MINUTES OF A MEETING

OF THE

STATE WATER CONSERVATION COMMISSION

Held in the Water Commission Office, Bismarck, North Dakota April 6th and 7th, 1943.

The regular meeting of the State Water Conservation Commission was called to order at 10:55 a.m., Tuesday, April 6th, 1943, in the Commission office at the Capitol, Bismarck. Roll was called with Lt. Gov. Holt, Comms. Simons, Thompson, Dahl and Orlady present. In the absence of Gov. Moses, Lt. Gov. Holt presided as Chairman. Binar Berge also present.

Minutes of the last meeting of the Commission, held in Bismarck on March 30, 1943, having been sent to each Commissioner, were brought up for discussion. Comm. Thompson moved that the minutes be tabled and moved for adoption at the next meeting of the Commission. Comm. Dahl seconded the motion. Motion carried by unanimous vote.

The financial statement for the month of March, 1943, and all outstanding vouchers to-date were brought up for discussion. Comm. Or lady asked to have the financial statement explained to him. Miss McDonald, Bookkeeper, came into the meeting to do this; also to give an accounting of the outstanding vouchers, as requested by Comm. Simons. Miss McDonald explained in some detail the different transfers of funds which have been made in the Commission's funds. Lt. Gov. Holt requested an explanation of the Administrative funds. He suggested that the Secretary assign the various engineers in the Commission presonnel to specific jobs, and charge this work against such appropriation.

Comm. Simons moved that Mr. Einar Berge be placed on the Commission staff as Technical Assistant at a salary of \$50.00 per month, continuing to July 1, 1943. Comm. Orlady seconded the motion. Motion carried by unanimous vote.

Meeting recessed at 12:15 moon.

Meeting reconvened at 1:45 p.a. Vice Chairman Simons presided in Lt. Gov. Holts absence. All Commissioners present; also Einar Berge.

Mr. Al Dexter of the Northern Pacific Railway Company, St. Paul, came into the meeting.

Commissioner Thompson moved that the Vice-Chairman be authorized to appoint Standing Committees of the State Water Conservation Commission. Comm. Orlady seconded the motion. Boll call vote was taken with all Commissioners voting aye. Lt. Gov. Holt absent. Motion carried. The following Standing Committees were then appointed by Vice-Chairman Simons: Comm. S. W. Thompson, Chairman of the Missouri River Diversion Committee;; Comm. L. T. Orlady, Chairman of the Audit and Finance Committee; also Chairman of the James River and Development in South Dakota Committee; Comm. Einar Dahl, Chairman of the Irrigation Committee. Vice Chairman Simons resigned as Chairman of the Irrigation Committee.

Mr. Milton K. Higgins of Mandan came into the meeting in regard to Project No. 326, Bismarck Irrigated Victory Gardnes, and the acquisition of the Harke land therefor. Mr. Higgins explained in detail the process of acquiring the land which Mr. Harke claims to own consisting of approximately two acres. Mr. Higgins intends to sondemn for the Water Commission only that part of the land known as the Northern Pacific Spur Line.

Comm. Thompson presented an exigency resolution on the acquisition of the Harke land, and moved its adoption. Comm. Dahl seconded the motion. Roll was called for vote

with all Commissioners voting aye. Lt. Gov. Holt absent. Motion carried. Mr. Higgins and Mr. Berge left the meeting.

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RESOLUTION .

whereas, It is deemed necessary and of public exigency that the following lands be obtained in order to provide proper location for the construction, equipment and maintenance of a pumping plant together with the necessary intake, outlets, ditches, conduits and other appurtenances thereto for the irrigation of lands situated south of Bismarck, known as the Bismarck Irrigation Project, and designated in the files of the Commission as Project Number 215; that title be obtained by the State Water Conservation Commission to the following lands to-wit:

Parcel II

A tract of land consisting of 0.30 acres lying in the northeast quarter (also known as Lot 1) Section 6, Township 138, Range 80, Burleigh County, Worth Dakota, bounded as follows: Beginning at a point on the north section line of said Section 5, twenty-one (21) feet west of the northeast corner of said section and thence running westerly along the said north section line 140 feet; thence running southeasterly at an angle of 45° 35° to the said north section line of said Section 5, 229.4 feet to the east section line of the said Section 6; thence running northerly along the said section line 142.8 feet; thence running northwesterly in a straight line to the point of beginning, and consisting of all of that portion of the abandoned Worthern Pacific Railway Company Landing spur right-of-way, lying upon and across the northeast quarter (also known as Lot 1) of said Section 6, owned by A. C. Harke, Bissarck North Dakota.

Parcel III

A tract of land consisting of approximately 1.693 acres, lying in the northeast quarter (also known as Lot 1) of Section 6, Township 138, Range 80. Burleigh County North Dakota, bounded as follows: Beginning at a point on the north section line of said section, 161 feet westerly of the northeast corner of said section; thence running westerly along said section line approximately 145 feet to a point on the said section line where it intersects the east bank of the Missouri River at lowwater mark; thence running southeasterly along the east bank of said Missouri River at low water mark to the point where the low water mark of the said east bank of the river intersects the east section line of said Section 6; thence running northerly along the said east section line approximately 340 feet to a point approximately 163.8 feet south of the northeast corner of said section; thence northwesterly in a straight line at an angle of 44° 25' from the said east line of said section 229.4 feet to the point of beginning, which tract adjoins and lies southwesterly from that portion of the abandoned Northern Pacific Railway Company river landing spur rightof-way lying upon and across the said northeast quarter (also known as Lot 1) of said Section 6, owned by J. S. Knauss and Bertha E. Bull, each owning an undivided half $(\frac{1}{2})$ interest, and in which Parcel Three (3) A. C. Harks of Bismarck, North Dakota, claims certain rights consisting of occupancy and a placer claim;

THEREFORE BE IT RESOLVED that the State Water Conservation Commission take all necessary steps, including the filing and recording in the office of the Register of Deeds of Burleigh County. North Dakota, of a proper plat of the said parcels, to acquire the said parcels of land before described, for the purpose heretofore stated in accordance with the statutes, and the Chief Engineer and Secretary of this Commission, is hereby authorized and directed to proceed accordinly.

At a meeting of the Industrial Commission on March 31, 1943, following a discussion of deposit made by and in behalf of the State Water Conservation Commission by the Bank of North Dakota in connection with the Wachter land controversy, such

deposit being in the sum of \$13.570.00 in the form of a cashier's check, the following resolution was introduced by Attorney General Strutz who moved its adoption:

WHEREAS, the State Water Conservation Commission did heretofore arrange with the Bank of North Dakota for a loan of \$13,570.00 to be utilized as a tender to Wachter Brothers incident to a pending transaction for the purchase of land by the State Water Conservation Commission, title to which is held by Wachter Brothers; and

WHEREAS, said moneys were not withdrawn from the Bank, but tender was made by means of a cashiers check, furnished by the Bank, and said moneys have always remained on deposit in the Bank; and,

WHEREAS, the transaction is still pending and the Commission desires to maintain such tender in force:

NOW, THEREFORE, Be it Hereby Resolved that in the event the Commission finds it impossible or undesirable to proceed in the matter and decides to abandon the tender now on deposit at any time before January 1, 1944, that in the event the Mank of North Dakota be authorized to cancel all interest on such loan; provided, however, that if the transaction proceeds and the moneys so deposited as a tender are accepted by said Wachter Brothers, that then interest shall be paid.

