NORTH DAKOTA
State Water Commission

BIENNIAL REPORT
FOR THE PERIOD
1983 to June 30, 1985
October 21, 1985

Honorable George A. Sinner
Governor of North Dakota
State Capitol
Bismarck, North Dakota 58505


Dear Governor Sinner:

In compliance with North Dakota Laws, we transmit for your information and consideration the Biennial Report of the State Engineer and State Water Commission for the period July 1, 1983, to June 30, 1985.

Respectfully submitted,

Vernon Fahy
Secretary & State Engineer

VF:kj
### INDEX

<table>
<thead>
<tr>
<th>Administrative Division</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority and Function</td>
<td>3</td>
</tr>
<tr>
<td>Available Resources</td>
<td>27</td>
</tr>
<tr>
<td>Engineering Division</td>
<td>13</td>
</tr>
<tr>
<td>Function Summary</td>
<td>23</td>
</tr>
<tr>
<td>Fund Summary</td>
<td>26</td>
</tr>
<tr>
<td>Hydrologic Division</td>
<td>11</td>
</tr>
<tr>
<td>Members and Meetings</td>
<td>2</td>
</tr>
<tr>
<td>Object Expenditures</td>
<td>25</td>
</tr>
<tr>
<td>Organization Chart</td>
<td>1</td>
</tr>
<tr>
<td>Planning Division</td>
<td>9</td>
</tr>
<tr>
<td>Policy Documents</td>
<td>5</td>
</tr>
<tr>
<td>Water Permit Summaries</td>
<td>8</td>
</tr>
<tr>
<td>Weather Modification</td>
<td>21</td>
</tr>
</tbody>
</table>
COMMISSION MEMBERS AS OF JUNE 30, 1985

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
<th>TERM ENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>George A. Sinner</td>
<td>Governor-Chairman</td>
<td>July, 1987</td>
</tr>
<tr>
<td>Kent Jones</td>
<td>Department of Agriculture</td>
<td>July, 1987</td>
</tr>
<tr>
<td>William Guy</td>
<td>Member from Bismarck</td>
<td>July, 1987</td>
</tr>
<tr>
<td>Joyce Byerly</td>
<td>Member from Watford City</td>
<td>July, 1987</td>
</tr>
<tr>
<td>Ray Hutton</td>
<td>Member from Oslo, Minn.</td>
<td>July, 1987</td>
</tr>
<tr>
<td>Jacob Gust</td>
<td>Member from West Fargo</td>
<td>July, 1989</td>
</tr>
<tr>
<td>Jerome Spaeth</td>
<td>Member from Bismarck</td>
<td>July, 1989</td>
</tr>
<tr>
<td>Richard Backes</td>
<td>Member from Glenburn</td>
<td>July, 1991</td>
</tr>
<tr>
<td>William Lardy</td>
<td>Member from Dickinson</td>
<td>July, 1991</td>
</tr>
</tbody>
</table>

COMMISSION MEETINGS

JULY 1, 1983 THROUGH JUNE 30, 1985

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 12 and 13, 1983</td>
<td>Devils Lake, ND</td>
</tr>
<tr>
<td>September 20, 1983</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>September 28, 1983 (Special Meeting)</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>December 7, 1983</td>
<td>Dickinson, ND</td>
</tr>
<tr>
<td>February 21, 1984</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>May 3, 1984</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>July 23, 1984</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>September 10, 1984</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>September 28, 1984</td>
<td>Lisbon, ND</td>
</tr>
<tr>
<td>December 5, 1984</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>March 15, 1985</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>March 25, 1985 (Telephone Conference Call Meeting)</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>June 6, 1985</td>
<td>Bismarck, ND</td>
</tr>
</tbody>
</table>
FUNCTION

The Commission was created in 1937 by the 25th Session of the Legislative Assembly. Originally the Commission body was the Governor and six appointed members. In 1939, the Legislature reduced the number of members to five including the Governor; in 1949, the Commission was increased in size to seven members, and in 1981, to nine members.

The Commission has the duty and authority to investigate, plan, regulate, undertake, construct, establish, maintain, control, operate and supervise all works, dams and projects to achieve any of the following objectives: provide water supplies for domestic, agricultural, municipal and industrial, irrigation, recreation and wildlife needs; control stream flow and channeling; provide for drainage of lands injured by excessive rainfall or water diversions; provide water for generation of electric power; develop and conserve waters within natural watersheds and provide for trans-basin diversion if deemed necessary; prepare and maintain a statewide master plan for future water resources development; and establish rules and regulations for the control of water supplies in the State.

The State Water Commission is located at the State Office Building near the State Capitol in Bismarck, North Dakota. The Commission is made up of the Governor as Chairman, the Commissioner of Agriculture as an ex-official member and seven appointed members who are appointed by the Chairman to serve terms of six years each. The terms of office for appointees are so arranged that two terms and not more than three terms shall expire on the first day of July of each odd numbered year. The Commission appoints a Secretary-State Engineer as their executive officer and he employs a staff as may be needed.

The State Engineer's role, during the 1981 Legislative Assembly, was separated from direct Water Commission authority although he remains as the Executive Officer for their activities. The State Engineer's duties are primarily in issuance of water permits and drainage permits, and to control any works used for storage, diversion or carriage of water.

In light of the responsibilities delegated by the State Legislature, the State Water Commission has promulgated a comprehensive state water resources program as follows:

1. Administration of the State's water laws and representation of the State's interest in water on federal and international levels;

2. Preparation and maintenance of a statewide master plan for future water resources development, including the collection of basic data;

3. Investigation and direction of planning of the development of water resources projects in accordance with the master plan;
4. Coordination of the program and projects of federal, state and local agencies in water resources planning and development and research; and cooperation with water management and other entities in planning and completing water resources development projects;

5. Organization of various types of legal entities through which water resources projects can be completed and operated;

6. Construction and repair of dams, drains and other water management facilities;

7. Appearances before federal agencies and congressional committees relative to appropriations and enactment of proposed legislation that may aid or oppose the state water resources development program;

8. Investigate or determine the ground-water availability in the state for municipal, agricultural and industrial uses.
1. **STATUTORY MANDATES**

The State Water Commission was created by legislative action following the depression of the 1930's for the specific purpose of fostering and promoting water resources development throughout the state.

