# STATE WATER COMMISSION MINUTES OF MEETING Held in Office of State Water Commission May 28, 1964

### PRESENT:

Governor William L. Guy, Chairman
Henry J. Steinberger, Member from Donnybrook
Einar Dahl, Member from Watford City
Richard P. Gallagher, Member from Mandan
Gordon Gray, Member from Valley City
Math Dahl, Commissioner, Department of Agriculture and Labor, Bismarck
Milo W. Hoisveen, Secretary and Chief Engineer, State Engineer, Bismarck

#### OTHERS PRESENT:

G. A. Freeman, Bureau of Reclamation, Bismarck
C. T. Judah, Bureau of Reclamation, Billings
M. W. McMorrow, Bureau of Reclamation, Bismarck
Halger Lindgren, Traill County Commissioner, Halstad, Minnesota
Gilman Strand, Traill County Commissioner, Portland
Theo. Wheeler, Traill County Water Management District, Buxton
Wallace Thompson, Caledonia
K. D. Schumar, Hillsboro
Dean Hagen, State Highway Department, Bismarck
Russell Stuart, Commissioner, State Game and Fish Department, Bismarck
Leo LaLonde, Photographer, Bismarck Tribune, Bismarck
Ralph Keller, Bowman County Water Management District, Scranton
Howard White, Bowman County Water Management District, Bowman
John Amundson, Bowman County Water Management District, Bowman
Tom Buzno, United Press

The State Water Commission meeting opened at 9:40 a.m. with Commissioners Steinberger, Einar Dahl, Richard P. Gallagher and Secretary Hoisveen present. In the absence of the chairman and vice chairman Commissioner Steinberger was appointed presiding chairman.

NATIONAL RECLAMATION ASSOCIATION BOARD MEETING - BISMARCK June 18 and 19 Secretary Hoisveen informed the Commission that the National Reclamation Association Board will hold its meeting in Bismarck on June 18 and 19. An informal banquet is scheduled for the evening of June 18. The

Commission members were invited to attend the banquet. An aerial tour of the Garrison Dam is planned for the Board members. Indications are that the 17 directors of the National Reclamation Association will be present and it is possible that chairmen of the various committees will also be present. The Board represents the 17 western states. Part of the meeting will be directed

toward planning for the convention to be held in Palm Springs the middle of November. This is the first time the National Reclamation Board has held a semi-annual meeting in any city other than Salt Lake City or Denver. The headquarters for the Board members will be the Prince Hotel. Reservation cards will be made available to the Commission members, should they plan to attend.

ENGLISH COULEE SURVEY

The Grand Forks County Water Management District has requested a flood control survey of the English Coulee area through the City of Grand Forks as well as in the reaches, above and below the city. The survey would involve a study as to the encroachment that is currently taking place in the channel and recommendations for providing uniform slopes and grades which will alleviate future flooding. The County Water Management District has deposited \$500 and signed an agreement in connection with the survey.

It was moved by Commissioner Gallagher, seconded by Secretary Hoisveen and carried that the State Engineer be granted authority to make a study of English Coulee.

PROPOSED AMENDMENT TO 61-16-28.1

Commissioner Gallagher suggested that Section 61-16-28.1 of the North Dakota Century Code be amended to include penalties

to be used in case of encroachment on streams water ways, and channels used to convey water as well as drains which are now covered against encroachment. Notice would be given to the landowners as is the case in the drainage law and irrigation statutes.

It was moved by Commissioner Gallagher, seconded by Commissioner Einar Dahl that Section 61-16-28.1 be brought to the attention of the Legislative Research Committee. Motion carried

A study should be made to include all possible water convey ances, such as channels used for conveyance of public and private drains, streams, irrigation ditches, reservoirs, dam sites, etc.

RED WILLOW LAKE AREA REQUEST FOR IMPROVEMENT

Red Willow Lake is 18 miles northwest of Cooperstown. A request for a survey to improve the lake area as a recreation site

has been received in the office of the StateWater Commission. It is desired that the survey include studies as to how the present lake area may be improved through the construction of a dam or the improvement of the watershed. This lake now serves as a recreation area for a considerable area. The study will be presented to the county commissioners or possibly a water management district may be created to care for further development.

