

# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

**Meeting To Be Held At**  
**State Office Building - 900 East Boulevard Avenue**  
**Lower Level Conference Room**  
**Bismarck, North Dakota**

**June 13, 2012**  
**1:30 P.M., CDT**

## AGENDA

- A. Roll Call
- B. Consideration of Agenda
- C. **Consideration of Draft Minutes of Following SWC Meetings:**
  - 1) **March 7, 2012 State Water Commission Meeting** \*\*
  - 2) **March 29, 2012 State Water Commission Meeting** \*\*
- D. State Water Commission Financial Updates:
  - 1) Agency Program Budget Expenditures
  - 2) 2011-2013 Biennium Resources Trust Fund and Water Development Trust Fund Revenues
- E. Devils Lake:
  - 1) Hydrologic and Projects Update:
    - a) **State Sales Tax** \*\*
    - b) **Land Acquisition** \*\*
  - 2) **City of Fargo Water Treatment Plant Improvements** \*\*
- F. Cost Share Policy Committee:
  - 1) Committee Report/Recommendations:
    - a) **Water Supply Cost Share Policy** \*\*
    - b) **Floodway Property Acquisition Policy** \*\*
- G. Consideration of Following Requests for State Cost Participation:
  - 1) **Argusville Flood Control Levee** \*\*
  - 2) **Countryside Villas/Whispering Meadow Drainage** \*\*
  - 3) **Mouse River Riverbank Stabilization** \*\*
  - 4) **Jackson Township Improvement District No. 1** \*\*
  - 5) **Meadow Lake Outlet** \*\*
  - 6) **Rice Lake Flood Control** \*\*
  - 7) **Rush River Watershed Retention Plan** \*\*
  - 8) **Upper Maple River Dam EA, Phase II** \*\*
  - 9) **Wild Rice Riverbank Stabilization** \*\*
  - 10) **Amenia Township Improvement District Drain No. 74** \*\*
  - 11) **Pontiac Township Improvements District 73** \*\*
  - 12) **Bismarck Storm Water Outfall Construction Project** \*\*
  - 13) **Sheyenne Diversion, Phases I & II, and Horace Diversion Channel Site A (Section 7, Phase V) Improvements** \*\*
  - 14) **Sheyenne Diversion, Phase VI, Weir Improvements** \*\*

- 15) ***Sheyenne Diversion, Installation of Sheyenne Diversion Exterior Pump Station*** \*\*
- 16) ***Burleigh County Tavis Road Storm Water Pump Station*** \*\*
- 17) ***Sawyer Floodway Property Acquisition*** \*\*
- 18) ***Ward County Floodway Property Acquisition, Phase II*** \*\*
  
- H. Fargo Moorhead Metropolitan Area Flood Risk Management Project Update
  
- I. Southwest Pipeline Project:
  - 1) Construction/Project Update
  - 2) ***Project Update*** \*\*
  - 3) ***Little Missouri Washout - Harold Hugelen Property Damage*** \*\*
  - 4) ***Contract 7-9D, North Zap Rural Distribution System*** \*\*
  
- J. Northwest Area Water Supply Project:
  - 1) Project Update
  - 2) ***2011-2013 Biennium Funding*** \*\*
  - 3) ***REM Request - City of Rugby*** \*\*
  
- K. Mouse River Enhanced Flood Protection Plan:
  - 1) Project Status Report
  - 2) ***Mouse River Enhanced Flood Protection Plan, Phase II*** \*\*
  - 3) ***Mouse River Enhanced Flood Protection Plan, Phase III*** \*\*
  
- L. 2012 Federal MR&I Water Supply:
  - 1) ***South Central Regional Water District*** \*\*
  
- M. 2011-2013 State Water Supply:
  - 1) ***Grand Forks-Trail Water District*** \*\*
  
- N. Western Area Water Supply Project:
  - 1) Project Update
  - 2) ***Lease of Western Area Water Supply Project Facilities*** \*\*
  
- O. Missouri River Update
  
- P. 2013-2015 Water Development Report
  
- Q. Red River Retention Authority
  
- R. Garrison Diversion Conservancy District
  
- S. Other Business
  
- T. Adjournment

**\*\* BOLD, ITALICIZED ITEMS REQUIRE SWC ACTION**

To provide telephone accessibility to the State Water Commission meeting for those people who are deaf, hard of hearing, deaf and/or blind, and speech disabled, please contact Relay North Dakota, and reference ... TTY-Relay ND ... 1-800-366-6888, or 711.

## **MINUTES**

### **North Dakota State Water Commission Bismarck, North Dakota**

**June 13, 2012**

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on June 13, 2012. Governor Jack Dalrymple, Chairman, called the meeting to order at 1:30 p.m., and requested Todd Sando, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Dalrymple announced a quorum was present.

#### **STATE WATER COMMISSION MEMBERS PRESENT:**

Governor Jack Dalrymple, Chairman  
Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck  
Arne Berg, Member from Starkweather  
Maurice Foley, Member from Minot  
Larry Hanson, Member from Williston  
Jack Olin, Member from Dickinson  
Harley Swenson, Member from Bismarck  
Robert Thompson, Member from Page  
Douglas Vosper, Member from Nече

#### **OTHERS PRESENT:**

Todd Sando, State Engineer, and Chief Engineer-Secretary,  
North Dakota State Water Commission, Bismarck  
State Water Commission Staff  
Approximately 50 people 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.

#### **CONSIDERATION OF AGENDA**

The agenda for the June 13, 2012 State Water Commission meeting was presented; there were no modifications to the agenda.

***It was moved by Commissioner Foley, seconded by Commissioner Thompson, and unanimously carried, that the agenda be accepted as presented.***

**CONSIDERATION OF DRAFT MINUTES  
OF MARCH 7, 2012 STATE WATER  
COMMISSION MEETING - APPROVED**

The draft final minutes of the March 7, 2012 State Water Commission meeting were approved by the following motion:

*It was moved by Commissioner Berg, seconded by Commissioner Thompson, and unanimously carried, that the draft final minutes of the March 7, 2012 State Water Commission meeting be approved as prepared.*

**CONSIDERATION OF DRAFT MINUTES  
OF MARCH 29, 2012 STATE WATER  
COMMISSION AUDIO CONFERENCE  
CALL MEETING - APPROVED**

The draft final minutes of the March 29, 2012 State Water Commission audio conference call meeting were approved by the following motion:

*It was moved by Commissioner Berg, seconded by Commissioner Thompson, and unanimously carried, that the draft final minutes of the March 29, 2012 State Water Commission audio conference call meeting be approved as prepared.*

**STATE WATER COMMISSION  
BUDGET EXPENDITURES,  
2011-2013 BIENNIUM**

In the 2011-2013 biennium, the State Water Commission has two line items - administrative and support services, and water and atmospheric resources expenditures. The allocated program expenditures for the period ending April 30, 2012, reflecting 42 percent of the 2011-2013 biennium, were presented and discussed by David Laschkewitsch, State Water Commission accounting manager. The expenditures, in total, are within the authorized budget amounts. **SEE APPENDIX "A"**

The Contract Fund spreadsheet, attached hereto as **APPENDIX "B"**, provides information on the committed and uncommitted funds from the Resources Trust Fund, the Water Development Trust Fund, and the general fund project dollars. The total amount allocated for projects is \$344,651,594, leaving an unobligated balance of \$46,608,988 available to commit to projects in the 2011-2013 biennium.

**RESOURCES TRUST FUND  
AND WATER DEVELOPMENT  
TRUST FUND REVENUES,  
2011-2013 BIENNIUM**

Oil extraction tax deposits into the Resources Trust Fund total \$127,681,003 through May, 2012, and are currently \$48,430,142 or 61.1 percent above budgeted revenues.

Deposits into the Water Development Trust Fund (tobacco settlement) total \$9,057,248 through May, 2012, and are currently \$1,254,769 or 12.2 percent behind budgeted revenues.

***DEVILS LAKE HYDROLOGIC,  
AND PROJECTS UPDATES  
(SWC Project No. 416-17)***

The Devils Lake hydrologic report, and project updates were provided, which are detailed in the staff memorandum, dated May 25, 2012, and attached hereto as ***APPENDIX "C"***.

Construction of the Devils Lake East End Outlet project is nearing completion, testing of the pumps began June 4, 2012, with Devils Lake water reaching Tolna Coulee that day. When the East End Outlet is completed, the outlet will pump water at a maximum rate of 350 cubic per second (cfs) from East Devils Lake to Tolna Coulee, which is a tributary to the Sheyenne River. The purpose of this project is to prevent further damage resulting from the high water level experienced around Devils Lake and to reduce the risk of a natural overflow to the Sheyenne River. The East End Outlet will be operated in conjunction with the existing Devils Lake West End outlet, which was upgraded to 250 cfs in 2010. This will bring the total discharge capacity from the two pumped outlets to 600 cfs. The preliminary engineering for this project began in January, 2011, an aggressive 18-month schedule resulted in being able to begin pumping in early June, 2012.

Governor Dalrymple reiterated the importance of the Devils Lake projects, and expressed his wholehearted appreciation to the State Water Commission, the State Engineer, the Commission staff, and others for their diligent commitment and dedication to the construction of the Devils Lake East End Outlet project.

***DEVILS LAKE WEST AND EAST END  
OUTLET PROJECTS - APPROVAL OF  
STATE FUNDS FOR NORTH DAKOTA  
SALES TAX (\$1,000,000) FOR STATE  
PROCURED MATERIALS  
(SWC Project No. 416-15)***

The estimated cost of material purchased on the Devils Lake East End Outlet project is \$17,457,829, of which 5 percent North Dakota sales tax on materials purchased by the state, is estimated at \$872,891. Pumps and motors were procured by the state and installed for the Devils Lake West End Outlet expansion project, at an estimated total cost of \$1,430,086, of which 5 percent North Dakota sales tax is estimated to be \$71,504. The total state sales tax for both outlet projects is estimated to be \$944,395.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed \$1,000,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for North Dakota sales tax on state procured materials for the Devils Lake West and East End Outlet projects.

***It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve an allocation not to exceed \$1,000,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for North Dakota sales tax on state procured materials for the Devils Lake West and East End Outlet projects. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***DEVILS LAKE EAST END OUTLET  
PROJECT - APPROVAL OF ADDITIONAL  
STATE FUNDS FOR CROP DAMAGES/  
PROPERTY ACQUISITION EASEMENTS  
(\$300,000)  
(SWC Project No. 416-15)***

On June 21, 2011, the State Water Commission approved an allocation not to exceed \$400,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), and authorized the secretary to the State Water Commission to finalize

and execute the property acquisition contract for the Devils Lake East End Outlet project.

The revised cost estimate for the property acquisition easements and crop damages for the Devils Lake East End Outlet project is \$700,000. A request was presented for the State Water Commission's consideration for an additional allocation of \$300,000 for the crop damages and easements related to the Devils Lake East End Outlet.

It was the recommendation of Secretary Sando that the State Water Commission approve an additional allocation not to exceed \$300,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for payment of crop damages and property acquisition easements for the Devils Lake East End Outlet project.

***It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve an additional allocation not to exceed \$300,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for payment of crop damages and property acquisition easements for the Devils Lake East End Outlet project. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***CITY OF FARGO WATER TREATMENT  
PLANT IMPROVEMENTS - APPROVAL  
OF ADDITIONAL STATE COST  
PARTICIPATION (\$14,400,000)  
(SWC Project No. 237-03/FAR)***

On June 21, 2011, the State Water Commission considered a request from the city of Fargo for state cost participation of the costs associated with the drinking water treatment plant improvements that are necessary to

address the downstream water quality impacts from the operation of the Devils Lake outlet. The city conducted a facility planning study related to this project that identified several important steps including a pilot study at an estimated cost of \$1,200,000. On June 21, 2011, the State Water Commission approved a 50 percent state cost participation grant of the eligible costs not to exceed an allocation of \$600,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to support the pilot study of the reverse osmosis treatment process at the water treatment plant. The pilot study was conducted in July, 2011 and completed in April, 2012 to evaluate seasonal water supply variation impacts on the membrane processes.

The project engineer's cost estimate for the design and equipment procurement of a reverse osmosis membrane system for the Fargo water treatment plant is \$28,800,000. The purpose is to have a treatment process to meet the targeted finished water quality goals (sulfate reduction, hardness reduction, bromide reduction, etc.). The anticipated schedule is to begin the system design and equipment procurement phases in the summer of 2012, with the final design completed in late 2013; construction to begin shortly thereafter. A request from the city of Fargo was presented for the State Water Commission's consideration for an additional state cost participation grant of 50 percent of the eligible costs in the amount of \$14,400,000 to support the design and equipment procurement phases.

It was the recommendation of Secretary Sando that the State Water Commission approve a 50 percent state cost participation grant of the eligible costs not to exceed an additional allocation of \$14,400,000 from the

funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B.2020), to the city of Fargo to support the design and equipment procurement of a reverse osmosis membrane system for the Fargo water treatment plant. The Commission's affirmative action would increase the total state cost allocation to \$15,000,000.

***It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve a 50 percent state cost participation grant of the eligible costs not to exceed an additional allocation of \$14,400,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the city of Fargo to support the design and equipment procurement of a reverse osmosis membrane system for the Fargo water treatment plant. This action is contingent upon the availability of funds, and is subject to future revisions.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***This action increased the total state cost allocation to \$15,000,000 for the pilot study using the reverse osmosis treatment process, and for the design and equipment procurement phases for the Fargo water treatment plant.***

**STATE WATER COMMISSION COST  
SHARE POLICY, PROCEDURE, AND  
GENERAL REQUIREMENTS -  
APPROVAL OF WATER SUPPLY  
COST SHARE POLICY; AND  
NORTHWEST AREA WATER SUPPLY  
REPLACEMENT AND EXTRAORDINARY  
MAINTENANCE (REM) FUND POLICY  
(SWC File AS/SWC/POL)  
(SWC Project Nos. 1753 and 237-04)**

The State Water Commission's cost share policy committee and others met on June 13, 2012. Items of discussion included a draft water supply cost share policy; the Floodway Property Acquisition cost share policy (adopted by the State Water Commission on February 2, 2012; revised on March 29, 2012); and the Northwest Area Water Supply (NAWS) project replacement and extraordinary maintenance fund policy.



The following draft policies were presented for the State Water Commission's consideration:

**State Water Commission Water Supply Cost Share Policy:**

Effective from the time of enactment

1. Water depots for industrial use receiving water from facilities constructed using State Water Commission funding or loans have the following additional requirements:
  - A. Domestic water supply has priority over industrial water supply in times of shortage;
  - B. If water service will be contracted, public notice of availability of the water service contracts is required; and
  - C. A portion of the water supply at any depot must be available on a non-contracted basis for public access.
2. The State Water Commission will not provide written consent to sell, lease, abandon, encumber, or otherwise dispose of any part of the property used by the Western Area Water Supply Authority without a public competitive request for proposal/selection process.
3. Water treatment and regional water supply project construction funding or loans from the State Water Commission have the following additional requirements:
  - A. Bidding and procurement will follow North Dakota Century Code § 48-01.2 and 54-44.7
  - B. The political subdivision shall require all project contractors and service providers to agree to defend, indemnify and hold harmless the political subdivision and the state from any and all vicarious and other derivative claims that arise out of the contractor's performance under the agreement, except for claims based upon the political subdivision or state's own direct active acts of negligence, sole negligence or intentional misconduct. This obligation to defend, indemnify, and hold harmless does not extend to professional liability claims arising from professional errors and omissions. The political subdivision shall require that the political subdivision and the state be made an additional insured on the contractor's commercial general liability policy including any excess policies, to the extent applicable. The levels and types of insurances re-

quired in any contract shall be reviewed and concurred to by the Chief Engineer. The political subdivision may not agree to any provision which limits or purports to limit the liability of a contractor or in which the political subdivision agrees to indemnify a contractor.

It was the recommendation of the State Water Commission that section 1. A. be amended as follows:

1. A. Domestic water supply has priority over industrial water supply in times of shortage. **This must be explicit in the water service contracts with industrial users.** *(added language is underlined)*

***It was moved by Commissioner Swenson and seconded by Commissioner Olin that the State Water Commission adopt the draft Water Supply Cost Share Policy as presented, including the underlined language in section 1. A. The effective date of the Water Supply Cost Share Policy will be June 13, 2012. SEE APPENDIX "D"***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

#### **State Water Commission Floodway Property Acquisition Policy:**

There were no changes recommended to the State Water Commission's Floodway Property Acquisition Policy.

#### **Northwest Area Water Supply (NAWS) Project Reserve Fund for Replacement and Extraordinary Maintenance Policy:**

The State Water Commission collects and maintains a reserve fund for replacement and extraordinary maintenance (REM) from water sales revenues from the Northwest Area Water Supply (NAWS) system. Funds are collected on all NAWS contracts including all users served through the city of Minot's contract, all communities and rural water systems served through the NAWS infrastructure, and the city of Rugby.

A policy regarding the utilization of funds from the NAWS REM fund is required as portions of the system have been in use for several years. The proposed policy mirrors that used on the Southwest Pipeline Project with the exception that

only items in excess of \$15,000 will be considered, and that the State Water Commission be notified in advance for their concurrence of the determination that an item is eligible for reimbursement from the replacement and extraordinary maintenance reserve fund.

The following Northwest Area Water Supply (NAWS) Project Replacement and Extraordinary Maintenance (REM) reserve fund draft policy was presented for the State Water Commission's consideration:

1. Only those items initially funded by Northwest Area Water Supply (NAWS) Project funds and are considered a NAWS project works are eligible for REM reimbursement;
2. Only those items over \$15,000 are eligible for REM reimbursement;
3. The State Water Commission shall be notified of budgeted items as part of the local budget process intended for REM reimbursement; and
4. The State Water Commission shall concur on eligible items for reimbursement and shall authorize the reimbursement from the REM reserve fund.

***It was moved by Commissioner Hanson and seconded by Commissioner Vosper that the State Water Commission adopt the Northwest Area Water Supply (NAWS) Project Replacement and Extraordinary Maintenance (REM) reserve fund draft policy as presented, effective June 13, 2012.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***CITY OF ARGUSVILLE FLOOD CONTROL LEVEE RECERTIFICATION - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION (\$216,200) (SWC Project No. 1806)***

On September 21, 2011, the State Water Commission considered a request from the City of Argusville for state cost participation in their costs for recertification of the city's flood control levee. FEMA has been updating its flood insurance rate maps as part of the map

modernization process. As part of the effort, FEMA has determined that the city must provide documentation that the levee protecting the city from floodwaters meets the

federal requirements. The levee is listed as a Provisionally Accredited Levee (PAL). The first phase of the project included a geotechnical analysis to determine if any reconstruction was necessary to meet the federal criteria for the base flood, the evaluation report was completed on March 27, 2012. The deadline is December 1, 2012 for completion of the levee recertification. On September 21, 2011, the State Water Commission approved a 60 percent state cost participation of the eligible costs not to exceed an allocation of \$25,432 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020).

The city of Argusville is proceeding with the remainder of the project as required by FEMA to accredit the levee. The project includes a home buyout/removal (\$100,000 not eligible) to realign a segment of the levee that must be constructed due to a failing crib wall and inadequate freeboard, reconstruction of a segment of the levee, slope repairs within the storm water holding pond, relocation of utility poles within the easement of the levee, and a certification report.