The Office of State Engineer was created in 1905 to regulate and administer matters concerning allocation of the state's water and related land resources in compliance with Section 210 of our constitution which declares all waters to be property of the state for public use. In 1937, additional duties were added to this office when the State Engineer was designated chief technical advisor of the Commission. Subsequently, in the years following, the State Engineer was assigned responsibilities for regulation of drainage, control of dikes and dams and management of development in the flood plains of the state.

2. **POLICIES PROMULGATED**

The State Water Commission and the State Engineer have developed procedures and policies based upon the comprehensive legislation contained in Section 61 of the North Dakota Century Code to:

- Administer the water laws of the state and its interest in federal and international waters.
- Prepare and maintain a comprehensive plan for future growth and development of the state and to direct project development in accordance with that plan.
- Conduct studies to determine availability and occurrence of the ground and surface waters of the state for the purposes of allocation and management.
- Assist local entities of government in the development and construction of water resource projects.
- Assist local entities of government in management and maintenance of water resources projects.
- Assist in the organization of various legal entities through which water resource projects can be sponsored and operated.
- Coordinate activities of federal, state, and local entities in water resources development.
- Represent the interests of the state in water resources matters in national, state, and international forums.

3. **OTHER POLICIES**

Many of the policies in effect have evolved as a result of the agency's financial participation in project development along with local government sponsors. The amount of financial participation varies with the project with the project purposes. The contract fund is the source of funds for assistance to local sponsors and is controlled by the Commission.
4. **MAJOR POLICY ISSUES**

- Establishing the procedures for claiming this state's share of the flows of the Missouri River for our future needs as reflected in our comprehensive planning documents.
- Pursuing through litigation the complex problems associated with agricultural levees along the Red River.
- Developing policies and initiatives that will stimulate progress in solving flooding problems along the Pembina and Red Rivers.
- Revision of legislation to modernize procedures for creation of irrigation districts.
- Revision of legislation to improve effectiveness of water resource districts.
- Continued funding by the legislature for advanced ground-water studies. Completion of these more detailed studies, which will more precisely define the nature and occurrence of ground-water, is essential in order to optimize development of the state's ground-water resources.
- Developing legislation and policies for creating and administering a Water Supply Facilities Fund through which water facilities such as the delivery of water into southwest North Dakota can be constructed where needed. This includes the assistance for creation of irrigation districts to increase agricultural productivity.

5. **INTERRELATIONSHIP**

This agency works as a catalyst for development of programs by several federal agencies including the Bureau of Reclamation, Corps of Engineers, U.S. Geological Survey, Soil Conservation Service, Federal Emergency Management Administration and the Water Resources Council.

These relationships are undergoing some rather radical changes as a result of the Reagan Administration reorganization efforts. The effects of the change are not as yet discernable since federal agency agreement in Washington has not been realized.

It is evident that state and local governments will be required to participate financially in areas historically assigned to federal funding. New Principles and Guidelines intended to facilitate project development have been published but they appear to provide little change from the old "log jam" Principles and Standards.

This agency works closely in several areas with the State Health Department, N.D. Geological Survey, State Game & Fish Department, State Public Service Commission, State Parks & Recreation, State Economic Development Commission, State Highway Department in the regulation, research and development of our water resources. The expertise and the activities of all agencies are compatible without being duplicative which is a major plus for this state.
The Administrative Division provides the overall direction of agency powers and duties as described in the State Water Laws. The activities include both the State Engineer's and the Water Commission's operations as well as accounting, records and support services for all agency programs.

Budget and fiscal control work must be carried on within the provisions of statutory law and principles or rules of that law exert a powerful influence in agency accounting. Agency accounting consists of keeping adequate financial records, preparation of financial statements and reports, project or program cost accounting, preparation of budgets and proper control of various funds appropriated by the State Legislature.

A considerable portion of time is spent in coordination of water resource program with federal agencies and other state and local entities. The division works with contracts and agreements necessary to carry out investigations, planning and cooperation with various other agencies in water resources development. A close liaison is maintained with Irrigation Districts, Water Resource Districts and the Garrison Conservancy District.

Activities during the current biennium under the combined duties of the nine-member Commission and the State Engineer, who also serves as Commission secretary, includes the following:

1. Supervise planning and preliminary design of Southwest Pipeline Projects involving services for engineering design, bonding repayment and to acquire necessary rights-of-way and easements.

2. Attend regular meetings held to conduct Commission financial participation in water resource projects and other business.

3. Represent the State's interest in water resources at regional and federal levels by assignments to issues such as the Ogallala Aquifer Study, Western States Water Policy, Missouri River Water Allocation and Garrison Diversion Unit hearings.
WATER PERMITS SUMMARY
JULY 1, 1983 THROUGH JUNE 30, 1985

TOTAL APPLICATIONS FILED --------------------------------- 167

IRRIGATION --

Applications Filed --------------------- 56
Total Acre-Feet of Water Granted -- 18,463.8 (Includes Backlog)
  From Ground Water: 8,965.6 Acre-Feet
  From Surface Water: 9,498.2 Acre-Feet
Total Acres Requested --------------- 19,286.6
Total Acres Granted ---------------- 13,601.3 (Includes Backlog)

FLOOD CONTROL --

Applications Filed --------------------- 2
Acre-Feet Storage Granted ------------- 665.0
Acre-Feet Annual Use Granted --------- 220.0

INDUSTRIAL --

Applications Filed --------------------- 69
Total Acre-Feet of Water Granted -- 2,919.87

MUNICIPAL --

Applications Filed --------------------- 8
Total Acre-Feet of Water Granted -- 14,505.0
  (Includes 13,047.0 Acre-Feet For Southwest Pipeline Project)

RECREATION (FISH AND WILDLIFE) --

Applications Filed --------------------- 22
Acre-Feet Storage Granted ------------- 2,812.9
Acre-Feet Annual Use Granted --------- 10,470.9
  (Includes 10,122.0 Acre-Feet Annual Use For Garrison Dam
  Fish Hatchery In McLean County)

RURAL DOMESTIC --

Applications Filed --------------------- 5
Total Acre-Feet of Water Granted -- 5,221.4
  (Includes 4,053.0 Acre-Feet For Southwest Pipeline Project)

STOCKWATER --

Applications Filed --------------------- 5
Acre-Feet Storage Granted ------------- 241.6
Acre-Feet Annual Use Granted --------- 88.0
State Water Plan Maintenance

The current State Water Plan was published by the State Water Commission in early 1983. Past experience has shown, however, that once a plan is completed in document form, it is very easy for unforeseen social, political, technical, or economic changes to render the plan obsolete.