It was moved by Commissioner Einar Dahl, seconded by Commissioner Gallagher and carried that a survey of the Red Willow Lake area for lake improvement.

TRAILL COUNTY GROUNDWATER STUDY AUTHORIZED

The Commission has in the past made a number of municipal groundwater studies in Traill County. Studies have been made in

the Hillsboro, Buxton and Mayville areas. The actual work left to perform in that county is rather small when considering the net result. The cost to accomplish the remaining study would be \$8,500 for the State Water Commission, \$8,500 for the local entity and the U. S. Geological Survey cooperating with the balance which would be \$17,000. This would provide the county with a report which would be of much value to them. It would also dovetail into the Grand Forks and Cass County studies which are now under way.

It was moved by Commissioner Gray, seconded by Commissioner Einar Dahl and carried that the State Engineer be authorized to participate in the Traill County ground water survey.

CITY OF LANSFORD GROUND WATER STUDY REQUEST

Messrs. Gray and Math Dahl enter the meeting.

The City of Lansford is requesting a ground water study. Their present water supply is of inferior quality. The city officials feel

there is a good supply of quality of water approximately two miles from Lansford. The cost of such a survey would be \$3,000 of which the Commission's share would be \$1,500 and \$1,500 from the City of Lansford. No deposit has been made by the city for such a survey; however, the city desired to have the Commission approval for this survey Secretary Hoisveen recommended that the survey request of the City of Lansford be approved contingent on the arrival of the deposit.

It was moved by Commissioner Einar Dahl, seconded by Commissioner Gray and carried that the request of the City of Lansford for a groundwater study be approved in the amount of \$3,000, the Commission's share not to exceed \$1,500.

Governor Guy presides at the meeting.

MOTT DAM AND CANNONBALL IRRIGATION PROJECT

Messrs. G. A. Freeman, C. T. Judah and M. W. McMorrow, U. S. Bureau of Reclamation appear before the Commission relative to

the Mott Dam and the Cannonball Irrigation project.

Mr. Freeman stated that the Bureau of Reclamation had no finalized plan relative to the construction of the Mott Dam and the Cannonball Irrigation Project.

Mr. Freeman told the Commission members that The Bureau attempts to keep Mr. Hoisveen informed as to the progress of the study. Mr. Freeman thought it advisable to bring the matter up at the Commission meeting to give the Commissioners an idea of the situation on the Cannonball project and some of the problems. This is an area that will benefit from this type of development. Mr. Freeman gave the bacground history of this project and stated that the Bureau had written a "wrap-up" report in 1954

which found the project to be infeasible at that time. The cost had exceeded In 1960 and 1961 drouth occurred in the area. The local people and the State Water Commission got a write in of \$20,000 in the budget which was presented to Congress. Mott is vitally interested in flood protection, irrigation and a municipal water supply. The residents in the Elgin area are interested in the project from the irrigation viewpoint. A feasibility study of the Mott unit is now being made. Such study is eventually to be presented to Mr. Aspinall and his committee for authorization. Originally Mott was not a part of the Missouri River plan. There is no doubt but what the Mott project will have to be reauthorized and included in the Missouri River Basin Project. The Bureau expects to build a larger dam than was talked about 10 years ago. The dam at Mott can be enlarged to provide water for 8 to 10,000 acres of irrigable land between Mott and the mouth of the Missouri. There would also be a possibility of constructing another dam downstream should the demand for irrigation be increased. The combination of dams would be large enough to irrigate 15 to 20,000 acres of irrigable land. IN discussing this project with the people in the Cannonball Valley they have been told that the Bureau could put in a purely government type of installation, which would be not only dam and reservoir but distribution service similar to the Heart Project, or a farmer installation. They seem to favor owning their pumps and obtaining the water on an annual rental basis. Mr. Freeman discussed the advisability of forming a mutual aid corporation or an irrigation district. The Bureau's preference is an irrigation district. Mr. Freeman wondered if the State Water Commission would back up a corporation in case of delinquency in payment of notes. The people in the Cannonball Valley would be paying about \$15,000 anually for this water. Before the Bureau could go ahead with the construction of the dam an organization of some sort would have to be formed to formed to guarantee the annual payment. The irrigation would be done by gravity or as might be desired by the owner. The fish and wildlife, recreation activities etc. in connection therewith are not reimbursable. If the Bureau builds the project they collect only enough to pay for it. The rate charged by other organizations was discussed.

