

MINUTES OF A SPECIAL MEETING

of the

NORTH DAKOTA STATE WATER CONSERVATION COMMISSION

held at

Fargo, Sunday May 9th, 1937 at 3 P. M.

The call for a special meeting of the Commission was made at the request of Vice Chairman Henry Holt, with the approval of the Chairman, Governor William Langer. All members of the Board were notified of the time and place of the meeting by telegram, sent May 6th, in compliance with Sec. 4 of H. B. 125. The meeting was called to order at 3 P. M. in the assembly room of the Powers Hotel, Fargo, by Vice Chairman Holt, in the absence of the Chairman.

Present:

- Comm. Henry Holt
- Comm. Kenneth W. Simons
- Comm. Gerald C. Olson
- Comm. J. Arthur Engen
- Comm. D. J. Beakey.

Absent:

- Governor William Langer
- Comm. Frank P. Whitney
- Guests:
- George S. Knapp, Tech. Advisor
- Dr. Irvin Lavine, Consultant
- E. J. Thomas, State Engineer.

The Chairman stated that inasmuch as copies of the minutes of the last regular meeting held at Bismarck, April 19 and 20, had been given to all members of the Commission, the reading of same would be dispensed with provided there were no objections. Moved by Comm. Simons, seconded by Comm. Olson, that the minutes be approved. The motion carried, all Commissioners voting aye.

Comm. Holt presented the written report of the Committee appointed to appear before the Projects committee and the convention of the National Rivers and Harbors Congress, held in Washington, D. C. A copy of the report is attached hereto and is signed by the full committee, consisting of Commissioners Holt and Olson, and Dr. Irvin Lavine. A general discussion followed concerning the report. Moved by Comm. Olson, seconded by Comm. Simons that the report be accepted and placed on file. The motion carried, all Commissioners voting aye.

The Secretary read a communication from Prof. Howard E. Simpson, State Geologist of the University of North Dakota, in regard to mapping work as to location of quadrangle, etc. The letter was referred to Chief Engineer E. J. Thomas.

A resolution signed by the County Commissioners of Pembina County, was read wherein they urged the State Water Conservation Commission to give support and approval to the Red River Basin Project.

Moved by Comm. Simons, seconded by Comm. Olson, that the resolutions be referred to the Red River Drainage Basin Commission with assurance that the State Water Conservation Commission will stand behind the committee with the purpose of doing everything possible to accomplish the desired results. The motion carried, all Commissioners voting aye.

Comm. Holt reported that the Red River Drainage Basin Commission, consisting of Governor William Langer, Leo Gauthier, and Henry Holt-President, Dr. Lavine, Secretary, and H. A. Bronson, Legal Adviser. They also took appropriate action to support the State Water Conservation Commission.

Moved by Comm. Olson, seconded by Comm. Simons, that the report be accepted and placed on file. The roll was called by the Secretary, all Commissioners voting aye.

The Committee on Scope and Program reported that they had approved 18 projects as follows:

<u>No. of Project</u>	<u>Applicant</u>	<u>Address</u>	<u>Commission Action</u>
13	T. B. Linn	Hope	Approved
19	C. A. Hess	Williston	Approved
21	A. W. Gussner	Bismarck	Approved
30	Arthur Hartsoch	Ray	Approved
32	Edward Nese	Elgin	Approved
33	Louis Signalness	Croff	Approved
38	Asmud Hamre	Watford City	Approved
39	Sanford Grinnell	Neche	Approved
44	Fred J. Schmalenberger	Hebron	Approved
62	C. E. Stewart	Ray	Approved
66	Clonda Lynn	Linton	Approved
69	John Mercer	Buford	Approved
72	J. W. O'Rourke	Mandan	Approved
78	Charles C lark	Livonia	Approved
80	T. A. Stenehjem	Williston	Approved
81	Sam Levering	Williston	Approved
87	R. A. Williamson	Buford	Approved
90	J. G. Houston	Williston	Approved

Moved by Comm. Simons, seconded by Comm. Olson that the report of the Committee be approved. The roll was called by the Secretary, with all Commissioners voting aye.

The Secretary was instructed to write to Robert Fechner and J. J. McEntee, with request that five main camps and six sub-camps of the CCC be assigned to North Dakota.

Moved by Comm. Olson, seconded by Comm. Engen that we compensate Attorney C. J. Kelsch for services rendered. The Secretary called the roll with all Commissioners voting aye.

Comm. Henry Holt, reported that the War Department Engineers would hold another hearing about July first, possibly at Bismarck on the proposal for Missouri River Diversion, and Bowman and Heart-Butte Projects. A general discussion followed, as to the best means of gathering data to show benefits as against estimated cost.

Moved by Comm. Olson, seconded by Comm. Simons, that the Commission be constituted in a Committee of the Whole to gather data and other essential facts covering Missouri River Diversion, and Heart-Butte and Bowman project, to be submitted when the War Department Hearing is held. The motion carried, all Commissioners voting aye.