Commissioner of Agriculture and Labor Dahl seconded the motion. Governor Moses voted aye; Attorney General Alvin C. Strutz voted aye; Commissioner of Agriculture and Labor Math Dahl voted aye.

And the motion was therefore declared carried and the resolution adopted.

Comm. Thompson moved the above resolution be adopted by the water Commission. Comm. Dahl seconded the motion. Motion carried by all Commissioners voting as

Lt. Gov. Holt came into the meeting at 2:25 p.m.

The Secretary reported that the Water Commission had received a check from Louis Signalness in the amount of \$150.00 as a payment on the equipment purchased from the Water Commission - Project No. 33. This leaves a balance of \$149.94.

Conn. Dahl recommended that the Water Conmission accept the check, with the understanding that the balance be collected on November 1, 1943.

A discussion was held on the Red River Valley Drainage Basin and other flood situations throughout North Dakota. Lt. Gov. Holt and Comm. Orlady suggested that the Water Commission send a representative into these flooded areas which are requesting assistance from this office. Comm. Simons opposed this action and believes that a publicity agent can do the work rather than incurring the expense of personal contact with the citizens. Lt. Gov. Holt brought out the point that it was a good idea to send an engineer into the flooded areas to show the Water Commission has an interest in their problems. He further suggested that the Secretary attend the Tri-State Waters Commission meeting on Thursday, April 8, 1943, at 8:00 a.m., Fargo and proceed to Wahpeton. Comm. Orlady stated that we must cooperate with these people who were very active in securing the appropriations for the Water Commission in the last legislative session. Comm. Simons stated that this is strictly a problem of public relations and not an engineering problem.

Mr. Al Dexter reported on a speech given at St. Paul, Minnesota, Monday night, April 5, 1943, by Major General Flemming of the U.S. Army Engineers, Washington, D.C. Lt. Gov. Holt suggested that the Secretary be instructed to write to Major Flemming

saying that the Water Commission is very much interested in his comments made at St. Faul and would appreciate hearing from him regarding the Army Engineer's plans for post-war work as it will affect our state.

Lt. Cov. Holt and Einar Berge left the meeting.

Mr. W. G. Sloan, Bureau of Reclamation, Denver; Mr. Charles Hinze, Bureau of Reclamation, Bismarck; and Mr. C. F. Kelsch, Bismarck, came into the meeting.

Mr. Kelsch reported on a conference he had had with Mr. Hagie of the National Reclamation Association, Washington, D. C., recently, at which time Mr. Page of the Bureau of Reclamation, Washington, D. C., was present. Mr. Hagie stated that the Missouri River Diversion Project is well thought of in Washington. It is considered big enough to provide for i mediate employment during the change from the war to peace time economy.

Mr. Kelsch told Mr. Hagie and Mr. Page about the Heart-Butte Dam south of Mandan and was told that this project was in the post-war picture, but bigger projects in the limelight. The Heart-Butte Dam is too small to provide for any substantial employment. The Missouri River Diversion Project would furnish great opportunity for employment. Mr. Hagie suggested that North Dakota get behind the Eight State Compact, a meeting about which is soon to be held in Omaha. It is his belief that we will incur considerable opposition to the amendment of the Ft. Peck Act. All of the water from Ft. Peck is impounded and utilized. There will be no substantial diversion in the flow of the Missouri stream.

Mr. W. G. Sloan reported: "We had a conference in Denver before I left about your work up here and I was told to tell you people that on the Missouri-Souris Project, there is no work to do to get it authorized, except to get Ft. Peck transferred and the Ten State Compact passed." Mr. Sloan believes that Minnesota should be included in that compact.

Mr. Sloam stated that there are other things that will have to be done before the Bureau will feel like going ahead; that is to come to a decision as to what is the proper scheme to follow. The Bureau has not exhausted the possibilities of the Missouri River as yet. There was no use in going ahead with the plan unless most of the people are agreed upon it.

Lt. Gov. Holt came into the meeting.

Mr. Slcan: "There are three other possibilities in North Dakota of getting Missouri River water and putting it to use: (1) The Army Engineers' plan at Garrison. (2) Pumping water out of the Missouri at Bismarck. (3) Pumping water out at Horsehead. Each of these additional projects involved land in South Dakota as well as in North Dakota and there is the question as to how much land can be served by any one project. What is the limit of the use to which the Missouri River can be put in North Dakota and South Dakota? North Dakota is not ready to talk on a Ten State Compact until those questions have been decided. There is the question of navigation to be answered also."

Mr. Sloan discussed the three proposed dams for South Dakota as they affect irrigation in North Dakota and navigation in the states below us. The acquisition of land is not a serious problem. The Bureau is considering the dam site at Garrison. The restoration of Devils Lake and the Sheyenne River are included. Lt. Gov. Holt inquired if this provided any flood control structures in the Sheyenne to which Mr. Sloan replied that it did. Mr. Sloan stated that under the theory of the Water Utilization Act, if the Bureau gets a project that can repay about 60% of its cost, they will not hesitate to ask Congress to authorize such project. If a project will repay all of

its costs, it is automatically authorized. If it does not repay all of its costs, the Bureau has to secure special authorization from Congress to build such project. It is necessary to get F.t Peck transferred. We must prove that we will not harm the navigation interests, according to Mr. Sloam. The Bureau operates under the 1939 Act. To get the flood control allocation, the Bureau will give data to the Army Engineers and they act upon it. If the biggest interest were irrigation, the Bureau of Reclamation gets the project; if it is navigation or flood control, the work goes to the Army Engineers. The matter of determining what the biggest interest is, is figured out on the basis of the costs and benefits of such project.

The meeting recessed at 4:10 p.m. and reconvened at 4:30 p.m.

Mr. S. O. Earper, Chief Engineer, Bureau of Reclamation, Denver sent a letter under date of April 3, 1943, to the Secretary of the Water Commission relative to the employment of state and federal funds for post-war construction. At this time, the letter was brought up for discussion. Each item contained therein was discussed at some length. Copy of letter is attached.

Comm. Dahl moved that the meeting adjourn, to convene at 9:00 a.m., Wednesday, April 7th. Comm. Thompson seconded the motion. Motion carried by unanimous vote. Meeting adjourned at 5:45 p.m.

Dr. J. C. McMillan, President of the Ellendale State Teachers' College, came into the office the morning of April 6th, 1943 and met with the Secretary and members of the Commission, preceding the regular meeting of the Commission, which had been called for April 6th.

Dr. McMillan discussed the matter of relief maps to be furnished by the Water Commission to the Teachers' Colleges in the state for the purpose of teaching conservation in the schools. Dr. McMillan stated he believed that this subject would be much more effective incorporated with a geography or state history class, rather than being taught separately. The interest of the pupils must be stimulated in this particular subject. The small relief maps in the office of the Water Commission, according to Dr. McMillan, would be of the greatest possible benefit in teaching this subject.

Dr. C. E. Scott, President of the Dickinson State Teachers' College came into the conference. Dr. Scott also expressed the belief that the subject of Conservation must be correlated and integrated into the present subjects being taught at this time.

Comm. Orlady suggested that some member of the Commission might be called upon to give lectures on the subject of Conservation at the colleges. Dr. Scott said that Mr. W. L. Gardiner of Waw England had been active in this work, and had talked at the Dickinson College.