Mr. Hoisveen stated that he had been examining the possibility of carrying on the irrigation feature of the project through the Small Reclamation Act. If this procedure were followed, it might be necessary to secure legislation whereby the reclamation power rate would be used on this project as well as Mott. The power rates will be necessarily reduced to make irrigation more feasible. Mr. Judah stated that the  $2\frac{1}{2}$  mill rate applied to delivery and low voltage units. The farmer would have to build additional lines. He stated that the  $2\frac{1}{2}$  mill rate can be a fictitious figure. The power rate was discussed. Mr. Hoisveen contended that the farmer would afford to pay at least 6 mills as the REA rates he would pay otherwise were possibly in excess of 15 mills.

Mr. Freeman stated that if Congress approves 50 to 60 thousand dollars for the project it would be two years before the report could be put together for authorization.

Mr. Freeman thought it advisable to appraise the Commission of some of the problems that will have to be worked out as the Bureau furthers its plan for this area. If this is to be a farmer type development it would aid the Bureau in securing approval of the project if the Commission or some other type of organization could stand behind this project. Whether it should be a mutual aid corporation or a water management district might be something the Commission would want to keep in mind as the studies go forward.

Secretary Hoisveen stated that the Commission should explore that possibility of accomplishing the project through a reduced power rate. This should be initiated through the REA and other interested power suppliers. He indicated that resolutions forwarded to certain people would also be helpful. An attempt should be made to get a more favorable power rate for prospective irrigators. A study could then be made as to how the Commission 's guaranty bond fund could be used in enhancing the project, if the Commission should desire to proceed with a bond issue. The Commission could be the entity that would support the project and care for some of the faulty payments should they occur.

Mr. Freeman stated that it would help if the Commission took a stand and gave moral support in working with the REA to figure a more favorable rate in the area.

Secretary Hoisveen stated that there should be a resolution to back up the cooperative.

It was moved by Commissioner Gallagher, seconded by Commissioner Math Dahl and carried that the following resolution be adopted.

## RESOLUTION 64-5-207

Adopted by the State Water Commission - May 28, 1964

# PERTAINING TO THE FINANCING AND POWER RATE OF THE PROPOSED CANNONBALL IRRIGATION PROJECT

WHEREAS, the Cannonball River Valley in southwestern North Dakota has experienced recurring drouths since the time it was first settled; and

WHEREAS, irrigation is needed to provide the necessary forage crops to maintain foundation herds during such drouth periods; and

WHEREAS, preliminary studies made by the Bureau of Reclamation indicate that approximately 10,000 acres of land can be irrigated through the construction of a multiple purpose dam and reservoir in the vicinity of Mott, North Dakota; and

WHEREAS, the delivery of water from the proposed Mott reservoir through the use of the Cannonball River as a conveyance channel appears to be the most feasible manner in serving landowners with irrigation water; and

WHEREAS, such a delivery system, according to the Bureau of Reclamation representatives, will require the installation of pumps and motors and the payment of such facilities will be borne by the landowner desiring to irrigate:

WHEREAS, the Bureau of Reclamation representatives further indicate that the favorable Bureau of Reclamation power rate for pumping irrigation water can not be made available to individually owned pumping units.

NOW, THEREFORE, BE IT RESOLVED, that the State Water Commission shall conduct studies with public power and investor-owned power utility groups in an effort to obtain the best possible pumping rates for the irrigator; and

BE IT FURTHER RESOLVED, that this study shall consider the possibility of utilizing the State Water Commission Construction Bond Guarantee Fund, and its authority to issue revenue bonds, prospective revolving funds, and enactment of federal legislation which may provide the extension of favorable irrigation power rates to projects considered through the use of the Small Reclamation Act.