The total estimated cost of the project is \$597,614, of which \$360,333 is determined eligible for state cost participation at 60 percent of the eligible costs (\$216,200). A request from the city of Argusville was presented for the State Water Commission's consideration for a 60 percent state cost participation in the amount of \$216,200.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation at 60 percent of the eligible costs, not to exceed an additional allocation of \$216,200 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), for the city of Argusville flood control levee recertification. The Commission's affirmative action would increase the total state cost allocation to \$214,632.

***It was moved by Commissioner Goehring and seconded by Commissioner Olin that the State Water Commission approve state cost participation at 60 percent of the eligible costs, not to exceed an additional allocation of \$216,200 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the City of Argusville to support their 2012 flood control levee recertification. This action is contingent upon the availability of funds.***

***This action increases the total state cost allocation to \$241,632 for the City of Argusville flood control levee recertification.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***COUNTRYSIDE VILLAS/WHISPERING MEADOW DRAINAGE IMPROVEMENT PROJECT (WARD COUNTY) - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION (\$157,211) (SWC Project No 1523)***

A request from the Ward County Water Resource District was presented for the State Water Commission's consideration for cost participation for Countryside Villas/Whispering Meadow drainage improvement project. The project is located 5 miles southeast of Minot and will

modify existing structures and construct new features to address flooding, drainage issues, and standing water during snowmelt and rainfall events within the subdivision.

The project is designed for the 100-year event and would enlarge the capacity of the drain in the subdivisions, by enlarging culverts, re-grading the channel from 20th avenue to 37th avenue, constructing a new interceptor channel north and south for a length of 1,950 feet between Countryside Villas and the field to the east, and the construction of a new channel for a length of 1,100 feet north of 24th avenue from 62nd street to the new interceptor channel. The road located south by the Mouse River will be raised and have a 6-foot high box culvert installed. The overall length of the project is 10,000 feet; the project outlet is approximately 6 miles southeast of Minot and empties into the Mouse River.

The project engineer's cost estimate is \$488,193, of which \$424,493 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$157,211). The proposed project was submitted for conditional approval pending an assessment vote, and satisfaction of the required permits. The State Water Commission's cost share policy provides for conditional approval of rural flood control projects subject to the satisfaction of conditions. The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$157,211.

It was the recommendation of Secretary Sando that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$157,211 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to support the Countryside Villas/Whispering Meadows drainage improvement project.

***It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve conditional state cost participation as a rural flood control project at***

**45 percent of the eligible costs, not to exceed an allocation of \$157,211 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to support the Countryside Villas/Whispering Meadows drainage improvement project. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required drain permit, and receipt of the final engineering plans.**

**Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.**

**MOUSE RIVER RIVERBANK  
STABILIZATION PROJECT  
(MCHENRY COUNTY) -  
APPROVAL OF STATE COST  
PARTICIPATION (\$120,615)  
(SWC Project No. 227)**

A request from the Eaton Flood Irrigation District was presented for the State Water Commission's consideration for state cost participation for the Mouse River Riverbank Stabilization project, in McHenry county. A stabilization project is needed in Section 6, Township 155

North, Range 76 West, Newport township, to prevent erosion into the east diversion channel. This project would allow water to go back into the river rather than into the East Meadow pond. If the river were to wash out the bank, a new route would run through the meadow and ruin several acres of hayland.

The project engineer's cost estimate is \$235,437, of which \$201,025 is determined eligible for state cost participation as a bank stabilization project at 60 percent of the eligible costs (\$120,615). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$120,615.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a bank stabilization project at 60 percent of the eligible costs, not to exceed an allocation of \$120,615 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Eaton Flood Irrigation District for the Mouse River Riverbank Stabilization project.

**It was moved by Commissioner Foley and seconded by Commissioner Goehring that the State Water Commission approve state cost participation as a bank stabilization project at 60 percent of the eligible costs, not to exceed an allocation of \$120,615 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Eaton Flood Irrigation District for the**

***Mouse River Riverbank Stabilization project. This action is contingent upon the availability of funds, and satisfaction of the sovereign lands permit.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***JACKSON TOWNSHIP IMPROVEMENT DISTRICT NO. 1 PROJECT - APPROVAL OF REVISED PROJECT; AND CONDITIONAL STATE COST PARTICIPATION (APPROVED ON SEPTEMBER 21, 2011) TO BE APPLIED TO REVISED PROJECT (SWC Project No. 1977)***

On September 21, 2011, the State Water Commission considered a request from the Dickey-Sargent Joint Water Resource District for state cost participation for the Jackson Township Improvement District No. 1 and Kraft Slough Outlet, Parts I, II, and III projects.

The project engineer's original cost estimate was \$8,250,000, of which \$5,121,944 was determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$2,304,875). The State Water Commission's policy limits the 2011-2013 biennium costs to \$500,000 per project. Pursuant to the State Water Commission's cost share policy, conditional approval of a rural flood control project is allowed subject to satisfaction of the required drain permit, a positive assessment vote, and receipt of the final engineering plans. On September 21, 2011, the State Water Commission approved conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) contingent upon satisfaction of the conditions.

The Jackson Township Improvement District No. 1 project has been rerouted to discharge into an existing legal drain known as the Oakes Pilot Drain, and includes new lateral alignment locations. The revised project, which is located southeast of the city of Oakes, is intended to improve drainage of agricultural lands, increase the hydraulic capacity of existing road ditches, and provide relief to State Highway 11, the Red River valley, and the Western Railway. Approximately 8 miles of ditch improvements will be completed under this project, which will be designed to minimize channel velocities. New section line culverts will be installed throughout the project.

The project engineer's revised cost estimate is \$5,285,000, of which \$3,759,940 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$1,691,972). The Dickey-Sargent Joint Water Resource District presented a request to the State Water Commission to consider approval of the revised project, and that the

allocation of \$500,000 (approved by the State Water Commission on September 21, 2011) be applied to the revised project (currently referred to as the Jackson Township Improvement District No. 1 project).

Commissioner Swenson reiterated concerns expressed at previous Commission meetings relating to the downstream impact analysis requirements and the possible liabilities which could be incurred as a result of negative downstream impacts. In response to Commissioner Swenson's concerns, the Commission staff explained the following cost share policy for rural flood control:

At its May 1, 2002 meeting, the State Water Commission approved cost share policy revisions for rural flood control. The criteria included the requirement for a discussion of downstream impacts at the project outlet with the need for further analysis considered on a case-by-case basis as determined by the State Engineer; and that the analysis also include a determination as to whether or not costs will be incurred downstream as a result of the project.

On December 6, 2002, the State Water Commission approved the following rural flood control policy relating to downstream impact analysis requirements:

*It is the policy of the State Water Commission to provide financial support, contingent upon the availability of funds, for rural flood control projects. In order to provide a basinwide perspective to the regulatory review of proposed drainage projects, the State Engineer shall solicit, at his discretion, comments from the applicable joint powers board. It is anticipated that this additional basinwide perspective, in concert with the State Engineer's judgment, will help ensure that the issue of potential downstream impacts is properly addressed.*

It was the recommendation of Secretary Sando that the State Water Commission approve the revised Jackson Township Improvement District No. 1 project, and that the conditional state cost participation of \$500,000 (approved by the State Water Commission on September 21, 2011) be applied to the revised project.

***It was moved by Commissioner Goehring and seconded by Commissioner Berg that the State Water Commission approve the revised Jackson Township Improvement District No. 1 project, and that the conditional state cost participation of \$500,000 (approved by the State Water Commission on September 21, 2011) be applied to the revised project. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required drain permit, and receipt of the final engineering plans.***



**Commissioners Berg, Foley, Goehring, Hanson, Olin, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioner Swenson voted nay. Recorded votes were 8 ayes; 1 nay. Governor Dalrymple announced the motion carried.**

**MEADOW LAKE OUTLET  
(BARNES COUNTY) -  
APPROVAL OF CONDITIONAL STATE  
COST PARTICIPATION (\$500,000)  
(SWC Project No. 2010)**

A request from the Barnes County Water Resource District was presented for the State Water Commission's consideration for state cost participation to construct a controlled outlet to the lower water level on Meadow Lake. The

current water levels are causing damages to local businesses, threatening to overtop roads, and inundate cropland. The water will be diverted to a natural spillway that drains into the James River. The project area is located approximately 8.5 miles west and 8 miles north of Litchville, ND.

The proposed project would create an outlet and lower the lake approximately 7 feet. The outlet would be 7,700 feet of a 36-inch diameter buried pipe, an open channel with a bottom width of 10 feet and 4:1 side slopes, and a 36-inch control gate on the upstream end. A portion of the excavation involves improvements to an existing drainage way.

The project engineer's total cost estimate is \$1,834,090, of which \$1,688,485 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$759,820). The State Water Commission's policy limits the 2011-2013 biennium costs to \$500,000 per project. Pursuant to the State Water Commission's cost share policy, conditional approval of a rural flood control project is allowed subject to satisfaction of the required drain permit, a positive assessment vote, and receipt of the final engineering plans. The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$500,000.

Commissioner Swenson reiterated the concerns he expressed relating to the downstream impact analysis requirements and the possible liabilities which could be incurred as a result of negative downstream impacts.

It was the recommendation of Secretary Sando that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Barnes County Water Resource District for the construction of the Meadow Lake outlet.

***It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Barnes County Water Resource District for the construction of the Meadow Lake outlet. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required drain permit, and receipt of the final engineering plans.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioner Swenson voted nay. Recorded votes were 8 ayes; 1 nay. Governor Dalrymple announced the motion carried.***

***RICE LAKE FLOOD CONTROL  
(WARD COUNTY) - CONDITIONAL  
APPROVAL OF STATE COST  
PARTICIPATION (\$2,842,200)  
(SWC Project No. 1997)***

A request from the Rice Lake Recreation District was presented for the State Water Commission's consideration for state cost participation for their project to install a pump station and discharge force main to lower the water elevation

on Rice Lake in Ward county. The water will be discharged into Douglas Lake and ultimately into Lake Sakakawea.

Rice Lake does not have an outlet, and the water levels have been continually rising during the past three years causing multiple properties to be substantially impacted. Temporary pumping has provided short-term relief, but that is not a long-term solution. The proposed project consists of installing a lift station and 12.87 miles of a 16-inch PVC force main to lower the flood water elevation.

Requirements from the Office of the State Engineer include a drain permit, and a temporary water permit requesting the volume of water and the pumping rate. The temporary water permit will be evaluated by the Commission's staff for determination of negative impacts which could occur to the aquifer as a result of the project.

The project engineer's total estimated cost is \$6,301,670, of which \$4,837,000 is determined eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$2,842,200). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$2,842,200.

It was the recommendation of Secretary Sando that the State Water Commission approve conditional state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$2,842,200 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Rice Lake Recreation District to support the Rice Lake flood control project.

***It was moved by Commissioner Foley and seconded by Commissioner Vosper that the State Water Commission approve conditional state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$2,842,200 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Rice Lake Recreation District to support the Rice Lake flood control project. This action is contingent upon the availability of funds, satisfaction of the required drain permit and the temporary water permit, and receipt of the final engineering plans.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, and Vosper voted aye. (Governor Dalrymple was not available for the vote.) There were no nay votes. Commissioner Goehring announced the motion carried.***

***RUSH RIVER WATERSHED  
RETENTION PLAN -  
APPROVAL OF STATE COST  
PARTICIPATION (\$67,500)  
(SWC Project No. 829)***

A request from the Rush River Water Resource District was presented for the State Water Commission's consideration for state cost participation for their Rush River Watershed Retention Plan. The District has made an effort to investigate

retention to assist in solving flooding issues with the completion of the Rush River Watershed Detention Site Feasibility in 2010, which resulted in a single preferred location recommended for further study. In 2011, the Rush River Dam Preliminary Soils and Hydraulic study began and is currently being completed for the site.

The District is interested in continuing its efforts working toward retention by developing a watershed wide comprehensive Rush River Watershed Retention plan that would be distributed throughout the entire watershed. After the plan is developed, there will be a specific set of objectives and priorities to meet the District's goal of peak flow reduction on the Rush River mainstem and secondarily on the Red River of the North.

The study objectives includes verification of existing retention facilities and updating elevation-area-storage-discharge curves within the HEC-HMS model; identifying all previously studied and proposed retention sites and updating contributing watershed areas using LiDAR; identifying and evaluating new retention sites; hydrologic modeling; and drafting of the final report.

The total estimated cost of the Rush River Watershed Retention Plan is \$135,000, of which all is determined eligible for state cost participation as an engineering feasibility study at 50 percent of the eligible costs (\$67,500). The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$67,500.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as an engineering feasibility study at 50 percent of the eligible costs, not to exceed an allocation of \$67,500 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Rush River Water Resource District to support the Rush River Watershed Retention Plan.

***It was moved by Commissioner Olin and seconded by Commissioner Thompson that the State Water Commission approve state cost participation as an engineering feasibility study at 50 percent of the eligible costs, not to exceed an allocation of \$67,500 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Rush River Water Resource District to support the Rush River Watershed Retention Plan. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, and Vosper voted aye. (Governor Dalrymple was not available for the vote.) There were no nay votes. Commissioner Goehring announced the motion carried.***

**UPPER MAPLE RIVER DAM  
ENVIRONMENTAL ASSESSMENT,  
PHASE II - APPROVAL OF ADDITIONAL  
STATE COST PARTICIPATION (\$112,500)  
(SWC Project No. 1878-02)**

On September 30, 2008, the State Water Commission approved a request from the Maple-Steele Joint Water Resource District for state cost participation to support the project development and preliminary engineering study, and Phase I of the environmental assessment for the proposed Upper Maple River Dam project as a flood retention project (flood control) at 50 percent of the eligible costs not to exceed an allocation of \$112,500 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020). The proposed project is located in Section 35 of Carpenter township, Steele county.

The Upper Maple River watershed experienced frequent and significant flooding and has been studied for retention for several years. Two studies were completed in 2002 and 2005 to identify site locations on the Minnie Lake tributary and adjacent streams in Barnes county. The Upper Maple River Dam site, located below the Sussex Dam, was identified as the preferred site based upon the results of the third study.

On December 10, 2010, the State Water Commission was informed that the project development and preliminary engineering costs for the proposed Upper Maple River Dam had increased to a total cost of \$382,170 as a result of the revised scope of work relating to aerial photogrammetry, soils investigation, Phase I of the environmental assessment, and a preliminary outline for the anticipated scope of work for Phase II. The State Water Commission approved an additional allocation not to exceed \$75,210 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Maple-Steele Joint Water Resource District for the Upper Maple River Dam project development and preliminary engineering, and the environmental assessment, Phase I. This increased the total state allocation to \$187,710.

Because final approval of the dam project will come from the United States Army Corps of Engineers, it constitutes federal action that can include funding, and is subject to the National Environmental Policy Act of 1969. The proposed retention structure may require an environmental impact statement (EIS) based upon the level of impacts identified through the environmental assessment.

Project Phase I has been essentially completed with no indications that an EIS will be required. It is the intent of the District to proceed with Phase II of the environmental assessment, which includes the permitting process. The scope of work proposed for Phase II includes an impact analysis, field surveys, environmental assessment and FONSI preparation, agency review and coordination, public meetings, and the final document preparation. The project engineer's cost estimate for Phase II of the Upper Maple River Dam environmental assessment is \$230,000, of which \$225,000 is determined eligible for state cost participation as a flood control study at 50 percent of the eligible costs (\$112,500). A request from the Maple-Steele Joint Water Resource District was presented for the State Water Commission's consideration for an additional state cost participation in the amount of \$112,500 for Phase II of the Upper Maple River Dam environmental assessment. The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$112,500.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a flood control study at 50 percent of the eligible costs, not to exceed an additional allocation of

\$112,500 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Maple-Steele Joint Water Resource District for the Upper Maple River Dam environmental assessment, Phase II. The Commission's affirmative action would increase the total state cost allocation to \$300,210.

***It was moved by Commissioner Vosper and seconded by Commissioner Foley that the State Water Commission approve state cost participation as a flood control study at 50 percent of the eligible costs, not to exceed an additional allocation of \$112,500 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Maple-Steele Joint Water Resource District for the Upper Maple River Dam environmental assessment, Phase II. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, and Vosper voted aye. (Governor Dalrymple was not available for the vote.) There were no nay votes. Commissioner Goehring announced the motion carried.***

***This action increases the total state cost allocation to \$300,210 for the Upper Maple River Dam project development and preliminary engineering study, and the environmental assessment, Phases I and II.***

***WILD RICE RIVER BANK STABILIZATION PROJECT - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION (\$41,632) (SWC Project No. 1979)***

On October 31, 2011, the State Water Commission approved a request from the Southeast Cass Water Resource District for state cost participation for the proposed Wild Rice River bank stabilization project at 60 percent of the eligible costs, not to exceed an allocation of \$149,568 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020).

On October 31, 2011, the State Water Commission approved a request from the Southeast Cass Water Resource District for state cost participation for the proposed Wild Rice River bank

A bank slide along the Wild Rice River occurred adjacent to 21st Street South in Stanley township, Cass county. The embankment needs to be stabilized to prevent the road from sliding and restricting access to the existing homes. The water and sewer lines are located in the road and a continued slide would cause disruption of service and costly utility relocation.

The proposed project work will consist of installing helical anchors into the ground to stabilize sheet pile that will be driven to hold back the road embankment. The slide is approximately 100 feet in length.

On February 8, 2012, the bids were opened for the project and were higher than the original estimated cost of the project (\$300,000). The project engineer's revised estimated cost of the project is \$382,169, of which \$318,669 is determined eligible as a bank stabilization project for state cost participation at 60 percent of the eligible costs (\$191,200). A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for an additional state cost participation in the amount of \$41,632 (eligible costs of \$191,200 less \$149,568 approved on October 31, 2011) to support the Wild Rice River bank stabilization project.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a bank stabilization project at 60 percent of the eligible costs, not to exceed an additional allocation of \$41,632 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the Wild Rice River bank stabilization project. The Commission's affirmative action would increase the total state cost allocation to \$191,200.

***It was moved by Commissioner Olin and seconded by Commissioner Vosper that the State Water Commission approve state cost participation as a bank stabilization project at 60 percent of the eligible costs, not to exceed an additional allocation of \$41,632 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the Wild Rice River bank stabilization project. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, and Vosper voted aye. (Governor Dalrymple was not available for the vote.) There were no nay votes. Commissioner Goehring announced the motion carried.***

***This action increases the total state cost allocation to \$191,200 for the Wild Rice River bank stabilization project.***

**AMENIA TOWNSHIP IMPROVEMENT  
DISTRICT DRAIN NO. 74 -  
DE-OBLIGATION OF \$313,600  
APPROVED SEPTEMBER 21, 2011; AND  
CONDITIONAL APPROVAL OF STATE  
COST PARTICIPATION (\$459,350)  
(SWC Project No. 1063)**

On September 21, 2011, the State Water Commission approved a request from the Rush River Water Resource District for conditional state cost participation to support the Amenia Township Improvement District Drain No. 69 project as a rural flood control project at 45 percent of the eligible costs not to

exceed an allocation of \$313,600 from the funds appropriated to the State Water Com-

mission in the 2011-2013 biennium (S.B. 2020). This action was contingent upon the availability of funds, a positive assessment vote, satisfaction of the required drain permit, and receipt of the final engineering plans.