Dr. Scott: "I think that this is the most promising program ever planued. The relief maps are excellent for teaching the subject."

Comm. Orlady suggested that some of the instructors in the colleges come into Bismarck and spend some time at the Water Commission office in order to grasp some of the facts and figures which the Commission has to offer on the subject of Conservation in North Dakota. Comm. Thompson suggested that some of the radio speeches be used in this connection. Articles written by John Haw of St. Paul and Comm. Page of the Bureau of Reclamation could be used. Dr. Scott suggested that such speeches, plus factual and statistical information be employed in this connection. Comm. Thompson suggested a talk by Mr. Tucker illustrating the large relief map in the Water Commission office. Mr. Tucker stated that Mr. Kelsch of the Public Service Commission had just returned from Washington, D. C., and says that he heard there that the Missouri Basin post-war projects are the biggest things in Washington at this time.

Comm. Simons suggested that the Water Commission send all available material on the subject of Conservation to the Board of Higher Education and that Board sound out such material and use what it determines best.

Dr. McMillan said that the fundamentals of the subject can be given to the children and thus accomplish the thing we are endeavoring to do. He asked the Water Commission to send information and material to all State Teachers' Colleges and they will each pick out a man from their faculty and send him to the Water Commission officein Bismarck to confer with the Secretary. It was here suggested that the fish and game aspects of the subject of Conservation should not be emitted.

The second day of this regular meeting of the Water Commission was called to order at 9:15 a.m., Wednesday. April 7, 1943, in the Conference Room of Gov. Moses' office, Capitol, Bismarck. Roll was called with Lt. Gov. Holt, Comms. Simons, Thompson, Dahl and Orlady present. Lt. Gov. Holt presided as Chairman in the absence of Gov. Moses. Also present were: Col. Lewis Pick and Col. Freeman of the Army Engineers' Office, Omaha; Lt. Col. Roberts and Lt. Johnston of the Army Engineers' Office, Ft. Peck; W. G. Sloan, Bureau of Reclamation, Denver; Chas. Hinze, Bureau of Reclamation, Bismarck Al Dexter, N.P.R.R., St. Paul; Mayor C. C. Byrely, Mandan; John Baton, Minot; Nels Johnson, Towner; Lee Hughes of the Water Commission Office, Bismarck.

The matters of floods and drainage in the state of North Dakota were brought up for discussion. Comm. Simons requested the Chairman to grant him permission to acquaint the Army Engineers present —ith the position of the Water Commission as regards this matter. Comm. Simons was granted such permission. He explained the appropriation given by the Commission by the last state legislature. The Commission has the responsibility of expending \$300,000, \$200,000 of which is to be matched by Federal agencies. The policy of the Commission is that it much prefers to have the great volume of the work done by the agencies of the Federal government, which are equipped to do so. The Commission invited the Army Engineers and the Bureau of Reclamation, which are the two main agencies of the Federal government interested in water developments in North Daksta, to advise the Commission as to how to expend this appropriation, guide it in its thinking, and make such suggestions as they see fit in this respect, explained Comm. Simons. Comm. Simons further suggested that Mayor Byrely be asked to go into the matter of the flood in Mandan. Comm. Simons stated that the water development program which the Commission has in mind, contemplates all phases of water development and control.

Mayor Byrely: "Our situation in Mandan is this: We did the best we could in our humble way. The dike built by the WPA served its purpose until there got to be too much water. We are now interested in what the state is interested in. We have the runoff in the spring and the June rise in Mandan. The dike is all washed out. When the June rise comes along, which won't be as bad as it is now, but we are going to have lets of water in June. If we could get cooperation to rebuild that dike in such a way as to hold the water out so that we won't have the June rise, it would clear up our troubles to a great extent. The railroad company is held up so that the army cannot get its supplies and troops through Mandan. All of the grain that is stored in Mandan is being sold at a greatly reduced price. There are thousands and thousands of dollars worth of property lost in Mandan. All of the top soil on many of the farms in the community is washed away. If you gentlemen can see fit to cooperate with us in building the dike before the June rise comes along, we will greatly appreciate the service. There was only one loss of life in Mandan as a result of the refent flood, however, Mandan built a temporary dike to connect with the big dike that is there."

Einar Berge came into the meeting.

Mayor Burely: "The Heart-Butte Dam would be a wonderful aid and other dams in the Heart River Basin. If this water were held back out of Mandam, it would be a great aid. If there is some way in which the water could be controlled at the source, it

would be mery worthwhile. The state of North Dakota in its last legislative session appropriated money for matching funds with the Federal agencies. That is the biggest thing North Dakota has ever done. North Dakota has resources. The only thing is that somebody should do something about the natural resources that we do have. We are asking for the cooperation of you epople and anyone that we can interest in the way of bettering our conditions in this state. I would like to have you consider this too, while it is a local proposition, our dike at Mandan is necessary. The dike originally cost about \$210,000. The railread company would be greatly benefited by the dike. The Nerthern Pacific Sailread there cooperated during the flood by giving trains and services to evacuate the flood stricken people."

Col. Pick: "Do you have any kind of an organisation in Mandan studying your problem?"

Perhaps a Flood Control Committee?"

Mayor Byrely: "We. The morning of the flood disaster a meeting of the City Commissioners was called. I was appointed to take charge of the flood situation."

Col. Pick: "Imasmuch as this is a local civic problem. I will meet with Mayor Byrely and discuss the situation at more length."

Comm. Simons: "We ought to explore the possibilities of some upstream engineering. You are familiar with the proposed construction of the Heart-Butte Dam. Our figures show that about 50% of the drainage of the Heart River is above that dam site. The Cemmission thinks it advisable to review the possibilities of using that dam as a flood control structure. There are no gaging stations on the Heart River. We would like before this meeting terminates, if there is time, to obtain from you such information as you may have on the sources of water and discuss with you the possibility of a flood control structure at Heart Butte."

Col. Pick: "We have a report on the Heart River which is in Washington now. That report has not yet been submitted to Congress. I want to go into the question of runeff and restudy this last flood to see whether or not we should make any changes in the report. Until that is done, I don't know any more shout it than you do."

Conm. Simones Col. Roberts, you had men here during this flood, did you not?"

Cel. Roberts: "Yes, we had two men in Mandan."

Comm. Simons: You should be able to get reports from them on conditions of the flood and perhaps the USGS can give us some information on the volume of the water."

Col. Pick: "We want definite information as to the damages incurred."

Lt. Gov. Holt: "The Water Commission can grange to cooperate with Mandan and areas affected so as to get a clear picture of the damage to lives and property. It can be arranged so that the Water Commission can work with Mayor Byrealy."

Col. Pick: "Start this work immediately while it is fresh in the People's minds."

Comm., Thompson: "Mr. Hughes of the Water Commission has been over there, but me have no office set up."

Lt. Gov. Holt: "We want to discuss here today the great Missouri River. The people of this state have become tremendously interested in the proper utilization of that water. The State Water Commission was created in 1937 tegether with these agencies which Comm. Simons has mentioned to develop a plan for the State of North Dakota for the utilization of the water in the Missouri River that we feel properly belongs to us and other streams in this state. I think we ought to discuss with you men from Omaha and

Ft. Peck just where we can fit in with you and the Bureau of Reclamation on the proper utilisation of this water. In this state, water and land will have to meet."