Messrs. Freeman, Judah and McMorrow leave the

Commission meeting.

CALEDONIA DAM

The proposed Caledonia Dam and reservoir area was discussed. The impoundment resulting from the dam is small. The proposed dam is located on the Goose River approximately 5 miles east of Hillsboro. The people have shown a great desire to have a structure built. The Commission made a survey and a cost estimate which included a bridge and a cost estimate without a bridge. To build a structure with a bridge would cost \$110,000 and without a bridge would be between \$70 and \$80,000.

Messrs. Lindgren and Strand, representing the Traill County Commissioners, Theo. Wheeler and Wallace Thompson, representing the Traill County Water Management District, K. D. Schumar, County Engineer, Dean Hagen, State Highway Department and Russell Stuart, State Game and Fish Department appear on behalf of the Caledonia Dam Project.

Mr. Thompson, spokesman for the group, stated that they had met above 5 times with various groups concerning the Caledonia Dam Project. They would like to have a bridge and dam built or a dam. whichever is cheapest. The present bridge will have to be replaced as it is in very poor shape. The school bus crosses over this bridge. The County Commissioners will have to put in a bridge and would like to have the dam and bridge built at the same time.

Mr. Stuart, Commissioner of the State Game and Fish Department, stated that his department is interested in this project. They had been approached sometime ago concerning the project but they will not have funds available until the 1965 biennium. The water area will be small and will not have as great a depth as the department would like. It was the proposal of Mr. Stuart that since the bridge had to be built that a dam and bridge be built together. Land will have to be acquired for access purposes. The Game and Fish Department is now insisting that public access be 100 feet.

Secretary Hoisveen stated that indications are that the proposed bridge and dam would approximate \$110,000, without the bridge it would be \$70, to \$80,000. There would have to be a determination as to the cost of the bridge so the amount could be deducted from the total combined cost and then some type of division of costs would be made to the various participants in the project. The dam would impound only 245 acre-feet and have a surface area of about 40 acres.

Mr. Schumar, Traili County Engineer, stated that the county has made no survey in regard to the bridge. The Corps of Engineers is interested in the project also. So many government divisions were involved in this project that the county pulled out to see what was going to happen. The bridge would have to be relocated. The county hasn't checked into this too thoroughly waiting to see what the outcome would be. Mr. Schumar explained what would be necessary to build the bridge and relocate it. He stated that the County Board feels that there will have to be some grading, which would be started this year. If the present bridge goes down something will have to be done.

Mr. Hagen, representing the State Highway Department, stated that the Highway Department was very much interested in the Caledonia Project. The road is a federal aid secondary road. If this project were undertaken 50% of the cost would be paid by the federal government so far as normal crossing requirements are concerned. No formal application for assistance has been filed with the Highway Department. This is a type of project in which the Highway Department is interested. From the Highway Department standpoint the project looks feasible. The federal government would not pay for raising the bridge.

 $\qquad \qquad \text{The Commission was informed that most of the } \\ \text{easements had been secured.}$ 

Mr. Gallagher suggested that the Water Commission staff outline to the water management district the steps necessary to present an application for participation to the Highway Department, the State Game and Fish Department and the State Water Commission. When the application has been presented by the proper local entity outlining the local entity's willingness to participate then the various agencies can act on the application.

It was moved by Commissioner Gray, seconded by Commissioner Math Dahl and carried that the State Water Commission outline the steps necessary for presenting an application requesting the participation of various state and federal agencies in the Caledonia Project.

The Caledonia delegation leave the meeting.

BOWMAN-HALEY CHECK PRESENTATION TO BOWMAN COUNTY WATER MANAGEMENT DISTRICT

Messrs. Keller, White and Amundson appear before the Commission relative to the presentation of a \$50,000 check to the Bowman County Water Management District for the Bowman-Haley Project. Governor Guy presented

the check to Mr. Keller. Mr. Leo LaLonde, photographer for the Bismarck Tribune, took a picture of the presentation.