To prevent the State Water Plan from becoming outdated, the Planning Division has worked to maintain the 1983 State Water Plan by computerizing its most important components. This computerization will not only make it possible to quickly and easily update information contained in the plan, but will also improve the ability to respond effectively to inquiries. Another benefit will be the ability to better analyze the implications of a project proposal on other existing and proposed projects in the affected watershed. With the increased capability provided by computer, the agency can move closer to planning along watershed boundaries, rather than planning along political boundaries as has often been the case in the past.

Water Resource District Master Plans

Legislation enacted by the 1981 Legislature stipulated that each water resource district prepare and adopt master plans for each of the various water management activities in the district. The State Engineer was also required to provide guidelines to help districts in developing their master plans. The Planning Division, in compliance with this law, proposed and distributed guidelines to the chairmen of the water resource districts.

In reviewing this legislation in 1985, the legislature found the master plan process to be less than desirable and, consequently, removed the requirement for water resource district master plans.

Missouri Basin States Association

After the Missouri River Basin Commission (MRBC) was terminated and federal funding was eliminated in 1981, the governors of the ten states in the Missouri River basin formed the Missouri Basin States Association (MBSA). MBSA, which is entirely state-supported, continues to promote communication and coordination between the basin states.

Red River Water Resources Council

Funds to continue operation of the Red River Water Resources Council beyond July 1, 1983 were not included in the Executive Budget recommendations for either North Dakota or Minnesota. This lack of funding, coupled with the resignation of the Council Executive Director, led to a decision by the two states not to fill the vacant staff position or to continue renting office space.

Although the office in Moorhead, Minnesota was closed, the Council continues to function as it has in the past as a vehicle for coordinating water and related land resources matters in the Red River basin.

The Red River Water Resources Council operates without staff and with a chairmanship that rotates annually between North Dakota and Minnesota. Meetings are held on a quarterly basis.
The International Coalition for Land and Water Stewardship in the Red River Drainage Basin

In early 1985, representatives of the International Coalition for Land and Water Stewardship in the Red River Drainage Basin met with members of the Red River Water Resources Council to request help in coordinating the Coalition's activities with federal, state, and local water management entities.

To assure that the efforts of the Coalition complement both the work that has been done in the past and the work that is currently being done by water management agencies, the representatives requested the involvement of the Red River Water Resources Council on two committees - the policy guidance committee and the education/information committee.

Public Education Program in North Dakota Water Resource Management

The Planning Division proposed and completed a development plan for the Public Education Program near the end of the biennium. The Public Education Program was proposed in response to the apparent public need for quality information on North Dakota water resources and related water resource management topics.

The main goal of the program is to create a greater public awareness and appreciation of North Dakota's water resources. To achieve this goal, the Planning Division will develop and distribute a number of informational pamphlets, fact sheets, newsletter articles, and education aids (for incorporation into the North Dakota school system.).

The Oxbow Newsletter

The Planning Division assumed publication of the Oxbow newsletter in March of 1984.

As in the past, the Oxbow newsletter serves a dual purpose of information and education, keeping readers aware not only of State Water Commission projects and programs, but also of recent activities in water resource management and development at the local, regional, and national levels.

The newsletter is sent to over 2100 people on a monthly basis.

Water Education Workshop for Teachers

The State Water Commission and several other water agencies sponsored two water education workshops for teachers during the biennium. These workshops were designed to acquaint participants with North Dakota's water resources, and to provide them with information regarding the management of water resources by federal, state, and local water agencies. In addition, the workshops were intended to help introduce water education into the North Dakota school system. More workshops are being planned for the next biennium.
HYDROLOGY DIVISION

Goal

Development and management of the State's water resources to serve the needs of present and succeeding generations of North Dakota citizens.

Objectives

1. Identify the availability and quality of the State's ground-water resources.

2. Assist municipalities and other public entities in developing solutions to particular water supply problems.

3. Assess impacts on existing water supply development in an aquifer or watershed on water levels, streamflow and water quality for purposes of allocation and management.

4. Construction and operation of predictive models that simulate hydrologic conditions for the purpose of developing viable water management programs and assist in the equitable allocation of the resource.

5. Collect, store and disseminate data on stream flow, ground-water levels, water quality and water use.

6. Provide orderly processing of water permit applications for the equitable allocation of the resource.

7. Provide recommendations on individual water permit applications to the State Engineer on the availability of water and impact on senior appropriations for the equitable allocation and management of the resource.

8. Provide for the orderly storage and retrieval of water permit records.

9. Maintain a record of the utilization of each conditional water permit and water right.

Project Activities - 1979-1981

1. The reports for the ground-water studies for Bottineau, Rolette, Towner and McKenzie Counties were published. This completes all phases of the county ground-water studies program.

2. Aquifer Evaluation Investigations
   A. Oakes Aquifer - Dickey County
   B. Englevale Aquifer - Ransom County
   C. Page Aquifer - Cass and Steele Counties
   D. Spiritwood Aquifer - Barnes, Stutsman, LaMoure, Dickey and Sargent Counties
E. Edgeley Aquifer - LaMoure County
F. West Fargo - Cass County
G. South Bismarck Water Table Study - Burleigh County
H. James River Hydrology Study - Stutsman, LaMoure and Dickey Counties
I. Sundre Aquifer - Ward County
J. Evaluation of methods to determine recharge to unconfined aquifers
K. Eastern McLean County Hydrologic Study

3. Stream Evaluation Investigations
A. Sheyeene River
B. Forest River
C. Heart River
D. Pembina

4. Basic Data Collection
A. Streamflow
B. Ground-water levels
C. Water quality - chemical
D. Water use
DIVISION OF ENGINEERING

The Division of Engineering provides for the issuance of permits for water resource project development, establishment of criteria and guidance for water management, assistance to communities on floodplain management, technical assistance to water resource districts, and hydrologic investigations for quantification of surface water resources. In addition, activities include the design, construction, maintenance and inspection of water resource projects in the State. The Division is also responsible for the distribution of maps, field notes, and government land office plats as directed by Section 61-03-11 of the North Dakota Century Code, and to ensure adequate map coverage is available by contracting with United States Geological Survey to map additional areas.