The assessment district vote failed for the original project, referred to as the Amenia Township Improvement District No. 69. The landowners within the assessment district requested that the Rush River Water Resource District modify the project design, and proceed with the assessment vote as a new project. The conditional state cost participation allocation of \$313,600, approved on September 21, 2011, will be de-obligated.

The revised proposed project, referred to as Amenia Township Improvement District Drain No. 74, consists of the development of two new legal assessment drains, with the intent to improve agricultural lands along the project and increase the hydraulic capacity of the existing road ditches. The project will include laying back the existing ditch side slopes to provide a lower water profile in the channel, the gradient of the channel will be flattened to mitigate future channel bottom erosion, and new culverts will be installed through both township and county roads, as well as the Burlington Northern and Santa Fe Railways. The new crossings will be designed to a 10-year USGS-NDDOT hydrology standard. The first new legal drain will be constructed along the east section line of Sections 5, 8, 17, and 20 of Amenia Township, and the second new legal drain will be constructed along the east section line of Section 7 and 18 in Amenia Township.

The project engineer's revised cost estimate is \$1,650,000, of which \$1,020,788 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$459,350). Pursuant to the State Water Commission's cost share policy, conditional approval of a rural flood control project is allowed subject to satisfaction of the required drain permit, a positive assessment vote, and receipt of the final engineering plans. A request from the Rush River Water Resource District was presented for the State Water Commission's consideration for a 45 percent state cost participation in the amount of \$459,350.

It was the recommendation of Secretary Sando that the State Water Commission approve a de-obligation of the state cost participation allocation of \$313,600, approved on September 21, 2011, for the Amenia Township Improvement District No. 69; and, that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$459,350 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Rush River Water Resource District to support the Amenia Township Improvement District Drain No. 74 project.



***It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission:***

***1) approve a de-obligation of the state cost participation allocation of \$313,600, approved on September 21, 2011, for the Amenia Township Improvement District No. 69; and***

***2) approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$459,350 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Rush River Water Resource District to support the Amenia Township Improvement District Drain No. 74 project. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required drain permit, and receipt of the final engineering plans.***

***Commissioners Berg, Foley, Goehring, Hanson, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioners Olin and Swenson voted nay. Recorded vote was 7 ayes; 2 nays. Governor Dalrymple announced the motion carried.***

***PONTIAC TOWNSHIP IMPROVEMENT  
DISTRICT NO. 73 PROJECT (CASS CO.) -  
CONDITIONAL APPROVAL OF STATE  
COST PARTICIPATION (\$500,000)  
(SWC Project No. 2007)***

A request from the Maple River Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Pontiac Township Improvement District No. 73 project. The drain improvements

will begin in Section 25 of Clifton township and continue downstream to Section 20 of Highland township in Cass county.

The project is the development of a new legal assessment drain to reduce impacts of the current flooding conditions on a series of sloughs south of Lake Alice. The current water levels have inundated roadways, threatened and impacted farming operations, and numerous farmsteads. The water elevations are 5 to 13 feet higher than in 2008. The proposed project will create a controlled outlet for each slough and lower the slough water elevation 6 to 10 feet.

The project will use 10,400 feet of 30-inch pipe on the upstream portions and 6,950 feet of 36-inch diameter pipe on the outlet. To accommodate the depth and size of the outlet, 2,200 feet of the downstream natural channel will be modified to have a uniform bottom width of 10 feet with 4:1 side slopes. The overall length of the project is 38,000 feet.

Discharges will be managed using a control gate located on the outlet of each slough. The project outlet is approximately 6 miles south of Alice, N.D., and empties into the Maple River upstream of the Maple River Dam.

The project engineer's total cost estimate is \$2,950,000, of which \$2,159,555 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$971,800). The State Water Commission's policy limits the 2011-2013 biennium costs to \$500,000 per project. Pursuant to the State Water Commission's cost share policy, conditional approval of a rural flood control project is allowed subject to satisfaction of the required drain permit, a positive assessment vote, and receipt of the final engineering plans. The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$500,000.

It was the recommendation of Secretary Sando that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Maple River Water Resource District to support the Pontiac Township Improvement District No. 73 project.

***It was moved by Commissioner Goehring and seconded by Commissioner Foley that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Maple River Water Resource District to support the Pontiac Township Improvement District No. 73 project. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required drain permit, and receipt of the final engineering plans.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**CITY OF BISMARCK STORM WATER  
OUTFALL CONSTRUCTION PROJECT -  
APPROVAL OF STATE COST  
PARTICIPATION (\$186,000)  
(SWC Project No. 0228)**

A request from the city of Bismarck was presented for the State Water Commission's consideration for state cost participation for their storm water outfall construction project.

During the 2011 Missouri River flood, the city of Bismarck was required to plug their storm water outfalls to the Missouri River to prevent flood waters from backing up and flooding low-lying areas in south Bismarck. In 2012, the city manually plugged these pipes with sand-filled plugs and, in one instance needed to use a concrete plug. This was a slow process and did not allow for a quick response. Removal and cleanup of these plugs is also slow, labor intensive, and delays the recovery process. To avoid these problems in the future, the city intends to install floodgates on these outfalls that can be closed proactively when threatened by a flood event.

The project engineer's total cost estimate is \$310,000, of which all is determined eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$186,000). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$186,000.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$186,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the city of Bismarck to support their storm water outfall construction project.

***It was moved by Commissioner Vosper and seconded by Commissioner Berg that the State Water Commission approve state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$186,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the city of Bismarck to support their storm water outfall construction project. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. (Commissioner Olin was not available for the vote). There were no nay votes. Governor Dalrymple announced the motion carried.***

**SHEYENNE RIVER DIVERSION  
LOW-FLOW CHANNEL REPAIRS  
AND IMPROVEMENTS PROJECT  
(CASS COUNTY) - CONDITIONAL  
APPROVAL OF STATE COST  
PARTICIPATION FOR AREAS  
1 AND 2, AND HORACE DIVERSION  
CHANNEL SITE A (SECTION 7,  
PHASE V) IMPROVEMENTS (\$50,422)  
(SWC Project No. 1344)**

On March 11, 2010, the State Water Commission considered a request from the Southeast Cass Water Resource District for state cost participation for the improvements to the Sheyenne River diversion low-flow channel. The proposed project identified four areas located in Mapleton and Barnes townships of the existing diversion channel that required repairs and improvements. Areas 1 and 2 were

completed in 2010-2011, and Areas 3 and 4 are scheduled for completion in 2011-2012.

Area 1 consisted of maintenance/repairs and improvements from the inlet weir near Highway 17 to the diversion convergence. The estimated cost of Area 1 was \$2,300,000, of which \$1,498,000 was determined as eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$898,800).

Area 2, consisted of improvements from Interstate 94 to the BNSF railroad crossing, which requires a construction permit. The total estimated cost for Area 2 was \$1,100,000, of which \$1,098,000 was determined to be eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$658,800). On March 11, 2010, the State Water Commission approved conditional state cost participation as a flood control project at 60 percent of the eligible costs (Area 1 - \$898,800 and Area 2 - \$658,800) not to exceed a total allocation of \$1,557,600 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020).

The diversion channel was originally constructed as earthen and is extremely susceptible to erosion. Since completion of the Sheyenne diversion in 1992, the channel has been utilized far more frequently than the original design had intended. As a result, it has been determined that the frequency of use and duration of the flows exceeds the stability of the low-flow channel. The increased saturation of the diversion channel has caused significant erosion to occur. The District requested a supplemental project review and reconsideration that all excavation and embankment be considered for additional state cost participation. The total estimated project costs including all excavation and embankment for Areas 1 and 2 was \$4,025,000, of which \$3,396,000 was determined eligible for state cost participation as a flood control project at 60 percent (\$2,037,600). On September 1, 2010, the State Water Commission approved state cost participation for an additional allocation of \$480,000 (\$2,037,600 less \$1,557,600 approved on March 11, 2010), summing an additional amount of \$480,000. This action increased the total state cost participation to \$2,037,600. The actual awarded construction amount (\$1,117,380) is \$920,220.

The proposed Site A (Section 7 - Phase V, Stanley township), consisted of improving a portion of the Horace Diversion channel by flattening the channel gradient, shaping the channel cross-section, and armoring the channel bottom with riprap and filter blanket. The estimated cost of Site A was \$1,200,000, of which all construction work (\$1,075,000) was considered eligible for a 60 percent state cost participation (\$645,000). On June 21, 2011, the State Water Commission approved the inclusion of Site A and allocated an additional \$645,000 from the remaining amount of cost share for Areas 1 and 2 (\$920,220). The remaining amount of \$275,220 was de-obligated. The total state cost participation for Areas 1 and 2 and Site A is \$1,762,380 (\$1,117,380, Areas 1 and 2, and \$645,000, Site A).

On June 21, 2011, the State Water Commission approved an allocation of \$2,802,000 (Area 3, \$876,000, and Area 4, \$1,926,000) from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020).

The projects in Areas 1 and 2 and Site A are near completion and the final construction costs were higher than the District had originally requested. The project engineer's revised project cost for Areas 1 and 2 and Site A is \$4,113,008, of which \$3,021,370 is determined eligible for state cost participation as a flood control project at 60 percent (\$1,812,822). A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for an additional allocation of \$50,422 (\$1,812,822 less \$1,762,380 previously approved (\$1,117,380, Areas 1 and 2, and \$645,000, Site A).

It was the recommendation of Secretary Sando that the State Water Commission conditionally approve an additional allocation not to exceed \$50,422 from the funds appropriated to the State Water Commission in the 2011-2013 biennium, to the Southeast Cass Water Resource District to support the Sheyenne River diversion improvements in Areas 1 and 2, and the Horace diversion channel Site A. The Commission's affirmative action would increase the total project state cost participation to \$4,614,802 (\$1,812,802, Areas 1 and 2 and the Horace diversion channel Site A; and \$2,802,000, Areas 3 and 4)

***It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission conditionally approve an additional allocation not to exceed \$50,422 from the funds appropriated to the State Water Commission in the 2011-2013 biennium, to the Southeast Cass Water Resource District to support Areas 1 and 2 and the Horace diversion channel Site A (Section 7, Phase V) of the Sheyenne River diversion improvements. This action is contingent upon the availability of funds, approval of the final engineering plans, and satisfaction of the required permits.***

***Commissioners Berg, Foley, Hanson, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. (Commissioners Goehring and Olin were not available for the vote). There were no nay votes. Governor Dalrymple announced the motion carried.***

***The action increases the total project state cost allocation to \$4,614,802 (\$1,812,802, Areas 1 and 2 and the Horace diversion channel Site A (Section 7, Phase V); and \$2,802,000, Areas 3 and 4) for the Sheyenne River diversion improvements.***

***SHEYENNE RIVER DIVERSION  
CHANNEL WEIR IMPROVEMENTS,  
PHASE VI - APPROVAL OF STATE  
COST PARTICIPATION (\$225,050)  
(SWC Project No. 1344)***

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Sheyenne River diversion channel improvements, Phase VI, weir improvements.

The proposed Sheyenne River diversion weir project is an improvement to the original inlet control weir constructed by the U.S. Army Corps of Engineers. The project was necessary for two primary purposes: 1) to serve as a temporary control structure that would cut off diversion flow so that construction could take place within Phases I, II, III, and IV areas of the Sheyenne River Diversion Channel Improvement Project; and 2) to permanently modify the weir to maintain more flow in the river channel to limit the amount of time the diversion channel is exposed to prolonged discharges. On March 11, 2011, the State Water Commission approved a state cost participation allocation, but funding was subsequently de-obligated by the Commission on June 21, 2011 pending the Corps of Engineer's permit approval.

The Corps approval for this project was a long process that included extensive modelling to ensure that areas within the protected area were not adversely impacted by the increased flows in the main river channel. With excessive flows in the Sheyenne River continuing to discharge into the diversion throughout the construction season and the anticipated increased flow associated from Devils Lake, the need to install the weir became extremely critical. The Corps of Engineers granted permission on September 23, 2011 for the construction of a temporary weir structure, and on January 3, 2012, approved converting the temporary structure to a permanent structure. This included lowering the crest elevation of the temporary structure one foot and installing riprap to protect the structure from erosion.

The project engineer's total cost estimate is \$375,079, all of which is determined eligible for state cost participation at 60 percent of the eligible costs (\$225,050). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$225,050.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$225,050 from the funds appropriated to the State Water Commission in the 2011-2013 biennium, to the Southeast Cass Water Resource District to support the Sheyenne River Diversion, Phase VI, weir improvement project.

***It was moved by Commissioner Olin and seconded by Commissioner Hanson that the State Water Commission approve state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$225,050 from the funds appropriated to the State Water Commission in the 2011-2013 biennium, to the Southeast Cass Water Resource District to support the Sheyenne River Diversion, Phase VI, weir improvement project. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***SHEYENNE DIVERSION EXTERIOR  
PUMP STATION INSTALLATION -  
CONDITIONAL APPROVAL OF  
ADDITIONAL STATE COST  
PARTICIPATION (\$23,340)  
(SWC Project No. 1344)***

On March 28, 2011, the State Water Commission approved a request from the Southeast Cass Water Resource District for state cost participation at 45 percent of the eligible costs not to exceed an allocation of \$60,750 from the funds appropriated to the State

Water Commission in the 2009-2011 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the installation of a pump station that will discharge agricultural runoff into the Sheyenne diversion channel.

The Sheyenne and Horace diversion channels were improved in 2011 by removing sediment, armoring the channel bottom with a filter band and riprap, placement of riprap to minimize future erosion of the low-flow channel, and stabilizing the slopes to allow the improved channel to better accommodate the agricultural discharge.

The project is near completion and the construction costs are higher than the District's original request. The project engineer's revised cost estimate is \$225,687, of which \$186,867 is determined eligible for state cost participation as a flood control project at 45 percent of the eligible costs (\$84,090). A request from the Southeast Cass Water Resource District was presented for the State

Water Commission's consideration for an additional state cost participation in the amount of \$23,340 (eligible costs of \$186,867 less \$60,750 approved on March 28, 2011). The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$23,340.

It was the recommendation of Secretary Sando that the State Water Commission approve conditional state cost participation as a flood control project at 45 percent of the eligible costs, not to exceed an additional allocation of \$23,340 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), for the installation of the Sheyenne diversion exterior pump station.

***It was moved by Commissioner Berg and seconded by Commissioner Vosper that the State Water Commission approve conditional state cost participation as a flood control project at 45 percent of the eligible costs, not to exceed an additional allocation of \$23,340 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the installation of the Sheyenne diversion exterior pump station. This action is contingent upon the availability funds, satisfaction of the permit requirements, and approval of the final engineering plans.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**TAVIS ROAD STORM WATER PUMP  
STATION (BURLEIGH COUNTY) -  
APPROVAL OF STATE COST  
PARTICIPATION (\$1,282,410)  
(SWC Project No. 1992)**

A request from the Burleigh County Water Resource District was presented for the State Water Commission's consideration for state cost participation for their Tavis Road storm water pump station. The project is in the development phase with the District taking the lead role in the design and construction administration of the project.

Following the 2011 Missouri River flood, Burleigh county developed a permanent flood protection plan, which identified the Tavis Road control structure. This proposed structure will protect portions of Fox Island from the Missouri River backwaters. It will also prevent backwaters from entering the south Bismarck storm water ditch and flooding structures, streets, and neighborhoods in south Bismarck.



The city of Bismarck recently completed the south Bismarck storm water study, which also identified Tavis Road as a control structure location with a storm water pumping plant to remove south Bismarck runoff from behind the control structure. The city and the county are concurrently working on this proposed control structure and pumping plant. Other projects required to provide permanent ice jam protection for portions of the county and south Bismarck in the Fox Island areas are also under project development.

The outlet of the south Bismarck storm water channel into the Missouri River is currently blocked due to a large amount of sediment that was deposited in the secondary side channel of the Missouri River following the 2011 flood. The storm water system in south Bismarck relies on this secondary side channel between the sandbar and the east bank to be free flowing and open to the river in order to function properly. Because the natural outlet is blocked, runoff from south Bismarck is currently flowing north, at a small flow rate, through Mills Avenue. Dredging of the sandbars is not considered eligible for State Water Commission cost share participation.

The project engineer's estimate of costs for the Tavis Road storm water pump station is \$2,534,000, of which \$2,137,350 is determined eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$1,282,410). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$1,282,410.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$1,282,410 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Burleigh County Water Resource District for the Tavis Road storm water pump station.

***It was moved by Commissioner Swenson and seconded by Commissioner Thompson that the State Water Commission approve state cost participation as a flood control project at 60 percent of the eligible costs, not to exceed an allocation of \$1,282,410 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Burleigh County Water Resource District for the Tavis Road storm water pump station. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**CITY OF SAWYER FLOOD  
PROTECTION PROJECT, PHASE I -  
APPROVAL OF STATE COST  
PARTICIPATION  
(2011 SENATE BILL 2371 - \$184,260)  
(SWC Project No. 2005-05)**

A request from the city of Sawyer was presented for the State Water Commission's consideration for state cost participation in their project to acquire property for permanent flood control. The city is proposing to acquire two properties in Phase I in their

acquisition project. The estimated purchase price for these properties is \$245,678.

The city plans to construct permanent flood control on these properties that would make the properties ineligible for the federal Hazard Mitigation Grant Program funds. Acquisition of these properties would also clear areas for temporary flood control measures if needed before completion of the permanent flood control project. The city has provided the information required under the State Water Commission's floodway property acquisition cost share policy. The request before the State Water Commission is for a 75 percent state cost participation in the amount of \$184,260.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation at 75 percent of the eligible costs, not to exceed an allocation of \$184,260 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371, to the city of Sawyer to support the city's flood protection project, Phase I.

***It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve state cost participation at 75 percent of the eligible costs, not to exceed an allocation of \$184,260 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371, to the city of Sawyer to support the city's flood protection project, Phase I. This action is contingent upon the availability of funds, and the criteria stipulated in the State Water Commission's floodway property acquisition cost share policy.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**WARD COUNTY FLOOD PROTECTION PROJECT, PHASE II - AUTHORIZATION OF ALLOCATION APPROVED FEBRUARY 2, 2012 (\$11,500,000) AVAILABLE FOR PHASES I AND II (NO ADDITIONAL FUNDS APPROVED) (SWC Project No. 1523-05)**

On February 2, 2012, the State Water Commission approved a request from the Ward County Commission for state cost participation at 75 percent of the eligible costs not to exceed an allocation of \$11,500,000 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371 to support the

county's flood protection project, Phase I. The county intended to acquire 56 properties in this phase of the acquisition program, at an estimated purchase price of \$15,300,000.

The County is proposing to acquire 27 properties for Phase II in their acquisition program for permanent flood control. The estimated purchase price for these properties is \$8,820,000, all of which is determined eligible for state cost participation at 75 percent of the eligible costs (\$6,620,000). A request from the Ward County Commission was presented for the State Water Commission's consideration for approval of the Phase II plan, and to authorize the funds approved on February 2, 2012 (\$11,500,000) to be used to acquire the properties for either Phase I or Phase II. No additional state cost share participation was requested at this time. The city has provided the information required under the State Water Commission's floodway property acquisition cost share policy.

