	Salary August	With Tax	Social Security	Hosp. Ins.	Savings Bonds	Net Pay	Remarks
Holsveen, Milo W.	State Engineer	N-6	824.17	117.60		12.60	18.75	675.22	Inc April, 1958
Baesler, Gordon	Draftsman	E-5	298.67	44.00	6.72			247.95	Inc September, '57
Bischof, Donald	Draftsman	B-8	201.67	26.40	4.54			170.73	Start June, 1958
Cooper, Vernon S.	Ass't Secretary	YM-3	353.84	71.00	7.96	12.60		262.28	Inc April, 1958
Duppong, Edwin	Driller	E-5	298.67	44.00	6.72			247.95	Start April, 1958
Fredrickson, Fred	Coordinator	F-5	350.00	32.60	7.88			309.52	Inc February, '58
Gehring, Edna	File Clerk	B-9	206.67	37.10	4.65	5.45		159.47	Inc August, 1958
Grindberg, Alan	Engineer	H-4	454.17	71.00	10.22			372.95	Start June, 1958
Grindberg, Charles	Rodman	A-10	189.50	24.20	4.26	5.45		155.59	Quit August, 1958
Hartze, Marcellus	Drillers' Ass't	C-10	243.42	33.90	5.48			204.04	Quit August, 1958
Helphrey, Dave	Rodman	B-8	201.67	26.40	4.54			170.73	Quit August, 1958
Johnson, Lloyd	Const. Foreman	F-9	392.67	41.30	8.84	12.60		329.93	Inc August, 1958
Krebsbach, Joseph	Instrumentman	F-6	364.17	25.50	8.19	12.60		317.88	Inc April, 1958
Monahan, John	Rodman	A-10	189.50	31.00	4.26			154.24	Inc August, 1958
Putz, Roy	Material Expert	A-9	185.00	13.50	4.16	5.45		161.89	Inc December, '57
Reimers, Ernest	Rodman	C-8	231.92	11.40	5.22			215.30	Inc May, 1958
Reiter, Daniel	Operator	G-1	366.67	35.50	8.25		18.75	304.17	Inc August, 1958
Sackman, Eugene	Instrumentman	F-3	335.67	9.80	7.55	12.60		305.72	Inc February, '58
Sandwick, Hazen	Engineer	K-4	617.67	61.60	13.90		37.50	504.67	Start July, 1958
Schweigert, Luella	Chief Steno	F-4	345.17	62.60	7.77			274.80	Inc August, 1958
Sell, Nancy	Bookkeeper	D-2	231.75	31.40	5.21	5.45		189.69	Inc December, 1957
Timm, Robert J.	Ass't St. Engr.	K-6	651.67	68.80		12.60		570.27	Inc July, 1958
Vincent, Charles	Rodman	A-10	85.59	10.93	1.92			72.74	Start August, '58
Walterson, Jean	Typist Clerk	D-2	231.75	11.40	5.21			215.14	Inc August, 1958
Ziegler, Victor	Engineer	H-10	529.17	75.40	11.91	12.60		429.26	Inc May, 1958

PAYROLL  
 NORTH DAKOTA STATE WATER CONSERVATION COMMISSION  
 AUGUST 31, 1958

TEMPORARY EMPLOYEES

Name	Position	Salary August	With Tax	Social Security	Net Pay	Remarks
Burkhardtmeier, Albert	Laborer	298.40	42.40	6.70	249.30	Working by the hour.
Gouin, Marlyn	Laborer	412.25	32.70	9.28	370.27	" " " "
Gouin, Robert	Laborer	351.63	49.20	7.92	294.51	" " " "
Jorde, John K.	Laborer	78.40	11.90	1.76	64.74	" " " "
Knutson, Lewis	Driller	575.25	95.30	12.94	467.01	" " " "
Lauinger, Anton	Laborer	400.13	58.30	9.01	332.82	" " " "
Lunde, Gary G.	Rodman	77.50	9.50	1.75	66.25	" " " "
McMaster, George	Driller	737.50	113.20	16.59	607.71	" " " "
O'Fallon, Jerome	Rodman	82.50	10.40	1.86	70.24	" " " "
Randall, Robert	Laborer	412.30	65.00	9.28	338.02	" " " "
Welch, Eugene	Laborer	367.36	57.10	8.27	301.99	" " " "