Moved by Comm. Simons, seconded by Comm. Engen that Vice Chairman Holt be authorized to employ Mr. Gus Lamb, of Michigan, North Dakota, to direct an economic survey covering the Bowman-Heart-Butte Project and Missouri River Diversion, and that he be authorized with the help and consent of the Missouri River Diversion committee, to employ such help as he deems necessary. The Secretary called the roll with all Commissioners voting aye.

Moved by Comm. Simons, seconded by Comm. Olson, that the Secretary be directed to write Mr. J. J. McEntee, Washington, D. C. asking for the reassignment of CCC camps in North Dakota for conservation work, under a program to be developed by the Technical staff of this Commission. The motion carried, all Commissioners voting aye.

Moved by Comm. Simons, seconded by Comm. Olson, that the Bureau of Engineering, of the Department of Agriculture be requested to intervene with the Army Engineering Corp and Bureau of Reclamation of the Department of Interior, in connection with the reports of the War Department on Missouri River Diversion, and Heart-Butte-Bowman projects. The motion carried, all Commissioners voting aye.

Mr. George S. Knapp, Technical Advisor to the Commission was asked to give the Commissioners his impressions. He recommended that we push farm irrigation, and that at least half dozen of the best projects be picked by extra attention, and be pushed to completion for demonstration purposes. He recommended that the Commission do everything possible to get the Bureau of Reclamation interested in irrigation at suitable locations in this state and especially along the Missouri River which could be made the state's greatest asset.

The question of securing larger quarters for the use of the Commission was discussed and the Chair appointed Comm. Simons a committee of one with power to act.

No further business appearing, it was moved by Comm. Olson and seconded by Comm. Engen, that the meeting adjourn to the call of the Chair. The motion was carried, all Commissioners voting aye.

*D. J. Reakey*  
Secretary

Approved *Henry Falk*  
Chairman

## MEMBERSHIP OF TEAMS TO CONDUCT COUNTY MEETINGS

## TO DISCUSS

## SOIL AND WATER CONSERVATION

Soil Conservation			Water Conservation	
1.	H. L. Walster, Fargo	--	Henry Holt, Grand Forks	
2.	Lyness G. Lloyd, Park River	--	(E. J. Thomas, Bismarck (J. A. Engen, Finley	
3.	G. N. Geiszler, Fargo	--	(Gerald Olson, Mooreton (Irvin Lavine, Grand Forks	
4.	A. D. McKinnon, Bismarck	--	(Kenneth W. Simons, Bismarck (William Farmer, Bismarck	
5.	Irvine Dietrich, Park River	--	(F. P. Whitney -Dickinson (J. P. Cain	
6.	C. T. Carlson, Bottineau	--	(Oscar Hagen, Watford City (D. J. Beakey, Williston	

## Places and Dates of Meetings

All Meetings at 8:00 P. M.

Team No. 1		Team No. 3		Team No. 5	
Casselton	May 10	Wahpeton	May 10	Dickinson	May 10
Hillsboro	" 11	Forman	" 11	Mott	" 11
Grand Forks	" 19	Ellendale	" 12	Hettinger	" 12
Park River	" 20	Lisbon	" 13	Bowman	" 13
Cavalier	" 21	Valley City	" 14	Killdeer	" 14
Team No. 2		Team No. 4		Team No. 6	
Finley	" 10	Linton	" 10	Watford City	" 10
Cooperstown	" 11	Steele	" 11	Williston	" 11
Lakota	" 12	Jamestown	" 12	Crosby	" 12
Langdon	" 13	Fessenden	" 13	Flaxton	" 13
Cando	" 14	Garrison	" 14	Sanish	" 14

Dates of meetings in 23 other Counties to be announced later.

May 24, 1937

Mr. D. J. Beakey, Secretary  
State Water Conservation Commission  
Bismarck, North Dakota

Dear Mr. Beakey:

There is a question in my mind as to the nature of the aid given landowners or lease holders in the purchase by the Commission of pumps, pipe and other equipment for irrigation pumping plants, particularly as to whether the present method of extending such aid, and the contract with the landowners relative thereto, conforms to the provisions of the law.

The contract form now in use covers both the engineering survey and the construction of the project. As to construction, it provides that the Commission is authorized to construct and complete projects upon such terms and conditions as it shall prescribe; that the Commission is authorized to furnish all materials, all labor or materials which he may be able to provide, and it further provides that upon the completion of the project the total net cost, "due to the Commission," shall be reduced to a promissory note to bear such interest and to be paid at the time and in the manner prescribed by the Commission. The presumption seems to be that the aid is in the nature of a loan to the owner and that the project is his property, although material and equipment for these projects is being purchased by the Commission in the name of the State and the contract makes no provision that the property shall belong to the owner upon the completion of the payments.

The law authorizes the Commission to construct and maintain works for the diversion, delivery and distribution of the water for the irrigation of agricultural land but it does not seem to authorize loans for such purposes. In section 23, subsection (a) the act does seem to provide for the sale of projects which the Commission has constructed. If that is true it would appear that the Commission should enter into contracts with landowners or lease holders, for the sale to them of the projects which it constructs rather than to enter into contracts with them for the construction of the projects. The contract, it would appear, should then provide that all title to the project should vest in the landowner upon the completion of the payments.