It was the recommendation of Secretary Sando that the State Water Commission approve the Ward County flood protection project, Phase II, and authorize that the allocation approved on February 2, 2012 (\$11,500,000) be available to acquire the properties for either Phase I or Phase II.

***It was moved by Commissioner Goehring and seconded by Commissioner Foley that the State Water Commission approve the Ward County flood protection project, Phase II, and authorize that the allocation approved on February 2, 2012 (\$11,500,000) be available to acquire the properties for either Phase I or Phase II. This action is contingent upon the availability of funds, and the criteria stipulated in the State Water Commission's floodway property acquisition cost share policy.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**FARGO-MOORHEAD METROPOLITAN  
AREA FLOOD RISK MANAGEMENT  
PROJECT REPORT  
(SWC Project No. 1928)**

Dennis Walaker, Mayor, city of Fargo, and project representatives provided an update on the Fargo-Moorhead Metro Flood Diversion project. An outline of the presentation is attached hereto as **APPENDIX "E"**.

**SOUTHWEST PIPELINE PROJECT -  
CONSTRUCTION/PROJECTS REPORT  
(SWC Project No. 1736-05)**

The Southwest Pipeline Project construction/projects reports were presented, which are detailed in the staff memorandum, dated May 21, 2012, and attached hereto as **APPENDIX "F"**.

**SOUTHWEST PIPELINE PROJECT -  
PROJECTS REPORTS; AND  
APPROVAL OF \$1,650,000 TO  
ADDRESS CAPACITY ISSUES  
NORTH OF DICKINSON  
(SWC Project No. 1736-05)**

The Southwest Pipeline projects reports were presented, which are detailed in the staff memorandum, dated June 1, 2012, attached hereto as **APPENDIX "G"**.

Dickinson has resulted in many interested parties contacting the Southwest Water Authority with requests for domestic water supplies in the Davis Buttes and New Hradec service areas. Hydraulic limitations and concerns over the impact to existing customers have caused the Authority to deny service to several of the interested parties. Bartlett & West/AECOM was authorized to study improvements and cost estimates that could be appropriate to increase the capacity in the Davis Buttes and the New Hradec service areas. Several alternatives were reviewed that are being considered for alleviating the situation, which are outlined in the staff memorandum dated June 1, 2012 (*Appendix "G"*).

Recent interest in and around the city of

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed \$1,650,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Southwest Pipeline Project to address the capacity issues north of Dickinson.

***It was moved by Commissioner Swenson and seconded by Commissioner Olin that the State Water Commission approve an allocation not to exceed \$1,650,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Southwest Pipeline Project to address the capacity issues north of Dickinson. This action is contingent upon the availability of funds.***

**Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.**

**SOUTHWEST PIPELINE PROJECT -  
APPROVAL OF STATE FUNDS  
(\$80,180.84) TO HAROLD HUGELLEN  
FOR PROPERTY AND CROP DAMAGES  
CAUSED BY WASHOUT ALONG PROJECT  
RURAL DISTRIBUTION LINE  
(SWC Project No. 1736-05)**

High flows on the Little Missouri River during the spring of 2009 resulted in the river cutting a new channel through an oxbow area south of Medora, North Dakota. The area cut by the new channel was along the alignment of the Southwest Pipeline rural distribution pipeline. The pipeline alignment also

corresponded with Harold Hugelen's private river crossing used to access agricultural land.

An appraisal was completed on December 22, 2010 that was used to assist the State Water Commission staff in negotiations with the property owner for damages to the property that occurred after the flooding of the Little Missouri River in March and April, 2009. The crop damage was estimated to be \$38,613.78, and the total monetary damage to Harold Hugelen due to the washout is \$80,180.84.

It was the recommendation of Secretary Sando that the State Water Commission approve \$80,180.84 to Harold Hugelen in compensation for the property and crop damages caused due to the washout along the Southwest Pipeline Project rural distribution line.

***It was moved by Commissioner Goehring and seconded by Commissioner Hanson that the State Water Commission approve \$80,180.84 to Harold Hugelen in compensation for the property and crop damages caused due to the washout along the Southwest Pipeline Project rural distribution line. This action is contingent upon the availability of funds.***

**Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.**

**SOUTHWEST PIPELINE PROJECT -  
OLIVER-MERCER-NORTH DUNN  
REGIONAL SERVICE AREA -  
NORTH ZAP SERVICE AREA,  
AWARD OF CONTRACT 7-9D  
(SWC Project No. 1736-05)**

services, road crossings, connections to existing pipelines and other related appurtenances in Mercer county. The contract documents stipulates a substantial completion date of August 1, 2013.

On April 27, 2012, bids were opened for Southwest Pipeline Project, Contract 7-9D, Oliver-Mercer-North Dunn Regional Service Area, North Zap Service Area. Contract 7-9D consists of furnishing and installing approximately 151 miles of 8" to 1 1/2" PVC gasketed joint pipe, 192

Seven bid packages were received for contract 7-9D. Six of the bid packages appeared in order and were opened from Swanberg Construction, Valley City, ND; Northern Improvement, Bismarck, ND; Neibur Development, Colorado Springs, CO; Carstensen Contracting, Pipestone, MN; Tand Construction, Mandan, ND; and Meyer Contracting, Maple Grove, MN. One bid package was not opened as it did not contain the required North Dakota contractor's license. The apparent low bid received was \$4,723,193.00 submitted by Swanberg Construction, Valley City, ND. The project engineer's estimate was \$5,008,314.50.

The contract documents allow the State Water Commission to select the most advantageous bid. Based on the project engineer's review, the bid received from Swanberg Construction appeared to be in accordance with the advertisement for construction bid and the bid documents, and is considered to be a responsive bid. It was the recommendation of the project engineer to award contract 7-9D to Swanberg Construction, Valley City, ND. The award of the contract and notice to proceed are dependent on the satisfactory completion and submission of the contract documents by Swanberg Construction, and review/approval by the Commission's legal counsel.

The contract will be funded from the 2011-2013 biennium State Water Commission allocation to the Southwest Pipeline Project (S.B. 2020).

It was the recommendation of Secretary Sando that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project contract 7-9D, Oliver-Mercer-North Dunn Regional Service Area, North Zap Service Area, to Swanberg Construction, Valley City, ND, in the amount of \$4,723,193.

***It was moved by Commissioner Foley and seconded by Commissioner Olin that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project contract 7-9D, Oliver-Mercer-North Dunn Regional Service Area, North Zap Service Area, to Swanberg Construction,***

**Valley City, ND, in the amount of \$4,723,193. This action is contingent upon the satisfactory completion and submission of the contract documents by Swanberg Construction, and the review/approval by the Commission's legal counsel.**

**Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.**

**NORTHWEST AREA WATER  
SUPPLY (NAWS) PROJECT -  
STATUS REPORTS  
(SWC Project No. 237-04)**

The Northwest Area Water Supply (NAWS) project and construction status reports were provided, which are detailed in the staff memorandum, dated May 29, 2012, attached as **APPENDIX "H"**.

**NORTHWEST AREA WATER  
SUPPLY PROJECT -  
APPROVAL OF ADDITIONAL  
STATE FUNDS (\$5,500,000)  
FOR 2011-2013 BIENNIUM  
(SWC Project No. 237-04)**

The State Water Commission initially built the budget for the Northwest Area Water Supply project for the 2011-2013 biennium assuming a 2009-2011 biennium carryover of \$2,000,000 in state funding. The actual carryover was approximately \$7,500,000 in state funding

due to the federal funds close out and the state funds carryover at the end of the biennium. This resulted in a \$5,500,000 shortage of state funding authority to the project budget. An additional \$5,500,000 would bring the total of new money to \$12,000,000 as planned for the project for the 2011-2013 biennium.

It was the recommendation of Secretary Sando that the State Water Commission approve an additional allocation of \$5,500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Northwest Area Water Supply Project.

**It was moved by Commissioner Foley and seconded by Commissioner Hanson that the State Water Commission approve an additional allocation of \$5,500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Northwest Area Water Supply Project.**

**Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.**

**NORTHWEST AREA WATER  
SUPPLY PROJECT - RUGBY  
WATER TREATMENT FACILITY  
HARDWARE AND SOFTWARE  
IMPROVEMENTS -  
APPROVAL OF REM FUNDS (\$57,488.34)  
(SWC Project No. 237-04)**

The State Water Commission collects and maintains a reserve fund for replacement and extraordinary maintenance (REM) from the water sales revenues from the Northwest Area Water Supply Project system. Funds are collected on all project contracts including all users served through the city of

Minot's contract, all communities and rural water systems served through the project infrastructure, and the city of Rugby. This account has not been used to this point.

A request from the city of Rugby for reimbursement from the REM account for hardware and software improvements made to the Rugby water treatment facility, in the amount of \$57,488.34, was presented for the State Water Commission's consideration. This facility was upgraded as part of the project prior to any of the other construction on the system. The Northwest Area Water Supply advisory committee approved the request at its March 27, 2012 meeting, and recommended that the State Water Commission develop a policy regarding the REM account. The State Water Commission approved the REM policy on June 13, 2012.

It was the recommendation of Secretary Sando that the State Water Commission approve the determination that the hardware and software improvements made to the Rugby water treatment facility are extraordinary maintenance, and that \$57,488.34 be reimbursed from the reserve fund for replacement and extraordinary maintenance.

***It was moved by Commissioner Goehring and seconded by Commissioner Vosper that the State Water Commission approve the determination that the hardware and software improvements made to the Rugby water treatment facility are extraordinary maintenance expenses, and that \$57,488.34 be reimbursed from the Northwest Area Water Supply project reserve fund for replacement and extraordinary maintenance. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***



**MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT UPDATE (SWC Project No. 1974-01)**

On February 29, 2012, the preliminary engineering report was completed for the urban reaches of the Mouse River Enhanced Flood Protection Plan, Phase

I. The work focused on two areas: 1) the ongoing needs for clarification; and 2) the refinements recommended in the report.

Phase I was completed on a highly accelerated schedule due to the urgent need to provide information to the displaced residents of the flooded communities. During this process, there was united support throughout the basin for addressing the communities first, and a willingness to defer the other areas on the expectation that they would be addressed on the same basis.

The total cost of the preliminary engineering work for Phase I was estimated at \$2,500,000. On September 21, 2011, the State Water Commission approved an allocation not to exceed \$750,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to Barr Engineering for the preliminary engineering work for the Mouse River Enhanced Flood Control project; and on October 31, 2011, the Commission approved an additional allocation of \$1,750,000 for the preliminary engineering work. On December 9, 2011, the Commission approved an allocation not to exceed \$50,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Souris River Joint Water Resource Board to support their responsibilities as the local sponsor for the project.

**MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT, PHASE II - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION (\$1,828,000) (SWC Project No. 1974-01)**

The Mouse River Enhanced Flood Protection Plan, Phase II, will extend preliminary engineering through the remaining areas of the valley to bring the same level of attention to the problems and issues in those areas. Preliminary input

collection efforts revealed that in addition to the flooding of rural homes, there are also issues with erosion, deposition, and seasonal flooding of farmland. Specific Authorization No. 4 for this work, Phase II, has been prepared by Barr Engineering, at an estimated cost of \$1,828,000.

The objective of this authorization scope is to establish a better understanding of the rural flooding characteristics under the existing river conditions, identify changes that may be the result from a levee-floodwall project from Burlington to Velva, and identify potentially viable options to reduce rural flood impacts with or without the levee-floodwall project implementations. To achieve this objective, it will be necessary to gather available information from various sources

and conduct field reconnaissance; develop and calibrate a hydraulic model of the Mouse River from border to border to establish inundation levels for various flow conditions; compile a GIS database to reflect existing land and infrastructure and map river inundation levels from hydraulic model results; and identify and screen alternatives to reduce rural flooding impacts; characterize and evaluate river bed scour, bed load, and deposition of materials.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation not to exceed an additional allocation of \$1,828,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to Barr Engineering for the preliminary engineering for the Mouse River Enhanced Flood Protection Project, Phase II. Specific Authorization Number 4 will complete the preliminary engineering for the entire project.

***It was moved by Commissioner Foley and seconded by Commissioner Goehring that the State Water Commission approve state cost participation not to exceed an additional allocation of \$1,828,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to Barr Engineering for Specific Authorization Number 4 for the preliminary engineering for the Mouse River Enhanced Flood Protection Project, Phase II. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***This action increases the total state financial allocation to \$4,378,000 for the Mouse River Enhanced Flood Protection Project (\$2,500,000, Phase I (preliminary engineering); \$1,828,000, Phase II (preliminary engineering); and \$50,000 to the Souris River Joint Water Resource Board to support their responsibilities as the local project sponsor).***

**MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT, PHASE III - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION (\$98,750) (SWC Project No. 1974-01)**

The Mouse River Enhanced Flood Protection Project, Phase III, Specific Authorization Number 3, will provide funding for the implementation of the preliminary engineering work completed between Burlington and Velva. Phase III

includes the on-going coordination with stakeholder groups, financial modeling of the preliminary alignment project described in the preliminary engineering report, and deve-

lopment of a scope of work to address additional study work requested by the city of Minot and the Souris River Joint Board. The total estimated cost of the project is \$197,000, of which all is determined as eligible for a 50 percent state cost participation (\$98,750).

It was the recommendation of Secretary Sando that the State Water Commission approve a 50 percent state cost participation not to exceed an additional allocation of \$98,750 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to Barr Engineering to support Specific Authorization Number 3 for the Mouse River Enhanced Flood Protection Project, Phase III.

***It was moved by Commissioner Thompson and seconded by Commissioner Hanson that the State Water Commission approve a 50 percent state cost participation not to exceed an additional allocation of \$98,750 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to Barr Engineering to support Specific Authorization Number 3 for the Mouse River Enhanced Flood Protection Project, Phase III. This action is contingent upon the availability of funds.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

***This action increases the total state financial allocation to \$4,476,750 for the Mouse River Enhanced Flood Protection Project, Phases I, II and III (\$2,500,000, Phase I (preliminary engineering); \$1,828,000, Phase II (preliminary engineering); \$98,750, Phase III (implementation); and \$50,000 to the Souris River Joint Water Resource Board to support their responsibilities as the local project sponsor).***

**2012 FISCAL YEAR FEDERAL  
MR&I PROJECTS FUNDS -  
SOUTH CENTRAL REGIONAL WATER  
DISTRICT, PHASE IV - APPROVAL  
OF ADDITIONAL \$7,700,000 GRANT  
(SWC Project No. 237-03SOU)**

District - \$7,700,000; and Administration - \$300,000.

The 2012 proposed federal budget included funding for the Garrison Diversion Unit, of which \$8,000,000 is for funding projects under the North Dakota Municipal, Rural and Industrial (MR&I) Water Supply program for the following: South Central Regional Water

**South Central Regional Water District - Emmons, Logan, and McIntosh Counties, Phase IV:** A regional water system is being developed to serve rural users and municipalities in the counties of Burleigh, Emmons, Kidder, Logan, and McIntosh, at an estimated cost of \$85,500,000. The South Central Regional Water District is developing the project with sponsors from the various counties. The water supply includes bulk water from the city of Bismarck, a new water source and treatment plant in Burleigh county, and a new water treatment plant using an intake in the Missouri River west of Linton.

Federal MR&I and State Water Commission previous funding actions for the South Central Regional Water District include the following:

On July 17, 2007, the State Water Commission approved a 29 percent grant, not to exceed an allocation of \$4,870,000 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020), to the South Central Regional Water District for Phase 1 project development. On February 4, 2008, the State Water Commission modified the Phase I allocation (\$4,870,000 approved on July 17, 2007) to a federal fiscal year 2008 MR&I grant of 31 percent, not to exceed an allocation of \$2,952,000; and an allocation not to exceed \$1,918,000 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020).

On June 23, 2008, the State Water Commission approved a 53 percent grant, not to exceed an allocation of \$8,200,000 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020), to the South Central Regional Water System, Phase II.

Federal Fiscal Year 2009 MR&I grant funds were earmarked in the amount of \$5,850,000 for the South Central Regional Water District, Phase II. On April 28, 2009, the State Water Commission modified its previous allocation (\$8,200,000 approved on June 23, 2008) to a federal Fiscal Year 2009 MR&I grant of 53 percent not to exceed an allocation of \$5,850,000; and an allocation not to exceed \$2,350,000 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020).

Federal Fiscal Year 2010 MR&I grant funds were earmarked in the amount of \$8,800,000 for the South Central Regional Water System (Emmons county, Phase II). On December 11, 2009, the State Water Commission approved a federal Fiscal Year 2010 MR&I grant of 75 percent, not to exceed an allocation of \$8,800,000.

Federal Fiscal Year 2011 MR&I grant funds were earmarked in the amount of \$6,650,000 for the South Central Regional Water System (Emmons county, Phase III). On September 1, 2010, the State Water Commission approved a

federal Fiscal Year 2011 MR&I grant of 75 percent, not to exceed an allocation of \$6,650,000.

Federal Fiscal Year 2011 grant funds were later revised and earmarked in the amount of \$9,300,000 for the South Central Regional Water System (Emmons county, Phase III, and a portion of Phase IV). On June 21, 2011, the State Water Commission approved a federal Fiscal Year 2011 MR&I grant of 75 percent, not to exceed an additional allocation of \$2,650,000, for a total federal Fiscal Year 2011 MR&I grant of \$9,300,000 for the South Central Regional Water System (Emmons county, Phase III, and a portion of Phase IV).

Federal Fiscal Year 2012 MR&I grant funds have been recommended in the amount of \$7,700,000 for the South Central Regional Water System, Phase IV, for serve Emmons, Logan, and McIntosh counties. The work includes 300 miles of 10" to 1-1/2" pipeline for 220 rural users and the Wishek standpipe, with 250,000 gallons of storage. The water service is southern Logan county and McIntosh county. The estimated cost of the 2012 Phase IV project is \$10,300,000, and will complete construction of the regional water system.

Commissioner Swenson disclosed that he serves as a member of the South Central Regional Water District board of directors and, therefore, to avoid a conflict of interest, Commissioner Swenson requested to be excused from discussion of the project and that an abstention vote be recorded.

It was the recommendation of Secretary Sando that the State Water Commission approve a federal Fiscal Year 2012 MR&I grant of 75 percent, not to exceed an additional allocation of \$7,700,000, to the South Central Regional Water District, Phase IV.

***It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve a federal Fiscal Year 2012 MR&I grant of 75 percent, not to exceed an allocation of \$7,700,000, to the South Central Regional Water District, Phase IV. This action is contingent upon the availability of funds, satisfaction of the federal MR&I Water Supply program requirements, and is subject to future revisions.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioner Swenson abstained from voting. There were no nay votes. Governor Dalrymple announced the motion carried.***

**GRAND FORKS-TRAILL WATER  
DISTRICT - APPROVAL OF STATE  
COST PARTICIPATION GRANT FOR  
EXPANSION PROJECT (\$3,700,000)  
(SWC Project No. 237-03GFT)**

A request from the Grand Forks-Trail Water District was presented for the State Water Commission's consideration for state cost participation for their 2012 expansion project for additional rural water service in Grand Forks and Traill

counties. The water quality samples have shown issues with arsenic, in addition to residents reporting quality issues.