The meeting recessed until 1:30 p.m. The meeting reconvened at 1:30 p.m. with Commissioners, Gray, Einar Dahl, Steinberger and Gallagher and Secretary Hoisveen present. Commissioner Steinberger presides.

APPROVAL OF APRIL 20, 1964 MINUTES

It was moved by Commissioner Gallagher. seconded by Commissioner Einar Dahl and Carried that the April 20, 1964 minutes be

approved as circulated.

MAY 1964 APPROVED

FINANCIAL STATEMENT FOR APRIL- It was moved by Commissioner Gallagher, seconded by Commissioner Einar Dahl and carried that the financial statements for

April and May 1964 be approved.

**GUARANTEE BOND FUND** (Crystal Municipal Water Supply)

Secretary Hoisveen stated that the Commission had not been making as much use of the Guarantee Bond Fund as it should. The town of Crystal is in need of a municipal water

supply. The Commission has already authorized an expenditure for half the structure. There is also money available from the local water management district and the city is attempting to proceed with some of the activity in connection therewith. They do not have sufficient funds to proceed with the entire water system and supply but are attempting to obtain a federal grant through the Federal Home Administration. In the meantime it was thought this would be an ideal place to put the Guarantee Bond Fund into effect. The Guarantee Bond Fund is up to the limit and the surplus will be returned to the General Fund. In the past the fund has been used for irrigation projects only; however, there is nothing to prohibit it being used for cities too.

Secretary Hoisveen stated that the cost estimate including a reservoir and water supply would approximate \$240,000. If Crystal obtains a federal grant it would cut the financial demand considerably and our bonding ability could meet the needed amount easily. Several state agencies have shown an interest in purchasing the bonds.

It was moved by Commissioner Gray, seconded by Commissioner Einar Dahl and carried that the Commission participate by authorizing the use of the Guarantee Bond Fund on the proposed Crystal municipal water supply.

Jim Schulz, Account for the State Water Commission, explained the Guarantee Bond Fund.

DRAINAGE POLICY Secretary Hoisveen read the recommended Commission policy on drains. There was considerable discussion on slopes. It was moved by Commissioner Math Dahl, seconded by Commissioner Gray and carried that the following be adopted as

the Commission's policy on drains:

#### COMMISSION POLICY ON DRAINS

- A. Control structures in old and new drains: Policy: Retain and confirm present policy of 50-50 participation in those drains where Commission forces perform the actual work and on a 40-60 basis where it is accomplished through some other means.
- On second rebuild, where Commission has participated in prior thereto, which has been regarded as deferred maintenance, and in previous policy established as 'No participation', - Suggested policy: Allow participation in reconstruction insofar as the improvement will benefit hydraulic characteristics, based upon construction of greater slopes on the sides. Definition of improvement: That portion of the estimated excavation which is chargeable to widening the ditch bottom, deepening the ditch bottom below the designed grade of the previous improvement, and providing  $3:\overline{1}$ ,  $3\frac{1}{2}:\overline{1}$  or 4:1 side slopes in place of original  $l_{\frac{1}{2}}$ :1 or 2:1. Excavation of silted-up bottom or sloughed-in banks to be regarded as deferred maintenance. Replacement of drainage structures to be considered qualified items only insofar as capacity increase is needed. Drop structure participation to be considered separately.
- C. For simplicity, it is suggested that the proportion of excavation in the second rebuild estimate which is chargeable to improved capacity, greater length, and a stabler, maintainable ditch be used to calculate the proportion of the basic 40% of qualified construction items normally committed, which could be allowed for the second reconstruction.

RESISTIVITY EQUIPMENT

Secretary Hoisveen explained the use of resistivity equipment in connection with locating water supplies as a method of implementing groundwater studies. Secretary Hoisveen explained the way the equipment would be used by Commission crews. The approximate cost of such equipment would be \$900.