The major goals of the Division of Engineering are to provide data; to manage and ensure that the surface waters of the State are developed in an orderly and safe manner; to ensure that the waters in which the State has a direct interest are protected for future generations; to develop necessary water resource projects at the request of local entities in the State; to provide technical data to communities in floodplain; and to satisfy public demands for availability of maps, field notes, and government land office plats.

During the biennium, at the request of the Red River Joint Water Resource Board, the State Water Commission established an office within the Red River Valley. The office, located in
West Fargo, includes one water resource engineer with arrangements for part-time secretarial services.

The Red River Joint Water Resource Board and State Water Commission each pay fifty percent of the total cost of operating the office. Approximately half of the engineer's time involves working on projects eligible for Red River Joint Water Resource Board funding. The purpose of the Red River Joint Water Resource Board, comprised of 13 water resource boards within 10 counties, is to develop flood protection projects within the Red River Basin.

The engineer has attended several of the individual water resource board meetings. He has provided technical assistance to the boards on numerous disputes, and related matters. When requested, hydrological studies have been performed to determine adequate culvert sizes. Field investigations of potential detention dam sites were made for the following sites during the biennium:

- Tributary of Wild Rice River (Sargent County)
- Tributary of Maple River (Cass and Barnes County)
- Cart Creek (Pembina County)
- Tributary to Sheyenne River (Griggs County)
- Wild Rice River (Richland County)

Further study will be performed on the sites to determine their feasibility.

The Southwest Pipeline Project will divert water from Lake Sakakawea to areas in southwestern North Dakota for municipal and rural domestic water uses. The project consists of 326 miles of pipeline, a 15.25 million gallon per day water treatment plant and several pump stations and reservoirs.
The 1983 legislature appropriated $6 million for final design and right-of-way easement acquisition for the project. As of June 30, 1985, the entire project was essentially designed and ready for construction bidding. Nearly 84 percent of the right-of-way easements were acquired, all on a negotiated basis.

During the 1983-85 biennium, the Regulatory Section processed 46 dike-dam permit applications and 197 applications to drain. Of the dike-dam applications, 23 were for flood control and of those, eight protected city property with the remaining 15 protecting agricultural lands or farmsteads. Of the remaining 23 dike-dam applications, 15 were for wildlife purposes, six were for irrigation or stockwater, one was for recreation, and one was for erosion control. Of the 197 drainage applications, 12 were found to be of statewide or interdistrict significance by the State Engineer.

The Regulatory Section processes requests for pipeline and utility crossings of streams, such as gas mains, power distribution lines, water and sewer lines, and telephone lines. Requests for mine permits involving new lands for mining and reclamation activities are also reviewed.

The Floodplain Management Act of 1981 placed the responsibility for the floodplain management in North Dakota in the office of the State Engineer. This Act gives the State Engineer the authority to assist communities in delineating floodplains and to work with them to meet the requirements of the National Flood Insurance Program (NFIP). The office of the
State Engineer has been designated as the State Coordinating Agency for the National Flood Insurance Program.

Assistance to communities participating in the National Flood Insurance Program involves: converting communities to the Regular phase of the program, helping communities to develop or revise ordinances, performing or coordinating floodplain hazard studies, technical assistance in resolving mapping and administration problems, publication of a newsletter, assisting in the development of local flood hazard mitigation plans for Linton, Lisbon, and Drayton. Flood Hazard Mitigation workshops were held during the biennium to increase awareness of local officials and administrators of the methods available to lessen the impact of flooding problems.

Preliminary engineering and hydrologic investigation reports were prepared for the following projects during the biennium:

- Painted Woods Lake (McLean County - SWC #160)
- Larsson Lake (Hettinger County - SWC #350)
- Rost Lake (Bottineau County - SWC #330)
- Thirty-Mile Creek Dam (Hettinger County - SWC #1497)
- Trotters Dam (McKenzie County - SWC #1776)
- DesLacs River (Burke, Mountrail, Renville and Ward Counties - SWC #1772)
- Grand Forks City Water Supply Dam (Grand Forks County - SWC #1536)
- Valley City Flood Insurance Study (Barnes County - SWC #1504)
- Rush Lake Restoration (Cavalier County - SWC #462)
- North Dakota Dam Design Handbook (SWC #1579-1)

Major construction projects undertaken during the biennium included:

- Dead Colt Creek Dam (Ransom County - SWC #1671)
- Dead Colt Creek Dam Recreation Areas (Ransom County - SWC #1671-A)
Mirror Lake Restoration, Phase 1 and 2 (Adams County - SWC #420)
Grafton Flood Control Bypass Channel (Walsh County - SWC Project #1771)
English Coulee Diversion, Phase 1 and 2 (Grand Forks County - SWC #1351-1 and #1351-2)
Big Coulee Dam Modification (Towner County - SWC #1418)

Maintenance was performed at the following projects during the biennium:

White Earth Dam (Williams County - SWC #327)
Epping Dam (Williams County - SWC #346)
Beaver Lake Dam (Williams County - SWC #390)
Niagara Dam (Grand Forks County - SWC #464)
Kota Ray Dam (Grand Forks County - SWC 489)
Grand Forks Riverside Park Dam (Grand Forks County - SWC #520)
Blacktail Dam (Williams County - SWC #560)
Beulah Flood Control Dam (Williams County - SWC #1732)
Short Creek Dam (Williams County - SWC #568)
USGS (2 sites) -
   Foxholm Gaging Station (Ward County - SWC #1393)
   Upham Gaging Station (McHenry County - SWC #1393)
Cavalier Dam (Pembina County - SWC #640)
Drayton Dam (Pembina County - SWC #681)
Tolna Dam #1 (Nelson County - SWC #266)
Karey Dam (Hettinger County - SWC #1453)
Danzig Dam (Morton County - SWC #374)
Glen Ullin RR Dam (Morton County - SWC #673)
Spring Lake Dam (Bowman County - SWC #388)

Under the State's Dam Safety Inspection Program, a total of 34 dams were inspected and reported on. Twenty-nine of the inspections were reinspections or addendums to original reports, completed during the National Dam Safety Program.
Twenty-two of the dams inspected were dams in which the State Water Commission had previously participated in construction or maintenance. Of the 34 dams, seven were considered to be high hazard, 24 were significant hazard, and the remaining three dams were considered to be low hazard dams. None of these inspections revealed unsafe structures. Dams inspected were:
Burlington Dam #1 (Ward County - SWC #221) 1
Burlington Dam #2 (Ward County - SWC #221) 1
Senator Young Dam (Cavalier County - SWC #849) 1
Olson Dam (Pembina County - SWC #849) 1
Bylin Dam (Walsh County - SWC #929) 1
Matecjek Dam (Walsh County - SWC #929) 1
Renwick Dam (Pembina County - SWC #849) 1
Wyard Dam (Foster County - SWC #467) 2
Colt Dam (Mercer County - SWC #1349) 2
Sather Dam (McKenzie County - SWC #1289) 2
Mt. Carmel Dam (Cavalier County - SWC #1346) 2
Big Coulee (Towner County - SWC #1418) 2
Pheasant Lake (Dickey County - SWC #501) 2
Edmore Dam (Ramsey County - SWC #927) 2
Drayton Dam (Pembina County - SWC #681) 2
Sweetbriar Creek Dam (Morton County - SWC #642) 2
Daub Dam (Oliver County - SWC #1527) 2
Crown Butte Dam (Morton County - SWC #870) 2
Flasher Dam (Morton County - SWC #1292) 2
Wilson Dam (Dickey County - SWC #1455) 2
Neche Dam (Pembina County - SWC #274) 2
Erie Dam (Cass County - SWC #1471) 2
Minto Dam (Walsh County - SWC #448) 2
Tolna Dam #1 (Nelson County - SWC #266) 2
Harvey Dam (Wells County - SWC #671) 2
Vigness Dam (Walsh County - SWC #546) 2
Bourbanis Dam (Cavalier County - SWC #849) 2
Big Coulee Dam (Towner County - SWC #1418) 2
Sweet Briar Creek Dam (Morton County - SWC #642) 2
Epping Dam (Williams County - SWC #346) 2
North Lemmon Lake Dam (Adams County - SWC #543) 2
Spec Davis Dam (Slope County - SWC #1784) 3
Olga Dam (Cavalier County - SWC #849) 3
Grafton Dam (Walsh County - SWC #660) 3

During the biennium, approximately 15,000 maps, field notes, and government land office plats were distributed to the public.

The contract fund for construction is used to cost participate in water resource projects throughout the state. The following is a list of projects in which the Water Commission cost participated during the 1983-85 biennium, from the contract fund:
## 1983-85 Biennium
### Construction Contract Fund Expenditures
(Includes Carryover From Previous Biennium)

<table>
<thead>
<tr>
<th>County</th>
<th>Project Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams County</td>
<td>420 Mirror Lake</td>
<td>$51,600</td>
</tr>
<tr>
<td>Bottineau County</td>
<td>1684 Russell Drain</td>
<td>20,708</td>
</tr>
<tr>
<td>Burleigh County</td>
<td>385 McKenzie Slough</td>
<td>11,000</td>
</tr>
<tr>
<td></td>
<td>1551 Salinity and Drainage Research</td>
<td>15,780</td>
</tr>
<tr>
<td>Cass County</td>
<td>568 Sheyenne River Snagging &amp; Clearing</td>
<td>23,965</td>
</tr>
<tr>
<td></td>
<td>583 Fargo 4th Street Dam</td>
<td>33,823</td>
</tr>
<tr>
<td></td>
<td>1008 Bell Twp. Critical Area Treatment</td>
<td>2,090</td>
</tr>
<tr>
<td></td>
<td>1067 Cass County Drain #10</td>
<td>71,112</td>
</tr>
<tr>
<td></td>
<td>1086 Cass County Drain #35</td>
<td>47,850</td>
</tr>
<tr>
<td></td>
<td>1751A Argusville Flood Control</td>
<td>45,000</td>
</tr>
<tr>
<td></td>
<td>1751C Casselton Flood Study</td>
<td>3,075</td>
</tr>
<tr>
<td></td>
<td>1751F Fargo Floodplain Study</td>
<td>7,350</td>
</tr>
<tr>
<td></td>
<td>1785 Maple River Flood Control Dam</td>
<td>293,500</td>
</tr>
<tr>
<td></td>
<td>1790 Walburg Twp. Critical Area Treatment</td>
<td>3,367</td>
</tr>
<tr>
<td></td>
<td></td>
<td>531,132</td>
</tr>
<tr>
<td>Cavalier County</td>
<td>1438 Mulberry Creek Drain #1 - Phase III</td>
<td>17,779</td>
</tr>
<tr>
<td></td>
<td>1787 Manilla Township Drain #2</td>
<td>2,425</td>
</tr>
<tr>
<td></td>
<td>1793 Easby Township Drain #2</td>
<td>6,360</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26,564</td>
</tr>
<tr>
<td>Grand Forks</td>
<td>1107 Grand Forks County Drain #4</td>
<td>20,240</td>
</tr>
<tr>
<td></td>
<td>1351 English Coulee</td>
<td>980,857</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,001,097</td>
</tr>
<tr>
<td>Hurricane Lake Joint Board</td>
<td>559 Hurricane Lake Control</td>
<td>21,887</td>
</tr>
<tr>
<td>LaMoure County</td>
<td>1751E Edgeley Floodplain Management Study</td>
<td>1,280</td>
</tr>
<tr>
<td>McLean County</td>
<td>160 &amp; 1789 Painted Woods &amp; Lake Nettie</td>
<td>4,260</td>
</tr>
<tr>
<td></td>
<td>1739 Coal Lake Coulee Drain</td>
<td>6,600</td>
</tr>
<tr>
<td></td>
<td>1782 County Water Supply Study</td>
<td>7,250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18,110</td>
</tr>
<tr>
<td>Morton County</td>
<td>1292 Zachmeier Coulee</td>
<td>1,841</td>
</tr>
</tbody>
</table>

19
<table>
<thead>
<tr>
<th>County</th>
<th>Project Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pembina County</td>
<td>38,748</td>
<td>27,681</td>
</tr>
<tr>
<td></td>
<td>1778' Flasher Critical Area Treatment</td>
<td>20,752</td>
</tr>
<tr>
<td></td>
<td>1751H Hamilton Floodplain Study</td>
<td>1,280</td>
</tr>
<tr>
<td>Ramsey County</td>
<td>1671 Dead Colt Creek Dam</td>
<td>146,304</td>
</tr>
<tr>
<td></td>
<td>1712 Devils Lake City Flood Control</td>
<td>11,130</td>
</tr>
<tr>
<td></td>
<td>1746 Morrison Lake Outlet - Phase I &amp; II</td>
<td>72,800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>230,234</td>
</tr>
<tr>
<td>Ransom County</td>
<td>1299 Ransom Co. Critical Area Treatment</td>
<td>5,380</td>
</tr>
<tr>
<td></td>
<td>1657 Enderlin Flood Control</td>
<td>111,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>116,380</td>
</tr>
<tr>
<td>Richland County</td>
<td>1027 Richland County Drain #65</td>
<td>43,769</td>
</tr>
<tr>
<td></td>
<td>1182 Richland Co. Drain #12 (Lateral 1)</td>
<td>19,040</td>
</tr>
<tr>
<td></td>
<td>1545 Richland Co. Drain #72</td>
<td>150,133</td>
</tr>
<tr>
<td></td>
<td>1748 Richland Co. Drain #8</td>
<td>13,370</td>
</tr>
<tr>
<td></td>
<td>1792 Wild Rice River Dam</td>
<td>13,035</td>
</tr>
<tr>
<td></td>
<td>1217 Tri-County Drain #6</td>
<td>22,165</td>
</tr>
<tr>
<td></td>
<td></td>
<td>261,512</td>
</tr>
<tr>
<td>Stark County</td>
<td>1721 Dickinson Floodplain Study</td>
<td>3,548</td>
</tr>
<tr>
<td></td>
<td>1777 Dickinson Flood Control</td>
<td>35,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38,748</td>
</tr>
<tr>
<td>Towner County</td>
<td>1418 Big Coulee Dam</td>
<td>145,818</td>
</tr>
<tr>
<td>Traill County</td>
<td>1238 Traill Co. Drain #19</td>
<td>38,130</td>
</tr>
<tr>
<td></td>
<td>1244 Traill Co. Drain #27</td>
<td>42,981</td>
</tr>
<tr>
<td></td>
<td>1246 Miller Drain #29</td>
<td>23,672</td>
</tr>
<tr>
<td></td>
<td>1743 Traill Co. Drain #52</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>129,783</td>
</tr>
<tr>
<td>Walsh County</td>
<td>1771 Grafton Flood Control</td>
<td>15,492</td>
</tr>
<tr>
<td>Williams County</td>
<td>1751C Williston Floodplain Study</td>
<td>780</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$2,660,866</td>
</tr>
</tbody>
</table>
The public of North Dakota has sought means for over a third of a century to better utilize its atmospheric resources. A small percentage increase in rainfall, or a decrease in hail damage, are both economically viable for North Dakota. In 1975 the Board was established to specifically:

1. Conduct scientifically and socially acceptable programs of cloud modification.

2. Provide guidance in following established environmentally prudent procedures in weather modification.

3. Assess the effects of modifying precipitation in an operational cloud modification program.

The board consists of the state engineer of the State Water Commission; director of the State Aeronautics Commission; a representative of the State Health Department, and seven gubernatorial appointed members. The state has taken well planned steps to achieve each goal through the board.

First, the Administration Program consists of making and enforcing reasonable rules and regulations concerning qualifications, procedures, and conditions for issuance, revocation, suspension, and modification of licenses and permits. The board establishes the standards and instructions governing weather modification operations.
Second, operational programs conducted in North Dakota are local programs. The state's involvement is to maintain highest standards, insure public safety, protect the environment, and standardize the operations across the state. The operational programs have local support and funds which provide the major funding resources.

Currently, the State of North Dakota is working with counties in cost-share programs where the state paid for 44% of the programs and the counties, plus some other incomes, paid for 56 percent. Again, the importance of local control is stressed by these figures.

Third, the board has taken action on its own, with the federal government, to address the critical questions concerning cloud modification. The absence of long-term formal planning for a coordinated evaluation that could achieve scientific acceptance is evident. As a result, technological development and assessment have been sporadic over the past thirty years. Such national shortcomings have been addressed by a few states, including North Dakota, in a cooperative effort in answering local questions that have national impact. The research being conducted by the state is leading to better understanding of precipitation in the Northern Great Plains.

The readers who desire further information are directed to the 1983-85 Biennium Report of the Board.
### NORTH DAKOTA

#### STATE WATER COMMISSION

**FUNCTION SUMMARY FOR BIENNIAL PERIOD ENDING JUNE 30, 1985**

#### FUNCTION NUMBER & DESCRIPTION

<table>
<thead>
<tr>
<th>Function Number &amp; Description</th>
<th>Cost to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>110 Administrative Division Including Management, Commission Members, Fiscal Control and Records</td>
<td>$ 705,731</td>
</tr>
<tr>
<td>Coordination, Personnel and Staff Support</td>
<td></td>
</tr>
<tr>
<td>200 Planning Division Administration</td>
<td>23,832</td>
</tr>
<tr>
<td>210 Upper Mississippi River Basin Commission</td>
<td>12,670</td>
</tr>
<tr>
<td>220 Missouri River Basin Commission</td>
<td>22,044</td>
</tr>
<tr>
<td>221 Missouri River Basin Commission Assessment</td>
<td>42,357</td>
</tr>
<tr>
<td>230 State Water Plan Process</td>
<td>389,437</td>
</tr>
<tr>
<td>240 Special Studies</td>
<td>10,820</td>
</tr>
<tr>
<td>301 Hydrology Division Administration</td>
<td>455,868</td>
</tr>
<tr>
<td>302 Field Work Related to Water Permits</td>
<td>27,266</td>
</tr>
<tr>
<td>303 Cancelling Water Permits</td>
<td>3,051</td>
</tr>
<tr>
<td>304 Computer Storage and Management</td>
<td>130,084</td>
</tr>
<tr>
<td>305 Hydrologic Studies</td>
<td>26,834</td>
</tr>
<tr>
<td>306 Design</td>
<td>10,386</td>
</tr>
<tr>
<td>307 Research</td>
<td>141</td>
</tr>
<tr>
<td>311 Preliminary Planning</td>
<td>164,957</td>
</tr>
<tr>
<td>312 Water Records</td>
<td>136,677</td>
</tr>
<tr>
<td>314 Subsurface Exploration</td>
<td>438,594</td>
</tr>
<tr>
<td>315 Quality of Water Work</td>
<td>148,390</td>
</tr>
<tr>
<td>316 Aquifer Testing and Special Investigations</td>
<td>109,248</td>
</tr>
<tr>
<td>317 Data Compilation and Analysis</td>
<td>176,046</td>
</tr>
<tr>
<td>318 Report Preparation and Review</td>
<td>94,995</td>
</tr>
<tr>
<td>319 Special Investigations</td>
<td>82,489</td>
</tr>
<tr>
<td>320 Repay</td>
<td>412,494</td>
</tr>
<tr>
<td>330 Ground-Water-Shop Related Act.</td>
<td>41,579</td>
</tr>
<tr>
<td>400 General Engineering Administration</td>
<td>355,577</td>
</tr>
<tr>
<td>401 Administration, Microfilming, Filing, Ect.</td>
<td>63,523</td>
</tr>
<tr>
<td>402 Training</td>
<td>14,856</td>
</tr>
<tr>
<td>403 Equipment Maintenance</td>
<td>40,676</td>
</tr>
<tr>
<td>404 Shop Maintenance</td>
<td>42,652</td>
</tr>
<tr>
<td>410 Definition and Protection of State Owned Lakes</td>
<td>10,181</td>
</tr>
<tr>
<td>411 Drainage Permits</td>
<td>53,002</td>
</tr>
<tr>
<td>412 Diking Permits</td>
<td>16,800</td>
</tr>
<tr>
<td>413 Flood Plain Management</td>
<td>308,477</td>
</tr>
<tr>
<td>415 Strip Mine and Energy Plant Regulation</td>
<td>5,934</td>
</tr>
<tr>
<td>416 Federal Permit Review</td>
<td>2,673</td>
</tr>
<tr>
<td>417 Inter Agency Coordination</td>
<td>99,869</td>
</tr>
<tr>
<td>418 Emergency Disaster Assistance</td>
<td>4,207</td>
</tr>
<tr>
<td>419 Intra Agency Coordination</td>
<td>6,175</td>
</tr>
<tr>
<td>420 Flood Control Project Hydrology</td>
<td>77,256</td>
</tr>
<tr>
<td>421 Drainage Project Hydrology</td>
<td>17,331</td>
</tr>
<tr>
<td>422 Recreation Project Hydrology</td>
<td>9,783</td>
</tr>
</tbody>
</table>

Continued
| 423 | Water Supply Project Hydrology | 535 |
| 424 | Irrigation Project Hydrology | 1,964 |
| 425 | Streambank Erosion & Maintenance Hydrology | 2,445 |
| 426 | Snagging, Clearing & Channel Improvement Hydro. | 100 |
| 430 | Flood Control Project Investigation | 198,061 |
| 431 | Drainage Project Investigation | 43,587 |
| 432 | Recreation Project Investigation | 21,756 |
| 433 | Water Supply Project Investigation (Includes SW Pipeline) | 5,294,115 |
| 434 | Irrigation Project Investigation | 12,600 |
| 435 | Streambank Erosion & Maintenance Investigation | 8,089 |
| 436 | Snagging, Clearing & Channel Improvement Investigation | 1,034 |
| 440 | Flood Control Project Design | 38,203 |
| 441 | Drainage Project Design | 668 |
| 442 | Recreation Project Design | 78,461 |
| 443 | Water Supply Project Design | 4,482 |
| 445 | Streambank Erosion & Maintenance Design | 64 |
| 446 | Snagging, Clearing & Channel Improvement Design | 100 |
| 450 | Flood Control Project Construction | 241,562 |
| 451 | Drainage Project Construction | 627 |
| 452 | Recreation Project Construction | 91,032 |
| 453 | Water Supply Project Construction | 229 |
| 455 | Streambank Erosion & Maintenance Construction | 77 |
| 456 | Snagging, Clearing & Channel Improvement Construction | 121 |
| 460 | Flood Control Project Maintenance | 14,305 |
| 461 | Drainage Project Maintenance | 152 |
| 462 | Recreation Project Maintenance | 136,596 |
| 463 | Water Supply Project Maintenance | 27,290 |
| 466 | Snagging, Clearing & Channel Improvement Maintenance | 121 |
| 470 | Dam Safety Inspection | 133,102 |
| 480 | Topographic Map Sales | 39,032 |
| 481 | Field Note Sales & H & V Control | 21,893 |
| 490 | Contract Payments for Flood Control Projects | 1,339,538 |
| 491 | Contract Payments for Drainage Projects | 563,587 |
| 492 | Contract Payments for Recreation Projects | 68,024 |
| 493 | Contract Payments for Water Supply Projects | 34,666 |
| 496 | Contract Payments for S. & C. & Ch. Impr. | 24,285 |
| 500 | Legal Division Including Agency Division Support and InterAgency Coordination | 151,118 |

$ 13,387,943
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Permanent Salaries</td>
<td>$3,211,410</td>
</tr>
<tr>
<td>1080</td>
<td>Temporary Salaries</td>
<td>45,626</td>
</tr>
<tr>
<td>1090</td>
<td>Overtime Salaries</td>
<td>91,858</td>
</tr>
<tr>
<td>1800</td>
<td>Fringe Benefits</td>
<td>712,082</td>
</tr>
<tr>
<td>2017</td>
<td>Central Data Processing</td>
<td>177,867</td>
</tr>
<tr>
<td>2110</td>
<td>Employee Travel</td>
<td>249,993</td>
</tr>
<tr>
<td>2140</td>
<td>Payments to State Motor Pool</td>
<td>88,300</td>
</tr>
<tr>
<td>2170</td>
<td>Dues and Professional Development</td>
<td>46,813</td>
</tr>
<tr>
<td>2200</td>
<td>Utilities</td>
<td>9,005</td>
</tr>
<tr>
<td>2310</td>
<td>Lease/Rental - Miscellaneous</td>
<td>11,175</td>
</tr>
<tr>
<td>2400</td>
<td>Postage</td>
<td>21,652</td>
</tr>
<tr>
<td>2420</td>
<td>Telephone/Telegraph</td>
<td>13,886</td>
</tr>
<tr>
<td>2500</td>
<td>Repair Services - Non-Contract</td>
<td>17,851</td>
</tr>
<tr>
<td>2515</td>
<td>Repair Services - Contracts</td>
<td>8,811</td>
</tr>
<tr>
<td>2610</td>
<td>Professional Services (Include SW Pipeline Design)</td>
<td>4,469,165</td>
</tr>
<tr>
<td>2616</td>
<td>Operating Fees and Services</td>
<td>14,301</td>
</tr>
<tr>
<td>2710</td>
<td>Insurances</td>
<td>6,183</td>
</tr>
<tr>
<td>2900</td>
<td>Miscellaneous Fees and Services</td>
<td>270</td>
</tr>
<tr>
<td>3050</td>
<td>Office Supplies</td>
<td>32,766</td>
</tr>
<tr>
<td>3105</td>
<td>Data Processing Supplies</td>
<td>734</td>
</tr>
<tr>
<td>3200</td>
<td>Printing</td>
<td>71,315</td>
</tr>
<tr>
<td>3210</td>
<td>Resource and Reference Materials</td>
<td>31,578</td>
</tr>
<tr>
<td>3400</td>
<td>Laboratory Supplies</td>
<td>7,078</td>
</tr>
<tr>
<td>3550</td>
<td>Building/Equipment Supplies</td>
<td>159,164</td>
</tr>
<tr>
<td>3800</td>
<td>Vehicle Maintenance/Operations</td>
<td>26,843</td>
</tr>
<tr>
<td>4115</td>
<td>Office Equipment/Furniture</td>
<td>14,977</td>
</tr>
<tr>
<td>4120</td>
<td>Scientific Equipment</td>
<td>19,771</td>
</tr>
<tr>
<td>4180</td>
<td>Motor Vehicles</td>
<td>77,329</td>
</tr>
<tr>
<td>4190</td>
<td>Machinery</td>
<td>16,106</td>
</tr>
<tr>
<td>5100</td>
<td>Land/Easements</td>
<td>786,592</td>
</tr>
<tr>
<td>5550</td>
<td>Contract Payments</td>
<td>2,947,442</td>
</tr>
</tbody>
</table>

$13,387,943
## NORTH DAKOTA STATE WATER COMMISSION

**FUND SUMMARY FOR BIENNIAL PERIOD ENDING JUNE 30, 1985**

<table>
<thead>
<tr>
<th>Account Description</th>
<th>Original Appropriation</th>
<th>Adjusted Appropriation</th>
<th>Revenues/Expenditures</th>
<th>Appropriation Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$ 7,409,982</td>
<td>$ 7,455,057</td>
<td>$ 6,127,094</td>
<td>$ 1,327,963</td>
</tr>
<tr>
<td>Transfer from Gen. Fund</td>
<td>5,952,196</td>
<td>7,798,803</td>
<td>7,614,567</td>
<td>184,236</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,362,178</strong></td>
<td><strong>15,253,860</strong></td>
<td><strong>13,741,661</strong></td>
<td><strong>1,512,199</strong></td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>$ 3,882,441</td>
<td>$ 4,045,975</td>
<td>$ 3,961,320</td>
<td>$ 84,655</td>
</tr>
<tr>
<td>Operating Expense</td>
<td>974,710</td>
<td>1,008,810</td>
<td>854,797</td>
<td>154,013</td>
</tr>
<tr>
<td>Central Data Processing</td>
<td>180,750</td>
<td>180,750</td>
<td>176,236</td>
<td>4,514</td>
</tr>
<tr>
<td>Equipment</td>
<td>116,260</td>
<td>126,260</td>
<td>125,546</td>
<td>714</td>
</tr>
<tr>
<td>1981-83 Contract Carryover</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts</td>
<td>2,213,017</td>
<td>2,071,517</td>
<td>1,433,960</td>
<td>637,557</td>
</tr>
<tr>
<td>Southwest Pipeline</td>
<td>6,000,000</td>
<td>6,000,000</td>
<td>5,322,737</td>
<td>677,263</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$13,362,178</strong></td>
<td><strong>$15,253,860</strong></td>
<td><strong>$13,387,943</strong></td>
<td><strong>$1,865,917</strong></td>
</tr>
</tbody>
</table>

**Appropriation Balance**

**Fund Cash Balance**

**NOTE:** Approved carryover from revenue balance: Contracts $626,782; Pipeline 677,208

Turnback of unused appropriation and carryover to General Fund $538,117
Resources Available From The Agency

1. Minutes of meetings held may be obtained by writing to:

   State Water Commission
   State Office Building
   Bismarck, ND 58505

2. Data available for public use include:

   a. Government Land Office Plats
   b. Survey Horizontal and Vertical Control
   c. Various Topographic Maps
   d. Water Permit Data
   e. Drainage Permit Data
   f. Stream Flow Data