The project involves 121 miles of 4" to 2" pipeline for approximately 150 rural users. The water will be treated using the system's water treatment plant. The water supply is permitted from the Elk River aquifer and is sufficient to meet the expansion needs. The estimated project cost is \$4,920,000, of which all is determined eligible for a 75 percent grant (\$3,700,000). The request before the State Water Commission is for state cost participation of a 75 percent grant in the amount of \$3,700,000.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation of a 75 percent grant, not to exceed an allocation of \$3,700,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Grand Forks-Trail Water District to support their 2012 expansion project.

***It was moved by Commissioner Thompson and seconded by Commissioner Vosper that the State Water Commission approve state cost participation of a 75 percent grant, not to exceed an allocation of \$3,700,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Grand Forks-Trail Water District to support their 2012 expansion project. This action is contingent upon the availability of funds, and subject to future revisions.***

***Commissioners Berg, Foley, Goehring, Hanson, Olin, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

**WESTERN AREA WATER SUPPLY  
(WAWS) PROJECT UPDATE  
(SWC Project No. 1973)**

2011 House Bill 1206 created the Western Area Water Supply (WAWS) project, under chapter 61-40 of the North Dakota Century Code.

On June 21, 2011, the State Water Commission passed a motion to approve the Western Area Water Supply project,

Phase I, an allocation not to exceed \$25,000,000 authorized in 2011 House Bill 1206 from the funds appropriated to the State Water Commission in the 2011-2013 biennium for project construction, and that the Commission staff be delegated to review the specific plans and specifications. In order for the Authority to access the remaining loans of \$85,000,000, the Bank of North Dakota's letter of conditions, dated September 16, 2011, required the State Water Commission's approval of Phase II, Tier I. On December 9, 2011, the State Water Commission approved the Western Area Water Supply project, Phase II - Tier I projects, up to a total plan approval of \$100,000,000.

On March 7, 2012, based on 2011 House Bill 1206, Governor Dalrymple directed the Secretary to the Commission to draft policy of the State Water Commission focusing on the legislative intent, and issues including liability, indemnification, and public availability of water. Governor Dalrymple also stressed the importance of communication among the groups to resolve issues as the projects proceed. The State Water Commission's cost share policy committee met on March 29, 2012; and, on June 13, 2012, the State Water Commission approved the Commission's water supply cost share policy.

The Western Area Water Supply project status report was provided, which is detailed in the staff memorandum, dated May 30, 2012, and attached hereto as **APPENDIX "I"**.

**WESTERN AREA WATER SUPPLY  
(WAWS) PROJECT - LEASE OF  
PROJECT FACILITIES  
(SWC Project No. 1973)**

water depot that would include a water loading and distribution station for the purpose of selling water to the oil industry clients.

The Western Area Water Supply (WAWS) Authority owns real property in Williams County, North Dakota, and executed a ground lease agreement for property in north Williston to construct a

water depot that would include a water loading and distribution station for the purpose of selling water to the oil industry clients.

Armstrong Service, Inc., a Michigan corporation, (Armstrong) initially requested a lease from the Authority for the north Williston depot to construct a water heating annex and to offer hot water for sale to the oil industry. Because of interest and response from the oil industry, Armstrong approached the Authority with a revised request comparable to a development agreement whereby Armstrong would lease the Authority's property at the north Williston site and would be responsible for the cost of constructing and operating a depot at that location.

The ground lease agreement between the Western Area Water Supply Authority and Armstrong Service, Inc. was presented for the State Water Commission's consideration and approval, attached hereto as **APPENDIX "J"**.

Governor Dalrymple referenced 2011 House Bill 1206, 61-40-06. Over site of authority projects. The legislation states, in part, "The authority shall comply with the policy of the state water commission as the policy relates to bidding, planning, and construction of the project. ... If the twenty-five million dollar zero interest loan from the state water commission has not been repaid, without the written consent of the state water commission, the authority may not sell, lease, abandon, encumber, or otherwise dispose of any part of property used in a water system of the authority if the property is used to provide revenue." The State Water Commission Water Supply Cost Share Policy, referred to in the legislation, was approved by the State Water Commission on June 13, 2012.

Following lengthy discussion, the Commission members determined that the agreements presented contained language that addressed rights for service at future water depot locations, priority of water use in times of shortage that only protected minimum domestic contracted use, granting Armstrong right of first refusal/exclusivity, and indemnification language that was of concern with the Commission. The Authority was not in compliance with the legislative intent of 2011 House Bill 1206 and the water supply cost share policy relating to the Commission's over site of the Authority projects. The Commission members also questioned whether the competitive bidding laws were followed when negotiating the agreement, and expressed concerns relating to the water supply cost share policy provision that a portion of the water supply at any depot that must be available on a non-contracted basis for public access. Denton Zubke, chairman of the Western Area Water Supply Authority, and Tami Norgard, Vogel Law Firm, Fargo, offered information relating to the project and the concerns of the Commission members.

Governor Dalrymple reiterated and emphasized the importance of communication among the groups to resolve issues as the projects proceed. Based on the discussion and the concerns, the Secretary to the State Water Commission and the Commission staff were directed to work with the Western Area Water Supply Authority and Armstrong Service, Inc. for resolution of the issues relating to the ground lease agreement. No action was taken by the State Water Commission at the June 13, 2012 meeting.

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

The Missouri River report was provided, which is detailed in the staff memorandum, dated May 29, 2012, and attached hereto as **APPENDIX "K"**.



**WATER DEVELOPMENT REPORT  
FOR 2013-2015 BIENNIUM  
(SWC Project No. 322)**

As part of the State Water Commission's efforts to identify future funding needs of water projects across the state, and to update and maintain the State Water

Management Plan, the Commission's Planning and Education Division is in the process of developing a Water Development Report for the 2013-2015 biennium. Project funding information collected during this process will be used in the State Water Commission's budgeting process and a complete report will be presented to the 63rd Legislative Assembly summarizing the state's water development funding needs.

Because a comprehensive overview of the state's current and future water needs and issues are critical, part of this effort included project information forms that were provided to potential water project sponsors including cities, county water resource districts, joint water resource districts, regional water system managers, and natural resource-related agencies to identify project that may come to the Commission for cost share in the 2013-2015 biennium and beyond. Information has been received to date on approximately 120 water projects, most of which could potentially come before the State Water Commission in the 2013-2015 biennium.

**RED RIVER RETENTION AUTHORITY  
(SWC Project No. 2011)**

The Red River Retention Authority (RRRA) is comprised of members of the North Dakota Red River Joint Water

Resource District and the Minnesota Red River Watershed Management Board. The primary objective of the RRRA is to ensure joint, comprehensive, and strategic coordination of retention projects in the Red River of the North watershed and facilitating implementation and construction of retention projects in the Red River Valley.

Pat Downs, Red River Retention Authority executive director, provided a report on the current efforts of the Authority, which is attached as **APPENDIX "L"**.

**GARRISON DIVERSION  
CONSERVANCY DISTRICT  
REPORT  
(SWC Project No. 237)**

There was no status report provided at this meeting from the Garrison Diversion Conservancy District.

There being no further business to be considered by the State Water Commission, Governor Dalrymple adjourned the meeting at 6:30 P.M.



---

Jack Dalrymple, Governor  
Chairman, State Water Commission

---

Todd Sando, P.E.  
North Dakota State Engineer,  
and Chief Engineer-Secretary  
to the State Water Commission

STATE WATER COMMISSION  
 ALLOCATED PROGRAM EXPENDITURES  
 FOR THE PERIOD ENDED APRIL 30, 2012  
 BIENNIUM COMPLETE: 42%

APPENDIX "A"  
 JUNE 13, 2012

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	22-May-12 PROGRAM TOTALS
<b>ADMINISTRATION</b>				
Allocated	1,926,299	1,303,575		3,229,874
Expended	792,120	380,844		1,172,964
Percent	41%	29%		36%
			Funding Source:	
			General Fund:	1,122,036
			Federal Fund:	50,928
			Special Fund:	0
<b>PLANNING AND EDUCATION</b>				
Allocated	1,285,138	212,198	99,000	1,596,336
Expended	453,960	52,132	36,383	542,475
Percent	35%	25%	37%	34%
			Funding Source:	
			General Fund:	434,355
			Federal Fund:	63,057
			Special Fund:	45,063
<b>WATER APPROPRIATION</b>				
Allocated	3,949,169	446,511	1,130,000	5,525,680
Expended	1,578,480	206,474	290,225	2,075,179
Percent	40%	46%	26%	38%
			Funding Source:	
			General Fund:	2,041,355
			Federal Fund:	4,188
			Special Fund:	29,636
<b>WATER DEVELOPMENT</b>				
Allocated	5,634,922	9,772,937	265,000	15,672,859
Expended	2,121,124	3,276,267	114,135	5,511,526
Percent	38%	34%	43%	35%
			Funding Source:	
			General Fund:	2,718,720
			Federal Fund:	833,228
			Special Fund:	1,959,578
<b>STATEWIDE WATER PROJECTS</b>				
Allocated			363,145,750	363,145,750
Expended			130,264,803	130,264,803
Percent			36%	36%
			Funding Source:	
			General Fund:	0
			Federal Fund:	178,318
			Special Fund:	130,086,486
<b>ATMOSPHERIC RESOURCE</b>				
Allocated	901,205	712,307	4,694,692	6,308,204
Expended	336,605	134,926	428,957	900,488
Percent	37%	19%	9%	14%
			Funding Source:	
			General Fund:	481,425
			Federal Fund:	0
			Special Fund:	419,063
<b>SOUTHWEST PIPELINE</b>				
Allocated	437,264	6,201,500	38,744,857	45,383,621
Expended	214,906	1,110,227	17,018,982	18,344,116
Percent	49%	18%	44%	40%
			Funding Source:	
			General Fund:	0
			Federal Fund:	13,180,184
			Special Fund:	5,163,931
<b>NORTHWEST AREA WATER SUPPLY</b>				
Allocated	604,626	5,235,500	49,976,971	55,817,097
Expended	193,727	1,562,241	9,650,095	11,406,063
Percent	32%	30%	19%	20%
			Funding Source:	
			General Fund:	0
			Federal Fund:	2,162,296
			Special Fund:	9,243,767
<b>PROGRAM TOTALS</b>				
Allocated	14,738,623	23,884,528	458,056,270	496,679,421
Expended	5,690,923	6,723,110	157,803,579	170,217,613
Percent	39%	28%	34%	34%
<b>FUNDING SOURCE:</b>				
GENERAL FUND	14,995,199	6,797,890	GENERAL FUND:	48,848
FEDERAL FUND	53,984,383	16,472,198	FEDERAL FUND:	17,531,030
SPECIAL FUND	427,699,838	146,947,525	SPECIAL FUND:	158,362,309
<b>TOTAL</b>	<b>496,679,420</b>	<b>170,217,613</b>	<b>TOTAL:</b>	<b>175,942,187</b>

STATE WATER COMMISSION  
 PROJECTS/GRANTS/CONTRACT FUND  
 2011-2013 BIENNIUM

Apr-12

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
<b>CITY FLOOD CONTROL</b>					
FARGO/RIDGEWOOD	50,941	50,941	0	0	50,941
FARGO	66,473,088	66,473,088	16,497,400	0	49,975,688
GRAFTON	7,175,000	7,175,000	0	0	7,175,000
MINOT	2,550,000	2,550,000	2,499,988	0	50,012
WAHPETON	1,013,000	1,013,000	0	0	1,013,000
<b>FLOODWAY PROPERTY ACQUISITIONS</b>					
MINOT	17,750,000	17,750,000	0	0	17,750,000
BURLINGTON	1,039,000	1,039,000	0	0	1,039,000
WARD COUNTY	11,500,000	11,500,000	0	0	11,500,000
VALLEY CITY	3,000,000	3,000,000	0	0	3,000,000
BURLEIGH COUNTY	1,425,000	1,425,000	0	0	1,425,000
LISBON	645,000	645,000	0	0	645,000
<b>FLOOD CONTROL</b>					
RENWICK DAM	1,246,571	1,246,571	0	0	1,246,571
<b>WATER SUPPLY</b>					
REGIONAL & LOCAL WATER SYSTEMS	22,952,898	22,952,897	7,200,368	0	15,752,529
VALLEY CITY WATER TREATMENT PLANT	15,386,800	15,386,800	12,219,391	0	3,167,409
FARGO REVERSE OSMOSIS PILOT STUDY	15,000,000	600,000	285,348	14,400,000	314,652
RED RIVER WATER SUPPLY	62,224	62,224	0	0	62,224
WESTERN AREA WATER SUPPLY	25,000,000	25,000,000	17,444,675	0	7,555,325
SOUTHWEST PIPELINE PROJECT	22,369,199	22,369,199	5,163,931	0	17,205,267
NORTHWEST AREA WATER SUPPLY	19,432,008	13,932,008	5,188,657	5,500,000	8,743,351
IRRIGATION DEVELOPMENT	3,608,353	1,097,422	831,189	2,510,931	266,233
<b>GENERAL WATER MANAGEMENT</b>					
OBLIGATED	24,672,170	24,672,170	3,497,767	0	21,174,403
UNOBLIGATED	13,692,039			13,692,039	0
<b>DEVILS LAKE</b>					
BASIN DEVELOPMENT	92,340	92,340	12,126	0	80,214
DIKE	12,254,788	12,254,788	12,254,158	0	630
OUTLET	2,420,212	2,420,212	1,397,169	0	1,023,043
OUTLET OPERATIONS	6,215,627	6,215,627	1,859,770	0	4,355,857
DL TOLNA COULEE DIVIDE	4,366,720	4,366,720	4,261,738	0	104,982
DL EAST END OUTLET	71,848,290	61,342,273	43,611,623	10,506,017	17,730,650
DL GRAVITY OUTFLOW CHANNEL	17,000,000	17,000,000	0	0	17,000,000
DL JOHNSON FARMS STORAGE	125,000	125,000	0	0	125,000
WEATHER MODIFICATIONS	894,314	894,314	106,221	0	788,093
<b>TOTALS</b>	<b>391,260,582</b>	<b>344,651,594</b>	<b>134,331,519</b>	<b>46,608,988</b>	<b>210,320,075</b>

**STATE WATER COMMISSION  
PROJECTS/GRANTS/CONTRACT FUND  
2011-2013 Biennium**

**PROGRAM OBLIGATION**

Approved SWC By	No	Dept		Initial Approved Date	Total Approved	Total Payments	Apr-12 Balance
<b>City Flood Control:</b>							
SWC	1927	5000	Fargo/Ridgewood Flood Control Project	6/22/2005	50,941	0	50,941
SB 2020	1928	5000	Fargo Flood Control Project	6/23/2009	66,473,088	16,497,400	49,975,688
SWC	1771	5000	Grafton Flood Control Project	3/11/2010	7,175,000	0	7,175,000
SB 2371	1974	5000	Mouse River Enhanced Flood Control Project	9/21/2011	2,500,000	2,499,988	12
SB 2371	1974-06	5000	Souris River Joint WRD sponsor Mouse River Enhance	12/9/2011	50,000	0	50,000
SWC	518	5000	Wahpeton Flood Control	7/1/2011	1,013,000	0	1,013,000
<b>Subtotal City Flood Control</b>					<b>77,262,029</b>	<b>18,997,388</b>	<b>58,264,641</b>
<b>Floodway Property Acquisitions:</b>							
SB 2371	1993-05	5000	Minot Phase 1 - Floodway Acquisitions	1/27/2012	17,750,000	0	17,750,000
SB 2371	1987-05	5000	Burlington Phase 1 - Floodway Acquisitions	1/27/2012	1,039,000	0	1,039,000
SB 2371	1523-05	5000	Ward County Phase 1 - Floodway Acquisitions	1/27/2012	11,500,000	0	11,500,000
SB 2371	1504-05	5000	Valley City Phase 1 - Floodway Acquisitions	12/9/2011	3,000,000	0	3,000,000
SB 2371	1992-05	5000	Burlington Phase 1 - Floodway Acquisitions	3/7/2012	1,425,000	0	1,425,000
	1991-05	5000	Lisbon Floodway Acquisition Project	3/7/2012	645,000	0	645,000
<b>Subtotal Floodway Property Acquisitions</b>					<b>35,359,000</b>	<b>0</b>	<b>35,359,000</b>
<b>Flood Control:</b>							
SWC	849	5000	Renwick Dam Rehabilitation	5/17/2010	1,246,571	0	1,246,571
<b>Water Supply Advances:</b>							
SWC	2373-09	5000	South Central RWD (Phase II)	6/23/2008	1,295,056	64,385	1,230,671
	2373-31	5000	North Central Rural Water Consortium (Anamoose/Ber	6/23/2008	3,295,000	1,945,262	1,349,738
	2373-24	5000	Trail Regional Rural Water (Phase III)	8/18/2009	2,355,670	763,959	1,591,711
<b>Water Supply Grants:</b>							
	2373-17	5000	City of Parshall	6/23/2008	490,452	0	490,452
	2373-18	5000	Ray & Tioga Water Supply Association	12/17/2008	1,868,153	1,868,153	0
	2373-25	5000	McKenzie Phase II	6/23/2009	868,327	0	868,327
	2373-28	5000	McKenzie Phase IV	3/11/2010	2,352,244	2,300,481	51,762
	2373-29	5000	City of Wilrose - Crosby Water Supply	7/28/2010	97,218	0	97,218
	2373-32	5000	North Central Rural Water Consortium (Berthold-Carpic	6/21/2011	3,150,000	0	3,150,000
	2373-33	5000	Stutsman Rural Water System	6/21/2011	6,800,000	0	6,800,000
<b>Subtotal Water Supply</b>					<b>22,572,121</b>	<b>6,942,241</b>	<b>15,629,880</b>
<b>HB No. 1305 Permanent Oil Trust Fund</b>							
	2373-21	5000	Burke, Divide, Williams Water District	6/23/2009	189,415	66,766	122,649
	2373-22	5000	Ray & Tioga Water Supply Association	6/23/2009	191,362	191,362	0
<b>Subtotal Permanent Oil Trust Fund</b>					<b>380,777</b>	<b>258,128</b>	<b>122,649</b>
	2373-26	5000	Valley City Water Treatment Plant	8/18/2009	15,386,800	12,219,391	3,167,409
	1984	5000	Fargo Water Treatment Plant Reverse Osmosis Pilot S	6/21/2011	600,000	285,348	314,652
	1912	5000	Red River Valley Water Supply Project	3/17/2008	62,224	0	62,224
HB 1206	1973	5000	Western Area Water Supply	7/1/2011	25,000,000	17,444,675	7,555,325
	1736-05	8000	Southwest Pipeline Project	7/1/2011	22,369,199	5,163,931	17,205,267
	2374	9000	Northwest Area Water Supply	7/1/2011	13,932,008	5,188,657	8,743,351
<b>Subtotal Water Supply</b>					<b>77,350,231</b>	<b>40,302,002</b>	<b>37,048,229</b>
<b>Irrigation Development:</b>							
SWC	1389	5000	BND AgPace Program	10/23/2001	98,907	8,555	90,352
SWC	AOC/IRA	5000	ND Irrigation Association	8/16/2011	100,000	25,000	75,000
SWC	1968	5000	2009-11 McClusky Canal Mile Marker 7.5 Irrigation Pro	6/1/2010	898,515	797,634	100,881
<b>Subtotal Irrigation Development</b>					<b>1,097,422</b>	<b>831,189</b>	<b>266,233</b>
<b>General Water Management</b>							
<b>Hydrologic Investigations:</b>					<b>900,000</b>		
SWC	1400/12	3000	Houston Engineering Water Permit Application Review	10/10/2010	8,500	6,372	2,128
SWC	1400/13	3000	Houston Engineering Water Permit Application Review	11/7/2011	17,000	12,778	4,222
	862	3000	Arlotta Herman	6/1/2011	1,508	1,732	(224)
	967	3000	Holly Messmer - McDaniel	4/19/2012	0	0	0
	1690	3000	Holly Messmer - McDaniel	4/19/2012	2,184	2,184	0
	1703	3000	Thor Brown	3/27/2012	1,740	1,740	0
	1707	3000	Neil Flaten	4/26/2011	1,137	1,136	0
	1761	3000	Gloria Roth	6/1/2011	462	461	0
	1761	3000	Fran Dobits	6/1/2011	0	0	0
	1395A	3000	US Geological Survey, US Dept. Of Interior Investigatio	10/18/2011	432,303	216,152	216,152
	1395	3000	US Geological Survey, US Dept. Of Interior Upgrade of	4/14/2011	2,670	2,670	0
<b>Hydrologic Investigations Obligations Subtotal</b>					<b>467,503</b>	<b>245,225</b>	<b>222,278</b>
<b>Remaining Hydrologic Investigations Authority</b>					<b>432,498</b>		
<b>Hydrologic Investigations Authority Less Payments</b>							