It was moved by Commissioner Math Dahl, seconded by Commissioner Gray and carried that the State Engineer be authorized to purchase resistivity equipment, the cost to approximate \$900.

MISSOURI RIVER BANK STABILIZATION

An odd problem has developed in connection with the Missouri River Bank Stabilization Project. In one of the areas where bank

stabilization is to be initiated - the so-called Square Butte area - 50 per cent of the land is owned by Wachter Enterprises. A water management district was created in Morton County and one in Oliver County with a view of putting in a watershed project. Both water management districts were created with a minor amount of objection. However, apparently the Watchter's have felt that they were going to be assessed more in the way of taxes and have decided to fight the organization of the district. The water management district has been selected to be the local contact agency with the Corps of Engineers.

The Corps of Engineers has worked with the Lower Heart Water Management District, the Bowman County Water Management District and the Marmarth Water Management District and have found them to be ideal local representatives. It now appears that rights of way have to be furnished. The Corps would like to have the rights of way assigned to the Morton County Water Management District. If this were done it would eliminate detailed search of register of deeds office to see if the individual signing the right of way permits had the legal right to sign the easements. The Wachters desire to give their right of way directly to the Corps in place of the water management district. It was suggested that the Water Commission be the legal entity to whom the right of way is to be assigned. It was the recommendation of the Commissioners that the Morton County Water Management District be the entity to receive the easements for right of way.

It was moved by Commissioner Gallagher, seconded by Commissioner Math Dahl and carried that the State Water Commission require that easements for bank protective works be drawn in the name of the Morton County Water Management District.

Governor Guy presides at the meeting.

SNAGGING PROJECT ON MISSOUR! RIVER IN THE MANDAN-BISMARCK REACH Secretary Hoisveen stated that he had received requests for a snagging project in the reach of the Missouri around Mandan and Bismarck. Secretary Hoisveen read a

letter received from Colonel St. Clair, Corps of Engineers, concerning this problem. The snagging is caused by trees becoming imbedded in the river. Another source of snagging is that the people who live along the Missouri River in order to protect their banks bulldoze trees along the bank. Another contribution to snagging is the way the water is being released into the river. Something like this should not be mechanical because it will eventually be taken care of by the Oahe but it should start at the mouth of the Heart and work back. There was discussion of using money to clear streams when cities need water supplies.

Mr. Gallagher stated that there was nothing in the law prohibiting the disposal of trees etc. into the river. The Commission should have authority to license such an operation where it might be necessary to protect against serious erosion.

Governor Guy suggested that the Corps of Engineers be requested to make a study to determine where the snags are coming from and the cost per mile of eliminating the snags.

It was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that a study be made of the cost per mile of eliminating the snags and the conditions which are causing recurrence of snagging on the flowing waters between the two reservoirs

DRAINAGE PARTICIPATION
Grand Forks Drain #3
Pembina Drains #34 and #5
Traill Drain #39
LaMoure Drain #1

Several requests for drainage assistance were brought to the attention of the Commission. These were drains that did not have previous participation by the Commission. They are Grand Forks County Drain #3, Pembina Drains #34 and #5,

Traill County Drain #39 and LaMoure County Drain #1 and these are eligible for Commission participation if the Commission so desires.

It was moved by Commissioner Steinberger, seconded by Commissioner Gray and carried that all requests for drainage participation be approved with the exception of lateral #1 to Miller Channel #29 in Traill County.

**EQUIPMENT PURCHASE** 

The Commission is desirous of trading in some of the survey equipment for new equipment.

The trade in value of the equipment now on hand would be \$300. The cost of the new equipment would be \$746.

It was moved by Commissioner Steinberger, seconded by Commissioner Einar Dahl and carried that the State Engineer be authorized to purchase new survey equipment as needed.

WATER RIGHTS

The application of Lemore Greenshields of Dodge, North Dakota to divert 358 acre-feet of water from Schaffner Creek tributary of the Knife River for the purpose of irrigating 179 acres of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 173.5 acrefeet to irrigate 131.5 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 173.5 acre-feet to irrigate 131.5 acres of land subject to such conditions as indicated on the permit.

