## **MINUTES**

## North Dakota State Water Commission Bismarck, North Dakota

## October 1, 1990

The North Dakota State Water the old State Office Building, Bismarck, North Dakota, on October 1, 1990. Chairman, Lieutenant Governor Lloyd Omdahl, called the meeting to order at 1:00 PM, and requested State Engineer and Chief Engineer-Secretary, David Sprynczynatyk, to call the roll.

## MEMBERS PRESENT:

Lieutenant Governor Lloyd Omdahl, Chairman
Sarah Vogel, Commissioner, Department of Agriculture, Bismarck
Joyce Byerly, Member from Watford City
Jacob Gust, Member from West Fargo
Lorry Kramer, Member from Minot
William Lardy, Member from Dickinson
Daniel Narlock, Member from Oslo, MN
Norman Rudel, Member from Fessenden
Jerome Spaeth, Member from Bismarck
David Sprynczynatyk, State Engineer and Chief EngineerSecretary, North Dakota State Water Commission, Bismarck

## OTHERS PRESENT:

State Water Commission Staff Members
Approximately 20 people in attendance interested in agenda items

The attendance register is on file in the State Water Commission offices (filed with official copy of minutes).

The meeting was recorded to assist in compilation of the minutes.

APPROVAL OF AGENDA

There being no additional items for the agenda, the Chairman declared the agenda approved and requested Secretary Sprynczynatyk to present the agenda.

CONSIDERATION OF MINUTES OF JULY 5 AND 6, 1990 MEETINGS -APPROVED

The minutes of the July 5, 1990 State Water Commission meeting and the July 6, 1990 joint State Water Commission and Garrison Diversion Conservancy were approved by the following

District Executive Board meeting were approved by the following

It was moved by Commissioner Spaeth, seconded by Commissioner Kramer, and unanimously carried, that the minutes of the July 5, 1990 State Water Commission meeting, and the July 6, 1990 joint State Water Commission and Garrison Diversion Conservancy District Executive Board meeting be approved as circulated.

CONSIDERATION OF AGENCY FINANCIAL STATEMENT

Secretary Sprynczynatyk presented and discussed the Program Budget Expenditures and

the Programs/Projects Authorized, dated August 31, 1990. Copies of the summary document of the agency's budget for the 1991-1993 biennium were distributed.

STATE WATER MANAGEMENT PLAN UPDATE (SWC Project No. 322)

At the July 5, 1990 meeting, the Commission members were briefed on the intent to update the 1983 State Water Plan. The

Commission members approved the efforts to update the 1983 State Water Plan, the goals and objectives, and the formulation of a Steering Committee. It was suggested and agreed that the title be changed from the State Water Plan to the State Water Management Plan, because of the need to not only look at development and construction but at other issues and programs as well.

LeRoy Klapprodt, State Water the 1983 State Water Management Plan Steering Committee, the Organization Chart, and the Eight Public Involvement Regions map. Mr. Klapprodt indicated Commissioners William Lardy and Lorry Kramer have been appointed to serve on the Steering Committee to represent the State Water Commission. Mr. Klapprodt indicated the first meeting of the Steering Committee will be scheduled in late November, 1990 to discuss the work plan and the public involvement process. Mr. Klapprodt's handouts are attached hereto as APPENDIX "A".

Mr. Klapprodt said the citizens advisory board groups are currently being selected and he explained the criteria involved in the selection process.

overall planning process is scheduled for completion in the spring of 1992.

SOURIS RIVER FLOOD CONTROL PROJECT UPDATE (SWC Project No. 1408)

In August, 1990 Governor Sinner and Secretary Sprynczynatyk accompanied the newly appointed Canadian Minister of Environment and Alamoda projects in

ment on a tour of the Rafferty and Alameda projects in Saskatchewan.

Secretary Sprynczynatyk stated an environmental review panel is continuing its review of the project. He said it is likely a public hearing will be held in Saskatchewan soon and the panel can complete its work by the end of the year.

Construction of the Rafferty that the environmental review panel will make its decision this year so that it will allow the project to be completed as originally designed.

The Corps of Engineers is in the process of advertising for bids for work that is to be done in the United States at several locations along the Souris River. Secretary Sprynczynatyk discussed problems which have occurred with the Corps of Engineers and the Fish and Wildlife Service involving the issuance of state water permits and construction permits. Secretary Sprynczynatyk stated he will not issue the water right until the land rights issue associated with the work at the Fish and Wildlife refuges has been resolved and the future of the Rafferty Dam project is known. He said the staff is in the process of developing assessments of the permit requests. Final decisions will not be made until after these assessments are complete.

Secretary Sprynczynatyk stated the staff is involved with the Corps of Engineers Augmentation Study to determine what it would take to augment the flow of the Souris River to satisfy the needs and demands along the river. Several alternatives including ground water and surface water are being studied.

RED RIVER DIKES UPDATE (SWC Project No. 1638)

At the March 19, 1990 meeting, the Commission members were informed the Corps of Engineers had completed its' on-site study of 21 areas that Minnesota defendants of the Red River dikes lawsuit had identified as questionable because of North Dakota's interpretation and judgement on the natural ground issue. Seventeen sites were found to be in compliance with the court order, two sites were above the natural ground level, and the Corps was uncertain on two sites because they could not get onto the land. Secretary Sprynczynatyk said he has discussed the natural ground issue with the Director of Minnesota's Department of Natural Resources and

Dale Frink, Director Engineering for the State Water Commission, informed the Commission members of the Corps of Engineers efforts to build a computer model of the Red River dikes area using Section 22 Mr. Frink indicated this computer model would be extremely useful for the complex situations in the dikes area but it could also be used in other areas of the state.

efforts are continuing to resolve the issue where the Corps of Engineers was unable to get onto the land of the two sites in

UNITED STATES VS SARGENT COUNTY LAWSUIT (SWC Project No. 1222)

question.

At the July 5, 1990 meeting, the Commission members were briefed on a lawsuit involving the United States vs Sargent

County Water Resource District. The lawsuit contends the Sargent County Water Resource District is in violation of a Section 404 permit on Sargent County Drain No. 11.

Secretary Sprynczynatyk plained that a water resource district falls within definition of a municipality under state law. The statute says the state will be joined when a municipality is sued, and if state law prohibits a municipality from paying the costs of a 404 violation, the state is liable for payment.