STATE WATER COMMISSION  
PROJECTS/GRANTS/CONTRACT FUND  
2011-2013 Biennium

PROGRAM OBLIGATION

Approved SWC		Dept		Initial Approved Date	Total Approved	Total Payments	Apr-12 Balance
By	No						
<b>General Projects Obligated</b>					<b>22,248,575</b>	<b>1,728,947</b>	<b>20,519,628</b>
<b>General Projects Completed</b>					<b>1,523,595</b>	<b>1,523,595</b>	<b>0</b>
<b>Subtotal General Water Management</b>					<b>24,672,170</b>	<b>3,497,767</b>	<b>21,174,403</b>
<hr/>							
<b>Devils Lake Basin Development:</b>							
SWC	416-01	5000	Devils Lake Basin Joint Water Resource Manager	6/15/2011	60,000	0	60,000
SWC	416-02	5000	City of Devils Lake Levee System Extension & Raise	7/1/2011	12,254,788	12,254,158	630
SWC	416-05	2000	Devils Lake Outlet Awareness Manager	6/16/2011	32,340	12,126	20,214
SWC	416-07	5000	Devils Lake Outlet	7/1/2011	2,420,212	1,397,169	1,023,043
SWC	416-10	4700	Devils Lake Outlet Operations	7/1/2011	6,215,627	1,859,770	4,355,857
SWC	416-13	5000	DL Tolna Coulee Divide	7/1/2011	4,366,720	4,261,738	104,982
SWC	416-15	5000	DL East End Outlet	7/1/2011	61,342,273	43,611,623	17,730,650
SWC	416-17	5000	DL Emergency Gravity Outflow Channel	9/21/2011	17,000,000	0	17,000,000
SWC	416-18	5000	DL Johnson Farms Water Storage Site	6/10/2011	125,000	0	125,000
<b>Devils Lake Subtotal</b>					<b>103,816,960</b>	<b>63,396,584</b>	<b>40,420,375</b>
<hr/>							
SWC		7600	Weather Modification	7/1/2011	894,314	106,221	788,093
<b>TOTAL</b>					<b>344,651,594</b>	<b>134,331,519</b>	<b>210,320,075</b>

**STATE WATER COMMISSION  
PROJECTS/GRANTS/CONTRACT FUND  
2011-2013 Biennium  
Resources Trust Fund**

**GENERAL PROJECT OBLIGATIONS**

Approved SWC By	No	Dept	Approved Biennium		Initial Approved Date	Total Approved	Total Payments	Apr-12 Balance	
HB	1020	1932	5000	2005-07	Michigan Spillway Rural Flood Assessment Drain	8/30/2005	500,000	0	500,000
HB	2305	1963	5000	2009-11	Beaver Bay Embankment Feasibility Study	8/10/2009	258,406	14,535	243,871
SB	2020	1131	5000	2009-11	Nelson Co. WRD/ Flood Related Water Projects	6/1/2011	250,000	86,260	163,740
SB	2020	1986	5000	2011-13	USDA-APHIS North Dakota Wildlife Services - animal control/beaver mgmt	6/1/2011	250,000	0	250,000
SE	867-01	5000	2011-13	NDSU Soil & Water Sampling for Assessment of Effects of Subirrigation thru tile	5/12/2012	7,225	0	7,225	
SE	1814	5000	2011-13	Richland Co. WRD/Sheyenne River Snagging & Clearing Project	5/4/2012	47,500	0	47,500	
SE	1689	5000	2011-13	Bottineau Co. WRD/Brander Drain #7 Improvement Project	4/19/2012	48,720	0	48,720	
SE	1814	5000	2011-13	Richland Co. WRD/Sheyenne River Snagging & Clearing Project/Logjam behind	4/19/2012	15,000	0	15,000	
SE	1988	5000	2011-13	Barnes Co. WRD/ Sheyenne Riverbank Encroachment Study Project	3/16/2012	22,875	0	22,875	
SE	1312/1933	5000	2011-13	Walsch Co. WRD/Digital Flood Insurance Rate Map Project/ J. Prescott	2/16/2012	8,356	0	8,356	
SE	1296	5000	2011-13	Pembina Co. WRD/ Bourbonis Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1296	5000	2011-13	Pembina Co. WRD/ Goschke Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1296	5000	2011-13	Pembina Co WRD/ Herzog Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1296	5000	2011-13	Pembina Co WRD/ Weiler Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1403	5000	2011-13	ND Water Resources Research Institute - Fellowship Program 2012-13	2/1/2012	13,850	0	13,850	
SE	1312	5000	2011-13	Walsch Co. WRD/Willow Creek Dam 2012 EAP	1/27/2012	10,000	0	10,000	
SE	1312	5000	2011-13	Walsh Co. WRD/Bylin Dam 2011 EAP	12/15/2011	14,800	0	14,800	
SE	1312	5000	2011-13	Walsh Co. WRD/ Melstad Dam 2011 EAP	12/15/2011	9,088	0	9,088	
SE	1312	5000	2011-13	Walsh Co. WRD/ Skyrud Dam 2011 EAP	12/15/2011	10,000	0	10,000	
SE	1312	5000	2011-13	Walsh Co. WRD/ Union Dam 2011 EAP	12/15/2011	10,000	0	10,000	
SE	1312	5000	2011-13	Walsh Co. WRD / Matejcek Dam 2011 EAP	12/14/2011	5,360	0	5,360	
SE	391	5000	2011-13	Sargent Co WRD, Silver Lake Dam Emergency Repairs	10/12/2011	2,800	0	2,800	
SE	1313	5000	2011-13	Ward Co. 2011 LIDAR Review & Data Creation Products	10/11/2011	16,311	0	16,311	
SE	1303	5000	2011-13	Shortfood Creek Watershed Feasibility Study/ Sargent Co. WRD	9/15/2011	7,500	0	7,500	
SE	1301	5000	2011-13	City of Wahpeton Water Reuse Feasibility Study/Richland Co.	9/8/2011	2,500	0	2,500	
SE	PS/WRD/MRJ	5000	2011-13	Missouri River Joint Water Board, (MRJWB) Start up	8/2/2011	20,000	0	20,000	
SE	1965	5000	2011-13	ND Silver Jackets Team Charter & Action Plan	7/1/2011	4,140	4,140	0	
SE	1607	5000	2011-13	Flood Inundation Mapping of Areas Along Souris & Des Lacs River	6/15/2011	13,011	0	13,011	
SE	PS/WRD/USR	5000	2011-13	Upper Sheyenne River WRB Administration (USRJWRB)	6/15/2011	6,000	0	6,000	
SE	501	5000	2009-11	Pheasant Lake Dam Emergency Action Plan	4/20/2011	9,600	0	9,600	
SE	1301	5000	2009-11	City of Lidgerwood Engineering & Feasibility Study for Flood Control	2/4/2011	15,850	0	15,850	
SE	571	5000	2009-11	Oak Creek Snagging & Clearing Project	1/28/2011	5,000	0	5,000	
SE	1967	5000	2009-11	Grand Forks County Legal Drain No. 55 2010 Construction	11/30/2010	9,652	0	9,652	
SE	1431	5000	2009-11	NDDOT Aerial Photography - MULTIPLES	11/19/2010	39,279	39,279	0	
SE	1291	5000	2009-11	Mercer County WRD Knife River Snagging & Clearing	11/1/2010	20,000	0	20,000	
SE	1577	5000	2009-11	Burleigh Co - Fox Island 2010 Flood Hazard Mitigation Evaluation	8/9/2010	11,175	0	11,175	
SE	AOC/RRBC	5000	2009-11	Red River Basin "A River Runs North"	6/30/2010	5,000	0	5,000	
SE	642	5000	2009-11	Morton Co/Sweetbriar Dam Emergency Action Plan	5/17/2010	15,200	0	15,200	
SE	269	5000	2009-11	Fordville Dam Emergency Action Plan/GF CO.	3/3/2010	9,600	0	9,600	
SE	1625	5000	2009-11	Sovereign Lands Rules - ND Game & Fish	2/23/2010	6,788	0	6,788	
SE	1785	5000	2009-11	Sweetbriar Dam EAP	2/17/2010	15,200	0	15,200	
SE	PBS	5000	2009-11	PBS Documentary on Soil Salinity/Lake Agassiz RC & D	1/29/2010	1,000	0	1,000	
SE	847	5000	2009-11	Absaraka Dam Safety Analysis	8/31/2009	5,719	0	5,719	
SE	1842	5000	2009-11	SCWRD Wild Rice River Snagging & Clearing	5/28/2009	4,331	0	4,331	
SWC	1444	5000	2011-13	City of Pembina's Flood Control FEMA Levee Certification	3/20/2012	21,344	16,936	4,408	
SWC	1138	5000	2011-13	Pembina Co. WRD/Drain No. 8 Reconstruction Project	3/7/2012	123,725	0	123,725	
SWC	1227	5000	2011-13	Trall Co. WRD/ Mergenthal Drain No. 5 Reconstruction	3/7/2012	84,670	0	84,670	
SWC	1396	5000	2011-13	(USGS) Missouri River Geomorphic Assessment	3/7/2012	140,000	0	140,000	
SWC	1444	5000	2011-13	City of Pembina's/ US Army Corps of Eng Section 408 Review City Flood Contr	3/7/2012	108,000	0	108,000	
SWC	1504	5000	2011-13	Valley City Flood Risk Management Feasibility Study - Phase 1	3/7/2012	115,244	0	115,244	
SWC	1989	5000	2011-13	Barnes Co. WRD/ Hobart Lake Outlet Project	3/7/2012	266,100	0	266,100	
SWC	1990	5000	2011-13	Mercer County WRD/Lake Shore Estates High Flow Diverstion Project	3/7/2012	43,821	0	43,821	
SWC	PS/WRD/JAM	5000	2011-13	James River WRD/ Engineering Feasibility Study Phase 1	3/7/2012	160,482	0	160,482	
SWC	1968	5000	2011-13	McClusky Canal Mile Marker 7.5 Irrigation Project Phase 1, GDCCD	12/14/2011	898,515	0	898,515	
SWC	1918	5000	2001-13	Maple River WRD Normanna Township Improvement District No. 71	12/9/2011	287,900	0	287,900	
SWC	1941	5000	2011-13	Walsh County Drain No. 4a Cost Overrun	12/9/2011	9,759	0	9,759	
SWC	1983	5000	2001-13	City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,500	
SWC	1296	5000	2011-13	Pembina County WRD Cook Bridge Riverbank Stabilization	10/21/2011	36,649	0	36,649	
SWC	1979	5000	2011-13	Southeast Cass WRD Wild Rice Riverbank Stabilization Project	10/21/2011	149,568	0	149,568	
SWC	275	5000	2011-13	City of Fort Ransom Engineering Feasibility Study	10/19/2011	40,000	0	40,000	
SWC	829	5000	2011-13	Rush River WRD Berlin's Township Improvement District No. 70	10/19/2011	500,000	0	500,000	
SWC	1224	5000	2011-13	Trall Co. WRD/ Preston Floodway Reconstruction Project	10/19/2011	208,570	0	208,570	
SWC	1978	5000	2011-13	Richland & Sargent WRD RS Legal Drain No. 1 Extension & Channel Improvem	10/19/2011	245,250	0	245,250	
SWC	CON/WILL-CA	5000	2011-13	Garrison Diversion Conservancy - Will Carlson Project	10/17/2011	70,000	0	70,000	
SWC	568	5000	2011-13	Sheyenne River Snagging & Clearing Reaches 1-3 , Southeast Cass WRD	9/21/2011	255,750	0	255,750	
SWC	829	5000	2011-13	Rush River Dam Preliminary Soils & Hydraulic Study/Rush River WRD	9/21/2011	57,500	0	57,500	
SWC	980	5000	2011-13	Maple River Watershed Food Water Retention Study/ Maple River WRD	9/21/2011	82,500	0	82,500	
SWC	1070	5000	2011-13	Cass County Drain No. 14 Improvement Recon	9/21/2011	415,610	55,665	359,945	
SWC	1101	5000	2011-13	Dickey Co. WRD, Yorktown-Maple Drainage Improvement Dist No. 3	9/21/2011	242,795	0	242,795	
SWC	1101	5000	2011-13	Trall Co./Broke Drain No. 30, Ervin Township	9/21/2011	23,660	0	23,660	
SWC	1101	5000	2011-13	Riverdale Township Improvement District #2 - Dickey -Sargent Co. WRD	9/21/2011	500,000	0	500,000	
SWC	1219	5000	2011-13	District Drain No. 4 Reconstruction Project/ Sargent Co. WRD	9/21/2011	60,620	0	60,620	
SWC	1219	5000	2011-13	City of Forman Floodwater Outlet - Sargent Co. WRD	9/21/2011	348,070	0	348,070	
SWC	1252	5000	2011-13	Walsh Co. Reconstruction Drain No. 97	9/21/2011	50,551	0	50,551	
SWC	1603	5000	2011-13	Rush River Drain No. 69, Armenia Township, Cass Co.	9/21/2011	313,500	0	313,500	
SWC	1705	5000	2011-13	Red River Joint WRD Watershed Feasibility Study - Phase 2	9/21/2011	60,000	0	60,000	
SWC	1806	5000	2011-13	City of Argusville Flood Control Levee Project	9/21/2011	25,432	0	25,432	
SWC	1842	5000	2011-13	SCWRD Wild Rice River Snagging & Clearing	9/21/2011	99,000	0	99,000	
SWC	1859	5000	2011-13	ND Dept of Health Non-Point Source EPA Pollution Program Priority Project	9/21/2011	200,000	0	200,000	
SWC	1975	5000	2011-13	Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	111,116	0	111,116	
SWC	1977	5000	2011-13	Jackson Township Improvement Dist. #1/Dickey-Sargent Co WRD	9/21/2011	500,000	0	500,000	
SWC	1968	5000	2011-13	Absaraka Dam Improvement Rehabilitation Project	8/12/2011	114,783	0	114,783	

STATE WATER COMMISSION  
PROJECTS/GRANTS/CONTRACT FUND  
2011-2013 Biennium  
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