I believe it will be well to bring this matter to the attention of the Commission, your attorney or both. If it is desired, I shall be glad to go into these matters with you.

Yours very truly,

Geo. S. Knapp  
Technical Advisor

June 3, 1937

Mr. D. J. Beakey,  
Secretary, North Dakota  
State Water Conservation  
Commission,  
Bismarck, North Dakota

Dear Mr. Beakey:-

Thanks for your kind letter in reply to the letter referred to you by Governor Langer.

I note what you say about presenting my recommendations to the whole Commission at its next meeting, and after informally discussing the matter with Mr. Holt, I am attempting to summarize the proposal in more convenient and definite form, so that the Commissioners may more easily understand what is contemplated.

The service needed is as follows:-

1. The collecting and summarizing of scientific and technical data for presentation to the Army Engineers at the hearing soon to be held to consider the Missouri River Diversion Proposal.
2. Provision for complete and accurate chemical analysis of municipal and other water supplies, in cooperation with the well drilling program, and then scientific prospecting for better ground water supplies.
3. Technical advice and assistance in problems of water treatment, and in particular the further study of methods of removing fluorides and other harmful ingredients from water.
4. Completion of the State-wide ground water survey abruptly terminated by WPA ruling.

The recommendations are as follows:-

1. That I be appointed Technical Consultant to the North Dakota State Water Conservation Commission at a salary commensurate with the duties and responsibilities incident thereto, with the understanding that full time will be devoted to work during the summer, and part time after the opening of the University in the fall.
2. That a staff of laboratory assistants be provided consisting of:-  
1 assistant chemist at a salary of \$125 per month.  
3 assistant analysts, each to receive \$75 per month.

The first service mentioned needs little comment or explanation. It is obvious that if the Army Engineers are to be favorably influenced it will be necessary to present convincing evidence of the actual need of the Diversion and the proof that the benefits derived will justify the expenditure. This will require the collection and organization of a large mass of scientific and technical data, and its convincing presentation.

Unfortunately as pointed out in my letter to the Governor, the other services mentioned are not generally appreciated. The matter of the quality of water supplies is almost universally overlooked or disregarded. In all of the conferences

discussions of water problems I have yet to hear of any serious consideration of water quality, yet it is this factor that presents perhaps the most serious difficulty in our water problem. With the exception of a few cities located on the Missouri and the Red Rivers, the entire population of the State is dependent upon ground water supplies.

Prior to the severe and prolonged drouth, it was usually possible to obtain satisfactory domestic water supplies from shallow wells; but we know that during the past several years the water table has been lowered to such a degree that most of these shallow wells have gone dry. In the effort to secure adequate supplies wells have been driven deep into the underlying formations, and while such wells generally yield dependable quantities of water, our water survey has shown that in many regions the water obtained is not only unfit for human consumption; but in many cases even unfit for stock to drink. Most of the deeper wells carry fluorides which ruin the teeth of young children and possibly cause other serious physiological effects. In many instances it has been possible through scientific prospecting to locate satisfactory supplies. But in order to do this it is necessary to have complete and accurate chemical analyses of the water. Such analyses must not be confused with the ordinary rough and partial analyses so commonly made, for they require the skill of the highest trained experts capable of detecting and estimating minute quantities of harmful substances.

The Federal Government has been spending very large sums in this State in an effort to provide water for distressed communities. If these efforts are to be effective, it is necessary that the State provide some means of giving prompt and reliable information on the quality of the water obtained. No other agency is prepared to give at once the expert service required for this cooperation.

If the analytical service suggested can be organized at once it will be possible to retain assistants already highly trained and experienced in this exacting work. With the help of the small group specified it will be possible to give prompt and efficient service and to render valuable aid to the Commission in all problems involving chemical information.

Finally it may be pointed out that the total expense involved is insignificant compared to the vital assistance which this set-up is prepared to give.

Hoping that these recommendations may meet with your favor and that of the Commission, I am

Very sincerely yours,

G. A. Abbott

June 9, 1937

Mr. D. J. Beakey, Secretary  
North Dakota State Water Conservation Commission  
Bismarck, North Dakota

Dear Mr. Beakey:

I was glad to receive your letter of May 27th and recall with pleasure our earlier meetings particularly in connection with the Williston War Department hearing.

We are still in correspondence with the Director of the United States Geological Survey regarding just what will be done with the \$5000.00 or less to be used in cooperative work in topographic mapping with the United States Geological Survey, but tentatively we have submitted to Dr. Mendenhall, Director, the following propositions:

- (1) If possible, a completion and publication of the W. H. Darton Base topographic map of the state of North Dakota, scale 1 to 500,000, contour interval 100 feet;
- (2) The next quadrangle recommended for survey is that including Heart Butte and the proposed dam on the Heart River Project.

This seems to be of the most immediate importance of any in the state, although our recommendation is tentative and subject to change before work begins.

Very truly yours,

Howard E. Simpson  
State Geologist

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