The lawsuit in "discovery" phase at this time. Several depositions of potential witnesses have been held. The discovery should be completed and pretrial motions filed by January 15, 1991. Secretary Sprynczynatyk indicated if the trial is to go forward that will occur approximately in March, 1991.

MISSOURI RIVER UPDATE (SWC Project No. 1392)

River lawsuit against the Corps of Engineers. In May, the Eighth Circuit Court of Appeals heard arguments regarding the case. The next day the Court of Appeals issued an order providing that it had serious doubts about whether the Corps' decision-making regarding the Missouri River operations was reviewable by the judiciary. The Court went on to state that, even if the Corps decision was reviewable, the preliminary injunction should not have been granted because the record did not support the District Court's conclusion that the Corps' decision-making was arbitrary and capricious, and that it would issue a formal opinion at a later date.

Secretary Sprynczynatyk provid-

On May 23, 1990, the Eighth Circuit issued an additional order. In the order, the Court stated that the issue of whether courts had jurisdiction to review decisions of the Corps of Engineers had not been decided in its previous order. It invited the parties to the lawsuit and all those who filed amicus curiae briefs in the case to file additional briefs by June 18 addressing the jurisdictional issues.

Secretary Sprynczynatyk stated the decision of the Eighth Circuit Court of Appeals has been issued, which states the Court is not going to address the issue of the accountability of the Corps of Engineers to the Courts because they felt the issue was moot at this point.

Secretary Sprynczynatyk indicated the Court criticized the upper basin states for not bringing the lawsuit against the Corps of Engineers at an early date so that the issue of accountability could have been addressed in a timely manner before the impacts occurred.

Secretary Sprynczynatyk stated the Corps of Engineers is to release its proposed plan of operation for 1991 this week and there will be a comment period until November 1, 1990. Hopefully, the Corps of Engineers will make its decision in November, 1990, in order that the upper basin states will have a better opportunity to review the situation and make a decision on further action, if necessary.

Basin States Association was discussed. Secretary Sprynczynatyk stated that at a recent meeting it was decided to hire an Executive Director for one year to try to set a course for the organization and to improve the communication within the basin. Eight of the Missouri Basin states met in September, 1990, and

reached a consensus on several other issues. One of the issues relates to alternative ways to manage the Missouri River system. Secretary Sprynczynatyk stated he has taken the position that an authority needs to be created to involve the states in the decision-making process.

Missouri River Basin Association membership was discussed and it was agreed member states dues would be reinstated at \$10,000 per year. An invitation was extended to the Indians of the Basin to be a member of the Association, providing the Indians are willing and able to pay the dues.

Corps of Engineers' annual operating plan for 1991 is released, the Association will attempt to develop a unified response to the

Secretary Sprynczynatyk stated the Master Manual for the operations of the Missouri River system and Phase 2 will involve a more in-depth review and will take approximately two years to complete. Secretary Sprynczynatyk said, hopefully, when Phase 2 is complete the Corps will be in a position to recommend a change of the operation to reflect what we consider to be the contemporary water needs of the Basin.

SOUTHWEST PIPELINE PROJECT - PROGRESS REPORT BY SOUTHWEST WATER AUTHORITY (SWC Project No. 1736)

Alfred Underdahl, Chairman of the Southwest Water Authority, introduced Ken Thompson, who was hired as the Southwest Pipeline

Project Signup Coordinator. Mr. Thompson's duties will include signup in the rural areas for the project.

Meeting, the Commission members considered a recommendation from the North Dakota Water Users Association relating to the unobligated funds in the Resources Trust Fund. The Water Users Association recommended that \$2 million of unobligated funds be allocated to the Southwest Pipeline Project and \$400,000 of the unobligated funds be dispersed for the Sheyenne River Flood Control Project.

Commission meeting, Alfred Underdahl presented a letter to the Commission members in support of the recommendation to allocate \$2 million needed to complete construction and funding of the

Southwest Pipeline Project to Dickinson. Mr. Underdahl reiterated the support of the Southwest Water Authority to do this.

SOUTHWEST PIPELINE PROJECT - PROJECT CONSTRUCTION STATUS (SWC Project No. 1736)

Tim Fay, Manager of the Southwest Pipeline Project, reported the major electrical work at the intake pump station is com-

plete. The initial testing indicated all pumps were wired correctly, although the start-up testing revealed some adjustments needed to be made in sensors and control hardware. The formal pump test has not yet been conducted but the pumps have all been operated and the lines brought up to operating pressure. Remaining work on this contract consists of site cleanup and replacement of some components which were defective or incorrectly supplied. Mr. Fay said the pump manufacturer's representative was very complimentary of the contractor's quality of workmanship in installing the pumps.

The hydrostatic testing of the reservoir piping is currently being conducted. The reservoir itself is in the process of being painted. Mr. Fay said the painting has been delayed but it is hoped that the contractor will meet the September 28th contract completion date.

progressing on the foundation and floor work at the Dodge pump station. He said it is likely that the steel building can be erected before winter allowing work to proceed inside the building.

Work at the Richardton pump station is not as far advanced as it is at Dodge, although the ring wall and foundation for the reservoir are complete. Mr. Fay said it appears at this time that progress is satisfactory.

East Dickinson Reservoir was held on August 30th. A final punchlist was prepared for the contractor.

The construction of the main began near the city shop and proceeded westward through the residential areas of the city with the intent of completing that work and the required asphalt replacement before the weather gets cold. Mr. Fay said it appears that this will be possible since nearly all disruptions of streets has been done. The asphalt contractor is scheduled to begin on September 24th.

In response to a question concerning liability and bonding, Mr. Fay explained the contractual provision covering these areas.

SOUTHWEST PIPELINE PROJECT -APPROVAL OF CONTRACT 2-2H, CATHODIC PROTECTION SYSTEM (SWC Project No. 1736)

Tim Fay reported that on September 25, 1990 bids were opened on Contract 2-2H, the cathodic protection system for the segment of main transmission line

between Dodge and Richardton. This system consists of three anode bed and rectifier installations and one set of jumper wires in a valve vault.

Mr. Fay indicated the apparent low bid was received from Becker Electric, Inc., located in Bismarck, ND, in the amount of \$34,940. Mr. Fay stated Becker Electric has done a considerable amount of work for Southwest Pipeline contracts in the past. The firm is currently the electrical contractor for the pump stations at Dodge (4-1) and Richardton (4-2/5-1).