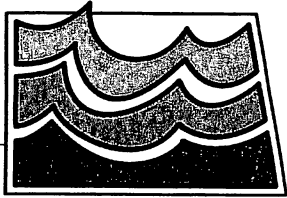
Approved SWC By	No	Dept	Approved Biennium		Initial Approved Date	Total Approved	Total Payments	Apr-12 Balance
SWC	AOC/RRBC	5000	2011-13	Red River Basin Commission Contractor	8/2/2011	200,000	50,000	150,000
SWC	PS/WRD/MRJ	5000	2011-13	Missouri River Joint Water Board (MRRIC) T. FLECK	8/2/2011	40,000	13,879	26,121
SWC	1878-02	5000	2011-13	Upper Maple River Dam Project Development & Preliminary Engineering	7/19/2011	187,710	0	187,710
SWC	1392	5000	2011-13	U. S. Geological Hydrographic Survey of the Missouri River Bis - Washburn	6/15/2011	55,000	35,350	19,650
SWC	1344	5000	2011-13	Southeast Cass Sheyenne River Diversion Low-Flow Channel Areas 3 & 4	6/14/2011	2,802,000	0	2,802,000
SWC	1671	5000	2011-13	Ransom Co WRD/ Dead Cold Creek Dam 2011 Emergency Action Plan	6/14/2011	22,800	0	22,800
SWC	1705	5000	2011-13	Red River Basin Flood Control Coordinator Position	6/10/2011	36,000	0	36,000
SWC	AOC/WEF	5000	2011-13	ND Water Education/North Dakota Water Magazine	6/10/2011	36,000	9,000	27,000
SWC	347	5000	2009-11	City of Velva's Flood Control Levee System Certification	3/28/2011	102,000	0	102,000
SWC	1161	5000	2009-11	Pembina Co. Drain 55 Improvement Reconstruction	3/28/2011	88,868	0	88,868
SWC	1245	5000	2009-11	Trails Co. Drain No. 28 Extension & Improvement Project	3/28/2011	336,007	0	336,007
SWC	1344	5000	2009-11	Southeast Cass Sheyenne Pump Station	3/28/2011	60,750	47,426	13,324
SWC	1438	5000	2009-11	Mulberry Creek Drain Partial Improv Phase III	3/28/2011	226,118	0	226,118
SWC	1969	5000	2009-11	Walsh Co. Construction of Legal Assessment Drain # 71	3/28/2011	304,141	0	304,141
SWC	1970	5000	2009-11	Walsh Co. Construction of Legal Assessment Drain # 72	3/28/2011	144,807	0	144,807
SWC	PS/IRR/NES	5000	2009-11	NDSU Williston Research Extension Center - purchase of irrigation equip	3/28/2011	60,050	12,788	47,262
SWC	568	5000	2009-11	SCWRD Sheyenne River Snagging & Clearing Project	12/10/2010	362,250	184,467	177,783
SWC	1164	5000	2009-11	Pembina County Drain No. 64 Outlet Area Improvement	12/10/2010	41,480	0	41,480
SWC	1842	5000	2009-11	SCWRD Wild Rice River Snagging & Clearing	12/10/2010	100,625	71,680	28,945
SWC	1878-02	5000	2009-11	Maple-Steele Upper Maple River Dam PE & PD	12/10/2010	187,710	184,534	3,176
SWC	281	5000	2009-11	Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	646	5000	2009-11	Christine Dam Recreation Retrofit Project	10/26/2010	184,950	0	184,950
SWC	646	5000	2009-11	Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	0	44,280
SWC	1667	5000	2009-11	Trails Co/Goose River Snagging & Clearing	9/1/2010	12,890	0	12,890
SWC	1882-07	5000	2009-11	NDSU Development of SEBAL	9/1/2010	15,244	0	15,244
SWC	847	5000	2009-11	Swan-Buffalo Detention Dam No. 12 Flood Control Dam Safety Project	7/28/2010	114,783	0	114,783
SWC	1966	5000	2009-11	City of Oxbow Emergency Flood Fighting Barrier System	6/1/2010	188,400	0	188,400
SWC	1244	5000	2009-11	Trails Co. Drain No. 27 (Moen) Reconstruction & Extension	3/11/2010	678,485	330,367	348,118
SWC	1313	5000	2009-11	City of Minot/Ward Co. Aerial Photo & LiDAR	3/11/2010	186,780	0	186,780
SWC	1344	5000	2009-11	Southeast Cass Sheyenne River (Horace Diversion Channel Site A)	3/11/2010	1,762,380	0	1,762,380
SWC	1577	5000	2009-11	Hazen Flood Control Levee (1517) & FEMA Accreditation	3/11/2010	449,500	264,516	184,984
SWC	322	5000	2009-11	ND Water: A Century of Challenge	2/22/2010	36,800	0	36,800
SWC	847	5000	2009-11	Swan Creek Diversion Channel Improvement Reconstruction	12/11/2009	76,528	0	76,528
SWC	1792	5000	2009-11	SE Cass Wild Rice River Dam Study Phase II	12/11/2009	130,000	0	130,000
SWC	1964	5000	2009-11	Hydraulic Effects of Rock Wedges Study- UND	11/12/2009	11,651	11,457	194
SWC	1401	5000	2009-11	International Boundary Roadway Dike Pembina	9/21/2009	227,431	0	227,431
SWC	1069	5000	2009-11	Cass County Drain No. 13 Improvement Reconstruction	8/18/2009	122,224	0	122,224
SWC	1088	5000	2009-11	Cass County Drain No. 37 Improvement Recon	8/18/2009	92,668	0	92,668
SWC	1232	5000	2009-11	Trails Co. Drain No. 13 Channel Extension Project	8/18/2009	23,575	0	23,575
SWC	1785	5000	2009-11	Maple River Dam EAP	8/18/2009	25,000	0	25,000
SWC	1960	5000	2009-11	Puppy Dog Flood Control Drain Construction	8/18/2009	796,976	0	796,976
SWC	1882-01	5000	2009-11	(ESAP) Extended Storage Acreage Program	8/18/2009	63,554	0	63,554
SWC	528	5000	2009-11	McGregor Dam Emergency Action Plan	6/23/2009	25,000	0	25,000
SWC	1638	5000	2009-11	Red River Basin Non-NRCS Rural/Farmstead Ring Dike Program	6/23/2009	424,262	235,977	188,285
SWC	1921	5000	2007-09	Square Butte Dam No. 6/(Harmon Lake) Recreation Facility	3/23/2009	852,251	0	852,251
SWC	642-05	5000	2007-09	Sweetbriar Creek Dam Project	3/6/2009	148,956	60,691	88,265
SWC	620	5000	2007-09	Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SWC	928/988/1508	5000	2007-09	Southeast Cass WRD Bois, Wild Rice, & Antelope	6/23/2008	60,000	0	60,000
SWC	1093	5000	2007-09	Cass Co. Drain No. 45 Extension Project	3/17/2008	124,757	0	124,757
SWC	1932	5000	2005-07	Michigan Spillway Rural Flood Assessment	8/30/2005	1,012,219	0	1,012,219
TOTAL						22,248,575	1,728,947	20,519,628



**STATE WATER COMMISSION  
PROJECTS/GRANTS/CONTRACT FUND  
2011-2013 Biennium  
Resources Trust Fund**

**COMPLETED GENERAL PROJECTS**


Approved By	SWC No	Dept	Approved Biennium		Initial Approved Date	Total Approved	Total Payments	Apr-12 Balance
HB 1020	322	5000	2009-11	Long-Term Red River Flood Control Solutions Study (AOC/RRC	6/23/2009	7,720	7,720	0
SE	AOC/ARB/ND:	5000	2011-13	NDSU Dept of Soil Science - NDAWN Center	2/27/2012	3,200	3,200	0
SE	AOC/BSC	5000	2011-13	Bismarck State College - ND Water Quality Monitoring Confere	2/7/2012	2,000	2,000	0
SE	1312/929	5000	2011-13	Fischer Land Surveying & Engineering/Harriston Township Dike	12/12/2011	6,000	6,000	0
SE	266	5000	2011-13	Tolna Dam 2011 EAP, Nelson County WRD	8/23/2011	9,600	8,540	1,060
SE	1378	5000	2011-13	Clausen Springs Dam Emergency Action Plan /Barnes Co. WR	8/23/2011	20,000	0	20,000
SE	1971	5000	2011-13	DES Purchase of Mobile Stream Gages (2 temporary stream g	7/19/2011	8,000	8,000	0
SE	929	5000	2009-11	Walsch Co. -Chyle Dam EAP	5/6/2011	10,000	7,546	2,454
SE	1433	5000	2009-11	Whitman Dam Emergency Action Plan	4/14/2011	10,000	8,348	1,652
SE	1289	5000	2009-11	McKenzie Co. Weed Control on Sovereign Lands	3/4/2011	11,705	11,705	0
SE	929	5000	2009-11	Walsch Co. -Soukop Dam EAP	3/2/2011	10,000	7,760	2,240
SE	1842	5000	2009-11	Richland Co. - Ph 2- Wild Rice River Snagging & Clearing	2/1/2011	15,000	11,603	3,397
SE	839	5000	2009-11	Elm River Detention Dam No. 1 EAP	1/10/2011	12,160	8,440	3,720
SE	839	5000	2009-11	Elm River Detention Dam No. 3 EAP	12/6/2010	12,160	7,162	4,998
SE	1131	5000	2009-11	Elm River Detention Dam No. 2 Emergency Action Plan	12/6/2010	12,160	8,310	3,850
SE	1396	5000	2009-11	Dale Frink Consultant Services Agreement	10/26/2010	18,600	0	18,600
SE	AOC/ARB/ND:	5000	2009-11	NDSU Dept of Soil Science - NDAWN Center	3/8/2010	3,000	3,000	0
SE	985	5000	2009-11	Kolding Dam Emergency Action Plan	5/29/2009	9,600	5,960	3,640
SE	568	5000	2007-09	Barnes Co/Sheyenne River Snagging & Clearing Project	4/11/2008	5,000	0	5,000
SWC	1267	5000	2011-13	Bottineau County LiDAR Collect/ Mike Hall	10/19/2011	97,000	97,000	0
SWC	1413	5000	2011-13	Traill Co/Buffalo Coulee Snagging & Clearing	9/21/2011	25,000	14,960	10,040
SWC	1667	5000	2011-13	Traill Co./Goose River Snagging & Clearing	9/21/2011	48,000	48,000	0
SWC	1842	5000	2009-11	Richland Co. Wild Rice River Snagging & Clearing Project - Re	3/28/2011	47,500	47,466	34
SWC	1971	5000	2009-11	DES Purchase of Mobile Stream Gages	3/28/2011	16,457	16,457	0
SWC	846	5000	2009-11	Morton Co.Square Butte Dam No. 5 EAP	12/10/2010	24,000	20,930	3,070
SWC	1378	5000	2009-11	Clausen Springs Dam Emergency Spillway Repair	10/26/2010	790,975	770,746	20,229
SWC	1299	5000	2009-11	City of Fort Ransom Riverbank Stabilization	9/1/2010	60,803	47,205	13,598
SWC	1413	5000	2009-11	Traill Co/Buffalo Coulee Snagging & Clearing	9/1/2010	26,000	19,659	6,341
SWC	1932	5000	2009-11	Peterson Slough into Dry Run Emergency	5/28/2010	32,150	32,150	0
SWC	1180	5000	2009-11	Richland Co. Drain No. 7 Improvement Reconstruction	3/11/2010	71,933	11,389	60,544
SWC	1331	5000	2009-11	Richland Co. Drain No. 14 Improvement Reconstruction	3/11/2010	116,988	16,549	100,439
SWC	1942	5000	2009-11	Walsh County Assessment Drain 10, 10-1, 10-2	9/21/2009	37,267	13,544	23,723
SWC	327	5000	2009-11	White Earth Dam EAP	8/18/2009	25,000	25,000	0
SWC	1068	5000	2009-11	Cass County Drain No. 12 Improvement Reconstruction	8/18/2009	741,600	0	741,600
SWC	1953	5000	2009-11	Walsh County Drain No. 73 Construction Project	8/18/2009	109,919	109,919	0
SWC	AOC/RRBC	5000	2009-11	Red River Basin Commission Contractor	7/1/2009	100,000	100,000	0
SWC	PS/WRD/MRJ	5000	2011-13	Missouri River Joint Water Board (MRRIC) T. FLECK	6/30/2009	6,470	6,470	0
SWC	PS/WRD/MRJ	5000	2007-09	Missouri River Joint Water Board, (MRJWB) Start up	12/5/2008	14,829	10,857	3,972
<b>TOTAL</b>						<b>2,577,796</b>	<b>1,523,595</b>	<b>1,054,200</b>



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:**  Todd Sando, P.E., Chief Engineer/Secretary  
**SUBJECT:** Devils Lake – Projects and Hydrologic Update  
**DATE:** May 25, 2012

### Hydrologic Update

The Devils Lake water surface elevation is near the value from the previous update. There was no significant raise in the lake from the low runoff this spring.

	CURRENT	1 MONTH AGO		1 YEAR AGO	
		VALUE	CHANGE	VALUE	CHANGE
Elevation (ft-msl)	1453.3	1453.5	-0.2	1454.0	-0.7
Area (acres)	197,000	199,000	-2,000	205,000	-8,000
Volume (acre-feet)	3.97 million	4.00 million	-30,000	4.10 million	-130,000

The volumes and areas above were obtained from the area-capacity table found on the Commission's website, and includes area and volume values from Stump Lake.

### West End Outlet

The pumping was started on April 2<sup>nd</sup>. For the month of April the release volume was calculated to be 6,263 acre-feet for 27 days at an average rate of 117 cubic feet per second (cfs). Originally the two repaired pumps were to be back on site in April, however breakdowns of equipment at the plant delayed the process. The repaired 50 cfs pump was placed back in operation at the Josephine Pump Station on May 24. The 75 cfs pump is slated repaired and shipped by the end of the month and be in operation in early June.

The water samples tested from the Sheyenne River at the gage near Cooperstown indicated a sulfate level of 260 mg/L on April 10<sup>th</sup> and 400 mg/L on April 25<sup>th</sup>. Below Baldhill Dam the sulfate levels were 325 mg/L on April 10<sup>th</sup> and 269 mg/L on May 2<sup>nd</sup>.

### Emergency Gravity Water Transfer Channel

The fieldwork for the soils investigation and wetland delineation was completed in April. Braun Intertec was hired to drill, sample and test four of the holes at locations for possible structures. The drilling near County Road No. 4 indicated an approximate 30 feet of silty-sand material intersecting the grade of the proposed channel. Braun Intertec is completing slope stability tests, and the results are expected soon. Results of the testing should help determine the feasibility of a

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

TODD SANDO, P.E.  
CHIEF ENGINEER AND SECRETARY

channel. The sandy soils and water table level may present difficulties for construction of a channel. Wetland delineation fieldwork was completed by Western Plains Consulting Inc., and a report should be completed soon. Nine wetlands were located in the proposed work limits of the proposed centerline. To avoid two Jurisdictional wetlands near the top of bank of Tolna Coulee, special design measures may be required. All reports will need to be completed prior to June 1<sup>st</sup> to conform to the court order on this project. It is anticipated that the final reports will be completed in May.

### **Tolna Coulee Control Structure**

The work on this project is substantially complete. All of the concrete for the stop log structure has been placed, the catwalk structure is in place, the sheet pile is complete, the embankments and riprap are complete, and the disturbed areas have been seeded. An operational test and demonstration of the stop logs, and setting the stop logs to their initial configuration are a couple of the remaining items, and will likely be complete by the time this memo is distributed.

### **East End Outlet**

The work on this project is nearing completion. The vaults and restoration of the disturbed areas along the 96" transmission line have been completed. At the intake and pump station, the intake structure is complete, the pumps have been installed, and most of suction and manifold piping and valves is installed. The electrical equipment building is installed and work is ongoing on the O&M building. The electrical contractor is pulling the wires to the pump motors in preparation for the "bump tests" scheduled for May 24<sup>th</sup>. Following these tests, the motors will be coupled to the pumps and readied for operation. The electrical service substation is complete and undergoing testing. The contractor at the outfall structure has completed all the structural work, and is now working on backfilling, final grading and placing riprap.

County roads in the vicinity of the projects have had continual maintenance during project construction and final repairs will begin soon. Funding approved for contract 6 should be sufficient for road maintenance costs and final repairs to bring the condition of the roads to a similar or better condition than prior to the 2011-2012 Devils Lake projects.

Additional funding is needed to pay the state sales tax of 5% on the materials purchased by the state and contractor installed. Estimated total for East Devils Lake Outlet Project is \$17,457,829.42 at 5% the tax is estimated to be \$872,891.47. The Devils Lake West Outlet Expansion Project also had pumps and motors procured by the state and installed by contractor this estimated total is \$1,430,086.00, at 5% the tax is estimated to be \$71,504.30. Total sales tax for both outlet projects is estimated to be \$944,395.77.

Additional funding also needed for property acquisitions, \$400,000 was approved in June 2011, it is estimated that an additional \$300,000 is needed to pay the remaining crop damages and easements for the Devils Lake East End Outlet Project.

**I recommend the State Water Commission approve \$1,000,000 for state sales tax on state procured materials installed by contractors and also approve an additional \$300,000 for property acquisition/crop damages for the Devils Lake East End Outlet Project.**

**State Water Commission Water Supply Cost Share Policy**

Effective date of June 13, 2012

1. Water Depots for industrial use receiving water from facilities constructed using SWC funding or loans have the following additional requirements:

A. Domestic water supply has priority over Industrial water supply in times of shortage. This must be explicit in the water service contracts with industrial users.

B. If water service will be contracted, public notice of availability of the water service contracts is required.


C. A portion of the water supply at any depot must be available on a non-contracted basis for public access.

2. The SWC will not provide written consent to sell, lease, abandon, encumber, or otherwise dispose of any part of the property used by the WAWS Authority, without a public competitive request for proposal/selection process

3. Water Treatment and Regional Water Supply Project construction funding or loans from the SWC have the following additional requirements:

A. Bidding and procurement will follow NDCC 48-01.2 and NDCC 54-44.7


B. The political subdivision shall require all project contractors and service providers to agree to defend, indemnify and hold harmless the political subdivision and the state from any and all vicarious and other derivative claims that arise out of the contractor's performance under the agreement, except for claims based upon the political subdivision or state's own direct active acts of negligence, sole negligence or intentional misconduct. This obligation to defend, indemnify, and hold harmless does not extend to professional liability claims arising from professional errors and omissions. The political subdivision shall require that the political subdivision and the state be made an additional insured on the contractor's commercial general liability policy including any excess policies, to the extent applicable. The levels and types of insurance required in any contract shall be reviewed and concurred by the Chief Engineer. The political subdivision may not agree to any provision which limits or purports to limit the liability of a contractor or in which the political subdivision agrees to indemnify a contractor.



**Flood Diversion Authority**


**F-M Metro Flood Diversion  
Project Overview**

Presentation to State Water Commission  
June 13, 2012



**Current Status and Path Forward**

- Continue Design (Currently designing from Outlet to Maple River)
- Continue Additional Post-ROD Study to Minimize Impacts
- Push for Congressional Authorization
- Land Acquisition Planning and Policy Development
- Continue Open Communications, Including Agricultural Community
- Continue Development of Funding Plan and Financing Model
- Build the Project!



## Post-ROD Analysis: In Response to Public Input

### Post-ROD Analysis

*The Diversion Authority/Local Sponsors will conduct evaluations of potential modifications to the project, some of these modifications are outside of the Corps process.*

3



## Post-ROD Analysis: Path Forward

### Corps and Local Sponsor Joint Efforts and Goals

- ▲ Increased flows through town
- ▲ VE 13, move inlet slightly north
- ▲ Evaluate levees and dikes for affected communities (Comstock and Christine)
  
- ▲ Conduct analysis while continuing design of project on schedule
- ▲ Continue to improve overall project value with goals to improve reliability, reduce impacts, and reduce costs.