The application of the Village of Pick City,
North Dakota to divert 160 acre-feet of water
from the Garrison Reservoir for municipal use was presented by the Secretary
to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 160 acrefeet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 160 acre-feet of water for municipal use subject to such conditions as indicated on the permit.

The application of Wachter Real Estate Trust of Bismarck, North Dakota to divert 622 acre-feet of water from the Missouri River for the purpose of irrigating 311 acres of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 622 acrefeet to irrigate 311 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the

permit granted for the diversion of 622 acre-feet to irrigate 311 acres of land subject to such conditions as indicated on the permit.

1130
The application of Eugene Klein of Eckelson,
North Dakota to divert 480 acre-feet of water
from underground sources for the purpose of irrigating 240 acres of land was
presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 480 acrefeet to irrigate 240 acres, it was moved by Commission Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 480 acre-feet to irrigate 240 acres of land subject to such conditions as indicated on the permit.

The application of Owen O'Neil of Dunn Center,
North Dakota to divert 106 acre-feet of water
from an Unnamed Dry Channel tributary of Spring Creek and Knife River for the
purpose of irrigating 53 acres of land was presented by the Secretary to the
Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 53 acrefeet to irrigate 53 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 53 acre-feet to irrigate 53 acres of land subject to such conditions as indicated on the permit.

The application of Henry Buehner of Dunn Center,
North Dakota to divert 50 acre-feet of water
from an Unnamed Dry Channel tributary of Spring Creek and Knife River for the
purpose of irrigating 25 acres of land was presented by the Secretary to the
Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 25 acrefeet from November 1 to April 30 to irrigate 25 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 25 acre-feet from November 1 to April 30 to irrigate 25 acres of land subject to such conditions as indicated on the permit.

The application of the City of Glenburn, North
Dakota to divert 96.5 acre-feet of water from
underground sources for the purpose of municipal use was presented by the
Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendations thereon for 96.5 acrefeet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 96.5 acre-feet of water for municipal use subject to such conditions as indicated on the permit.

The application of Quentin Becker of New Salem,
North Dakota to divert 114 acre-feet of water
from Sweetbriar Creek tributary of the Heart River for the purpose of irrigating 57.3 acres of land was presented by the Secretary to the Commission for
consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 57.3 acrefeet to irrigate 57.3, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 57.3 acrefeet of water to irrigate 57.3 acres of land subject to such conditions as indicated on the permit.

The application of George Horner, Linton, North
Dakota to divert 720 acre-feet of water from
Beaver Creek and Clear Creek tributaries of the Missouri River for the purpose
of irrigating 360.1 acres of land was presented by the Secretary to the
Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 180 acrefeet to irrigate 120 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 180 acre-feet to irrigate 120 acres of land subject to such conditions as indicated on the permit.

The application of George W. Jennings, Jr. of Bismarck, North Dakota to divert 40 acrefeet of water from the Missouri River for the purpose of irrigating 20 acres of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 40 acrefeet to irrigate 20 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 40 acrefeet to irrigate 20 acres of land. subject to such conditions as indicated on the permit.

The application of Robert J. Christ, Jr. of Wimbledon, North Dakota to divert 400 acrefeet of water from underground sources for the purpose of irrigating 192 acres of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 400 acrefeet to irrigate 192 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 400 acre-feet to irrigate 192 acres of land subject to such conditions as indicated on the permit.

The application of the Village of Carson, North
Dakota to divert 50 acre-feet of water from underground sources for municipal use was presented by the Secretary to the Commission

ground sources for municipal use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 50 acre-feet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 50 acre-feet for municipal use subject to such conditions as indicated on the permit.

The application of the City of Berthold, North Dakota to divert 15 acre-feet of water from underground sources for municipal use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 15 acrefeet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 15 acre-feet for municipal use subject to such conditions as indicated on the permit.

The application of Dr. E. J. Hagan, Williston,
North Dakota to divert 16 acre-feet of water
from an Unnamed Creek tributary to Sand Creek for the purpose of irrigating
16 acres of land was presented by the Secretary to the Commission for
consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 16 acrefeet to irrigate 16 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 16 acre-feet to irrigate 16 acres of land subject to such conditions as indicated on the permit.