Col. Pick: "Insofar as making use of the water for conservation purposes, I think Mr. Sloan is in a better position to say how this can be done than I am. Our activities are generally confined to the rivers and river bottoms themselves rather than to the highlands along the rivers. What you can do with the water which may be diverted from the Missouri River for consumptive use, I am sure that Mr. Sloan is in a much better position to advise you as to the best course to pursue since that is one of the Bureau's primary functions."

Mr. Sloan: "Of course, we are furnishing the Army Engineers with all of the information we can get as we get it and we are evolving a plan which is not final yet. You all know that we have the information in our Missouri-Souris Report which immediately brought up the problem as to what effect the use of this water was going to have on the lower river; the navigation problem and the needs of the population in the Lower Basin. We have been working on all of them to find a balance and the best use of the water both for irrigation and navigation. To date, we have concluded that it is best to utilize a large amount of the water in the upper river for irrigation and by re-regulation of the river in South Dakota, we can still take care of the navigation needs below. We have been working two or three years trying to get the fundamentals of that plan worked out and see whether or not it was actually workable. In North Dakota we have proposed irrigation of some million acres of land so far. In that report we had a surplus of two to three thousand acre feet of return flow on this project which we contemplated. This also includes sanitation purposes on the Shyenne and James Rivers and the restoration of Devils Lake. This work involves an economic problem as well as physical problems and involves not only North Dakota but South Dakota. There has always been a question in my mind as to wheather or not irrigation is actually needed in southern Forth Dakota and northeastern South Dakota. There has been a good deal of pressure brought to bear to investigate its possibilities and we are soon to work along that line. With all of the developments that are contemplated in the Upper Missouri, Yellowstone, tributaries of the Missouri, there will be a depression in the normal flow of the river at Yankton of probably 3,000,000 acre feet of water. We have found there are possibilities of reservoirs in South Dakota which will re-regulate the flow and conserve it and persit a discharge in the navigation period of something like twenty to thirty thousand second feet. In any project for North Dakota we immediately become involved with all of the other states. It looks very much as though we have to come to the point, if we can agree amongst states and Federal government on the equitable distribution of the waters. We have pointed the way for conservation of a large amount of this water."

Mr. Bernie Maurek and Mr. Brice McBride of the Fish and Wildlife Service, Minot, came into the meeting.

Mr. Sloan: "Now is the time and opportunity to finally settle on a plan. Now is the time to determine what that plan should be."

Col. Pick: "I reached the conclusion that the Missouri River Valley was in a position to be developed. A tremendous amount of work has been done in this valley, but never reached the point where it had become to pay big dividends. The development of the Missouri River Valley started back a number of years ago. If you think what has happened in that time you will realize that a lot has been done, especially a lot has been done on this river. That which has been done has been well worthwhile and in my opinion it is the background and the backlong from which we should start now. It is the basis of all of it. The problem in the Missouri River Valley requires lots of studying. I think that studying would be in the wrong direction unless when it is completed, it will provide for the maximum development possible and use the water as it comes down the Missouri. Anything short of that, in my opinion, is short-sighted. With that in mind, I started out to devise a plan to take care of the Missouri River. Today that plan is in some respects well along. My report on the Missouri in South Dakota should

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be cut by June 1st. That is only part of the comprehensive plan. I outlined a comprehensive plan of development of the upper Missouri to the Board and it took me only a short time to convince them that we should make a comprehensive plan for making the maximum use of all of the water that comes down the Missouri. In January I got a definite decision on my plan and went to Washington and secured the money. I have all of the money I need and I have the people employed now and in the field. I hope to have that report out early in the fall. That report will provide for the impounding of water above Sioux City on the Missouri and below Ft. Peck. Based on the records that we have worked out, we should work out a plan which will allow the states of the Missouri River Valley to make the maximum use of all the water that comes down the Missouri. It will mean that in dry seasons all of the water will be stored as well as in moderately wet seasons and in general, very little water will ever escape in the extreme wet years. It will be a scheme in which I hope that the Upper River Valley states will be able to interest the Lower Valley states in the p proposition and gain their support. I came up here today to tell you gentlemen that insofar as a comprehensive plan of development on the main stream is concerned, we don't need any money to help us because we have plenty. I am at a loss to say how you should spend the money that you have, but I am convinced that there is plenty of work to be done. If we can impound the water in the rivers in this state and make it available for irrigation and provide at least a sufficient amount of power to pump that water around, then I think your plans would be worth more to the cause of development. If you could determine what you want to do with the water that was being impounded and definitely where you will want to use it, that will be your job. We know we have a problem of getting it out of the river and putting it on the land, especially getting it over the Divide. It seems to me that somebody should have a plan outlined because one of these days we are going to have to go before some committee of Congress with a definite scheme because we have to ask Congress to give us the money to build the structures. The plan for thich I am responsible, with the Board, must necessarily involve multi-purpose structures. The primary purposes of any multi-purpose construction is flood control, navigation, irrigation and power. I am convinced that if we ever put into effect the plan that I have in mind, we would eliminate floods in the Missouri River Valley. In my opinion, it would be a short sighted policy not to develop sufficient power to be able to take care of the pumping needs for irrigation; utilize power if it could be done without affecting the entire scheme, for industrial purposes.

We have to provide for irrigation up here, power, flood control and navigation. In my opinion, the inland waterways of this country have been developed far beyond anything that was dreamed of one hundred years ago. I don't think it is far-sighted to do anything that will stifle development. I don't think it is far enough along for me to tell you what we are going to do exactly, but I can assure you that unless something happens which does not seem to be in the making now, when this war is over, we will have something that we can get out here in the Upper Missouri Valley. It is my firm belief that the plan which we present now should be the plan which will provide for the ultimate development for all purposes in the Missouri Miver; that is what I am working on now. It won't be necessary for you to contribute any of your funds for this work. I have sufficient money. My only suggestion is to find out how you can best use the water that will be impounded in this scheme in southern Borth Dakota."

Lt. Gov. Holt: "Have you gone sufficiently along in your plan to give us an indication of the amount of water that we can divert?"

Col. Pick: "Ne. sir, I have not."

Lt. Gov. Holt: "We will naturally have to know approximately what amount of water will be available to us."

Col. Pick: "That is true. It seems to me that with the funds you have available

you could go ahead and pick out areas, collect the necessary data on those areas, set them up in some kind of priority for that which you want to do first; that which would come first; and work along that line and go to the full extent of your money."

Lt. Gov. Holt: "We are cooperating with the Bureau on a comprehensive plan for the utilization of the water for irrigation and other purposes and it seems to me that perhaps the time has come when the two Federal departments, will have to get together as to where they fit into this state."

Col. Pick: "We are working together. Isn't that right, Mr. Sloan? In this diversion problem, we have several other problems connected with it. We have this Devils Lake thing to consider; the James and the Sheyenne Rivers. We have the question of conserving all of the water in the Missouri River Basin that is possible to conserve. I doubt whether Mr. Sloan could tell you if we had the water now where he would want to put it first."

Mr. Sloan: "No."

Lt. Gov. Holt: "We are very pleased to hear your statements here today because I think you are grasping the feeling and hopes of the people up here. It is most encouraging to hear you talk. I want to stress the idea that both the Army and the Bureau have been most considerate of the people of North Dakota. We will cooperate to the fullest extent. We have to depend upon you people who know about irrigation and navigation."

Col. Pick: "The people in the lower valley are interested in navigation in the Missouri and Mississippi. This thing has to be worked out on an over-all scheme for all of the valley."

Comm. Simons: "Have you any suggestions as to hew we might approach the Mississi-ppi Valley people?"

Col. Pick: "Talk to them."

Comm. Simons: "Do we face a time problem?"

Col. Pick: "We want to have this report ready for the next flood control bill."

Comm. Simons: "It will take us a long time to present what we want."

Co. Pick: "Suppose we build these dams which are necessary. That's the first thing you have to have. The time you need the water most you have the least water running down the river. It seems like to be that you could get some preliminary figures on how many acres of land you want to irrigate in certain territories and about how much water it will take to irrigate the same. If we store all of the water that is possible, we will cut down the duration of drought and perhaps spread the water a little thinner and get over the area."

Cosm. Simons: "We ordinarily can stand a 30-40% shortage in ten years."

Col. Pick: "Therefore, I say we have to base our studies on the longest record we have. Our plan is not going to be based on the water that came down the river during the drought period."

Comm. Simons: The drought set the people to thinking."

Comm. simons, quoted relief figures for the state of Borth Dakota.

Lt. Gov. Holt: "In your scheme that you are thinking about. I take it that you are planning to build large reservoirs so that you can hold back the water and prevent floods."

Col. Pick: "Floods will disappear."

Comm. Simons: "Will that involve some up-stream engineering."?

Col. Pick: "I don't know about that."

Lt. Gov. Holt: "Do you contemplate the restoration of Devils "ake."?

Col. Pick: "We have to consider that. It is one of our resolutions. I have never been able to get a clear picture in my mind of what we will do with the water when we do get it there."

Comm. Thompson: "Contemplation is to run it into Stump Lake from Devils "ake and then through an old channel back into the Sheyenne River, a short distance from Stump Lake.

Mr. Tucker: "That's right,"

Comm. Thompson: "Is that part of your report which deals with the water supply and water for domestic use on the James. Sheyenne and Red Rivers sufficiently set out to enable you to know what the needs are in those three basins?"

Comm. Simons: "When we go to Congress with the plan, it looks like a good deal of the benefits would accrue in North Dakota and South Dakota. What provision has the Army made to study the benefits which would accrue so that we can make the best showing before Congress?"

Col Pick: "Show how much land you want to irrigate."

Comm. Simons: "In 1938 the Water Commission made a study of the benefits that would accrue. A good deal of the valuation that we could allocate to ti developed east of Devils Lake and involved no irrigation - domestic and industrial purposes. This information has been sent to the Army. Col. Flemming held a hearing here and all of that information went on record."

Lt. Gov. Holt: "The flood damages and loss of life in the Red River Valley can be included this year. We should make available data on Fargo and vicinity."

Col. Pick: "There is no reason why you should not call it to the attention of the St. Paul office."

Comm. Simons: "The original allocation of benefits was made by the Army Engineers. This was approximately \$8,000,000."

Col. Pick: "I think if we can get out reports now, it would be an opportune time."

L Lt. Gov. Holt: "In your plan for this diversion, have you given any thought asto the place of diversion from the river?"

Dol. Pick: "Yes. We have found a way to get over to Devils Lake."

Comm. Orlady: "Would it be contemplated to put enough water in the James River to affect the plain lands of South Dakota? The western people in South Dakotaare navigation minded. Two-thirds of the state is in the Basins area through which the

James River flows."

Col. Pick: "We have to consider the question of water in the James River for domestic purposes."

Comm. Simons: "What you have in mind, Colonel, would provide a stabilized flow in the Missouri?"

Col. Pick: "When a report is sent to the Chief of Engineers, it is immediately referred to the Rivers and Harbors Congress. If there is an adverse report, you are notified and priveleged to appear before the Rivers and Harbors Congress and review any information before it is finally presented to the Chief Engineer and Secretary of war. Our reports are not considered comprehensive until they are submitted to Congress."

Mr. Sloan: "You could give us a little more information as to what field work you intend to do this summer on the Missouri River Project."

Col. Pick: "We are doing some air mapping. That will be from the Yellowstone downstream just as far as we can go this season on the main river. We will obtain data and foundations. We will do some more work on the Devils Lake territory. I would like to be able to locate along the Ridge sufficient data to pick out the best place to cross the ride."

Comm. Thompson: "Do you think this is the opportune time for a Ten State Compact?"

Col. Pick: "It is not very difficult to get up a compact on a small stream. I am not convinced you need one."

Lt. Gov. Holt: "We have to plan our program on a long-range basim. We have to determine whether or not we are going to have available to us to irrigate all of the land we want to irrigate."

Col. Pick: "I imagine that Congress will decide how much water each state will get?"

Mr. Sloan: "Congress told us on the Colorado that we had to have a compact."

Lt. Gov. Holt left the meeting at 11:25 a.m.

Comm. Thompson: "Will it harm us to form a Ten State Compact?"

Col Pick: "I would think that it would be most important to do everything possible to wield the people of the Valley together to get the development started. I would be very glad to have the Board of Engineers meet with your Governor and you gentlemen. We plan to be in Devils Lake on the night of April 23rd; Bismarck on the night of the 27th or 28th; also Minot and Ft. Peck. The Board consists of Col. Malcolm Elliott. Mr. McAlpine and me."

The Secretary of the Water Commission is to write to Coll Pick for his definite itinerary.

The meeting recessed at 11:45 a.m. to reconvene at 1:30 p.m. by the call of the Chair.

The meeting reconvened at 1:35 p.m. Comms. Simons, Thompson, Dahl and Orlady were present. In the absence of Lt. Gov. Holt, Vice-Chairman Simons presided. Also in attendance were: Col. Pick, Col. Freeman, Lt. Col. Roberts and Lt. Johnston of the Army Engineers: William Gardner, New England: John Rovig, Mandan: Bert Groom

Greater North Dakota Association, Fargo; Nels Johnson and John Eaton, Eaton Flood Control Project, Towner; Brice McBride and Burnie Maurek, Fish and Wildlife Service, Minot; Al Dexter, NPRR, St. Paul; Paul Speer, U.S. Geological Survey, St. Paul; Chas Hinze, Bureau of Reclamation, Bismarck; W. G. Slona, Bureau of Reclamation, Denver; Frank Bavendick, U.S. Weather Bureau, Bismarck; Frank Whitney, Dickinson; Harold Kelly and C. S. Duschinske, Chamber of Commerce, Devils Lake.

Mr. Sloan informed the Water Commission that by its next meeting they should have a contract ready to be signed by the Commission and the Eureau of Reclamation in line with Mr. Harper's letter of April 3, 1943 (copy attached.)

Lt. Gov. Holt came into the meeting.

The Commissioners stated that the Bureau is to understand that the Commission is ready to go ahead. The Bureau should prepare the contract and present it to the Commission for approval at its next meeting.

Comm. Simons: "Col. Pick, we want you to know that we are anxious to help you."

Mr. Ray Brandt of Minot came into the meeting; also Finar Berge.

The Mouse River controversy was brought up for discussion. Wels Johnson of Towner reported on the Eaton Flood Control Project, or the Board of Flood Irrigation in McHenry County. This project is an irrigation project existing right in the locality of the town of Towner between the Upper and Lower Souris Projects. The area that is flooded consists of 6,724 acres of land; 7,000 acres in the entire project. The Board negotiated for a water agreement with the then called Biological Survey, which is now called the Fish and Wildlife Service. Out of the six years the Eaton Project has been in Operation, this is the third year that it has been completely flooded over the entire project. They have had partial floodings before this year. The Board has been and still is negotiating and hoping to conclude a successful negotiation with the Fish and Wildlife Service to get a modification of that agreement to be assured that the project will get enough water each year to flood the entire project. The Board contends that the project uses about 30% of the water that goes into the hay meadows. If the project gets enough water to use up about 30% of the water over a period of 21 days, it would then be ready to release water to the Lower Souris Project.

The following are the modifications the Eaton Project wishes to be made in the present agreement:

- 1. Definite time and period of about 21 days be provided for the use of irrigation by flooding the project.
- 2. Sufficient volume of water be furnished from the Upper Souris reservoir to completely flood the Eaton Project during these 21 days.
- 3. Storage period for water for use of Eaton Project be increased from the time complete flooding has been obtained until next flooding period. The agricultural needs should come ahead of everything else.
- 4. Some water master be appointed on the Mouse River so as to control the whole situation from the Canadian border above Minot to the point where the Mouse River again enters Canada.

Mr. Brice McBride, representing the Fish and Wildlife Service, Minot, reiterated the stand his department is taking in this matter. He said that this was the fourth time he had appeared before the Water Commission on this same matter and he still will not consent to the above modifications.

John Enton reviewed the history of the Mouse River Valley for the benefit of Mr. Orlady, a new member of the Water Commission.

Mr. C. F. Kelech, Assistant Attorney General for North Dakota, and Mr. Math Dahl, Commissioner of Agriculture and Labor for North Dakota, came into the meeting.

Mr. Fels Johnson stated that the Eaton Flood Control Project has been hoping all of the time for a peaceful settlement of this controversy. Gov. Moses has advised the Biological Survey that he feels some adjustment should be made in this connection.

Mr. Johnson: "Unless we can work out some modification of our agreement with the Fish and Wildlife Service, the only other recourse is to test out the legality of the Biological Survey's rights in Court."

Mr. Sellens, Member of the N.D. House of Representatives, came into the meeting.

Comm. Simons: "I might clarify the situation some if I stated the position which the Water Commission takes in this matter. We have certain legal responsibilities which are delegated to us under the law. Our idea in bringing this matter up at this time is in the hope that we might be able to negotiate this thing in such a way that we can make the best use of the facilities there as possible. The fundamental question, it seems to me, is how much water is available, who is entitled to it, and what is the best use that can be made of it, bearing in mind the legal rights of each party. The Commission is very much interested in the preservation of the historic rights which have been established by the various people along the streams. There are hundreds of so-called "little people" on the Mouse River. These people are entitled to protection from the Commission insofar as the Commission can protect their rights. Mr. McBride, do you keep records of the water on this stream?"

Mr. McBride: "Yes, 40,000 acre feet of water in 1942 went into Canada. Prospects this year are probably that 70,000 acre feet will go into Canada. 1,500 second feet will be released and 2,800 second feet coming into the state. The capacity of the dam is 112,000 acre feet. It takes about 50,000 acre feet to maintain the marshes over the entire area."

Conn. Simons: "Mr. McBride, can you give us some data on the stream flow in the Mouse River?"

Mr. Tucker: "Mr. Speer of the USGS will ascertain that figure and present it to us at an early date."

Comm. Simons: "From the standpoint of the Commission, we would much prefer to may out of the Courts. We are trying to establish here a policy which will work satisfactorily for all concerned."

Mr. E. M. Gregory of the Great Northern Railway Company, Pargo, came into the meeting.

Comm. Simons: "The question of the rate of release from the dam comes to mind. You need 50,000 acre feet of water at Upham. Mr. Johnson says you use about 30% of the water. We have before us then the question of the method of release and volume at which the water comes down."

Mr. Johnson: "Is there any disposition on the part of the Fish and Wildlife Service to negotiate and change the present agreement?"

Mr. McBride: "We made an agreement with you."

Mr. Johnson: "Several years we have not used our 10,000 acre feet that came into your reservoir. We have felt that it is not more than right and in the best interest of all of the people that we should be able to use the water not used in one year, the next year if it is dry."

Lt. Gov. Helt came into the meeting, having left just previous to Mr. Simons' and Mr. McBride's conversation.

Comm. Simons: "Suppose we have Mr. Tucker get in touch with youat critical periods and suggest to you what should be done or work out a plan and submit it to you for reference to the people?"

The Army Engineers wished to take leave at this point and concluded with:

Col. Pick: "We have sufficient funds to do everything that we think is necessary now and I believe that your funds can be profitably expended on developments that will be well worthwhile when presented to the United States Congress. I would urge that you get everthing done this summer that is possible because sooner or later the war is going to be over and I would like to be ready then."

Lt. Gov. Holt: "It really has been a pleasure and a profitable one to us in North Dakota to have had you here. Your story makes us feel very good. We want you to know that the NorthDakota State Water Conservation Commission is anxious to cooperate so that we can have some solution to our problem in this state."

The Army Engineers, Messrs. Eaton, Johnson, McBride and Marek left the meeting. Lt. Gov. Holt left the meeting, turning the Chair over to Vice Chairman Simons.

Vice Chairman Simons requested Mr. Frank Whitney of Diskinson to read Mr. Harper's letter of April 3 alound for the benfit of all those present. Mr. Tucker expalined each item contained therein.

Comm. Simons: "For the information of the people here, it looks like it is going to be necessary to investigate every possibility before we can be sure what we can do. The Army deal is based on Garrison. The Bureau of Reclamation, according to this letter, is going to examine further into the Garrison deal so that we won't miss any good possibility."

Mr. Sloan came into the meeting; also Mr. Hinze.

Mr. Sloan: "I went to make it clear that we have come to the conclusion that no further figure work is necessary on the Missour-Souris Project. We have it in shape that when other difficulties are cleared, we can go to Congress and ask for authorization. These difficulties are primarily: having Ft. Peck turned over to the Bureau for operation and control; and agreement with the lower states, the Ten State Compact."

Mr. Tucker; "Can we do anything about the matter of conservancy districts?"

Mr. Sloan: "I don't know how to answer that. The conservancy district was preposed so that we could in some way get additional money by taxing everyone who got any benefit out of a project. I am not sure this is the way to go at it. If Congress does not pass legislation, then a conservancy district is the thing to have. The problem of financing your projects is one you have to think ever a good deal longer and see if the sentiment of the state is going to support it. I am hoping that someone of us will evolve the scheme of taking care of that situation."

Mr. Tucker: "What can we do on the Ten State Compact?"

Mr. Slean: "Your State Committee which was appointed a couple of years ago should begin to function."

Comm. Thompson: "Minnesota and Colorado should be included in that Compact, should they not?"

Comm. Simons explained the matter of compacts to Mr. Sellans, illustrating with the Yellowstone Compact with which we are all familiar.

Mr. Sellans: "If the state of North Dakota should put in projects and use the Missouri River water without interferring with navigation, why do we have to have a compact?"

Mr. Sloan: "You cannot build the Missouri-Souris Project without changing the use for which Ft. Peck was built. Therefore, a compact is vital." Mr. Sloan further discussed the advisability of compacts with Mr. Sellans.

Mr. Sloan: "I very much regret your giving up the idea that a compact is necessary.

Comm. Thompson: "Do you think it wise to attempt to negotiate a compact before you have completed your investigations?"

Mr. Sloan: "For the purpose of a compact, we can come real close to our final figures."

Comm. Simons: "I would like to explain to Mr. Sellas that if the Yellowstone Compact had been ratified, all of the water out of the Yellowstone River would have been given to us."

Mr. Sloan: "I would like to get the viewpoint of the people in the southern states on navigation before you people proceed so as to know just what they are going to request. I can go by what information I can get out of the Army reports on the requirements of navigation, but I want to bring that out into the open so that everybody understands it. I think the people down there will be satisfied with 20,000 second feet of water.

Comm. Simons: "What is the opinion of you men representing the citizens of the state on this proposal of the Bureau's involving the expenditure of the state's money?"

Mr. Gregory: "It seems to me that the proposed plan covers the state very well. I think it is a well proposed plan."

Mr. Groom: "As I understand it, this program outlined here today is right in line with what we discussed during the legislative session. Any plan devised will be acceptable to our organization. I think it is up to the Commission and the Federal agencies to cooperate and get the work done."

Comm. Simons: "We suggested to Mr. Sloan that we would like the Bureau to go into the Red River Valley and investigate the economic benefits of diversion there. Now is the time to do this work."

Mr. Gregory and Mr. Groom left the meeting.

Mr. Sloan: "On my proposition, it was not so essential that we show enormous benefits because we have so many other benefits that overcome the economic benefits that they look rather small."

Mr. Sellens: "I have confidence in the Commission and I hope to see it go ahead on whatever you think advisable and feasible for North Dakota."

The Secretary was instructed to write letters of thanks to the State Organizations for their assistance when the contract with the Bureau is signed.

The Secretary was instructed to negotiate with the Board of Administration relative to securing office space for the Bureau of Reclamation on the northeast side of the 18th floor of the Capitol.

The Secretary was instructed to drop a few lines, when any definite move on the part of the Commission has been made, to various members of the legislature, outlining what has been done. Keep them informed and show them that we want to cooperate with them. Invite them to visit the Commission office.

The Water Commission went into its executive session, after all persons attending the preceding discussions left the meeting.

The matter of the acquisition of the Harke land for Project 326 was again brought up for discussion. The following resolution was presented by Comm. Orlady who moved its adoption: Comm. Thompson seconded the motion. Roll call vote was taken with all Commissioners voting aye. Lt. Gov. Holt absent.

RESOLUTION L.

WHEREAS, this Commission did at its regular meeting on April 6, 1943, adopt a resolution declaring an exigency to exist and that it is necessary to obtain the following parcels of land:

PARCEL II

A tract of land consisting of 0.30 acres lying in the northeast quarter (also known as Lot 1) Section 6. Township 138. Range 80, in Burleigh County, North Dakota, bounded as follows: Beginning on the point on the north section line of said Section 6, twenty-one (21) feet west of the northeast corner of said Section and; thence running westerly along the said north section line 140 feet; thence running southeasterly at an angle of 45° 35° to the said north section line of said Section 6; thence running northerly along the said east section line 142.8 feet; thence running northwesterly in a straight line to the point of beginning, and consisting of allof that portion of the abandoned Northern Pacific Railway Company landing spur right-of-way, lying upon and across the northeast quarter (also known as Lot 1) of said section 6, owned by A. C. Harke of Bismarck, North Dakota.

PARCEL III

A tract of land consisting of approximately 1,693 acres lying in the northeast quarter (also known as Lot 1) of Section 6, Township 138, Range 80, Burleigh County, North Dakota, bounded as follows: Beginning at a point on the north section line of said section, 161 feet westerly of the northeast corner of said section; thence running westerly along said section line approximately 145 feet to a point on the said section line where it intersects the east bank of the Missouri River at low water mark to the point where the low water mark of the said east bank of the river intersects the east section line of said Section b; thence running northerly along the said east section line approximately 340 feet to a point approximately 163.8 feet south of the northeast corner of said section; thence morthwesterly in a straight line at an angle of 44° 25° from the said east line of said section 229.4 feet to the point of beginning, which tract adjoins and lies southwesterly from that portion of the abandoned Morthern Pacific Railway Company river landing spur right-of-way lying upon and across the said northeast quarter (also known as Lot 1) of said Section 6, owned by J. S. Knauss and Bertha E. Bull. each owning an undivided half $(\frac{1}{2})$ interest, and in which Parcel III (3) A. C. Harke of Bismarck, North Dakota, claims certain rights consisting of occupancy and placer

as a location for the construction and maintenace of a pumping plant together with its necessary intakes, outlets, ditches, conduits and other appurtenances thereto,

for the irrigation of lands south of Bismarck known as the Bismarck Irrigation Project, and designated in the files of the Commission as Project No. 215, and

WHEREAS, pursuant thereto a plat of said parcel has been duly filed and recorded in the office of the Register of Deeds, Burleigh County, North Dakota, in which the said tracts are located:

NOW THEREFORE: It is hereby declared and determined that the following amounts are deemed to be the values of the respective interests in the following parcels of land, to-wit:

PARCEL II

Owner	Bismarck, North Dakota \$ 90.00
0wner	fee simple)\$100.00
0 _{wner-}	
A. C. Harke,	Bismarck, North Dakota (all claims but subject to his priviledge to remove his improvements within 15 days after title is received by the Commission if he desires)

AND BE IT FURTHER RESOLVED, that written offers be made to each of the said owners for the respective interests as each is evaluated above in accordance with the statutes.

The matter of bonds with the Workmen's compensation was brought up for discussion, relative to Project No. 214, Yellowstone Pumping Irrigation District. Commissioner Dahl moved that the Workmen's Compensation Bureau be asked to held the \$35,000.00 for the proposed financing of this project. Commissioner Thompson seconded the motion. Motion carried with all Commissioners voting age on a roll call vote.

Commissioner Thompson moved that the following resolution be adopted:

RESOLVED, that the Secretary and Chairman of the Commission be authorized to enter into a contract with the Bureau of Reclamation on a 50-50 basis for the purpose of investigating the various projects of the Commission within the state of North Dakota for post-war development; Commission's share not to exceed \$100,000.

Commissioner Orlady seconded the motion. Roll call vote taken with all Commissioners voting aye. Lt. Governor Holt absent.

Commissioner Orlady moved the adoption of a resolution authorizing the Secretary to enter into a contract for plowing the Bismarck Victory Gardens or a portion therefor as he may find necessary to hire done, at a rate not to exceed \$4.00 per acre. Motion seconded by Commissioner Dahl, Holl call vote taken all Commissioners voting aye. Lt. Fovernor Holt absent.

The Secretary reported on the Valley City Winter Show at which the Commission had an exhibit and an engineer from the office to explain the various maps and plans. The Commission has now been requested to pay rent for the booth in which the exhibit was displayed. The Secretary was instructed to write to the Manager of the Show and applicate for not putting up a poster, giving the name of the company furnishing such space, and telling him that no meney was appropriated the Commission for such expenditures as rent of space for similar purposes.

The Soil Conservation Service wants an agreement signed for planting trees in connection with our Project No. 326. Comm. Dahl moved that the Sedretary and Chairman be authorized to enter into such an agreement. Comm. Orlady seconded themotion. Motion carried with all Commissioners voting aye.