The bids have been submitted to the US Bureau of Reclamation for approval. It was the recommendation of the State Engineer that the State Water Commission approve the award of the bid for Southwest Pipeline Project Contract 2-2H to Becker Electric, Inc.

It was moved by Commissioner Vogel and seconded by Commissioner Lardy that the State Water Commission approve the award of the bid for Southwest Pipeline Contract 2-2H for the cathodic protection system to Becker Electric, Inc.

Commissioners Byerly, Gust, Kramer, Lardy, Narlock, Rudel, Spaeth, Vogel, and Chairman Omdahl voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

SOUTHWEST PIPELINE PROJECT - APPROVAL OF DESIGN STANDARDS MODIFICATION (SWC Project No. 1736)

Tim Fay indicated that when construction of the Southwest Pipeline moves beyond Dickinson many of the segments will have pipe of less than 12 inches in

diameter and be designed for flows of less than 1,000 gallons per minute. Mr. Fay said for construction of pipelines of this size, opportunities for significant cost savings occur if the design standards are reconsidered.

Mr. Fay explained that when the project was designed 10 years ago, materials pipe installation standards were different than they are today. current materials and design criteria require a trench large enough to permit worker activities in the trench. Allowing PVC pipe and installing it to a minimum cover rather than laying to grade, and relaxing the tolerance on the alignment, would make it possible to install the pipe by use of a trenching machine. lighter pipe can be manually manipulated so most of the time it is unnecessary for anyone to work in the trench. These factors combine to significantly reduce the construction costs. easements require stripping of topsoil so that operation will still be necessary.

It is estimated that modifying the standards in this way would not significantly diminish the quality of the work, but Mr. Fay said could save as much as \$10,000,000 on the remainder of the project. The savings on the next segment to be constructed, the Belfield and Medora service areas, could be as much as \$2,000,000. Mr. Fay said the cost savings associated with modification of the standards would exceed the risk that may be associated with the new standards.

It was the recommendation of the State Engineer that the State Water Commission approve modification of the construction standards for pipeline segments 12 inches and less in diameter and carrying less than 1,000 gallons per minute.

Bruce McCollom, Project Manager for Bartlett & West/Boyle Engineering Corporation, provided additional information relative to the modification of design and construction standards for the Southwest Pipeline Project.

It was moved by Commissioner Lardy and seconded by Commissioner Byerly that the State Water Commission approve modification of the construction standards for Southwest Pipeline segments 12 inches and less in diameter and carrying less than 1,000 gallons per minute.

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye; there was no opposition expressed; and declared the motion unanimously carried.

SOUTHWEST PIPELINE PROJECT CONTINUED DISCUSSION RELATIVE
TO WORK WITH NORTH DAKOTA
INDUSTRIAL COMMISSION TO
INVESTIGATE DEVELOPMENT OF A
FINANCIAL PLAN FOR COMPLETION
OF PROJECT
(SWC Project No. 1736)

At the July 5, 1990 meeting, Secretary Sprynczynatyk reviewed the current financial status of the Southwest Pipeline Project. In order to complete the project within a reasonable time frame period of approximately five years, Secretary Sprynczynatyk said it is

important that new financial arrangements be developed for the remainder of the project. The State Water Commission authorized the expenditure of up to \$10,000 to work with the North Dakota Industrial Commission to investigate the development of a financial plan that could allow the development of a reasonable construction schedule for completion of the Southwest Pipeline Project.

has met with representatives of the Industrial Commission and further information should be available for discussion at the Commission's December meeting.

CONSIDERATION AND APPROVAL
OF RESOLUTION OF APPRECIATION
TO WILLIAM HANSON
(SWC Resolution No. 90-10-439)

Secretary Sprynczynatyk presented a draft resolution of appreciation to William Hanson for the Commission's consideration.

It was moved by Commissioner Narlock and seconded by Commissioner Rudel that the State Water Commission approve Resolution No. 90-10-439, In Appreciation to William Hanson.

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye; there was no opposition expressed; and declared the motion unanimously carried. SEE APPENDIX "B"

Secretary Sprynczynatyk presented a plaque to William Hanson expressing thanks and appreciation for his valuable and dedicated contribution in his service to the State Water Commission, the North Dakota State Engineer, and to the sound management of the water resources of the state.

DEVILS LAKE MANAGEMENT PROJECT UPDATE (SWC Project No. 1712)

At the July 5, 1990 meeting, Secretary Sprynczynatyk reported on the efforts to secure funding for the stabilization

of the level of Devils Lake through the Garrison Diversion Project. He said the national environmental interests are opposed to having the Bureau of Reclamation involved in an inlet study for Devils Lake because in their opinion the Corps of Engineers has not satisfied the requirements of the 1986 Reformulation Act by not completing the outlet study. Secretary Sprynczynatyk said he is of the opinion, and the Corps agrees, that it has completed the outlet study. Thus, it would be appropriate for the Bureau to do an inlet study.

Secretary Sprynczynatyk stated Appropriations Committee included language in the 1991 appropriation directing the Corps of Engineers to do additional studies on the outlet and inlet for the lake. He said it is important that the Bureau of Reclamation be involved in this process and serve as a cooperating agency in the completion of this study. This would require the Corps's budget to be increased by \$500,000 and would allow reimbursement of the Bureau by the Corps.

approved, the Corps of Engineers would be able to begin a study in October, 1990, to work with the Bureau of Reclamation as a cooperating agency as well as other federal and state agencies. The study for both an inlet and outlet and a comprehensive basin-wide management plan for the basin would be completed within one year. Secretary Sprynczynatyk said this may allow for the design and construction of the project to proceed depending upon further authorization. Secretary Sprynczynatyk stated the reconnaissance study on the stabilization of Devils Lake will be federally funded.

DEVILS LAKE MANAGEMENT PROJECT -PRESENTATION BY REPRE-SENTATIVE GORDON BERG (SWC Project No. 1712)

Representative Gordon Berg distributed copies, and discussed two letters addressed to Governor Sinner, dated October 1, 1990, in which concern was expressed relative to treating

wastewater in Devils Lake; and, information relative to treating water from the Missouri River to Devils Lake. These letters are attached hereto as APPENDIX "C".

ENVIRONMENTAL PROTECTION AGENCY - WETLANDS PROTECTION DEVELOPMENT PROGRAM GRANT UPDATE (SWC Project No. 1847) At the August 24, 1989 meeting, the State Water Commission approved a project for the State Water Commission to serve as a principal investigator in a "grass roots" wetlands and

water management proposal. This proposal was jointly sponsored by the North Dakota Water Users Association and the North Dakota Water Resources Research Institute. Several public and private funding sources were subsequently contacted to determine their interest in the project, which was intended to be of a three-year duration.

Bill Sharff, Water Resource Planner/WET Program Coordinator for the Planning Division, updated the Commission members on the progress of the program. In July, 1990, the Environmental Protection Agency announced approval of a \$40,000 grant for the first year of a State Wetlands Protection Developmental Program. This initial grant award involves two major goals: 1) the development of a wetlands management handbook for landowners, political subdivisions, and natural resource managers; and 2) the development and conducting of a network of statewide educational meetings of landowners, political subdivisions and natural resource managers regarding wetlands management programs. Accomplishment of these goals will greatly enhance North Dakota's current efforts in continuing a cooperative approach to resolving wetlands issues between water and conservation groups.

Mr. Sharff indicated the State Engineer is the designated project manager for the grant. The State Water Commission is the grant recipient. The North Dakota Water Users Association will provide the overall day-to-day direction of grant and project implementation in close collaboration with the State Water Commission, through a contract with the State Water Commission and the North Dakota Water Users Association. The Water Users Association will subcontract with several designated individuals to carry out the project goals and tasks.

Mr. Sharff stated the Wetlands Protection Handbook has been drafted by the North Dakota Water Users Association and was reviewed by the Wetlands Advisory Committee in August, 1990.

Mr. Sharff presented an implementation schedule for the Wetland and Water Management Policy Development Project and discussed procedures for the local education information meetings.

GARRISON DIVERSION PROJECT - PROJECT UPDATE AND FISCAL YEAR 1991 BUDGET (SWC Project No. 237)

Secretary Sprynczynatyk reiterated the fact that considerable effort has been put forward by representatives of the State to include funding in the FY 1991

budget for the Garrison Diversion Project. In order for the project to move forward, Secretary Sprynczynatyk said a minimum of \$45 million has been requested.

Secretary Sprynczynatyk stated the Garrison Diversion Conservancy District Executive Board will meet on October 4 and 5, 1990 to discuss alternative ways to proceed with the project, funding, and operation and maintenance.

GARRISON DIVERSION PROJECT MR&I WATER SUPPLY PROGRAM UPDATE
(SWC Project No. 237-3)

Jeffery Mattern, MR&I Water Supply Program Coordinator, reported there are 115 projects in the different phases of the

MR&I Water Supply Program. This includes 43 projects in the initial application phase, 34 in the preliminary engineering phase, 24 in the feasibility study, 4 in design and construction, and 10 already completed. Since \$37 million has been received, the projects completed are serving 47,000 North Dakotans. Mr. Mattern said with some additional funding, the City of Dickinson will be able to be served in 1991. Other projects that were under construction this summer and are essentially complete providing service to 8,100 residents include: Hankinson Water Supply; Langdon Rural Water Phase 2; McLean-Sheridan Rural Water, Phase 1; Minto Water Supply; and, Rugby Water Treatment.

Mr. Mattern indicated the following projects are currently ranked near the top of the priority list: Grandin Water Supply; Langdon Rural Water Phase 2, Part 2; McLean-Sheridan Rural Water, Phase 2; North Valley Rural Water; Agassiz Water Users; Ramsey County Rural Water; and, Missouri West Rural Water.

Two new applications requesting assistance are Garrison Rural Water Association and the City of Northwood. The Garrison Rural Water Project includes a new system to serve rural residents around the City of Garrison and has 140 signups. The request from the City of Northwood is for changes in its water treatment system.

Secretary Sprynczynatyk stated that to ensure continuing operation, additional funds for program administration will need to be allocated. This covers MR&I program expenses for the Conservancy District and the State Water Commission. Due to the uncertainty of the appropriation for FY

1991, approval will be required to use \$150,000 from remaining interest and program funds. If FY 1991 funding becomes available, then the new funds would likely be used for administrative costs.

It was the recommendation of the State Engineer that federal MR&I funding of \$150,000 be allocated for program administration from remaining interest and program funds or from FY 1991 funding.

It was moved by Commissioner Lardy and seconded by Commissioner Gust that the State Water Commission approve the allocation of federal MR&I funding in the amount of \$150,000 for program administration from remaining interest and program funds, or from FY 1991 funding.

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye; there was no opposition expressed; and declared the motion unanimously carried.

NORTHWEST AREA WATER SUPPLY INTEGRATION STUDY (SWC Project No. 237-4) Jeffrey Mattern indicated the draft has been completed on the Northwest Area Water Supply/Fort Berthold Integrated Water System Study. The joint pro-

ject involves the possible integration of the Fort Berthold Indian Reservation with the east water supply system of the Northwest Area Water Supply. Mr. Mattern stated after the report is finalized in October, 1990, consideration will be given to presenting it to the North Dakota Congressional Delegation in order to try and secure Congressional authorization and appropriation. The estimated cost of the project is \$181.2 million,

Mr. Mattern stated the draft report has been provided for review and comment to the Northwest Area Water Supply advisory committee members, Three Affiliated Tribes, City of Minot, Garrison Diversion Conservancy District, and the State Water Commission staff. The schedule is to provide approximately two weeks for review and then schedule a meeting with the Advisory Committee to discuss comments.

Affiliated Tribes were asked to recommend a new name for the joint project. Several suggestions are being considered, including "MUA ITS GUPAHISH", which is the Indian wording for "like a fishhook village".

Supply System of the NAWS has proposed a plan that provides water for Williston, Williams Rural Water, Trenton, Ray-Tioga, City of Stanley, and the area around those systems. The group has developed a preliminary engineering report including a phased-construction plan serving Stanley from the Ray-Tioga System and removing the Stanley area from the East NAWS system. It is believed that Stanley could be served considerably faster with this approach.

Engineering, Inc., presented a briefing on the history of the study and provided comments relative to the draft final report.

GARRISON DIVERSION PROJECT CONTINUED DISCUSSION ON
FINANCING OPTIONS FOR MR&I
WATER SUPPLY PROJECTS
(SWC Project No. 237)

Secretary Sprynczynatyk reported that on July 5, 1990, the briefing paper on financing options for water supply projects was presented to the Garrison Diversion Conservancy District Board of Directors.

At the July 6, 1990 meeting, the State Water Commission directed the State Engineer and staff to continue to study the financing options for water supply development in North Dakota and develop recommendations for the Commission's consideration.

he has met with representatives of several bonding firms and information is being developed for presentation to the Commission.

APPROVAL OF REVISED ALLOCATION OF 1989-1991 CONTRACT FUND

At the July 5, 1990 meeting, the State Water Commission approved the following allocation of the 1989-1991 Contract Fund:

Southwest Pipeline Project Sheyenne River Flood Control	\$1,046,000
Biota Transfer Studies	500,000 51,900
Hydrologic Data Collection	430,000
MR&I Water Supply Program	130,000
General Projects (Traditional Contract Fund)	400,000

Total \$2,557,900

October 1, 1990

Secretary Sprynczynatyk indicated it has been learned that the Contract Fund allocation from the Resources Trust Fund could be restored to the original appropriation. The Legislature approved an allocation of \$4,622,000 to the State Water Commission's Contract Fund. As a result, Secretary Sprynczynatyk indicated there is \$2,064,100 that could be allocated by the State Water Commission. The North Dakota Water Users, in a letter dated June 29, 1990, recommended that \$400,000 be allocated to the Sheyenne River Flood Control, and the remaining amount be allocated to the Southwest Pipeline Project.

Secretary Sprynczynatyk stated to General Projects. The State Water Commission will have to approve the projects individually at the appropriate time. Secretary Sprynczynatyk stated he was aware of several requests that would be made for projects in 1991.

Some of the funds could be used spillway at Blacktail Dam in Williams County. This project is estimated to cost \$546,000 and the Water Commission's share could be \$182,000. It is also estimated that in-house engineering costs would be \$42,000 and, therefore, \$140,000 will be needed from the Contract Fund. Secretary Sprynczynatyk stated the Williams County Water Resource Board has not requested funding, but will make a decision on the project soon.

the second phase of the Sheyenne River Flood Control Project is going to be more costly than estimated. Thus, the project sponsor has requested restoration of the original funding level of \$900,000.

Additional funds for the beyond Dickinson.

It was the State Engineer's recommendation that the State Water Commission approve the following revised allocation of the 1989-1991 Contract Fund:

Southwest Pipeline Project	\$2,510,979
Sheyenne River Flood Control	900,000
Biota Transfer Studies	
Hydrologia Dota Collecti	51,900
Hydrologic Data Collection	430,000
MR&I Water Supply Program	130,000
General Projects (Traditional Contract Fund)	600,000

Total \$4,622,879

It was moved by Commissioner Spaeth and seconded by Commissioner Rudel that the State Water Commission approve the revised allocation of the 1989-1991 Contract Fund as recommended by the State Engineer.

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye; there was no opposition expressed; and declared the motion unanimously carried.

CONSIDERATION OF REQUEST FROM SOUTHEAST CASS WATER RESOURCE DISTRICT FOR HYDROLOGIC STUDY OF WEST FARGO AQUIFER IN CASS COUNTY (SWC Project No. 1707)

A request from the Southeast Cass Water Resource District was presented for the Commission's consideration to cost share in an investigation of the West Fargo Aquifer. The total cost of the investigation is \$164,784.

Hydrology Division for the State Water Commission, stated the City of West Fargo, several industries, numerous small communities and individual homes depend upon the West Fargo aquifer system for their water supply. The total water use from the aquifer system has ranged from about 1300 acre-feet to about 2400 acre-feet between 1968 and 1987. During the drought year of 1988, the use was about 3400 acre-feet.

The West Fargo aquifer system county. The aquifer system is comprised of three major aquifers and some minor aquifers. The major units are the West Fargo North, West Fargo South, and the Horace aquifer along with several small aquifers. The degree of interconnection between the different aquifers is poorly understood.

Mr. Lindvig explained that when water level was near land surface and it has been declining since at varying rates. The water level at West Fargo has been about 120 to 130 feet below land surface since the 1970's. In other units of the aquifer the water levels have declined several tens of feet over a period of a few years as withdrawals increased.

system is an important source of water supply for the area and water levels have been declining, it is proposed that a compre-

October 1, 1990

hensive hydrologic investigation of the aquifer in Cass County be undertaken. The overall objectives of the comprehensive study are to:

- Define the nature of the West Fargo aquifer system in Cass County and the relationship between the individual units;
- Predict the long-term impacts resulting from the present utilization of the aquifer system;
- Determine the potential for, and impacts of, increased utilization of the aquifer system; and
- 4) Identify and assess water supply management alternatives.

Mr. Lindvig said the comprehensive definition of the ground-water resources in eastern Cass County is the primary building block for the other objectives. This phase of the investigation will consist of five parts: inventory of existing data; development of a conceptual model of the aquifer system; collection of additional data; development of three related computer models to simulate the three major units of the aquifer system; and, the preparation of an interpretative report. Three years will be required to complete this phase.

The Southeast Cass Water Resource District has requested the State Water Commission proceed with the proposed investigation. It will cost share in 50 percent of the total cost of \$164,784 with the State Water Commission.

It was the recommendation of the State Engineer that the State Water Commission approve cost sharing in 50 percent of the total eligible costs, in an amount not to exceed \$82,392. Of this amount, \$10,000 would be from the Contract Fund.

James McLaughlin, Southeast Cass Water Resource District, indicated the Board is in support of undertaking an investigation of the West Fargo aquifer to determine the short and long term needs of the area. He said the investigation is essential and urged the Commission's approval to proceed with the investigation and to cost share in 50 percent of the costs.

It was moved by Commissioner Lardy and seconded by Commissioner Narlock that the State Water Commission approve cost sharing in 50 percent of the total eligible costs, not to exceed \$82,392, for the investigation of the West Fargo aquifer. Of this amount, \$10,000 would be from the Contract Fund. This motion shall be contingent upon the availability of funds.

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye; there was no opposition expressed; and declared the motion unanimously carried.

# UPDATE ON STATE DROUGHT CONDITIONS

Secretary Sprynczynatyk updated the Commission members on the drought conditions throughout

the state. Governor Sinner has made a request to the Corps of Engineers for assistance in the City of Parshall's water supply problems. The communities of Stanley and Ryder are in the process of requesting technical assistance to develop supplemental water supplies.

Commissioner Kramer leaves the meeting.

CONSIDERATION OF REQUEST FROM CAVALIER COUNTY WATER RESOURCE DISTRICT FOR COST SHARING FOR GEOTECHNICAL FEASIBILITY STUDY ON MOUNT CARMEL DAM IN CAVALIER COUNTY (SWC Project No. 1346)

A request was presented for the Commission's consideration to cost share in a geotechnical feasibility study on Mount Carmel Dam in Cavalier County.

Dale Frink stated Mount Carmel Dam provides a water supply to the City of Langdon and the Langdon Rural Water District. The existing principal spillway is undersized and needs to be replaced by a larger spillway. The preliminary engineering study will evaluate the possibility of raising the existing dam to provide for additional water supplies.

Mr. Frink said the total field costs for the geotechnical study and topographic surveying is approximately \$20,000. The estimated cost of the geotechnical study is \$16,000 and this will be completed by a private soils

firm. The exact dollar amount will not be determined until the selection process for a private consultant is complete. The Cavalier County Water Resource Board will provide a 50 percent payment to the Commission as their cost share for the total field cost.

It was the recommendation of sharing up to \$16,000 from the Contract Fund for the soils investigation on Mount Carmel Dam.

It was moved by Commissioner Rudel and seconded by Commissioner Gust that the State Water Commission approve cost sharing in an amount not to exceed \$16,000 from the Contract Fund for a geotechnical feasibility study on Mount Carmel Dam in Cavalier County. This motion shall be contingent upon the availability of funds.

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye (Commissioners Spaeth and Kramer absent); there was no opposition expressed; and declared the motion unanimously carried.

PRESENTATION BY JON LINDGREN, MAYOR OF FARGO, RELATIVE TO URBAN DEVELOPMENT WATER MANAGEMENT PROGRAM; APPROVAL OF RESOLUTION NO. 90-10-440

Jon Lindgren, Mayor of Fargo, appeared before the State Water Commission to discuss a proposal to resolve differences between state and local approaches to various aspects of water policy.

Mayor Lindgren said state and different perspectives. Because state government has less reason to become involved with the variables which influence the amount of water used, it treats water "demand" as simply the amount of water the city has used historically.

officials, on the other hand, follow closely the variables which determine how much, when and for what purpose water is used. Mayor Lindgren said this is necessary because the local officials are under continual pressure to make decisions about water volume. These include decisions about staffing, treatment, plant

capacity and transportation. The local officials, unlike state officials, do not consider "demand" as simply the quantity, and in some cases quality, of water used, but a series of different demands that depend on other variables. Mayor Lindgren said a review of local water restrictions imposed by the local officials reveals there is a consensus across the state as to which water uses are most valuable to a community and which are least valuable.

while both the state and local Lindgren said it does not seem in the best interests of the state for only one view to prevail when presenting information about water availability to industrial prospects. Mayor Lindgren proposed the following for the Commission's consideration:

- The Urban Development Water Demand Management Program would be voluntary and cities would be invited to participate;
- 2) Participating cities would enact ordinances, resolutions and policies which reflect the local government's resolve to execute demand management and determine the daily water volume available through these measures for purposes such as economic development; and
- 3) State agencies would provide industrial prospects with information available through the Urban Development Water Demand Management Program along with other water information traditionally made available in response to such inquiries.

Secretary Sprynczynatyk indicaperspective on municipal water use and future needs than do the city officials who operate water treatment and distribution systems. He said the responsibility of the State Engineer and that of the State Water Commission is to conserve and manage the state's available water resources to meet the needs of all types of current and future users under wide-ranging conditions.

Secretary Sprynczynatyk said many factors which must be considered including the long-term requirements of communities, agriculture/irrigation, industry, rural water supply, recreation, and wildlife. Through the water permitting process, Secretary Sprynczynatyk said we endeavor to balance prudent use of the state's water resources with its

availability. The State Water Commission has consistently supported projects which move water from areas of surplus to areas where quantity or quality is inadequate to meet identified needs.

Mayor Lindgren presented a resolution directed the State Engineer and staff to review and study a voluntary program called the Urban Development Water Management Program, which would allow participating cities to declare specific amounts of raw water and/or water plant output available for purposes which local governments consider of the highest public interest. The resolution requested that the State Water Commission consider making available to industrial prospects this information along with any other information it normally provides such prospects.

It was moved by Commissioner Gust and seconded by Commissioner Vogel that the State Water Commission approve Resolution No. 90-10-440, Urban Development Water Management Program. SEE APPENDIX "D".

Chairman Omdahl clarified that the motion is a directive to the State Engineer and staff to work with interested cities with the idea of studying and recommending a voluntary program, and to present the information to the Commission at a future meeting.

concerns regarding the possibility of a community water demands.

Commissioner Lardy expressed expressed over-appropriating its water supply and unable to meet its basic

The Chairman called for a voice vote on the motion. The Chairman stated the record shall indicate all members present voted aye; there was no opposition expressed; and declared the motion unanimously carried.

NEXT MEETING OF STATE WATER COMMISSION

Secretary Sprynczynatyk stated the next meeting of the State Water Commission will be held ion with the North Dakota Water

on December 3, 1990, in conjunction with the North Dakota Water Users Association and North Dakota Water Resource Districts Association annual meeting.

There being no further business to come before the State Water Commission, it was moved by Commissioner Spaeth, seconded by Commissioner Rudel, and unanimously carried, that the meeting adjourn at 5:00 p.m.

Lloyd B. Omdahl

Lieutenant Governor-Chairman

SEAL

David A. Epryficzymatyk C State Engineer and

Chief Engineer-Secretary

## NORTH DAKOTA STATE WATER COMMISSION

REGISTER

ATTEN	DANCE AT State Se	ten Pemnission Hasteria
		PLACE Bismarck, NA
		PROJECT NO

Your Name	Your Address	Who do you Represent? (Or Occupation)
Ken Thompson	DICKINGON	SWA
Bob Otherser	B,'s	NODAK BONDS inc
David Juran	Bismarck	No Oak Bends
Karen Kreil	Bismark City Halp	US Fish + Wildlife Service
Jon Lindgren	(:ty /talp	C. ty of Forzo
Jeffy Volk	WestForgs	SE Coss WRD
Buy Mount	Bismarch	Bur N. Del Stito W. S.
CHARUE VEN	GRAND FORKS	KBIM INC.
James R. M. Laugh	7 ago Po 80 2793	SE Cass WRD
Dave Rustedakke	Po Bay 2793 Bismande, ND	NA Farm Bureau
LLANK TRANGSRUS		HOUSTON ENG.
DAUE RIPLEY	BIS	SWC
	a .	

## 1993 STATE WATER MANAGEMENT PLAN STEERING COMMITTEE

Chairman: Lt. Governor Lloyd B. Omdahl

Two Water Commissioners: William Lardy from Dickinson and Lorry Kramer of Minot.

Production Agriculture: <u>Howard Olson</u> from Fargo, a long time supporter of irrigation and soil and water conservation. Past Superintendent of the Carrington Irrigation Experiment Station.

Recreation/Fish & Wildlife: Pam Dryer from Bismarck, currently has a private consulting firm. Formerly employed with North Dakota Parks and Recreation Department and is currently active in the North Dakota Wildlife Society.

Energy/Manufacturing: Fletcher Poling from Bismarck, currently on staff with Basin Electric Power Cooperative; extensive experience in dealing with a broad range of natural resource issues.

Tribal Interests: Brenda Schilf from New Town, currently a consultant to the Three Affiliated Tribes.

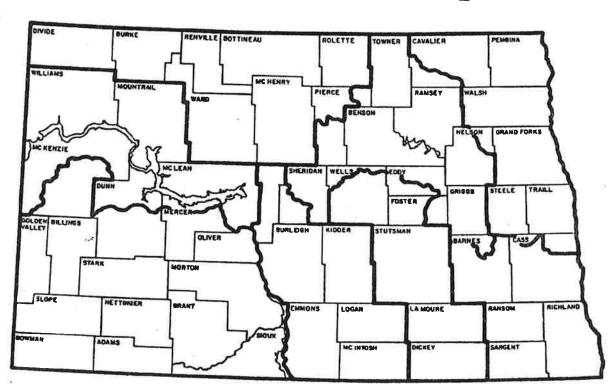
North Dakota Water Users Association: Alfred Underdahl from Hebron, a farmer, active in Southwestern North Dakota Water Management. Served as chairman of the Heart River Citizen Advisory Board during the 1983 State Water Plan update.

North Dakota Water Resource Districts Association: Bob Broadshaug from Fargo, a farmer, and a member of the Southeast Cass Water Resource District. He is active in the Lower Sheyenne Flood Control Project.

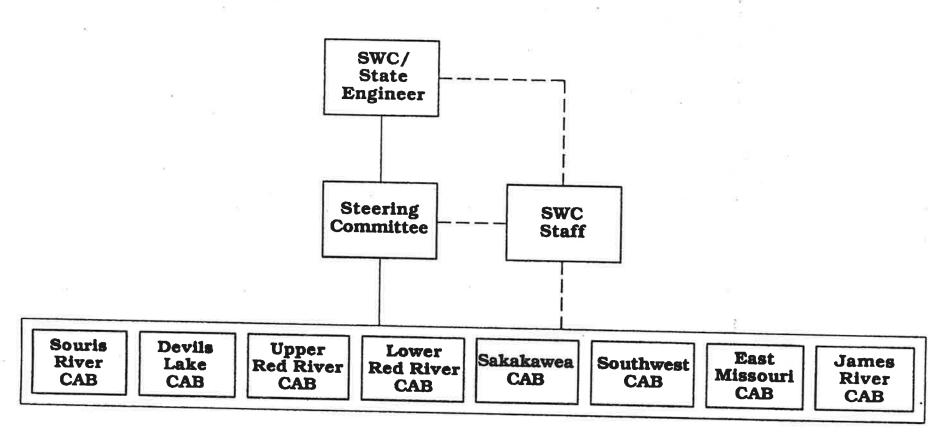
Two Members-at-large: <u>Leon Dubort</u>, a banking official from Walhalla, North Dakota. He is active in the promotion of economic development in the lower Red River Valley and a long-time supporter of balanced water resources management. <u>Dr. Jay Leitch</u>, Ag. Resource Economist at NDSU and Associate Director of North Dakota Water Resources Research Institute.

# EIGHT PUBLIC INVOLVEMENT REGIONS

- water resource district members
- community leaders
- representatives of special interest groups



# State Water Management Plan Organizational Chart



### RESOLUTION NO. 90-10-439

# IN APPRECIATION WILLIAM A. HANSON

WHEREAS, Bill Hanson has resigned from the State Water Commission and has become self-employed as a partner in AmeriTech Engineering; and

WHEREAS, Bill worked for the State Water Commission from 1970 to 1973 and from 1977 to June, 1990, and provided valuable assistance in many areas; and

WHEREAS, this dedication led to Bill becoming the state coordinator for the National Flood Insurance Program. As coordinator, Bill provided North Dakota city officials with assistance in the wise management and development of flood hazard areas in their communities. Bill was instrumental in the initiation of numerous detailed flood insurance studies used by the communities in managing their floodplains; and

WHEREAS, Bill was named State Mitigation Officer because of his expertise in flood hazard areas and his willingness to lend assistance.

NOW, THEREFORE, BE IT RESOLVED that the North Dakota State Water Commission and the North Dakota State Engineer assembled at Bismarck, North Dakota, this 1st day of October, 1990, express their thanks and appreciation for the valuable and dedicated contribution of Bill Hanson in his service to the North Dakota State Water Commission, the North Dakota State Engineer, and to the sound management of the water resources of this state.

BE IT FURTHER RESOLVED that the North Dakota State Water Commission and the North Dakota State Engineer conveys to Bill Hanson their best wishes in his future endeavors.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:

Lloyd B. Omdahl

Lieutenant Governor-Chairman

SEAL

David A. Spryngryngt State Engineer and

Chief Engineer-Secretary



Rep. Gordon Berg

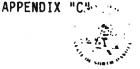
Devils Lake, ND 58301

District 15 Route 5

## HOUSE OF REPRESENTATIVES

STATE CAPITOL BISMARCK, ND 58505

October 1, 1990



COMMITTEES:
Finance and Taxation
Natural Resources

Honorable George A. Sinner Governor State Capitol Bismarck, ND 58505

Dear Governor Sinner:

As you know, recently the city of Devils Lake in cooperation with various federal agencies has completed a \$5 million lemna project to treat municipal wastewater in Devils Lake. During the treatment process, the lemna removes phosphates and nitrates from the wastewater. The city has purchased equipment to harvest the lemna and the plants are then spread on nearby land.