The application of the City of Rolette, North Dakota to divert 225 acre-feet of water from underground sources for municipal use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 225 acre-feet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 225 acre-feet of water for municipal use subject to such conditions as indicated on the permit.

The application of Marvin Olson of Almont, North
Dakota to divert 256 acre-feet of water from
the Muddy Creek tributary of Heart River for the purpose of irrigating 128 acres
of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 192 acre-feet to irrigate 128 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 192 acre-feet to irrigate 128 acres subject to such conditions as indicated on the permit.

The application of the City of McVille, North
Dakota to divert 117 acre-feet of water from
underground sources for municipal use was presented by the Secretary to the
Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 105 acrefeet for municipal use with 12 acre-feet for irrigation, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 105 acrefeet of water for municipal use and 12 acre-feet for irrigation, subject to such conditions as indicated on the permit.

The application of Cornelis J. Jonks of Park River, North Dakota to divert 10 acre-feet of water from the Park River for the purpose of irrigating 4.6 acres of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 4.6 acrefeet to irrigate 4.6 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 4.6 acre-feet to irrigate 4.6 acres of land subject to such conditions as indicated on the permit.

The application of Moen Brothers of Moorhead, Minnesota to divert 21.1 acre-feet of water from a slough tributary of the Missouri River for industrial use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 21.1 acrefeet for industrial use, it was moved by Commissioners Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 21.1 acre-feet for industrial use subject to such conditions as indicated on the permit.

The application of the City of Medina, North
Dakota to divert 160 acre-feet of water from
underground sources for municipal use was presented by the Secretary to the
Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 160 acrefeet for municipal use, it was moved by Commissioner Gallagher seconded by

Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 160 acre-feet for municipal use subject to such conditions as indicated on the permit.

The application of Knute Elvik of Almont, North
Dakota to divert 34 acre-feet of water from an
Unnamed Coulee tributary of the Heart River for the purpose of irrigating 61
acres of land was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 34 acre-feet to irrigate 61 acres, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 34 acre-feet to irrigate 61 acres subject to such conditions as indicated on the permit.

The application of Megarry Brothers, Inc., of St. Cloud, Minnesota to divert 30 acre-feet of water from the Knife River near Marshall for the purpose of industrial use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 30 acrefeet for industrial use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 30 acre-feet for industrial use subject to such conditions as indicated on the permit.

The application of the Village of Almont, North Dakota to divert 104.7 acre-feet of water from underground sources for municipal use was presented by the State Engineer to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 70acrefeet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 70 acre-feet for municipal use subject to such conditions as indicated on the permit.

The application of the City of Garrison, North Dakota to divert 630 acre-feet of water from underground sources for municipal use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendations thereon for 630 acrefeet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 630 acre-feet for municipal use subject to such conditions as indicated on the permit.

1160P

The application of the City of Wishek, North Dakota to divert 523 acre-feet of water from underground sources for the purpose of municipal use was presented by the

Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 523 acrefeet for municipal use, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application be approved and the permit granted for the diversion of 523 acre-feet of water for municipal use subject to such conditions as indicated on the permit.

1161

The application of United Power Association of Elk River, Minnesota to divert 806,536 acrefeet of water from the Missouri River for industrial use was presented by the Secretary to the Commission for consideration.

The State Engineer, Milo W. Hoisveen, having considered the application and made his recommendation thereon for 162,900 acre-feet annual use and a total withdrawal rate at ultimate plant capacity of 570,100 acre-feet annually, it was moved by Commissioner Gallagher, seconded by Commissioner Gray and carried that the application as modified by the recommendation of the State Engineer be approved and the permit granted for the diversion of 162,900 acre-feet annual use and a total withdrawal rate at ultimate plant capacity of 570,100 acre-feet annually subject to such conditions as indicated on the permit.

There being no further business the meeting

adjourned at 3:45 p.m.

milo w Horas

ATTEST: