

MINUTES

North Dakota State Water Commission Devils Lake, North Dakota

July 2, 1993

The North Dakota State Water Commission held a meeting at the Elks Lodge, Devils Lake, North Dakota, on July 2, 1993. Chairman, Governor Edward T. Schafer, called the meeting to order at 8:30 AM, and requested State Engineer and Chief Engineer-Secretary, David Sprynczynatyk, to call the roll. The Chairman declared a quorum was present.

MEMBERS PRESENT:

Governor Edward T. Schafer, Chairman
Sarah Vogel, Commissioner, Department of Agriculture, Bismarck
Mike Ames, Member from Williston
Judith Dewitz, Member from Tappen
Elmer Hillesland, Member from Grand Forks
Jack Olin, Member from Dickinson
Harley Swenson, Member from Bismarck
Robert Thompson, Member from Page
David Sprynczynatyk, State Engineer and Chief Engineer-
Secretary, North Dakota State Water Commission, Bismarck

MEMBER ABSENT:

Florenz Bjornson, Member from West Fargo

OTHERS PRESENT:

State Water Commission Staff Members
Approximately 10 persons in attendance interested in agenda items
(The attendance register is on file with the official minutes.)

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

**INTRODUCTION OF
MIKE AMES,
WILLISTON, ND, TO
STATE WATER COMMISSION**

Mike Ames, Williston, ND, was introduced. Mr. Ames was appointed by Governor Schafer to serve as a member of the State Water Commission, replacing

Joyce Byerly. His term is effective July 1, 1993 and expires on July 1, 1999.

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**INTRODUCTION OF
JUDITH DEWITZ,
TAPPEN, ND, TO
STATE WATER COMMISSION**

ing Norman Rudel. Her term is effective July 1, 1993 and expires July 1, 1999.

Judith Dewitz, Tappen, ND, was introduced. Mrs. Dewitz was appointed by Governor Schafer to serve as a member of the State Water Commission, replac-

APPROVAL OF AGENDA

Secretary Sprynczynatyk stated additional items to be considered under Other Business are a continued discussion of the Devils Lake Stabilization Project and the Hammer-Sullivan Drain Project in Ramsey County. The agenda was approved and the Chairman requested it be presented by Secretary Sprynczynatyk.

**CONSIDERATION OF MINUTES
OF JUNE 9, 1993 TELEPHONE
CONFERENCE CALL MEETING -
APPROVED**

The minutes of the June 9, 1993 telephone conference call meeting were approved by the following motion:

It was moved by Commissioner Vogel, seconded by Commissioner Ames, and unanimously carried, that the minutes of the June 9, 1993 telephone conference call meeting be approved as circulated.

**AGENCY FINANCIAL STATEMENT -
AGENCY OPERATIONS**

Charles Rydell, Assistant State Engineer, presented and discussed the Program Budget Expenditures, dated June 15, 1993, and reflecting 95.8 percent of the current biennium. Mr. Rydell indicated that the biennium will end June 30, 1993 and that approximately \$150,000 will be turned back to the General Fund. **SEE APPENDIX "A"**

**AGENCY FINANCIAL STATEMENT -
RESOURCES TRUST FUND/
CONTRACT FUND**

Dale Frink, Director of the State Water Commission's Water Development Division, reviewed and discussed the Contract Fund expenditures for the 1991-1993 biennium. **SEE APPENDIX "B"**

**AGENCY FINANCIAL STATEMENT -
1993-1995 BIENNIUM BUDGET**

Charles Rydell explained the 1993-1995 biennium budget, reflecting approximately a seven percent reduction over the present budget. **SEE APPENDIX "C"**

**CONSIDERATION OF ALLOCATION
OF RESOURCES TRUST FUND
FOR 1993-1995 BIENNIUM**

The 1993 Legislature approved a spending limit of \$11,501,581 from the Resources Trust Fund as a part of the 1993-1995

State Water Commission budget. Secretary Sprynczynatyk indicated the approved spending limit was based on the following revenue estimates for the biennium:

Beginning Balance (Previously Obligated)	\$ 4,993,728
Oil Extraction Tax Revenue	4,446,237
Interest Income	159,713
Southwest Pipeline Reimbursement	567,000
MR&I Loan Payments	<u>709,000</u>
Estimate of Available Funds	\$ 10,875,678
Authorized Spending Limit	<u>\$ 11,501,581</u>
Estimated Deficit	\$ 625,903

Secretary Sprynczynatyk stated that in the past, the State Water Commission has only allocated funds up to the most current estimate of available funds. He indicated this allocation is consistent with the request made to the Legislature except for the Southwest Pipeline Project, which was reduced by approximately \$1 million because of lower revenue projections.

Secretary Sprynczynatyk presented for the Commission's consideration the following State Engineer's request for funding from the Resources Trust Fund for the 1993-1995 biennium:

General Projects	\$ 1,500,000
Hydrologic Investigations	600,000
Southwest Pipeline Project	2,092,678
State Water Commission Operations	1,683,000
Carryover Projects	<u>5,000,000</u>
Total	\$ 10,875,678

It was moved by Commissioner Olin and seconded by Commissioner Dewitz that the State Water Commission approve the recommendation of the State Engineer for funding from the Resources Trust Fund for the 1993-1995 biennium.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

SOUTHWEST PIPELINE PROJECT -
PROJECT UPDATE AND
CONTRACT/CONSTRUCTION STATUS
(SWC Project No. 1736)

Tim Fay, Manager of the Southwest Pipeline Project, provided a status report on the following construction contracts:

Contracts 2-3E and 2-3F - Ductile Iron Main Transmission Line From Dickinson to Highway 21: Work on Contract 2-3E is currently directed towards installing the remaining five miles of 16-inch piping and reclamation.

Piping on Contract 2-3F from the New England reservoir site to Highway 21 is installed and current activities include reclamation and line filling in preparation for the pressure test.

Contract 2-6A - 10-Inch Transmission Line From Highway 22 to Mott: During construction of this contract, the quality of the pipe has been a continuing problem. Various manufacturing codes had been rejected for foreign inclusions, variance from dimensional tolerances, and internal rips in the pipe wall. This pipe was all manufactured in Winnebago, MN, on extruder #3. In addition, some of the pipe was rejected on an individual piece basis for sunlight bleaching damage. These actions appeared to result in improved quality for a short time; however, on May 12, 1993, numerous examples of these problems were detected again. This pipe had also been manufactured on the same extruder. The new problems were so extensive that all pipe manufactured on extruder #3, which had not yet been installed, was rejected. Concern was also expressed about the pipe which had been installed.

On May 21, 1993, a meeting was held with representatives of the contractor, the pipe manufacturer, the project engineer, the Bureau of Reclamation, and the project manager. The pipe manufacturer did not dispute that a problem existed and was cooperative in identifying steps to be taken to resolve the uncertainty about the installed pipe. Mr. Fay stated that a program has been proposed for inspection and testing which should detect

any problems with the in-place pipe. This program includes video camera inspection, additional physical and pressure testing, and special testing to predict the long-term strength of the pipe. The program includes the provision that the cost of these tests and the cost of the additional engineering and inspection will be deducted from the contract cost. Mr. Fay indicated that at this point, the overall program appears to be acceptable to all parties.

These problems have impeded installation of the main transmission piping. The contractor has been able to install some of the 6-inch piping to connect to the cities of Mott and Regent.

Contract 2-7B - 12-inch Transmission Line From Davis Buttes to Richardton: Approximately 10 miles of 12-inch pipe has been installed, and most of the 4-inch piping to serve the City of Gladstone has been installed. Field inspectors recently discovered defects in pipe representing five manufacturing codes. These defects are similar to those experienced on Contract 2-6A. Discussions with the contractor and the pipe manufacturer are proceeding.

Contract 3-1B - Zap Reservoir: Earthwork, concrete work and tank erection are complete. Painting of the tank is currently underway. Completion of the painting, installation of the cathodic protection system, and hydrostatic testing will complete this contract. These are scheduled for completion by the end of June. After the new tank is complete and in service, tank 3-1A will be drained and its interior will be repainted under the warranty of its construction contract.

Contract 4-3 - Dickinson Pump Station: The general contractor is active on the site. Excavation for the clearwell is complete, the underdrain system is installed, and the site access road and the clearwell overflow channel are constructed. Construction of the concrete clearwell and foundation will follow.

Contracts 5-3 and 5-13 - New England and Davis Buttes Reservoirs: Both tanks are being built by the same contractor and it is the contractor's intention to send construction crews to each site in turn during the construction sequence.

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Access roads have been built at each site. The earthwork contractor is presently working at the Davis Buttes site on construction of the inlet and outlet piping and the concrete ringwall foundation. This crew will move to the New England site when their work at Davis Buttes is complete.

**SOUTHWEST PIPELINE PROJECT -
FUTURE CONTRACTS
(SWC Project No. 1736)**

Mr. Fay discussed future contracts and development work on the Southwest Pipeline Project. Contract 2-7C, the transmission piping extending from Taylor to Golden Valley, Dodge, Halliday, and Dunn Center is nearing completion of design. It is scheduled to be submitted to the Bureau of Reclamation in July, 1993, with the intention of advertising in August, 1993.

Contract 7-1B, the rural water distribution systems for the New Hradec, Davis Buttes and West Taylor service areas is also well along in design. It will be submitted shortly after Contract 2-7C. The process of acquiring easements for these systems began as soon as the routes were known and is progressing.

The Taylor Watershed SCS PL-566 rural water system is under preliminary design by the Soil Conservation Service. That agency now has the user signup information and is in the process of routing lines.

Preliminary design of the integrated rural water system has progressed to the point that the service areas are identified. A service area is the region that can be served from a given reservoir. The entire Southwest Pipeline integrated project includes 26 service areas. These service areas can be grouped into construction contracts. The basis for developing a revised phased development plan, with a high degree of detail is now available. With the input of the Southwest Water Authority, the new phased development plan will be developed this fall.

**SOUTHWEST PIPELINE PROJECT -
PROJECT STAFF
(SWC Project No. 1736)**

Tim Fay reported that the Central Personnel Division is in the process of classifying an Assistant Manager position for the Southwest Pipeline Project. The primary need for this person is to make preparations for transferring operating functions of the project to the Southwest Water Authority. This transfer will involve a large amount of research, preparation of agreements, and possibly proposed legislation. In addition, this person will become the operations manager and will likely remain as the Southwest Water Authority's manager after the transfer. For this reason, the Southwest Water Authority will be involved in interviewing and hiring when the position is filled.

**SOUTHWEST PIPELINE PROJECT -
DICKINSON WATER TREATMENT
PLANT UPGRADE, PHASE 2
(SWC Project No. 1736)**

Tim Fay indicated that when the decision was made to treat Southwest Pipeline Project water at the Dickinson water treatment plant, it was recognized that certain improvements would need to be made to increase its capacity. Mr. Fay emphasized that these improvements must be related to increasing the plant's capacity, and not to deferred maintenance or the city's distribution system. Since that time, the City of Dickinson and their engineering firm have identified the work needed to upgrade the plant.

At its April 2, 1992 meeting, the State Water Commission considered the items identified and grouped the items into a two-phase process. Funding for this process was approved by the Commission.

Phase 1 included plant telemetry, a new raw water valve, and a new finished water metering system. The other items were to be incorporated into a systematic plan which was to be presented to the State Water Commission as Phase 2 at a later date. Since that time, the city's engineering firm has recommended that the telemetry be deferred into Phase 2, and part of the recarbonation chamber upgrade be moved into Phase 1, at a cost of \$4,500. These Phase 1 items are currently being advertised for bids at an estimated cost of \$62,000.

The items in Phase 2 are primarily related to the hydraulics of the process stream. Water enters the plant and is passed through a clarifier in which coagulation and settlement takes place. It then flows through a recarbonation basin and into a filter. After filtration it enters one of two clearwells from which it is pumped to distribution or storage.

The Phase 2 plan has recently been submitted for approval. Mr. Fay said it is organized to identify the work needed to reach three different capacities: 10 million gallons per day, 12 million gallons per day, and 15 million gallons per day. The actual target capacity is 12 million gallons per day. The estimated cost of Phase 2 for upgrading the Dickinson water treatment plant is \$1,316,000. The plan also identifies some features the City of Dickinson needs to address and some which may be desirable in the future for the entire Southwest Pipeline Project, but which are operational costs.

It was the recommendation of the State Engineer that the State Water Commission approve funding and construction of Phase 2 to upgrade the City of Dickinson's water treatment plant to a capacity of approximately 12 million gallons per day.

It was moved by Commissioner Swenson and seconded by Commissioner Ames that the State Water Commission approve funding and construction of Phase 2 to upgrade the City of Dickinson's water treatment plant to a capacity of approximately 12 million gallons per day.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

**SOUTHWEST PIPELINE PROJECT -
RURAL WATER DESIGN CRITERIA
(SWC Project No. 1736)**

Tim Fay indicated that since the actions to integrate the rural water service into the Southwest Pipeline Project, much progress has been made on design and small-scale construction using generally accepted criteria. For further development of the integrated project, a comprehensive set of criteria needs to be adopted. Bartlett & West/Boyle Engineering Corp. has prepared a set of criteria for this purpose. Mr. Fay summarized the proposed criteria, which is attached hereto as **APPENDIX "D"**, and presented the following deviations to the proposed criteria for the Commission's consideration:

1) Pipe Testing: The criteria proposes that the State Water Commission adopt a program of testing pipe materials. This program would include physical measurement, chemical testing and impact testing.

It was the recommendation of the State Engineer that in view of the problems that have been experienced to date with pipe, additional in-field visual, physical, and measurement testing would seem to produce more valuable information regarding the quality of pipe materials than the testing program recommended and, therefore, the proposed criteria for pipe testing not be adopted for the following reasons:

- a) It is the pipe manufacturer's primary responsibility for quality control of his product.
- b) A testing program must be prompt enough to produce results quickly enough to avoid delaying installation of passing pipe.
- c) The impact tests are of limited value.

2) Service Area Feasibility: The proposed criteria does not address the issue of financial feasibility of individual service areas.

It was the recommendation of the State Engineer that the Commission consider the following proposed service area feasibility criterion, which was developed with the cooperation of the Southwest Water Authority:

No service area will be considered feasible in which less than 50 percent of the potential users have signed up as members and paid their membership fees. In addition, no more than \$25,000 will be allocated or expended for a single hookup. The \$25,000 maximum may be modified for certain factors.

3) Service Meters: Section X. H. of the proposed criteria relates to service meters, stating that all users will be provided with a meter box, a 5/8" x 3/4" sealed register water meter and a meter setting containing a 3/4-inch pressure regulator, a shut-off valve, and a backflow preventing device. The meter box will be installed at or near the edge of the yard area of the user. The user will be responsible for connecting the meter box to his service. Livestock user hookups will be served at a point just within the property, not to exceed 325 feet of service line.

Tim Fay explained that most other rural water systems in the state provide the user with a meter assembly, which the user installs in his own frost-free location. For the project to provide the meter pits described in the proposed criteria would be a luxury denied most other rural water users and other MR&I projects. If the user or some other party desires to pay for the additional cost of the meter pit, it could be installed at his cost. If no location is available, such as in the case of a pasture tap or a trailer house, one would have to be provided. With those two exceptions, Mr. Fay said the meter pits should not be used.

Secretary Sprynczynatyk indicated he recently met with the Southwest Water Authority to discuss the matter and the Authority has requested additional information be considered. Therefore, it was the recommendation of the State Engineer, and concurred by the State Water Commission, that action be deferred on the proposed service meter criteria.

It was moved by Commissioner Swenson and seconded by Commissioner Vogel that the State Water Commission adopt the rural water criteria proposed by Bartlett & West/Boyle Engineering Corp., and modified as described above, for use on the integrated Southwest Pipeline Project, with the exception of the proposed criteria designated as X. H.

The State Water Commission deferred action on the proposed service meter criteria, designated as X. H. in the proposed rural water design criteria summary.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

**SOUTHWEST PIPELINE PROJECT -
CONSIDERATION AND APPROVAL OF
SOLE-SOURCE AMENDMENTS TO WATER
SERVICE CONTRACTS FOR CITIES OF
TAYLOR, RICHARDTON, CARSON,
HETTINGER AND GLADSTONE
(SWC Project No. 1736)**

At the April 2, 1992 meeting, the State Water Commission approved a sole-source amendment policy for water service contracts. Under this amendment, a user agrees to use the Southwest Pipeline as its sole source of water. In return,

the monthly and annual minimum purchase requirements are waived. The policy is currently in place for the cities of Dickinson, Mott and Belfield, and for the Assumption Abbey.

Tim Fay stated that the cities of Taylor, Carson, Richardton and Hettinger have executed sole-source amendments to their water service contracts. The City of Gladstone has verbally requested a sole-source amendment to their water service contract.

Interest in this amendment has also been expressed by the City of Halliday. The New Hradec Water Works has requested a water service amendment with sole-source and demand service amendments. The Manning Water Association and the Sacred Heart Monastery have also expressed interest in similar contracts.

It was the recommendation of the State Engineer that the State Water Commission approve executing the sole-source amendment for the cities of Taylor, Carson, Richardton, Hettinger, and for the City of Gladstone upon receipt of the executed sole-source amendment.

It was moved by Commissioner Vogel and seconded by Commissioner Swenson that the State Water Commission approve executing the sole-source amendment to water service contracts for the cities of Taylor, Carson, Richardton and Hettinger, and from the City of Gladstone upon receipt of the executed amendment.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

**SOUTHWEST PIPELINE PROJECT -
CONSIDERATION OF RESOLUTION
09-93 FROM CITY OF DICKINSON
REQUESTING RECONSIDERATION OF
CERTAIN PROVISIONS OF THE WATER
SERVICE CONTRACT OF 1982 AND
CONCERNING LAKE PATTERSON AND
THE BASCULE GATES
(SWC Project No. 1736)**

Secretary Sprynczynatyk briefed the Commission members on a meeting held with representatives of the City of Dickinson Board of Commissioners. On June 21, 1993, the Board adopted Resolution No. 09-93, which is attached hereto as **APPENDIX "E"**. The resolution requests the State Water Commission to:

- 1) Eliminate the annual CPI increase to the repayment rate for capital costs pursuant to paragraph VII.E.2. of Contract No. SWC 1736-3. The city does not receive the same consideration on the capital credits received or on any debt service. This increase imposes an unfair burden on water users and may cause the city to increase water rates again.
- 2) Reconsider the amount of the cap on the replacement fund. Being the only user for more than two years, the City of Dickinson will have contributed a disproportionate share to this fund.
- 3) Negotiate with the US Bureau of Reclamation for the acquisition and settlement of the Dickinson Dam and bascule gates project to be maintained by the State of North Dakota for a back-up water supply for southwestern North Dakota.

Secretary Sprynczynatyk indicated staff is in the process of preparing an appropriate response to the resolution and will be presented to the Commission for consideration.

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**SOUTHWEST PIPELINE PROJECT -
INVITATION FROM SOUTHWEST
WATER AUTHORITY TO HOLD
OCTOBER, 1993 SWC MEETING
IN DICKINSON
(SWC Project No. 1736)**

The Southwest Water Authority presented an invitation to the State Water Commission to hold its October meeting in Dickinson. The invitation was accepted and the date was left to the discretion of the Chairman and the State Engineer.

**CONSIDERATION AND APPROVAL
OF REQUEST FROM CAVALIER
COUNTY WATER RESOURCE
DISTRICT FOR REAUTHORIZATION
OF COST SHARING IN NORTH
LOMA TOWNSHIP DRAIN NO. 1
(SWC Project No. 1840)**

A request was presented from the Cavalier County Water Resource District for the Commission's consideration to reauthorize cost sharing in North Loma Township Drain No. 1.

On July 5, 1990, the State Water Commission approved cost sharing for this project at 40 percent of eligible costs not to exceed \$15,758. This approved cost share has been carried over once into the 1991-1993 biennium and cannot be carried over again without reauthorization from the Commission.

Dale Frink presented the project and stated according to the new request letter from the District, it has had problems with the US Army Corps of Engineers concerning placement of a control structure and a landowner easement problem on the upper end of the project. The District has decided to downsize the project and eliminate the control structure and channel work on the upstream portion.

The downsized project is estimated to cost \$24,430, with eligible costs of \$19,900. cost sharing in 40 percent of the eligible costs is \$7,960 from the State Water Commission.

It was the recommendation of the State Engineer that the State Water Commission approve 40 percent cost sharing of the eligible costs for the North Loma Township Drain No. 1, not to exceed \$7,960 from the Contract Fund, and contingent upon the availability of funds.

It was moved by Commissioner Vogel and seconded by Commissioner Thompson that the State Water Commission approve cost sharing in 40 percent of the eligible costs for the North Loma Township Drain No. 1 in Cavalier County, not to exceed \$7,960, from the Contract Fund. This motion is contingent upon the availability of funds.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

CONSIDERATION AND APPROVAL
OF REQUEST FROM RAMSEY COUNTY
WATER RESOURCE DISTRICT FOR
REAUTHORIZATION OF COST
SHARING FOR HAMMER-SULLIVAN
DRAIN PROJECT, PHASE 2
(SWC Project No. 1832)

A request was presented from the Ramsey County Water Resource District for the Commission's consideration to reauthorize cost sharing in the Hammer-Sullivan Drain Project, Phase 2.

At the July 5, 1990 meeting, the State Water Commission approved 40 percent of the actual eligible costs, not to exceed \$65,733, for the project. This approved cost share has been carried over once into the 1991-1993 biennium and cannot be carried over again without reauthorization from the Commission for the balance of \$21,231.

It was the recommendation of the State Engineer that the State Water Commission approve reauthorization for cost sharing in the Hammer-Sullivan Drain Project, Phase 2, not to exceed the balance of \$21,231 from the Contract Fund, contingent upon the availability of funds.

It was moved by Commissioner Olin and seconded by Commissioner Swenson that the State Water Commission approve reauthorization for cost sharing in the Hammer-Sullivan Drain Project, Phase 2, in Ramsey County, not to exceed the balance of \$21,231 from the Contract Fund. This motion is contingent upon the availability of funds.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

CONSIDERATION AND APPROVAL
OF EXTENSION OF CONSULTING
AGREEMENT FOR FIRM OF WILL & MUYS
TO RETAIN ENVIRONMENTAL CONSULTANT
FOR GARRISON DIVERSION PROJECT
(SWC Project No. 237)

At the August 22, 1991 meeting, the State Water Commission approved funding in the amount of \$40,000 from the Contract Fund to retain the firm of Will & Muys as an environmental consultant for the Garrison

Diversion Project. Peter Carlson of the firm of Will & Muys had been selected as the best person for the position, functioning as a liaison in Washington, DC.

Secretary Sprynczynatyk stated the total cost for the contract through June 30, 1993 was estimated at \$120,000. It was agreed that the Garrison Conservancy District would pay one-half of the cost if the State Water Commission could pay one-third and the State Game and Fish Department one-sixth. An agreement was entered into for these terms. Secretary Sprynczynatyk said that through the end of June, nearly all of the \$120,000 will have been expended for about 22 months of effort.

Secretary Sprynczynatyk presented a proposal for the Commission's consideration for an extension of the consulting agreement through December 31, 1994, if necessary, to continue trying to move the Garrison Diversion Project forward. He said this ending date would coincide with the ending date of the current Congress. The proposal was to continue at the same rates as agreed to in 1991. Recently, both the Garrison Conservancy District and the State Game and Fish Department approved extending the contract with Will & Muys and cost sharing the same as in the past.

Secretary Sprynczynatyk said, "I have been very pleased with the performance of Peter Carlson and the firm of Will & Muys. He has helped us to stay on top of activities in Washington and has helped to maintain a liaison with several environmental organizations and federal agencies. He also has been helpful in developing the Seven-Year Plan for the project and the conceptual alternative plan."

It was the recommendation of the State Engineer that the State Water Commission obligate \$40,000 from the Contract Fund, contingent upon the availability of funds, towards extending the consulting agreement for the firm of Will & Muys through December 31, 1994. Extending the agreement would also be based upon cost sharing by the Garrison Diversion Conservancy District and the State Game and Fish Department, with the District paying one-half of the costs, the Department paying one-sixth of the costs and the Commission paying one-third of the costs.

The Commission members expressed agreement that retaining an environmental consultant is a very important step for North Dakota to take in order to answer and satisfy some of the environmental concerns. The Commission did express concern regarding the liaison's reporting process of the activities in Washington, DC. Secretary Sprynczynatyk stated that Peter Carlson provides monthly reports on his activities and that copies will be provided to the Commission members.

Since the congressional delegation was involved in the selection process to retain an

environmental consultant for the Garrison Diversion Project, the Commission directed the State Engineer to meet with the congressional delegation and staff to reaffirm their support of the effort and the firm of Will & Muys.

It was moved by Commissioner Thompson and seconded by Commissioner Olin that the State Water Commission obligate \$40,000 from the Contract Fund, contingent upon the availability of funds, toward extending the consulting agreement for the firm of Will & Muys through December 31, 1994. Extending the agreement would also be based upon cost sharing by the Garrison Conservancy District and the State Game and Fish Department, with the District paying one-half of the costs, the Department paying one-sixth of the costs, and the Commission paying one-third of the costs.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

**BALDHILL DAM SAFETY PROJECT
(SWC Project No. 300)**

Secretary Sprynczynatyk provided background information and a status report on the Baldhill

Dam Safety Project. The cities of Fargo, Grand Forks, Valley City, West Fargo, Lisbon, and the Red River Joint Board have agreed to a 50 percent non-federal cost sharing on the project. The non-federal cost sharing agreement for the project is being circulated for execution among the six entities. The State Water Commission has agreed to cost share in the remaining 50 percent of the non-federal costs amounting to approximately \$389,000.

Negotiations are continuing with the Corps of Engineers and, hopefully, the final agreement will be approved by the Corps in Washington in August, 1993, allowing the project to move forward with possible construction in late 1994.

Secretary Sprynczynatyk indicated there has been discussion regarding the possibility of increasing the permanent flood storage at the dam. The surveys done by the Corps of Engineers on this issue have not been completed to date. If the decision is made to proceed with that project, Secretary Sprynczynatyk indicated there may be an opportunity to do that project in conjunction with the dam safety project in order to reduce the costs.

**DROUGHT DISASTER LIVESTOCK
WATER ASSISTANCE PROGRAM
(SWC Project No. 1851)**

Secretary Sprynczynatyk presented background information and a status report on the Drought Disaster Livestock

Assistance Program. To date, 215 applications have been received, of which 179 applications have been approved, and 165 projects are completed for the program. Thirty-six applications have been withdrawn or denied. The producers' total project costs to date are \$744,657. Cost sharing of \$284,688 has been approved and \$260,918 has been paid on 165 completed projects.

Secretary Sprynczynatyk stated that with the recent rains and runoff in many areas, he does not see a need to extend the program beyond June 30, 1993. Any unused funds, which will be minimal, will remain in the Resources Trust Fund for other programs.

**NORTH DAKOTA COMPREHENSIVE
WETLANDS CONSERVATION PLAN UPDATE
(SWC Project No. 1489-5)**

LeRoy Klapprodt, State Water Commission Planning and Education Division, presented background information on the grant

the US Environmental Protection Agency has awarded to the State Water Commission to financially support development of a North Dakota Comprehensive Wetlands Conservation Plan. The grant, as approved in September, 1992, totals \$606,300 with a requirement for a 75/25 percent federal/state cost share. The grant supports a number of tasks required in formulating a workable state wetlands conservation plan. Mr. Klapprodt indicated the centerpiece of North Dakota's wetlands conservation initiatives and one of the primary goals in developing the North Dakota Comprehensive Wetlands Conservation Plan is the overall no-net loss of wetlands. This goal is consistent with the recommendations of the National Wetlands Policy Form.

Mr. Klapprodt indicated the current effort under the Fiscal Year 1992 grant will:

- * continue wetlands education program development;
- * position the state to assume federal Clean Water Act, Section 404 regulatory responsibilities;
- * evaluate geographic information system technology in managing wetlands resources;
- * advance state wetlands water quality standards;
- * advance the state's private lands initiative program; and
- * support watershed demonstration projects in the Grand Harbor watershed and Devils Lake Basin including the adopt-a-pothole program.

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Mr. Klapprodt summarized the goals and objectives of each task and the work accomplished to date. The tasks report is attached hereto as APPENDIX "F".

Ray Horne, Devils Lake Basin Coordinator, briefed the Commission members on activities of the Wetlands Trust to develop an operating plan for the Trust restoration efforts, and the Grand Harbor/Dry Lake Water Management Project as a demonstration project in implementing the Devils Lake Basin Conceptual Water Management Plan. Mr. Horne said the demonstration project has all of the components that need to be addressed in the Basin Plan and it has been determined the basin coordinator work closely with this project to insure that its procedures and results will relate to the Basin Plan.

Mr. Horne concluded his comments stating the "largest majority of the problems with water in the Devils Lake Basin is caused by the relationship between the environmental community and agriculture. Part of my job description is to promote peace and harmony in the Basin."

Commissioner Hillesland discussed the state's no-net loss of wetlands program. He stressed the importance that North Dakota's Information and Education Program address the agriculture concerns. He said "in order for the no-net loss of wetlands to be a successful program, it is important for everyone to cooperate and work together. What additional efforts can the State Water Commission take to make this a successful program?"

Commissioner Vogel addressed the statewide geographic information system (GIS) development and evaluation efforts. She reiterated the comments she made at the November 19, 1992 and December 9, 1992 Commission meetings, that "GIS technology compatibility is extremely important statewide so that all interested parties can have access to the information."

Secretary Sprynczynatyk explained the State Water Commission's objective in the GIS development and evaluation task is to evaluate the ability to enhance wetlands regulatory programs with computer mapping and geoprocessing capabilities. Specifically, the ability to improve tracking wetlands losses and gains which would result in better and more objective decision-making in the management of wetlands. He explained the Geographic Resource Analysis Support System (GRASS) GIS software package that was acquired by the Commission to accomplish the objective. He said he and staff are continuously working with the appropriate agencies to insure compatibility of the GIS technology and accuracy of information.

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**MISSOURI RIVER UPDATE
(SWC Project No. 1392)**

the Corps of Engineers study of the Master Manual for the Missouri River Basin system. Copies of the Executive Summary of the preliminary draft Environmental Impact Statement (EIS) were distributed to the Commission members. He said staff is in the process of reviewing the preliminary draft and written comments will be provided to the Corps. The Corps of Engineers has scheduled a meeting on August 3-5, 1993 in Omaha with the state agencies to discuss 307 alternatives that are being considered. Unless more data collection or analysis is required, Secretary Sprynczynatyk said the EIS should be available for distribution late this winter and, hopefully, by the end of 1994 the changes on the Missouri River Master Manual can be implemented.

Secretary Sprynczynatyk provided background information on the Missouri River lawsuit and

Secretary Sprynczynatyk indicated a meeting has been scheduled with the Missouri River Upper Basin Governors on September 7, 1993 in Rapid City, SD.

**CONSIDERATION AND APPROVAL
OF RESOLUTION OF APPRECIATION
TO JOYCE BYERLY
(SWC Resolution No. 93-7-458)**

The Commission members considered a draft resolution of appreciation to Joyce Byerly.

It was moved by Commissioner Vogel, seconded by Commissioner Olin, and unanimously carried, that the State Water Commission approve Resolution No. 93-7-458, In Appreciation to Joyce Byerly. SEE APPENDIX "G"

**CONSIDERATION AND APPROVAL
OF RESOLUTION OF APPRECIATION
TO DANIEL NARLOCK
(SWC Resolution No. 93-7-459)**

The Commission members considered a draft resolution of appreciation to Daniel Narlock.

It was moved by Commissioner Vogel, seconded by Commissioner Olin, and unanimously carried, that the State Water Commission approve Resolution No. 93-7-459, In Appreciation to Daniel Narlock. SEE APPENDIX "H"

**CONSIDERATION AND APPROVAL
OF RESOLUTION OF APPRECIATION
TO NORMAN RUDEL
(SWC Resolution No. 93-7-460)**

The Commission members considered a draft resolution of appreciation to Norman Rudel.

It was moved by Commissioner Vogel, seconded by Commissioner Olin, and unanimously carried, that the State Water Commission approve Resolution No. 93-7-460. SEE APPENDIX "I"

**DEVILS LAKE STABILIZATION
PROJECT UPDATE
(SWC Project No. 1712)**

Secretary Sprynczynatyk provided a status report on the Devils Lake Stabilization Project. An appropriation of

\$300,000 was made in 1992 to the Corps of Engineers along with directive language to initiate the feasibility study for the stabilization of Devils Lake, including an inlet to the lake and an outlet from it. The Assistant Secretary of the Army has directed the St. Paul District Corps of Engineers to proceed with the feasibility study for the stabilization of Devils Lake. The State Water Commission and the Corps of Engineers are negotiating an agreement for Phase 1 of a three-phase study. Phase 1 is estimated to cost \$60,000 and will include a review of the hydrologic data and determine the frequency analysis for the lake.

On February 4, 1992, the State Water Commission authorized the State Engineer to provide a letter of intent to the Corps of Engineers to proceed with the feasibility study for the Devils Lake Basin. The letter of intent provided the assurances that the State Water Commission understands the financial requirements and expressed the intent to become the local sponsor, or find an appropriate local sponsor from the Devils Lake Basin. The main requirement of the local sponsor is to provide for 50 percent of the total cost. Secretary Sprynczynatyk stated that \$500,000 was allocated in the last biennium from the Resources Trust Fund for this purpose and has been carried forward to the current biennium.

It was the recommendation of the State Engineer that the Commission authorize the State Engineer to enter into the agreement with the Corps of Engineers for Phase 1 of the feasibility study for the stabilization of Devils Lake, and to provide the cost sharing assurances from the \$500,000 previously allocated for this study.

It was moved by Commissioner Thompson and seconded by Commissioner Olin that the State Water Commission authorize the State Engineer to enter into an agreement with the US Army Corps of Engineers for Phase 1 of the Devils Lake Feasibility Study; and to provide the cost sharing assurances from the \$500,000 allocated from the Resources Trust Fund for this study.

Commissioners Ames, Dewitz, Hillesland, Olin, Swenson, Thompson, Vogel, and Chairman Schafer voted aye. There were no nay votes. The Chairman declared the motion unanimously carried.

**RECONFIRMATION OF APPOINTMENT
OF DAVID A. SPRYNCZYNATYK TO
POSITION OF NORTH DAKOTA STATE
ENGINEER AND CHIEF ENGINEER-
SECRETARY OF STATE WATER
COMMISSION**

It was moved by Commissioner Thompson, seconded by Commissioner Hillesland, and unanimously carried, that the State Water Commission reconfirm the appointment of David A. Sprynczynatyk to the position of the North Dakota State Engineer and Chief Engineer-Secretary of the State Water Commission. Secretary Sprynczynatyk shall receive salary increases approved by the legislature for state employees.

**INQUIRY BY COMMISSIONER
DEWITZ RELATIVE TO POSSIBLE
CONFLICT OF INTEREST**

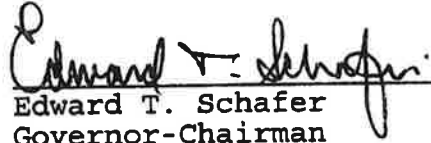
Secretary Sprynczynatyk stated that when Commissioner Dewitz was appointed by Governor Schafer to serve as a member of the State Water Commission, it was realized there could be a possible conflict of interest since Commissioner Dewitz has, since 1984, worked under contract for the State Water Commission monitoring groundwater observation wells. Commissioner Dewitz is currently under contract with the State Water Commission until December, 1993 to provide data collection services.

Secretary Sprynczynatyk explained that although these contracts are between Commissioner Dewitz and the State Water Commission, they have never been approved by the Commission. Instead, they have been signed by the State Engineer on behalf of the Commission. Secretary Sprynczynatyk stated he has asked Julie Krenz, Assistant Attorney General, to review the situation to determine whether there is a conflict of interest if Commissioner Dewitz serves as a water commissioner while remaining under contract with the Water Commission.


**NEXT STATE WATER
COMMISSION MEETING**

The next meeting of the State Water Commission is scheduled for August 26, 1993, in Bismarck, ND.

There being no further business to come before the State Water Commission, it was moved by Commissioner Vogel, seconded by Commission Thompson, and unanimously carried, that the State Water Commission meeting adjourn at 11:45 AM.


Edward T. Schafer
Governor-Chairman

SEAL


David A. Spryoczynatyk
State Engineer and
Chief Engineer-Secretary

July 2, 1993 - 94



North Dakota State Water Commission

900 EAST BOULEVARD • BISMARCK, ND 58505-0850 • 701-224-2750 • FAX 701-224-3696

Meeting To Be Held At
Elks Lodge
1216 Old Highway 2 East
Devils Lake, North Dakota

July 2, 1993
8:30 AM, Central Daylight Time

AGENDA

- A. Roll Call
- B. Approval of Agenda
- C. *Consideration of Minutes of June 9, 1993 Telephone Conference Call Meeting* **
- D. *Agency Financial Statement:*
 - 1) *Agency Operations* **
 - 2) *Resources Trust Fund/Contract Fund* **
 - 3) *1993-1995 Biennium Budget* **
- E. *Allocation of 1993-1995 Resources Trust Fund* **
- F. *Southwest Pipeline Project:*
 - 1) *Project/Construction Status Report* **
 - 2) *Dickinson Water Treatment Plant Upgrade* **
 - 3) *Rural Water Design Criteria* **
 - 4) *Sole Source Agreements* **
- G. *Consideration of Following Cost Sharing Requests:*
 - 1) *North Loma Drain - Cavalier County* **
 - 2) *Washington, DC Liaison-Garrison Conservancy District* **
- H. Baldhill Dam Safety Project
- I. Drought Disaster Livestock Water Assistance Program **
- J. *Comprehensive State Wetlands Conservation Plan Update* **

AGENDA - PAGE 2

K. Missouri River Update **

L. *Other Business:*

 1) *Resolutions of Appreciation* **

M. Adjournment

* * * * *

** MATERIAL PROVIDED IN BRIEFING FOLDERS

ITALICIZED, BOLD-FACED ITEMS REQUIRE SWC ACTION

If auxiliary aids or services such as readers, signers, or Braille material is required, please contact the North Dakota State Water Commission, 900 East Boulevard, Bismarck, North Dakota 58505; or call (701) 224-4940 at least five (5) working days prior to the meeting. TDD phone number is (701) 224-3696.

NORTH DAKOTA STATE WATER COMMISSION

REGISTER

ATTENDANCE AT State Water Commission Meeting

DATE July 2, 1993 PLACE Devils Lake W.D.

PROJECT NO. _____

Your Name	Your Address	Who do you Represent? (Or Occupation)
Ray Horne	D. Lake	D. LAKE BASIN
Willie Mastel	Dickinson	SW W Authority
Mike Dwyer	Bismarck	NA Water Users
Gene Krenz	"	Water Commission
Mary Thompson	Page	
Lee Klapprodt	Bismarck	SWC
Chuck Rydell	BISMARCK	STATE WATER COMMISSION
Tim Fay	Bismarck	SWC STAFF
MERLE HUNTER	DEVILS LAKE	RAMSEY CO. WRO
Donna Pass	" "	" " off-sec.
GARLAND HOISTAD	Churchs Ferry, ND	FARMER

APPENDIX "A"

July 2, 1993

STATE WATER COMMISSION
PROGRAM BUDGET EXPENDITURES MAY 31, 1993
BIENNIUM TIME 95.8%

FINANCIAL STATEMENT
SWC File #C5-1.4
06-15-1993

AGENCY PROGRAM	SALARIES & WAGES	INFORMATION SERVICES	OPERATING EXPENSE	EQUIPMENT	CONTRACTS	PROGRAM TOTAL
Administration						
Budget	\$584,488	\$81,133	\$305,242	\$25,200	\$0	\$996,063
Expended	\$547,859	\$67,505	\$255,933	\$23,644	\$0	\$894,941
Percent	94	83	84	94	0	90
Water Education						
Budget	\$599,097	\$0	\$157,532	\$6,000	\$130,100	\$892,729
Expended	\$561,729	\$0	\$131,566	\$5,527	\$49,371	\$748,192
Percent	94	0	84	92	38	84
Water Appropriation						
Budget	\$2,138,156	\$24,192	\$462,824	\$161,000	\$760,946	\$3,547,118
Expended	\$1,930,842	\$11,409	\$391,554	\$142,963	\$765,088	\$3,241,856
Percent	90	47	85	89	101	91
Water Development						
Budget	\$2,451,105	\$3,500	\$385,367	\$106,800	\$13,957,514	\$16,904,286
Expended	\$2,276,134	\$1,763	\$322,260	\$105,211	\$5,953,166	\$8,658,534
Percent	93	50	84	99	43	51
Atmospheric Resources						
Budget	\$344,592	\$27,175	\$1,229,220	\$11,872	\$3,050,000	\$4,662,859
Expended	\$307,383	\$11,433	\$804,127	\$6,290	\$882,361	\$2,011,594
Percent	89	42	65	53	29	43
Southwest Pipeline						
Budget	\$614,047	\$8	\$3,772,489	\$131,100	\$27,240,000	\$31,757,644
Expended	\$502,205	\$0	\$2,920,388	\$81,588	\$9,520,514	\$13,024,696
Percent	82	0	77	62	35	41
Contract Carryover						
Budget	\$0	\$0	\$0	\$0	\$2,769,132	\$2,769,132
Expended	\$0	\$0	\$0	\$0	\$545,515	\$545,515
Percent	0	0	0	0	20	20
Agency Totals						
Budget	\$6,731,485	\$136,008	\$6,312,674	\$441,972	\$47,907,692	\$61,529,831
Expended	\$6,126,152	\$92,110	\$4,825,828	\$365,222	\$17,716,015	\$29,125,327
Percent	91	68	76	83	37	47
FUNDING SOURCE:	APPROPRIATION	EXPENDITURES	BALANCE	FEDERAL FUND INCOME:	\$14,501,202	
General Fund	\$5,809,811	\$4,849,366	\$960,445	SPECIAL FUND INCOME:	\$10,868,011	
Federal Fund	\$34,966,595	\$14,840,189	\$20,126,406	TOTAL:	\$25,369,213	
Special Fund	\$20,753,417	\$9,435,773	\$11,317,644			
TOTAL	\$61,529,823	\$29,125,327	\$32,404,495			

STATE WATER COMMISSION
1991 - 1993 Grants

Approved by SWC: 09-15-92

	RTF	General Funds	Other Funds	Reimbursement	Totals
MR&I Program (Fed FY 93)	\$7,501,441			\$1,219,490	\$8,720,931
Maple River Dam	\$500,000				\$500,000
Southwest Pipeline	\$0			\$2,384,219	\$2,384,219
General Projects	\$739,915		\$40,000		\$779,915
EPA Wetlands Grant			\$291,825		\$291,825
Devils Lake Feas. St	\$500,000				\$500,000
Na chiin Huun-Dakota	\$50,000				\$50,000
Souris River FC	\$1,637,924				\$1,637,924
Drought Livestock Prog.	\$300,000				\$300,000
Hydrologic Invest	\$486,446		\$274,500		\$760,946
Biota Transfer Studies		\$100,000			\$100,000
SWC Grants Totals	\$11,715,726	\$100,000	\$606,325	\$3,603,709	\$16,025,760

APPROVD BY	SWC No.	NAME	Date Approved	Amount Approved	Payments	Balance
WATER DEVELOPMENT DIVISION						
		MR&I Program				
		Unallocated Balance		\$0.00		\$0.00
SWC	237-5	Ramsey Co Rural Water	9-15-92	\$3,489,596.00	\$2,345,053.84	\$1,144,542.16
SWC	237-12	Agassiz Rural Water (Final)	3-13-91	204,750.00	204,750.00	0.00
SWC	237-15	North Valley Water Assoc (Final)	9-17-91	496,800.00	490,527.05	6,272.95
SWC	237-17	Tri-County Rural Water (Final)	9-15-92	120,480.00	114,258.46	6,221.54
SWC	237-27	Missouri West	9-15-92	2,625,565.00	541,855.86	2,083,709.14
SWC	237-38	Grandin (Final)	3-13-91	36,190.00	28,136.59	8,053.41
SWC	237-40	Kindred (Final)	9-15-92	36,050.00	30,151.41	5,898.59
SWC	237-36	Stanley	10-21-91	1,011,500.00	183,938.24	827,561.76
SWC	237-42	Garrison Rural Water	9-15-92	700,000.00	43,723.86	656,276.14
		MR&I SUBTOTAL		\$8,720,931.00	\$3,982,395.31	\$4,738,535.69
SWC	237-4	Na Chinn Hunn-Dakota (NAWS)	2-04-92	\$50,000.00	\$0.00	\$50,000.00
SWC	416	Devils Lake Flood Control	2-04-92	500,000.00	0.00	500,000.00
SWC	1344	Maple River Flood Control	2-04-92	500,000.00	67,041.00	432,959.00
SWC	1798	Souris River Flood Control	2-04-92	1,637,924.00	1,637,923.50	0.50
SWC	1736	Southwest Pipeline Project	2-04-92	2,384,219.00	2,384,219.00	0.00
SWC	1851	Drought Livestock Program	6-24-91	300,000.00	255,553.00	44,447.00
		SUBTOTAL		\$5,372,143.00	\$4,344,736.50	\$1,027,406.50
EPA Wetlands Grant						
		Unallocated Balance		\$0.00		\$0.00
SWC	1489-5	Wetlands Education	9-15-92	\$77,550.00	\$23,725.56	\$53,824.44
		Technical Services		14,400.00	5,527.50	8,872.50
		Water Quality Analysis		14,325.00	0.00	14,325.00
		Grand Harbor		71,775.00	2,051.72	69,723.28
		Adopt-a-Pothole		24,000.00	0.00	24,000.00
		Private Lands		31,950.00	4,995.26	26,954.74
		Devils Lake Basin		48,825.00	21,164.67	27,660.33
		Attorney General		9,000.00	1,951.48	7,048.52
		GRANT TOTAL		\$291,825.00	\$59,416.19	\$232,408.81

STATE WATER COMMISSION
1991 - 1993 Grants

Page 2
15-JUN-1993

APPROVD BY	SWC No.	NAME	Date Approved	Amount Approved	Payments	Balance
		Unallocated Balance		\$58,096.00	\$0.00	\$58,096.00
SWC	237	Garrison Consultant	8-22-91	\$40,000.00	\$32,051.42	\$7,948.58
SE	237	Water/Wildlife Program		\$1,160.00	\$1,154.00	\$6.00
SWC	237	Garrison Coalition	12-19-92	\$10,000.00	\$0.00	\$10,000.00
SWC	237-99	Miller:P/E (F)	2-08-93	\$20,000.00	\$20,000.00	\$0.00
SE	237-99	Miller:P/E II	4-01-93	\$10,000.00	\$0.00	\$10,000.00
SWC	300	Baldhill Dam	9-15-92	\$184,000.00	\$0.00	\$184,000.00
SWC	322	Planning Consultant	6-24-91	\$26,100.00	\$26,999.28	-\$899.28
SWC	416	Devils Lake Water Quality (F)	12-20-91	\$19,800.00	\$19,800.00	\$0.00
SE	475	Golden Lake (F)	2-09-93	\$865.00	\$865.00	\$0.00
SWC	662	Snag & Clear Park River	4-02-92	\$14,958.00	\$4,841.00	\$10,117.00
SWC	662	Snag & Clear Park River #2	5-23-92	\$4,625.00	\$0.00	\$4,625.00
SE	847	Absarraka Dam (F)	12-10-91	\$2,098.00	\$2,098.00	\$0.00
	988	Antelope Creek Cleanout (F)	1-07-92	\$2,400.00	\$1,778.00	\$622.00
	1217	Tri-County Drain #6 (F)	12-10-91	\$1,556.00	\$1,556.00	\$0.00
SWC	1280	Turtle River Snag & Clear (F)	2-05-92	\$438.00	\$438.00	\$0.00
	1311	Trails County (Elm)	9-15-92	\$5,590.00	\$0.00	\$5,590.00
	1311	Trails County (Bing)	9-15-92	\$4,900.00	\$0.00	\$4,900.00
SWC	1346	Mount Carmel	4-02-92	\$14,350.00	\$9,955.00	\$4,395.00
SWC	1389	Irrigation District (F)	4-02-92	\$2,000.00	\$2,000.00	\$0.00
SWC	1496	Lake Elsie		\$11,500.00	\$0.00	\$11,500.00
SE	1751-G	Williston Floodplain	2-24-93	\$1,000.00	\$0.00	\$1,000.00
	1588-1	International Coalition (F)	2-04-92	\$5,000.00	\$5,000.00	\$0.00
	1701	Statewide Communication Plan (F)	2-04-92	\$15,000.00	\$15,000.00	\$0.00
	1701	UNET/Barkaw Visit Walsh (F)	8-01-91	\$1,464.00	\$1,464.00	\$0.00
	1701	UNET/Walsh Co (F)	6-23-92	\$3,139.00	\$3,139.00	\$0.00
	1730	Section 22 (FY 92) (F)	2-04-92	\$32,300.00	\$32,300.00	\$0.00
SE	1730	Section 22 (FY 91) (F)	8-29-91	\$3,500.00	\$3,500.00	\$0.00
SE	1730	Section 22 (FY 92) Parshall (F)	7-28-92	\$3,562.50	\$3,562.50	\$0.00
SE	1730	Section 22 (FY 92) Washburn (F)	5-29-92	\$1,687.50	\$1,687.50	\$0.00
SWC	1730	Section 22 (FY 93)	4-06-93	\$10,000.00	\$0.00	\$10,000.00
SE	1751-H	Lower Forest River FP		\$5,200.00	\$0.00	\$5,200.00
SE	1791	TRS 5% Cost Share (F)	5-30-91	\$9,400.00	\$9,400.00	\$0.00
SWC	1802	Lake Irvine Outlet Structure	2-04-92	\$26,900.00	\$2,000.00	\$24,900.00
SWC	1804	Grand Harbor (F)	4-02-92	\$5,500.00	\$5,500.00	\$0.00
SWC	1804	Grand Harbor #1	4-06-93	\$68,826.00	\$0.00	\$68,826.00
SWC	1803	Belfield Flood Control	12-20-91	\$38,800.00	\$0.00	\$38,800.00
SE	1813	Cass County Snagging & Clearing	11-25-91	\$3,750.00	\$3,425.00	\$325.00
SWC	1815-4	Sheyenne Snagging & Clearing	12-09-92	\$4,836.00	\$0.00	\$4,836.00
SWC	1816-3	Sheyenne Snagging & Clearing (F)	12-20-91	\$5,508.00	\$4,595.00	\$913.00
SWC	1816-4	Sheyenne Snagging & Clearing (F)	12-09-92	\$3,000.00	\$3,000.00	\$0.00
SWC	1822	Devils Lake Hydraulic Study (F)	4-06-93	\$15,000.00	\$15,000.00	\$0.00
SWC	1826	Wetlands	4-06-93	\$10,000.00	\$0.00	\$10,000.00
SWC	1842-3	Wild Rice Snagging & Clearing III	2-04-92	\$31,000.00	\$13,277.00	\$17,723.00
SWC	1842-4	Wild Rice Snagging & Clearing	12-09-92	\$725.00	\$0.00	\$725.00
SE	1852	Water Strategy TF	4-26-91	\$13,056.00	\$12,083.86	\$972.14
SE	1859	Water Quality Task Force	11-25-91	\$1,000.00	\$445.34	\$554.66
SWC	1865	Belfield Dam	4-02-92	\$11,000.00	\$1,030.80	\$9,969.20
SWC	1868-3	Wild Rice Snagging & Clear (F)	12-09-92	\$2,600.00	\$352.00	\$2,248.00
SWC	1868	Wild Rice Snagging & Clear (F)	12-20-91	\$12,725.00	\$994.00	\$11,731.00
GENERAL PROJECTS SUBTOTAL				\$779,915.00	\$260,291.70	\$519,623.30
DIVISION TOTALS				\$15,164,814.00	\$8,646,839.70	\$6,517,974.30

	PLANNING & EDUCATION DIVISION				
1828	Biota Transfer Studies		\$100,000.00	\$77,464.79	\$22,535.21
	WATER APPROPRIATION DIVISION				
1395	USGS Coop Program		\$460,000.00	\$419,528.05	\$40,471.95
1854	Project Contracts		\$300,946.00	\$249,521.88	\$51,424.12
	Division Totals		\$760,946.00	\$669,049.93	\$91,896.07
SWC GRANT LINE TOTALS (Water Development, Water Appropriations & Planning)			\$16,025,760.00	\$9,393,354.42	\$6,632,405.58

July 2, 1993

STATE WATER COMMISSION

1993-95 BIENNium BUDGET

AGENCY PROGRAM	SALARIES WAGES	INFORMATION SERVICES	OPERATING EXPENSES	EQUIPMENT	GRANTS/ CAP. IMPR.	SPECIAL ** COOP RES	PROGRAM TOTAL
ADMINISTRATION DIVISION							
PRESENT *	\$584,488	\$81,133	\$305,242	\$25,200	-	-	\$996,063
REQUESTED	\$620,857	\$88,925	\$321,954	\$22,300	-	\$13,433	\$1,067,469
1993-1995	\$633,590	\$75,792	\$279,937	\$3,000	-	-	\$992,319
PLANNING & EDUCATION DIVISION							
PRESENT *	\$599,097	-	\$157,532	\$6,000	\$130,100	-	\$892,729
REQUESTED	\$611,598	-	\$206,933	\$16,750	\$100,000	-	\$935,281
1993-1995	\$624,858	-	\$142,264	\$12,750	\$25,000	-	\$804,872
WATER APPROPRIATION DIVISION							
PRESENT *	\$2,138,156	\$24,192	\$462,824	\$161,000	\$760,946	-	\$3,547,118
REQUESTED	\$2,148,038	\$5,455	\$472,370	\$72,000	\$660,000	\$63,520	\$3,421,383
1993-1995	\$2,178,891	\$3,955	\$415,264 #	\$33,000	\$660,000	-	\$3,291,110
WATER DEVELOPMENT DIVISION							
PRESENT *	\$2,451,105	\$3,500	\$385,367	\$94,900	\$16,726,646	-	\$19,661,518
REQUESTED	\$2,534,097	\$2,500	\$391,700	\$132,100	\$3,712,509	\$59,400	\$6,832,306
1993-1995	\$2,486,884	\$2,500	\$323,464 #	\$57,100	\$8,612,509	-	\$11,482,457
ATMOSPHERIC RESOURCES DIVISION							
PRESENT *	\$344,592	\$27,175	\$1,229,220	\$11,872	-	\$3,050,000	\$4,662,859
REQUESTED	\$378,303	\$13,000	\$1,829,521	\$18,372	-	\$3,057,940	\$5,297,136
1993-1995	\$384,452	\$11,500	\$1,700,701	\$10,500	-	\$3,050,000	\$5,157,153
SOUTHWEST PIPELINE PROJECT							
PRESENT *	\$614,047	-	\$3,772,489	\$143,000	\$27,240,000	-	\$31,769,536
REQUESTED	\$652,525	-	\$3,597,298	\$110,000	\$27,600,000	\$19,722	\$31,979,545
1993-1995	\$736,047	-	\$4,617,020 ##	\$110,000	\$26,600,000	-	\$32,063,067
TOTAL							
PRESENT *	\$6,731,485	\$136,000	\$6,312,674	\$441,972	\$44,857,692	\$3,050,000	\$61,529,823
REQUESTED	\$6,945,418	\$109,880	\$6,819,776	\$371,522	\$32,072,509	\$3,214,015	\$49,533,120
1993-1995	\$7,044,722	\$93,747	\$7,478,650	\$226,350	\$35,897,509	\$3,050,000	\$53,790,978

FUNDING SOURCE	PRESENT BUDGET	REQUESTED BUDGET	1993-95 APPROVED
GENERAL FUNDS	\$5,809,811	\$6,623,834	\$5,532,084
FEDERAL FUNDS	\$34,966,595	\$32,654,911	\$32,775,404
OTHER FUNDS	\$20,753,417	\$10,254,375	\$15,483,490
TOTAL	\$61,529,823	\$49,533,120	\$53,790,978

* REFLECTS REDUCTION IN GENERAL FUNDS OF \$20,942 AS PER OMB DIRECTIVE AND INCREASE IN FEDERAL FUNDS OF \$47,600 AS PER EMERGENCY COMMISSION ACTION ON AUG 5, 1992

** "SPECIAL/COOP RES" REFERS TO SPECIAL LINE ITEM FUNDING FOR INTERAGENCY LEGAL FEES AND COOPERATIVE RESEARCH FUNDING.

INCLUDES \$6,764 FOR INDIRECT COSTS OF WHICH \$6,900 OF \$13,528 ARE SPECIAL FUNDS AND \$6,628 ARE FEDERAL FUNDS.

INCLUDES \$10,278 IN FEDERAL FUNDS FOR INDIRECT COSTS.

MAY 27, 1993

RURAL WATER DESIGN CRITERIA SUMMARY**I. FLOW CRITERIA, DESIGN UNIT CAPACITY, AND USER CLASSIFICATION.**

The base design flow unit is 720 gallons per day per equivalent hookup. This flow unit does not include any provision for fire protection or for growth. Fire departments can be allowed to use water from the lines, although pumper trucks should not be used, but those demands are not designed into the system. Capacity for growth is accommodated by including one-half of the potential users who do not sign up in the design.

II. WATER SUPPLY.

The design flows for the Dickinson pump station, which will serve all the project except the city of Dickinson, will total 4,167 gallons per minute, distributed as follows:

West - 900 gpm
South - 2200 gpm
North - 1067 gpm

III. TRANSMISSION FLOW.

Transmission flow will be .5 gallon per minute for each equivalent hookup. Contract users will have an individually determined flow rate.

IV. PEAK INSTANTANEOUS FLOW.

Peak instantaneous flows will be determined by one of two formulas, depending on the number of equivalent hookups in the service area. For areas with less than or equal to 25 users the formula is:

$Q_p = 9N + C$ where Q_p is the peak flow, N is the number of users, and C is the peak flow rate for contract users

For areas with more than 25 users, the formula is:

$Q_p = 0.9N + 22.5 + C$

V. WATER STORAGE.

The system will be designed to operate on gravity storage rather than open-loop pumping wherever feasible. Storage tanks will be provided in each of the major service areas. These tanks will be either elevated, standpipes, or reservoirs, depending of case

specific requirements. Construction will be glass lined bolted steel or painted welded steel. Each tank will be equipped with a buried prefabricated steel control vault containing telemetry equipment level transmitters and environmental control equipment. Gravel access roads will be provided and site fencing will be considered on a case-by-case basis, as will insulation of tanks. Elevated tanks will be provided with insulation and water heater recirculation systems for the riser pipes.

Total storage will be the sum of peak equalization storage, operational storage, and reserve storage.

A. Peak Equalization Storage.

Peak equalization storage will be based on the assumption that users may be served on a demand basis during an 800 minute period of each day. Therefore, during the period of the day when demand exceeds transmission capacity of the line, water must be withdrawn from the tank. The storage required for this demand is:

$$Sp=320N$$

Where Sp is the peak equalization storage required, and N is the number of users.

B. Operational Storage.

This is the storage which is used between start of a demand and beginning of a transmission flow, or that which is held in reserve for pump shutoff. It is set to minimize excessive pump cycling and to allow tolerances for control equipment.

C. Reserve Storage.

This amount is provided to allow service in the event transmission is interrupted temporarily. It is equal to one-half of the design day's water use for the users in the service area, including constant flow users.

VI. OPERATING PRESSURE.

The minimum operating pressure will be 20 psi at maximum use with the storage tank at the bottom of the peak equalization storage zone.

The maximum design operating pressure is related to the piping material. Pressure in pipe manufactured to ASTM specification D-2241 will be limited to 2/3 of the pipe pressure rating. Pressure in pipe manufactured to AWWA specification C900 will be

limited to the pipe's pressure rating. No surge analysis will be performed on rural distribution lines.

All rural services will be equipped with pressure reducing valves which will limit pressure to the user to 45 psi.

VII. PIPE MATERIAL.

A. Plastic Pipe.

PVC pipe manufactured to ASTM Specification D-2241 or AWWA Specification C900 will be used. A program of testing pipe materials is recommended. This program would include dimensional measurements, extrusion quality testing by acetone immersion, and impact testing.

B. Plastic Pipe Joints.

Gasket type joints using either couplings or integral bells will be used. Field-assembled solvent welded joints will not be permitted.

C. Ductile Iron Pipe.

Ductile iron pipe may be required in high-pressure areas. When used, it will conform to AWWA standard C151. Gasketed joints will be used, and polyethylene encasement will be provided to mitigate corrosion. Mortar lining in accordance with AWWA standard C104 will be required. Consideration will be given to cathodic protection on a case-by-case basis.

VIII. PIPE INSTALLATION.

Pipe will be installed by trenching or backhoe. Plowing will not be used. Pipe will be laid on a flat bottom trench with loose backfill (Class D embedment). Bedding will consist of fine, loose native earth material that is free from stones, hard or frozen clods, or other material that may damage the pipe. Bedding will be placed to a depth not less than 9 inches above the top of the pipe. The remainder of the trench backfill will be made of non-compacted fill material which will be free of rock over 12 inches. Stripping and segregation of trench area topsoil will not be required for piping installed by trencher. For piping and appurtenances installed by backhoe topsoil stripping and segregation will be required.

IX. LINE AND GRADE/DEPTH OF COVER.

Pipe will be laid to a smoothly graded vertical profile with a minimum depth of cover specified over the top of the pipe. For PVC main lines minimum cover will be 7 feet, and service lines will have a minimum cover of 7-1/2 feet.

Construction drawings will show only the plan view, with horizontal alignment staked in the field. Horizontal alignment will normally parallel existing features such as fence lines or road right-of-ways and will not be surveyed.

X. APPURTENANCES AND CROSSINGS.

A. Pump Stations.

Pump stations will be located to maintain storage tank water levels. They will be housed in buried steel vaults containing 2 electrically powered pumps, each sized to deliver the design flow. They will be controlled by telemetry, and equipped with electric pump control valves, extreme pressure shutoff protection, and environmental control equipment.

Hydro-pneumatic and open-loop pump stations, if required for specific applications will be designed according to case-specific requirements.

B. Pressure Reducing Valves.

Pressure reducing valves will be used where appropriate to limit pipe pressures. They will be housed in buried vaults or manholes.

C. Master Meters.

Contract and special users will be provided with master meters. Larger sized master meters will be housed in buried vaults and will contain flow rate/pressure control devices and controls connecting to the user's existing system. Where a control system is not required, master meters may be located in concrete manholes without environmental controls.

D. Telemetry Controls.

Pump stations and storage tanks will be equipped with telemetry controls contained in remote terminal units similar and compatible with the existing telemetry equipment. These locations will be integrated into the existing transmission system controls.

E. Line Valves.

In-line valves will be buried and located at intervals of no more than 5 miles on transmission lines and at all branches off transmission lines. They will also be provided downstream of all junction points in the distribution system and on all service lines. Valves will be resilient seat gate valves for the distribution system and ball valves for service lines.

F. Air Release/Vacuum Valves.

Automatic air release valves will be provided at selected prominent high points. Combination air release/vacuum valves will only be provided on pumping lines. If, after operation begins, it is found that additional air valves are needed, they can be installed at that time.

G. Blowoffs, Cleanouts, and Flush Hydrants.

Blowoffs and flush hydrants will be located at selected low points along the larger pipelines. Flush hydrants will also be provided at storage tanks. Cleanouts will be provided at the ends of selected distribution lines and at the ends of all branch lines.

H. Service Meters.

All users will be provided with a meter box, a 5/8" X 3/4" sealed register water meter and a meter setting containing a 3/4-inch pressure regulator, a shut off valve, and a backflow preventing device. The meter box will be installed at or near the edge of the yard area of the user. The user will be responsible for connecting the meter box to his service. Livestock user hookups will be served at a point just within the property, not to exceed 325 feet of service line.

I. State Highway Crossings.

All state highway crossings will be bored and jacked with encasement from inslope to inslope. All Department of Transportation requirements will be followed.

J. Railroad Crossings.

Railroad crossings will be bored and jacked with encasement provided in accordance with the crossing permit.

K. County Road Crossings.

Paved roads will be crossed by boring and jacking and will be in compliance with the requirements of the county permits. Unpaved gravel or dirt roads will be crossed either by boring or by trenching with mechanical compaction required.

L. Stream Crossings.

Designated intermittent stream crossings will be crossed using restrained joint PVC piping extending a minimum of 20 feet each side of the bank. Other permit requirements will be followed.

M. Sewer Crossings.

Any sewer crossings will be made in accordance with provisions of the Department of Health and Consolidated Laboratories.

N. Pipeline Marking.

Pipe routes will be marked by signs at fence line crossings. In congested areas, detectable pipeline marker tape will be installed above the pipe. Field ties to pipe valves, and other appurtenances will be recorded on the record drawings at the time of construction.

XI. DESIGN LIFE.

The design life will be considered to be from 30 to 40 years.

RESOLUTION NO. 09-93APPENDIX "E"
July 2, 1993**A RESOLUTION REQUESTING RECONSIDERATION OF CERTAIN PROVISIONS OF THE WATER SERVICE CONTRACT (SWC-1736-3) OF 1982 AND CONCERNING LAKE PATTERSON AND THE BASCULE GATES.**

WHEREAS, the Board of City Commissioners of the City of Dickinson and the State Water Commission entered into Southwest Water Pipeline Water Service Contract No. SWC-1736-3 in 1982; and

WHEREAS, at the time the Contract was entered into, it was anticipated that the facility would be used for supplementation of the water supply of the area of North Dakota south and west of the Missouri River; and

WHEREAS, since completion of the pipeline, the City of Dickinson has been the sole user of the Southwest Pipeline for more than two years and has paid all of the OM&R costs for the project; and

WHEREAS, the Southwest Pipeline is currently the sole source of municipal water for the City of Dickinson; and

WHEREAS, the City of Dickinson has the highest water rates in the State of North Dakota; and

WHEREAS, the State Water Commission may decrease the CPI adjustment to the water rate for capital costs as it deems appropriate pursuant to paragraph VII.E.2. of the Contract; and

WHEREAS, the Board of City Commissioners of the City of Dickinson entered into a Repayment Contract with the Bureau of Reclamation in December, 1988, for the construction of the Bascule gates. The maintenance cost and repayment of the Bascule gates constitutes maintaining an alternative water supply which the City of Dickinson cannot support given the present water rates. The City has contacted the Bureau of Reclamation to attempt to negotiate a reduced payment or a transfer of ownership of the Bascule gates and Lake Patterson; and

WHEREAS, the State Water Commission, the City of Dickinson and all of Southwestern North Dakota would benefit if the State Water Commission obtained ownership of Lake Patterson to be used as a recreational facility and an alternate municipal water supply.

NOW THEREFORE, IT IS HEREBY RESOLVED that the State Water Commission be requested to do the following:

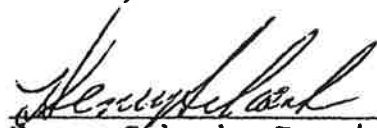
1. Eliminate the annual CPI increase to the repayment rate for capital costs pursuant to paragraph VII.E.2. of Contract No. SWC-1736-3. The City does not receive the same consideration on the capital credits received or on any debt service. This increase imposes an unfair burden on water users, and may cause the City to increase water rates again.

2. Reconsider the amount of the cap on the replacement fund. Being the only user for more than two years, the City of Dickinson will have contributed a disproportionate share to this fund.

3. Negotiate with the U.S. Bureau of Reclamation for the acquisition and settlement of the Dickinson Dam and Bascule gates project to be maintained by the State of North Dakota for a back-up water supply for southwestern North Dakota.

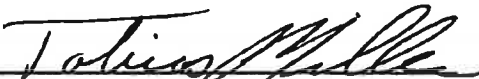
Dated this 21st day of June, 1993.

CITY OF DICKINSON, NORTH DAKOTA



Henry Schank, President
Board of City Commissioners

ATTEST:


Tobias Miller, City Auditor

APPENDIX "F"
July 2, 1993

Office of the State Engineer

MEMORANDUM

TO: Governor Edward T. Schafer
State Water Commission Members

FROM: *David* David A. Sprynczynatyk, State Engineer

SUBJECT: State Wetlands Conservation Plan

DATE: June 18, 1993

This memo is provided to give you an update on the grant EPA has awarded to the State Water Commission to aid development of a state wetlands conservation plan. Specifically, it is EPA grant #CD998003-01 begun in FY '92. This grant, approved in September, 1992, totals \$606,300 with a requirement for a 75/25 cost share.

As approved, the grant supports a number of tasks required in formulating a workable state wetlands conservation plan. The centerpiece of North Dakota's wetlands conservation initiatives and one of the primary goals in developing North Dakota's Comprehensive Wetlands Conservation Plan is the overall no-net loss of wetlands. This goal is consistent with the recommendations of the National Wetlands Policy Form. The current effort under the FY '92 grant will:

- * continue wetlands education program development;
- * position the state to assume federal Clean Water Act, Section 404 regulatory responsibilities;
- * evaluate geographic information system technology in managing wetlands resources;
- * advance state wetlands water quality standards;
- * advance the state private lands initiative program; and
- * support watershed demonstration projects in the Grand Harbor watershed and Devils Lake Basin including the adopt-a-pothole program.

Work accomplished on each task is summarized as follows:

Wetlands Education Program -

An agreement was entered into between the State Water Commission and the North Dakota Water Users Association to continue development of the state's wetlands education program.

One of the objectives of this phase of the Wetlands Education and Information Program was to establish a North Dakota Wetlands Institute. The North Dakota Wetlands Institute has been created as a division of the State Water Education Foundation, a non-profit organization in North Dakota with 501 (c) (3) designated tax status.

The Wetlands Institute was created for the purpose of serving as a clearing house for wetlands information; assisting in coordination between state, federal and local agencies and organizations; providing an ongoing forum for public input on wetlands issues and policies; and sponsoring the development of wetlands activity guides, wetlands demonstration days, and other programs to enhance wetlands education and information in North Dakota.

Attachment number one provides a discussion of the progress made in creating the Wetlands Institute and other tasks such as crating a Wetlands Demonstration Field Day Program. The attachment also discusses the development of a teachers Wetlands Discover Guide through a writing workshop.

As part of this effort, the North Dakota Wetlands Institute and Information Program is preparing a North Dakota Guide to Wetlands which will provide basic information on the state's wetlands, identify contacts, outline wetlands policy, discuss Section 404 and Swampbuster, and list wetlands incentive programs. North Dakota's no-net loss of wetlands program and wetlands cooperative solutions will be included in this comprehensive guide.

We are pleased to report that North Dakota Wetlands Information and Education Program is beginning to provide results. The 1993 Legislative Session did not consider legislation to repeal North Dakota's no-net loss of wetlands program. This is clear evidence that there is increasing legislative and public awareness concerning wetland issues and solutions.

Section 404 Assumption -

The State Water Commission is working with the State Attorney General's office to position North Dakota to assume Section 404 regulatory responsibilities. The major objective is to identify and initiate necessary administrative changes associated with assuming the Section 404 permit program. This process has been divided into four specific tasks: 1) legal research to determine legislation required to assume Section 404 as a state program; 2) draft legislation to be introduced to the North Dakota State Legislature; 3) draft agreements required for state assumption; and 4) draft administrative rules.

The North Dakota Attorney General has assigned an attorney to work with the State Engineer's staff on these tasks. Task one has been completed. Under Task two, legislation was drafted, and submitted to the North Dakota state legislature as a State Water Commission agency bill draft. The bill ultimately passed the legislature and was signed by Governor Schafer.

Work on Tasks three and four has begun. Actually, task four is being pursued first. In accomplishing the development of administrative rules it will be necessary to adopt a major outreach program. This program will permit broad input into the decision making process. A draft outline for the outreach program has been developed by a mutli-agency group. Implementation of the outreach program is awaiting formal approval by the State Water Commission.

As administrative rules near final draft status, work will focus on preparing agreements with EPA and the U.S. Army Corps of Engineers required for the state assumption.

GIS Development and Evaluation -

The State Water Commission's objective in this task is to evaluate the ability to enhance wetland regulatory programs with computer mapping and geoprocessing capabilities, also known as a geographic information system (GIS). Specifically, the ability to improve tracking wetland losses and gains which would result in better and more objective decision-making in the management of wetlands.

A State Water Commission staff member, Stan Hanson, has been assigned this task. Thus far, the State Water Commission has acquired the necessary hardware and software; trained personnel to operate the system; and obtained digital spatial data from various agencies.

Specific system acquisitions include an additional central processing unit with additional memory and storage added to the agencies' AViiON, a Data General mini-computer system. Adding capacity to the State Water Commission's existing system was favored over a new, single workstation due to lower initial cost and ample system expandability. The Geographical Resource Analysis Support System (GRASS) GIS software package was acquired and loaded onto the computer system. This package was chosen because it has a low initial cost and a more reasonable learning curve than other packages reviewed. A Tektronix Phaser III PXi color printer was purchased as a system output device. This printer allows the use of most types of paper up to 12" x 18" in size.

Dynamic Decision International, a GIS consulting firm, provided one week of onsite training specific to the GRASS GIS software package. Training covered basic GIS analysis, GRASS command usage, and maintenance of the system. A special presentation was made to several State Water Commission employees to

familiarize them with GIS technology and application in natural resource management.

The State Water Commission has obtained digital spatial data from numerous state and federal agencies. Examples are topographic mapping, soils survey data, National Wetlands Inventory, hydrology features, vegetation cover, and land use.

Stutsman County located in central North Dakota has been chosen for the initial system evaluation because a large amount of digital spatial data is currently available for portions of that area. A map identifying the test area is attached. This map is a product of the new GIS system.

This evaluation of GIS technology as it applies to wetland management will be documented in North Dakota's Comprehensive Wetland Conservation Plan. Recommendations for expanded use of this technology in managing wetlands across North Dakota are expected to result for this evaluation process.

State Wetland Water Quality Standards -

An agreement was entered into between the State Water Commission and the North Dakota Department of Health and Consolidated Laboratories who will conduct this work.

The Department has assigned a staff person to the project. This person is continuing a literature search on wetland related water quality data. Hard copies of pertinent information will be summarized and kept on file in the Department's offices.

Thus far the majority of classification systems published since 1953 that are applicable to the prairie pothole region have been reviewed. Personal notes pertaining to each system have been compiled and documented on computer disk. A sample of the final document containing a list of fourteen classification systems along with a short paragraph describing the major indicators used in each has been completed. The final number of systems to be evaluated and incorporated into the final document is not available at this time. A draft listing of classification systems is included here as *attachment number five*.

Literature concerning wetlands and water quality along with available data bases is currently being collected and studied. If no other water quality references are found to be applicable, estimated completion time should be August 1993.

The products of the work accomplished under this agreement will be utilized in formulating wetland management guidelines in North Dakota's Comprehensive Wetland Conservation Plan.

State Private Lands Initiative Program -

An agreement was entered into between the State Water Commission and the North Dakota Game and Fish Department who will conduct this work.

The Department has hired an individual to work within their Private Land Initiative guidelines and to be stationed at Woodworth, North Dakota to compliment and work in conjunction with the Chase Lake Prairie Project. The Chase Lake Project is considered a flagship project within the North American Waterfowl Management Plan (NAWP). This arrangement will strive to bring State and Federal Private Land Programs together to more closely match the needs of the landowner interested in one or all of the variety of programs available to the project area.

Work continues in the Chase Lake Project area focusing on wetland and water developments. A variety of these type of endeavors have been undertaken in the project area. The employee has been involved in these either as a cooperater bringing Game and Fish cost share dollars to the project or simply adding to the federal work effort to complete the project in a timely manner so that the particular project will benefit by holding water this spring. He has also been active in the activities of the Department's Private Land Initiative. Tree plantings, habitat for nesting birds, food plots and winter feeding of stressed wildlife have all been part of the assignment. The most beneficial aspect of the Department having an employee at Chase Lake is the cooperative nature of the Fish and Wildlife Service personnel and Game and Fish personnel working out of the same office and acting as "brokers" for each others programs. An excellent working relationship has developed, and is evident in the communication with landowners in the vicinity. Landowners are being serviced by qualified biologists who are providing excellent response to landowner requests.

The State Comprehensive Wetland Conservation will document the expected successes of coordinated and cooperative efforts in wetland preservation to serve as an example to other areas of the state.

Grand Harbor Watershed Demonstration Project -

A three-way agreement has been signed between the State Water Commission, North Dakota Wetland Trust and the Ramsey County Water Resources Board to continue negotiations on development of the Grand Harbor Water and Wetlands Management Project. The goal is to develop a management plan and sign a memorandum-of-understanding (MOU) prior to conducting wetland enhancements in the Grand Harbor watershed. Under an agreement with the State Water Commission, the Wetland Trust is responsible for leadership in performing the work associated with this task.

Currently, a special technical committee is continuing its efforts in resolving remaining issues in the Grand Harbor watershed. The Wetland Trust contracted

with the Dwyer Law Office to finalize the management plan and MOU. A plan was tentatively agreed upon by all parties of the technical committee, including landowners, Wetlands Trust, State Engineer, Game and Fish Department, State Soil Conservation Service, and U. S. Fish and Wildlife Service. That plan has been revised and the Grand Harbor technical committee is in agreement on the course of action laid out. A subcommittee of the technical committee met to develop wetland enhancement features for the watershed area. The wetlands enhancement features of the project can now be developed.

A list of eight types of wetland enhancements were developed by the subcommittee and sent to the Wetlands Trust Board of Directors, landowners, and the Fish and Wildlife Service for their review. The Wetlands Trust Board of Directors will make a decision on these enhancements in July.

Planning for restoration of Kenner Marsh continues. Pam Dyer, Executive Director of the North Dakota Wetlands Trust, visited the Grand Harbor Project area to refine wetland enhancement features and to review water management problems for Kenner Marsh.

In addition to the Wetland Trust activities the Devils Lake Coordinator, Mr. Ray Horne, has been involved in the Grand Harbor/Dry Lake Water Management Project as a Demonstration Project for the Devils Lake Basin Water Management Plan. It has all of the components that need to be addressed in the Basin Plan. It has been determined that it is necessary that the basin coordinator work closely with this project to insure that its procedures and results will relate to the Basin Plan.

The original Grand Harbor Project was designed and permitted in 1983. Initial construction was started, however, due to the lengthy legal process of establishing an assessment drain and ongoing discussions with the Fish and Wildlife Service, work was halted until 1986. Continuous problems arising from Swampbuster rule changes have caused delay of the conclusion of the Project.

Activities in 1992-1993:

1. The Ramsey County Water Resource District issued Warrants in 1989 to fund the activities of the Assessment District. Taxes on the District were spread on the lands within the District in 1991. These tax revenues were used to service the Warrant interest. Disgruntled landowners are threatening litigation because of taxation without benefit. The coordinator has acted as liaison between the Water Resource District and the Landowners.
2. The project is attempting to show the results of a cooperative effort of the

following parties: Local landowners, ramsey County Water Resource District, ND State Water Commission, USF&WL Service, ND Game and Fish Department, US Soil Conservation Service, ND Health Dept. and the ND Wetlands Trust. The coordinator is assisting in the process.

3. Problems with the movement of Project waters through downstream channels have arisen. The coordinator has been working with the water resource district who in turn have been in contact with the downstream landowners and the Burlington Northern Rail Road trying to resolve the situation.
4. The Project has obtained a prior commencement determination on certain lands within its boundaries. This process has necessitated the coordinator to work with the county, state, and the Washington DC ASCS offices.
5. The Project cannot go forward until the Soil Conservation Service determines how many mitigating acres are available from wetland restoration. These acres can then be used for the Project. The coordinator has been overseeing this procedure.
6. The Project has not been finalized as far as the total Project features. The movement of waters through the presently completed portions is being attempted. Cooperative efforts between the farm operators and the regulatory agencies relating to the gating of wetlands and pumping of waters through the system has been one of the duties of the coordinator.
7. Meetings between four of the Project farm operators, the local US F&WS, the ND Extension Area Agronomist and the local Soil Conservation Service. Residue management and other practices pertaining to erosion control were discussed. Three of the operators agreed to participate in "O" till seeding this growing season. Approximately 240 acres of "O" till seeding is in place. The coordinator facilitated this effort.
8. The coordinator assisted the local Soil Conservation Service with their Water Quality Improvement Project application. The WQIP project area includes the Grand Harbor area.
9. The coordinator has been working closely with the Wetlands Trust Project Officer in developing an operating plan for the Trust restoration efforts. Present water levels due to recent heavy rains have necessitated the rebuilding of roads in the Project area. Relations among the local Township Board, the County Highway Department and the Trust have become the coordinator's responsibility.

Devils Lake Basin Demonstration Project -

The State Water Commission has contracted with Ray Horne who is serving as a Coordinator to work with the special Devils Lake Task Force in implementing the Devils Lake Basin Conceptual Water Management Plan.

Thus far Mr. Horne has been instrumental in several tasks regarding the Conceptual Plan. The Plan has been reviewed with eight Water Resource Districts in the Basin; with representatives of the Devils Lake Sioux Tribe; the US Fish and Wildlife Service, ND State Game and Fish, ND State Health Department, ND State Water Commission; plus many farmers, fishermen, community and economic development persons in the Basin.

Comments are being incorporated into a draft report. The draft report will be reviewed with the people mentioned above. A final Devils Lake Basin Water Management Plan report will be developed and made ready for implementation later this summer. Various contentious situations have existed within the basin for many years. The Devils Lake Basin Water Management Plan will address, and hopefully, resolve most of the issues.

These issues are as follows:

1. Conflict between U.S. Fish & Wildlife Service and farmers in the Chain Lake area. The resolution of this conflict is paramount to the success of the Devils Lake Basin Water Management Plan.
2. The Devils Lake Basin Joint Board is in a position to be the controlling authority in the Basin if the member Water Resource Districts continue to work together. The Joint Board has reorganized and is in the process of taking an active role in the water management business of the Basin.
3. Various recreational and community interests have expressed the need to establish an Emergency Management Plan for the short term survival of the Devils Lake fishery. Information has been gathered from the ND State Water Commission; the ND Game and Fish Department and the ND State Health Department relating to procedures necessary to implement such a Plan.
4. Relations between the Lake Preservation Coalition and the state agencies dealing with the stabilization of Devils Lake will be improved through better communications.
5. Riparian land issues both adjacent to Devils Lake and to the chain of lakes north of Devils Lake need to be resolved. The Assistant Attorney General assigned to the State Water Commission has been contacted and is

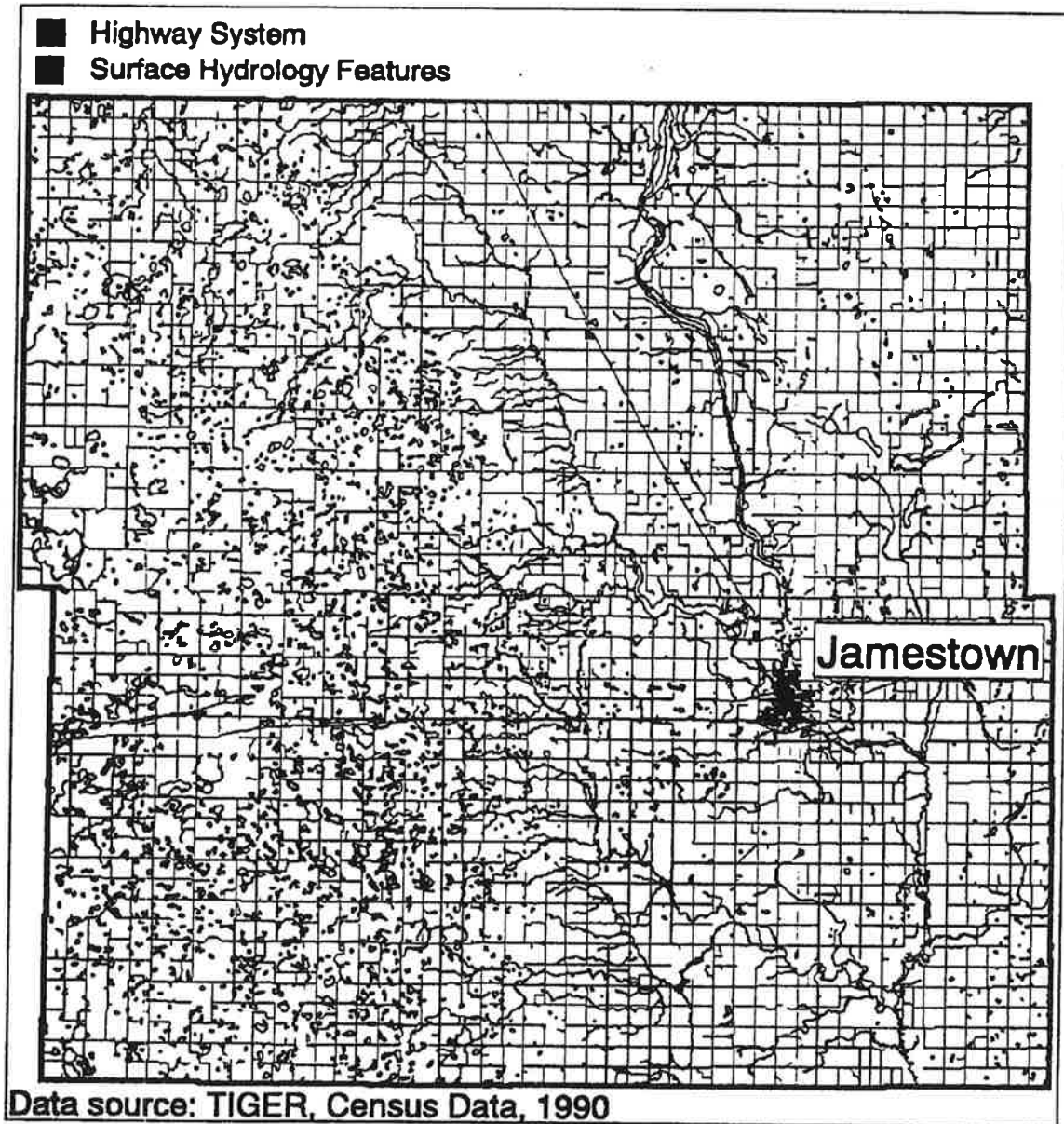
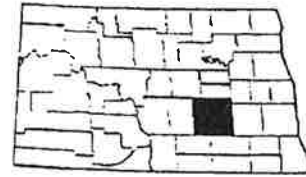
addressing this issue.

6. **Wildlife/waterfowl depredation issues must be addressed. Various avenues of resolution are being explored.**
7. **Credible water quality data is needed in the Basin. Various agencies have conducted water quality data collection and analysis activities at various times within the Basin. Results of these activities must be coordinated with the U.S. Army Corp of Engineer's Feasibility Study. A water quality monitoring and analysis procedure has been developed by the State Water Commission and the United States Geological Survey that fulfills those needs.**
8. **Demonstration sites to identify the concepts in the Water Management Plan are in place for 1993. These include no-till demonstrations on three separate sites. Approximately 240 acres have been seeded this year as a result of this program. Other water quality improvement practices are being pursued in the Grand Harbor/Dry Lake Water Management Project area.**
9. **Accurate media coverage has been lacking. If a cooperative water management plan is going to be accepted by the residents of the Devils Lake Basin, the various interests must be made aware of factual information. A media plan was developed and is being implemented. This approach consists of news releases and interviews of resource experts for the various publications in the area. Radio interviews are a possibility being explored.**
10. **On site public tours of the demonstration areas are being arranged.**

An agreement between the State Water Commission and the Delta Waterfowl Group will provide assistance to the Devils Lake Task Force the Devils Lake Coordinator in setting up demonstration sites to portray the mutual advantages that can occur to agriculture, wildlife and water quality through preservation of wetland habitat. To date, financial resources provided for in the grant to accomplish this have not been expended. Contracts are being arranged with land owners in the Devils Lake Basin at this time. Funds are expected to entirely obligated by mid-summer.

If there are any questions on any of the aspects of our current project, please contact me at your convenience, (701) 224-4970.

STUTSMAN COUNTY NORTH DAKOTA



Developed by North Dakota State Water Commission,
Geographic Information System Lab



North Dakota State Water Commission

900 EAST BOULEVARD • BISMARCK, ND 58505-0850 • 701-224-2750 • FAX 701-224-3696

RESOLUTION NO. 93-7-458

In Appreciation To Joyce Byerly

WHEREAS, Joyce Byerly has dedicated her life to ranching as well as government and community service; and

WHEREAS, Joyce has experienced drought-related water shortages and the resulting damages to grazing lands and water supplies for livestock and wildlife; and

WHEREAS, Joyce has been recognized by state and federal organizations for cooperative and productive National Grasslands management; and

WHEREAS, Joyce is an advocate of weather modification activities as a way to reduce hail damages and to enhance rainfall in North Dakota; and

WHEREAS, Joyce was a member of the advisory committee that formulated rules and regulations to administer the Drought Disaster Livestock Water Assistance Program whereby the Commission dedicated \$300,000 to assist state livestock producers in securing emergency water supplies; and


WHEREAS, Joyce has steadfastly supported a statewide distribution system for Missouri River water.


NOW, THEREFORE, BE IT RESOLVED that the members of the North Dakota State Water Commission; its Chairman, Governor Edward T. Schafer; State Engineer, David A. Sprynczynatyk; and the staff of the State Water Commission, at a meeting held on July 2, 1993, do hereby express their thanks and appreciation to Joyce Byerly for the commitment of time and energy she has dedicated in the interest of water resource development in North Dakota; and

BE IT FURTHER RESOLVED that we wish Joyce the best of health and a happy and prosperous future.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:

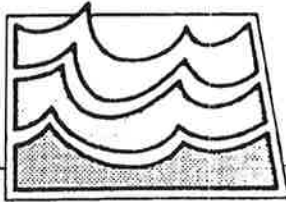
SEAL


Edward T. Schafer
Governor-Chairman


David A. Sprynczynatyk
State Engineer and
Chief Engineer-Secretary

GOVERNOR EDWARD T. SCHAFER
CHAIRMAN

DAVID A. SPRYNCZYNATYK, P.E.
SECRETARY & STATE ENGINEER



North Dakota State Water Commission

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RESOLUTION NO. 93-7-459

In Appreciation To Daniel Narlock

WHEREAS, Daniel Narlock has a full understanding of the complex nature of water management issues and concerns affecting urban and rural North Dakota; and

WHEREAS, Dan served on the Walsh County Board of Commissioners for eight years, two years of which he served as the Board's Chairman; and

WHEREAS, Dan has worked to expand the delivery of rural water to those areas of the state having poor quality and/or insufficient quantity of domestic water; and

WHEREAS, Dan was a key player in resolving the issue of overland flooding and diking along the Red River.


NOW, THEREFORE, BE IT RESOLVED that the members of the North Dakota State Water Commission; its Chairman, Governor Edward T. Schafer; State Engineer, David A. Sprynczynatyk; and the staff of the State Water Commission, at a meeting held on July 2, 1993, do hereby express their thanks and appreciation to Daniel Narlock for the commitment of time and energy he has dedicated in the interest of water resource development in North Dakota; and

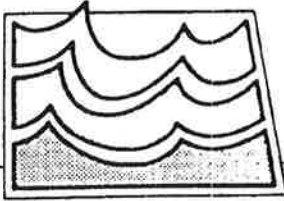
BE IT FURTHER RESOLVED that we wish Dan and his wife, Yvonne, the best of health and a happy and prosperous future.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:


Edward T. Schafer
Governor-Chairman

SEAL


David A. Sprynczynatyk
State Engineer and
Chief Engineer-Secretary



North Dakota State Water Commission

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RESOLUTION NO. 93-7-460

In Appreciation To Norman Rudel

WHEREAS, Norman Rudel is a life-long farmer who has experienced major changes in the administration of the state's agricultural lands; and

WHEREAS, Norm chaired the Wells County Water Resource District for 20 of the 22 years service on that board; he was elected President of the North Dakota Water Users Association; and he was elected Vice President of the North Dakota Water Resource Districts Association; and

WHEREAS, Norm serves on the North Dakota Wetlands Trust and North Dakota Atmospheric Resource Board; and

WHEREAS, Norm was instrumental in creating a cooperative attitude among counties, agricultural and wildlife interests; and


WHEREAS, Norm was a key participant in taking the first steps to construct a statewide distribution system through the allocation of the Garrison Diversion Unit's Municipal, Rural and Industrial (MR&I) Program funds.

NOW, THEREFORE, BE IT RESOLVED that the members of the North Dakota State Water Commission; its Chairman, Governor Edward T. Schafer; State Engineer, David A. Sprynczynatyk; and the staff of the State Water Commission, at a meeting held on July 2, 1993, do hereby express their thanks and appreciation to Norman Rudel for the commitment of time and energy he has dedicated in the interest of water resource development in North Dakota; and

BE IT FURTHER RESOLVED that we wish Norm and his wife, Norma, the best of health and a happy and prosperous future.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:


Edward T. Schafer
Governor-Chairman


David A. Sprynczynatyk
State Engineer and
Chief Engineer-Secretary

SEAL