Comm. Thompson neved that the Secretary be requested to prepare a map showing the necessary quadrangles in North Dakota, per a request from Mr. C. L. Sadler, Division Engineer in Charge, Central Division of the U. S. Geological Survey, Rolla, Missouri. (Dated March 31, 1943). This map is to be prepared in connection with the Bureau and the U.S. Engineers. The Secretary is to be authorized to allocate to said work such sums of money as may be necessary for said purposes not to exceed the appropriation made for this work. Comm. Orlady seconded the motion. Roll call vote taken with all Commissioners voting aye. Lt. Gov. Holt absent.

The Secretary asked permission to submit the name of KFYR to Variety Magazine for the award offered for public service. It was suggested that it be submitted in the form of a resolution, signed by Gov. Moses.

Meeting adjourned at 5:10 p.s. to the call of the Chair.

Respectfully submitted.

John J. Zustie,

SEAL

Secretary

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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION Customhouse Denver, Colorado

Office of the Chief Engineer

April 3, 1943 Airmail

Mr. John T. Tucker
Secretary and Chief Engineer
North Dakota State Water Conservation Commission
Bismarck, North Dakota

Dear Mr. Tucker:

In accordance with the Commissioner's letter to you of March 27, 1943, arrangements are being made for Mr. W. G. Sloan to confer with you next week on the work to be conducted with the State and with financial assistance from a part of the appropriation of \$300,000 discussed in your letter of March 19, 1943, to the Commissioner. After a discussion in this office of the North Dakota situation, the following program is submitted to you as our suggestion for the employment of the State and Federal funds:

- (1) Williston, Senechal, Nesson and Birdhead pumping projects, Remaining work to be done: Designs and estimates of pumping plants; preparation of report. Estimated cost \$10,000.
 - (2) Missouri-Souris Project extensions.
- (a) James River area extension, from Sheyenne River. Work to be done: Reconnaissance land classification. Plans and estimates for distribution and drainage system, laid out on quadrangle sheets. Estimated cost \$20,000.
- (b) Pumping at Garrison or Bismarck with power generated at Oak Creek or Oahe power sites. Pump canal surveys completed. Work to be done: Land classification, plans, estimates, and report. Estimated cost \$20,000.
 - (c) Dam on Missouri River at Garrison to pump water.
- (1) At Williston to enter Missouri-Souris Canal and divert southerly at head of Des Lacs power plant.
 - (2) At Garrison or Bismarck to serve lands along Missouri-James divide. Work to be done: Land Classification, canal, and reservoir surveys, plans and estimates and report. Estimated cost - \$50,000.
 - (3) Little Missouri River Basin.

Basin report including consideration of diversion to Heart River. Land classification on Little Missouri and Upper Heart River, survey and geologic reconnaissance of reservoir site on Little Missouri River, rough plans and estimates, and report. Estimated cost \$10,000.

(4) Cannonball River Project

Work to be done: Detailed land classification, exploration at Thunder H_{awk} and Cannonball Dam sites, surveys of two diversion sites, plans and estimates, and report. Estimated cost - \$20,000.

(5) 14 pumping projects below Garrison Dam site, with power from Garrison or Oak Creek (Oahe) dams.

Work to be done: Topography, detailed land classification, pumping plant surveys and exploration plans, estimates, and reports. Estimated cost \$60,000.

In the above tabulation the different activities have been arranged in the order of a suggested priority with the idea that in the utilization of available manpower and funds the work will be finished in the order in which it is listed. The estimates of cost are tentative only as no one can accurately foresee the work that may come up before any particular investigation is completed as a result of which the cost may be contemplated in each item is that which we consider necessary in order to be able to present to the Secretary and to the Congress information needed for authorization of the project. It is, of course, not adequate by any means for the issuance of plans and specifications and in most cases will not result in detailed topographic and other similar surveys as the cost thereef would be prohibitive for undertaking with investigation funds. Such work must await the availability of construction funds. Mr. Sloan will explain these matters to you in greater detail.

The contract for investigations should follow very general lines in order that it may not prove unwieldly or unworkable because of charging conditions and unforeseen situations. It is customary when we enter into such contracts to state the objectives of the cooperation and to omit specifying the particular work to be done. If you wish, there is no objection on our part to naming of projects on which the work is to be done but there should be no designation of definite amounts to be expended as any additional expenditure which might become necessary would require another contract. Ordinarily, we meet this situation by stating in the general contract that the details of the location, conduct and character of the work done is to be covered by memoranda and informal agreements in the progress of the work. In short, the master contract is only for the purpose of designating the life of the cooperative arrangement, the maximum that either party may expend under the contract, and the general objectives to be attained, together with a description of arrangements for exchange of data and of the arrangements for furnishing the State or other contractors with copies of the data developed in the cooperative investigation. Another feature usually included is the manner in which the State funds will be handled. These matters should also be discussed with Mr. Sloan.

Very truly yours.

S. O. Harper Chief Engineer

/s/ W. R. Young

Acting

C O P

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NORTH DAKOTA STATE ? CONSERVATION COMM. MONTHLY REPORT OF ACCOUNT. AS OF MARCH 31, 1943.

No.	Name of Account;	Total Approp. 24 mo.	Expended to 2/28/43	March Expenses	Total Expenses 3/31/43	Total Refunds	Balance Available next 3 mo.	Balance Available per month.		
1	Commissioners Per Diem	3,000.00	2,027.00	35.00	2,062.00		938.00	312.66		
2	Administration	25,000.00								
3	Admin. Bal. due 1937-41 Construction Bond Guarantee	4,696.41 40,000.00	36,685.35	1,056.58	37.741.93	13,096.97	-5,051.45	1,683.81		
	Bal. due 1939-41 approp.	35,300.00	2,880.00		2,880.00		72,420.00	24,140.00		
4	Maintenance Existing Dams	4,000.00	3,460.58		3,460.58	2,032.58	2,572.00	857.33		
5	Engineering & Soil Survey	1,000.00	477.00		477.00		523.00	174.33		
6	Little Missouri, Grand, Cannon-ball.	700.00	587.18		587.18		112.82	37.50		
7	Pembinayi Tongue, Park, , etc.	250.00	85.00		85.00		165.00	55.00		
8	James, Wildrice Rivers, etc.	150,00	65.00		65.00		85.00	28.33		
9	Invest. Surveys, Designs, etc.	2,000.00	1,388.35	150.00	1,538.35	26.92	488 . 57	162.85		
10	Evaluation Economic Benefits	300.00	87.94		87.94		212.06	70.68		
11	Reports and Attendance at Conf.	1,500.00	1,114.37	76.00	1,190.37		309.63	103.21		
12	Tri-State Waters Commission	7,500.00	4,669.69	207.50	4.877.19		2,622.81	874.27		
13	Indep. Investigation & reports	1,000.00	809.25		809.25		190.75	63.57		
14	International and Interstate	1,500.00	941.13		941.13		558.87	186.29		
15	Topographic Mapping	3,000.00	2,237.34	9	2,237.34		762.66	•		
16	Cooperation in Obtaining Water	3,000.00	2,060.43		2,060.43	12.80	952.37	254.22		
17	Designs, Reports & Conf.	500.00	341.90		341.90	-2,33		317.45		
18	Salary State Engineer	4,400.00	3,666.60	·· 183.33			158.10	52.70		
19	Hydrographic Survey	3.500.00	2,883.77		3,849.93		550.0 7	183.35		
	Potal	142,296.41		11.00	2,894.77		605.23	201.74		
/hn 5	-4401	-42,230.41	66,467.88	1,719.41	68,187.29	15,169.27	89,278.39	29,759.39		