The lemna or duckweed for this wastewater treatment project were obtained from the James River Valley. When the duckweed or lemna were removed, carp and carp eggs and possibly other fish species, biota, and fish diseases were transferred from the James River Valley to the Devils Lake wastewater treatment facility. This, in effect, has resulted in the transfer of fish, fish biota, and fish diseases from one drainage basin to another drainage basin. Chemicals have been used to kill the carp in the Devils Lake wastewater treatment facility; however, the waters in the wastewater treatment cells have not been tested for the presence of fish diseases.

As you are well aware, Canadians are very concerned about the transfer of fish, fish diseases, and other biota from the Missouri River drainage system to a drainage basin that may ultimately affect the waters of Canada. At the present time, the wastewater treatment cells have not been emptied into Devils Lake and a permanent injunction should be obtained prohibiting the emptying of the wastewater treatment cells into Devils Lake until it is determined that no fish, fish diseases, or other biota transferred from the James River Valley to the Devils Lake wastewater treatment facility have survived and would be transferred to Devils Lake if the treatment cells were subsequently emptied into the lake.

In order to complete this investigation, the state should utilize the facilities of our two research universities, North Dakota State University and the University of North Dakota, in testing the waters of the Devils Lake wastewater treatment facility to ensure that no foreign biota from the James River remain in the Devils Lake wastewater treatment facility. This research must be conducted in a timely fashion before Devils Lake freezes this fall.

Thank you for your consideration in this matter.

Sinceraly,

Gordon Berg

State Representative

GB/KJM

cc: Francis Schwindt

Lloyd Jones

David Sprynczynatyk 
James Scherer

James Scherer Mike McEnroe Fred Bott



## HOUSE OF REPRESENTATIVES

STATE CAPITOL BISMARCK, ND 58505



Rep. Gordon Berg District 15 Route 5 Devils Lake, ND 58301 October 1, 1990

COMMITTEES:
Finance and Taxation
Natural Resources

Honorable George A. Sinner Governor State Capitol Bismarck, ND 58505

Dear Governor Sinner:

As you know, one of the uncertainties surrounding the Garrison Diversion Unit is related to the feature of the project that would move water from the Missouri River via the McClusky Canal; the Lonetree Reservoir or the Sykeston Canal; and the New Rockford Canal, to Devils Lake and possibly into the Sheyenne River to supply municipal water to Fargo and Grand Forks. The basis for this uncertainty is grounded in objections posed by Canada concerning the interbasin transfer of Missouri River fish, fish diseases, and biota into drainage basins that are located in Canada and ultimately drain into Lake Winnipeg and Hudson Bay.

However, one solution to this problem which has not been studied would be to divert water from the Qu'Appelle River in Saskatchewan to the Souris River in Saskatchewan. This would provide water for Saskatchewan as well as water for refuges beneficial to waterfowl located along the Souris River in North Dakota and Manitoba. One of the obligations of the United States and Canada under the Boundary Waters Treaty of 1909 is to enhance water resources beneficial to waterfowl and this proposal would accomplish the goals of this treaty.

In addition, this proposal would provide much-needed water for municipal consumption along the Souris River in Saskatchewan and North Dakota and the Souris River between the North Dakota-Canadian border and the Assiniboine River in southern Manitoba.

In conjunction with this proposal, flood waters could be moved from the Souris River to Devils Lake, which would act as a regulatory reservoir for flood control in wet years for the Devils Lake Basin. In wet years, water could be discharged from Devils Lake into Stump Lake and from Stump Lake into the Goose River or Forest River, both of which flow into the Red River. The high saline content of the water from Devils Lake would be mixed with fresher water from the Red River to ensure that water reaching the Canadian border did not violate water quality standards under the Boundary Waters Treaty of 1909. This could be accomplished without building a water treatment plant or desalinization plant at Devils Lake. In addition, this proposal has the added benefit in that it would not involve moving water from the Missouri River Basin to the Souris

River Basin, Sheyenne River Basin, or Red River Basin, which ultimately flow into Canada, or the Devils Lake Basin, which is a closed drainage system.

This project would entail working closely with Canada, the provincial governments of Saskatchewan and Manitoba, as well as various United States federal and state agencies. Careful study may show that this proposal may actually be less expensive and accomplished sooner than bringing Missouri River water to Devils Lake to stabilize that lake. In addition, this proposal would provide much-needed municipal water for the North Dakota municipalities of Fargo and Grand Forks and Canadian municipalities located between Emerson, Manitoba, and Winnipeg, Manitoba. Also, as noted above, this project would provide much-needed municipal water supplies for the Canadian communities located on the Souris River in southern Manitoba.

Due to the uncertainty surrounding the Garrison Diversion Unit, this proposal should be explored further at this time. If I can be of any assistance concerning this matter, please contact me.

Sincerely,

Gordon Berg

State Representative

GB/PG Encs.

cc: David Sprynczynatyk, State Engineer

C. Emerson Murry, Garrison Diversion Conservancy District Lance Yohe, Executive Secretary of the International Coalition, Moorhead, Minnesota

Lou Kowalski, United States Army Corps of Engineers, St. Paul, Minnesota

Fred Bott, Mayor, Devils Lake



# North Dakota State Water Commission

900 EAST BOULEVARD . BISMARCK, ND 58505-0187 . (701)224-2750 . FAX (701)224-3696

#### RESOLUTION NO. 90-10-440

## Urban Development Water Management Program

WHEREAS, water plays an important role in the economic development of North Dakota cities; and

WHEREAS, the goals and aspirations of each North Dakota city are best understood by the citizens and elected officials of that city.

NOW, THEREFORE, BE IT RESOLVED that the North Dakota State Water Commission assembled at Bismarck, North Dakota, this 1st day of October, 1990, endorse and direct its staff to review and study a voluntary program called the Urban Development Water Management Program, which would allow participating cities to declare specific amounts of raw water and/or water plant output available for purposes which local governments consider of the highest public interest; and

BE IT FURTHER RESOLVED that the State Water Commission consider making available to industrial prospects this information along with any other information it normally provides such prospects.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:

Lloyd B. Omdahl

Lieutenant Governor-Chairman

SEAL

David A. Sprync ynar, State Engineer and

Chief Engineer-Secretary