4



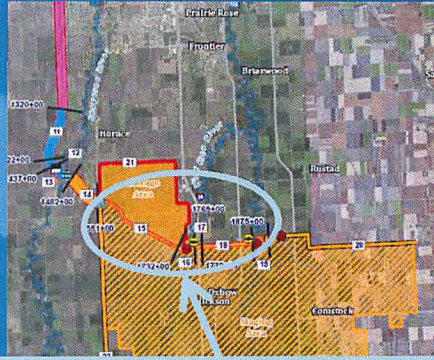
## Flows Through Town

### Increased Flows thru Town (Authority/Sponsor Lead)

- Provides early flood protection benefits prior to project completion
- Reduces frequency of need to operate the diversion channel
- Reduces duration of water in staging/storage area
- Ability to handle historic summer peak events avoiding crop damage



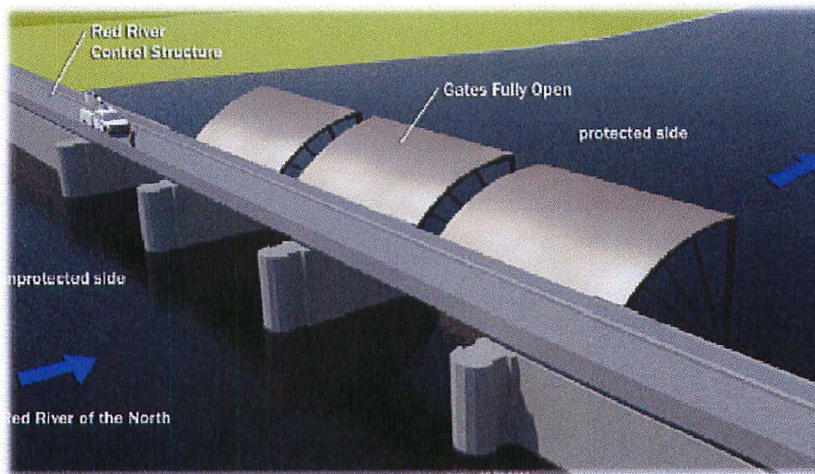
## Value Engineering 13



### Red River Channel Inlet (VE 13) (Authority/Sponsor Lead)

- Evaluating opportunity to move the diversion channel inlet alignment north
- Potentially eliminate Wolverton Creek structure and identify cost savings

## Increased Flows Through Town



6

FLOOD DIVERSION AUTHORITY

## Post-ROD Analysis: Path Forward

### Diversion Authority-Only Efforts and Goals

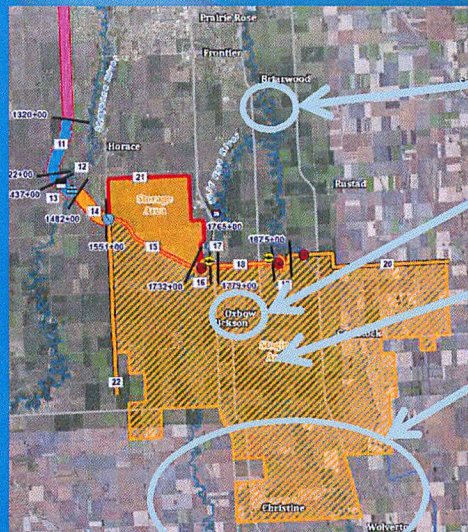
- 💧 Conduct Preliminary Post-ROD Analysis by Oct 2012
  - 💧 Move Diversion inlet south of Oxbow
  - 💧 Move Diversion inlet north of confluence of Red and Wild Rice Rivers
  - 💧 Evaluate upstream retention
  - 💧 Evaluate levees/ring dikes for Oxbow area

7



Post-ROD

Diversion Authority



Move Diversion inlet north of Wild Rice River

Protect Oxbow area with levees/ring dike

Move Diversion inlet south of Oxbow

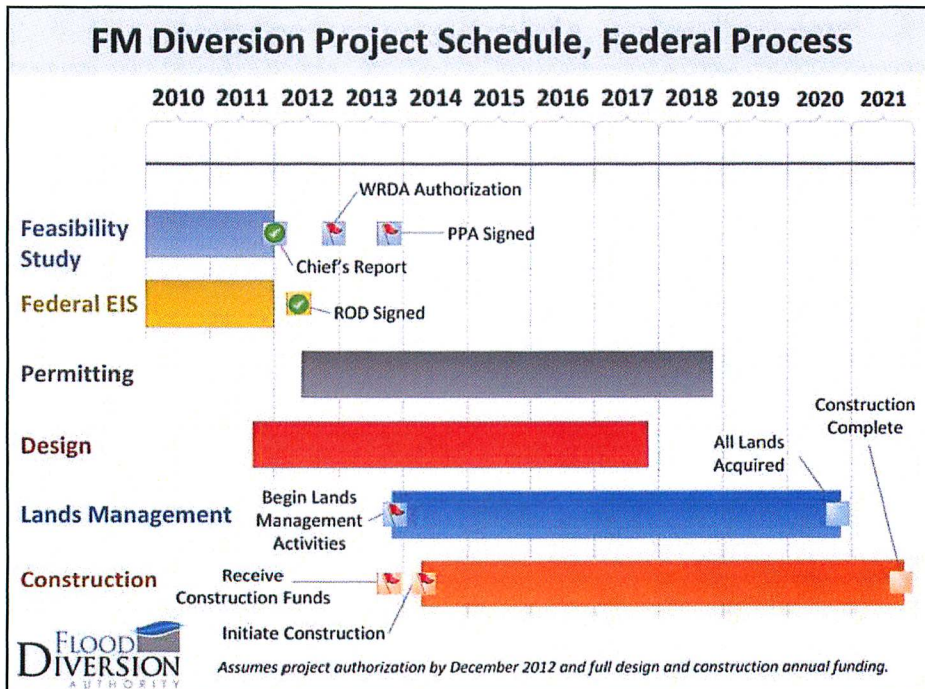
Evaluate upstream retention

8



## Federal FY'13 Work Plan

Three Options for FY'13 Work Plan	Benefits & Risks
1. Match Federal Funds (\$5M) "Fed Match"	<ul style="list-style-type: none"> <li>Delay Planned Completion Well Beyond 2020</li> <li>Increased Costs Due to Inflation</li> <li>No Construction Until 2015 at Earliest</li> <li>Allows Time to Complete Alternate Study/Design Work</li> </ul>
2. Advance Fund Design (\$20M) "Diversion 2020+?"	<ul style="list-style-type: none"> <li>Continue Design in 2013 (Begin In-Town Levee Design)</li> <li>Allows Construction in 2014</li> <li>Allows Funding of Early Land Acquisitions</li> <li>Risk or Proceeding Prior to Authorization</li> </ul>
3. Advance Fund Design & Construction (\$50M) "Diversion 2020"	<ul style="list-style-type: none"> <li>Stay on Track for 2020 Completion</li> <li>Greatest Opportunity to Control Cost</li> <li>Begin In-Town Levee Construction in 2013</li> <li>Begin Diversion Construction in 2014</li> <li>Allows Expanded Land Acquisitions</li> <li>Risk or Proceeding Prior to Authorization</li> </ul>




JUNE 13, 2012



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:**  Todd S. Sando, P.E., Chief Engineer - Secretary  
**SUBJECT:** SWPP Construction /Project Update  
**DATE:** May 21, 2012

### **Oliver, Mercer, North Dunn (OMND) Regional Service Area**

#### *Contract 3-1D OMND Water Treatment Plant Building and Membrane Equipment Installation:*

The construction of the OMND water treatment is almost complete. The plant has been producing drinking water since May 1<sup>st</sup>. Southwest Pipeline Project water was delivered to the City of Stanton and City of Hazen on May 16<sup>th</sup> and May 21<sup>st</sup> respectively. Service to the City of Zap and the rural customers around Zap and Beulah served by Beulah interim service area began on May 22<sup>nd</sup>.

The contractors are working on final finishing items and cleanup. The final completion date on the contract is June 14<sup>th</sup> 2012 and it is proceeding well towards that completion date.

*Contract 3-1E OMND Water Treatment Plant Concentrate Disposal Facility:* The contract was awarded to Carstensen Contracting, Inc. on August 31, 2011 and work began on September 27, 2011. The contract includes an 8" concentrate discharge line and a 10" potable water line to serve some rural users. The installation of the concentrate discharge line is essentially complete with a leak at a valve in the control vault remaining to be fixed. The concentrate discharge line is necessary for the production of finished water from the water treatment plant. Even with the leak, the concentrate discharge line is being used for discharging the concentrate water into the lake. The contractor has installed almost all of the 10" domestic water piping and is currently performing hydrostatic testing on the line.

*Contract 2-8B Main Transmission Line from Hazen to Stanton and Beulah to Center Elevated Tank:* This contract was awarded to Kamphuis Pipeline Company last July and work began on April 18, 2011. A letter summarizing the documents required for the contract closeout has been forwarded to the contractor. The contractor was substantially completed on November 1, 2011.

*Contract 5-16 Center Elevated Tank:* Landmark Construction commenced work on this tank on May 17<sup>th</sup> 2011. The concrete pedestal and most of the site work was complete by September, 2011. Welding of the metal tank structure on the ground commenced in October and the steel tank structure was jacked into position on November 8<sup>th</sup>, 2011. Landmark mobilized to the site on May 7<sup>th</sup> 2012 and worked on pressure testing the pipeline and grouting the steel tank floor. The pre-paint conference was held on May 21<sup>st</sup> 2012. The substantial completion date on this contract is July 15<sup>th</sup> 2012.

*Contract 2-8C/D Main Transmission Line from Center Elevated Tank to Center:* This contract was awarded to Neibur Development. Niebur began work on July 11<sup>th</sup> 2011. The pipeline

segment to the City of Center was completed on October 24<sup>th</sup> 2011. The contractor had only approximately 2.5 miles of pipeline left to be installed this construction season. Neibur mobilized during the week of May 7<sup>th</sup> 2012 and has begun cleanup and flushing of pipelines installed during the 2011 construction season.

*Contract 7-9C Zap Service Area Rural Distribution Line Phase I:* This project was bid August 4, 2011. The Commission approved award of the contract to Northern Improvement Co. at its August 17, 2011 conference call meeting. We received the concurrence of award from the Garrison Diversion Conservancy District and the Bureau of Reclamation. The contract documents have been executed. We expect the contractor to begin construction soon. Estimated total project cost is \$5.9 million.

*Contract 7-9D Zap Service Area Rural Distribution Line Phase II:* This contract was bid on April 27<sup>th</sup> 2012. A separate memo requesting award of this contract is presented.

*Contract 2-8E/2-8F Main Transmission Line from OMND Water Treatment Plant to West of Killdeer:* Contract 2-8E will be the Main Transmission Line from the OMND water treatment plant to a combination reservoir and booster station north of Halliday. Contract 2-8F will be the second segment west of Halliday.

The submittal set of plans from the Engineer is pending since the size of the pipeline depends on the City of Killdeer's decision to sign on to the project. A meeting was held with the City of Killdeer's representatives, their engineer, SWA, Bartlett & West /AECOM and SWC staff. The City of Killdeer plans to put the question of service from the SWPP on the June ballot. According to the 2010 census data the City of Killdeer's population is 751. The city's representatives during the meeting expressed interest in securing 600 gallons per minute (gpm) allocation from the SWPP which would meet the needs of the future population growth to 2,300 at 375 gallons per capita per day (gpcd). Since that meeting the City has sent a letter to the SWC indicating that the City Commission has voted to adopt a policy to develop infrastructure plans to meet the needs of 4,000 people in the near future. Based on that projection for population at 275 gpcd, they have requested allocation of 750 gpm (with 450 gpm initially and 750 gpm after the completion of Phase II expansion of the OMND WTP) from the project. It was also indicated during the meeting that until the city grows to the projected population they intend to sell the water to the oil industry.

Cost estimate for various pipeline capacity going west from the OMND WTP were obtained from the Bartlett & West/AECOM and it is provided below.

525 gpm (Required for Dunn Center, Halliday and Fairfield Service Areas. It does not include any capacity for Killdeer) - \$5.0 Million

825 gpm (Additional 300 gpm) - \$7.3 Million

1000 gpm (Additional 475 gpm) - \$8.3 Million

1200 gpm (Additional 675 gpm) - \$9.4 Million

1600 gpm (Additional 1075 gpm) - \$11.5 Million

We intend to propose to the City of Killdeer that the pipeline to Killdeer will have enough capacity to meet their anticipated growth, but the current allocation to them would be sufficient to meet their current needs. Their allocation would be changed as their need grows.

*Secondary Raw Water Intake:*

Bartlett & West/AECOM is working on the design of the secondary raw water intake. The intake is being designed for 6000 gpm capacity. The initial design locates the intake adjacent to the existing Basin Electric Power Cooperative (BEPC) Intake and the SWPP booster pump station. The Bureau of Reclamation will be working on the NEPA document in order to get Corps permit.

JUNE 13, 2012



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

---

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** Todd S. Sando, P.E., Chief Engineer - Secretary  
**SUBJECT:** SWPP Project Update  
**DATE:** June 1, 2012

Recent growth in and around the City of Dickinson has resulted in many interested parties contacting the Southwest Water Authority (SWA) with requests for domestic water supplies in the Davis Buttes and New Hradec Service area (Primarily in the ND State Highway 22 corridor north of Dickinson and areas along the former ND highway 10 to the east of Dickinson). Hydraulic limitations and concerns over the impact to existing customers have caused SWA to deny service to several of the interested parties. Bartlett & West/AECOM was authorized to study what improvements if any are appropriate to increase capacity along with cost estimates for those improvements.

### Alternatives North of Dickinson:

Several alternatives were considered for alleviating the situation. The following are the recommendations listed in the order of economic effectiveness. The attached map has the following recommendations labeled.

1. Installing approximately 7 miles of 8" PVC pipe from a location near Davis Buttes Reservoir on the east side of Highway 22 to a point just south of Dunn County – Stark County line would provide an estimated 350 gpm additional capacity. Estimated approximate cost for the project is \$900,000.
2. A reservoir in the New Hradec service area will provide for storage and convert the peak flow into transmission flow and provide for 131 gpm additional capacity. This service area originally included a tank constructed in 1994-1995. The tank was damaged in a severe windstorm in August 1999 and was not rebuilt due to issues with inadequate turnover because of the tank's location and low water use in the service area. The New Hradec Service Area has since been supplied with peak flows from the Davis Buttes Reservoir located north of Dickinson. A more desirable location for the tank near Highway 22 but at a lower elevation would result in more turnover of water in the tank. Some users will be served with a booster pump station with variable frequency drive (VFD) pumps. The estimated cost for building the new tank along Highway 22 as well as the new booster pump station is approximately \$750,000.
3. When the Dunn Center Service area is built as a part of the OMND regional service area, some of the users of the New Hradec Service area can be moved into the Dunn Center Service area. Moving all the existing users, north of the PRV located 2 miles south of Manning would free up additional approximately 42 gpm. This alternative cannot be used to address the immediate needs

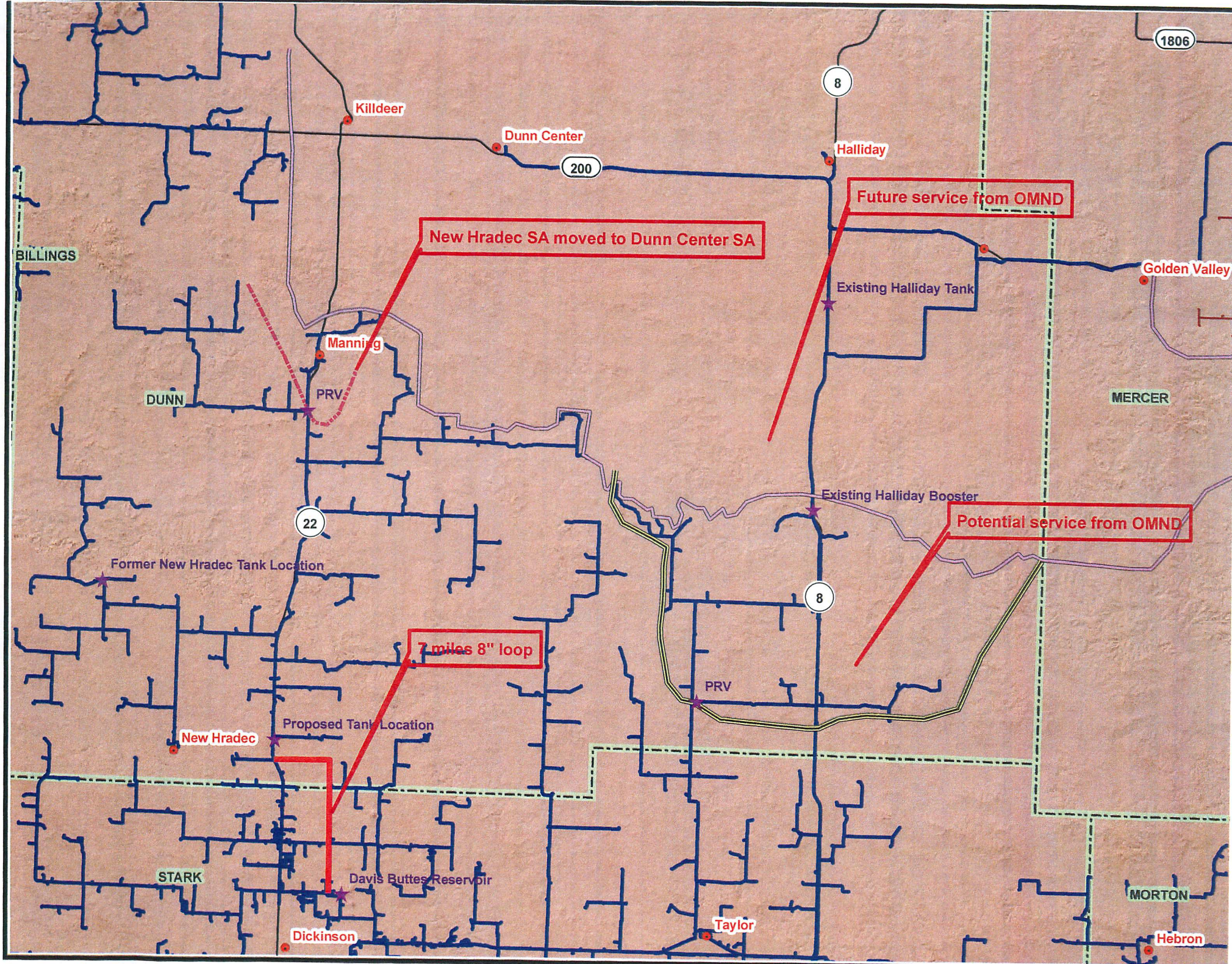
as the Dunn Center Service area main transmission line, rural distribution system are still in the design process.

#### Alternatives East of Dickinson

The area east of Dickinson does not lend itself well to obvious improvement that would increase capacity other than paralleling the 12" PVC Main Transmission Line. When the 2-8E line to Halliday gets completed, the 125 gpm baseflow that is currently being supplied to the Halliday tank for service to Dodge, Golden Valley, Halliday and Dunn Center will be available to customers east of Dickinson. Users located along the 2-7C MTL back to the PRV located north of Taylor can be served from the OMND WTP and this would free up some capacity. This alternative cannot be used to address the immediate needs as the Dunn Center Service area main transmission line (2-8E line) which is needed to feed the 2-7C MTL from the OMND Water Treatment Plant is still in the design process.

Installing 7 miles of pipeline to form a looped system and constructing a new storage tank for the New Hradec service area can be implemented quickly to address the current capacity needs.

**I recommend the State Water Commission approve \$1,650,000 Dollars to the Southwest Pipeline Project to address the capacity issues north of Dickinson, from the funds appropriated to the State Water Commission in the 2011-2013 biennium.**




JUNE 13, 2012



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:**  Todd Sando, P.E., Chief Engineer-Secretary  
**SUBJECT:** NAWS – Project Update  
**DATE:** May 29, 2012

### Supplemental EIS

Reclamation held a cooperating agency meeting on March 7 for the NAWS Supplemental EIS. Agenda items included purpose and need, alternative analysis, water needs and supply, transbasin effects, resource analysis, Missouri River depletion, climate change, and the schedule. When the Supplemental EIS is completed, the report will be provided to the federal court. Reclamation is assuming a draft version out this fall and the final EIS next spring.

### Manitoba & Missouri Lawsuit

The Federal Court issued an order on March 5, 2010, requiring Reclamation to take a hard look at (1) the cumulative impacts of water withdrawal on the water levels of Lake Sakakawea and the Missouri River, and (2) the consequences of biota transfer into the Hudson Bay Basin, including Canada. The most recent order dated October 25, 2010, allows construction on the improvements in the Minot Water Treatment Plant to proceed, however it does not allow design work to continue on the intake.

### Design and Construction Update

<b>Table 1 - NAWS Contracts under Construction</b>				
<b>Contract</b>	<b>Contract Award</b>	<b>Contractor</b>	<b>Contract Amount</b>	<b>Remaining Obligations</b>
2-2D Mohall	7/24/09	American Infrastructure, CO <b>In Default – Being taken on by the Bonding Co - EMC</b>	\$5,196,586.13	\$289,013.74
2-3A Minot AFB	1/4/11	S.J. Louis Construction	\$5,925,311.67	\$1,667,099.40
2-3B Upper Souris/Glenburn	1/4/11	S.J. Louis Construction	\$3,747,982.00	\$601,293.00
7-1A Minot WTP Filter Rehab and SCADA	11/30/11	PKG Contracting, Inc. Main Electric, Inc.	\$7,982,287.00	\$4,710,735.75
<b>Total Remaining Construction Contract Obligations</b>				<b>\$7,268,141.29</b>

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

TODD SANDO, P.E.  
CHIEF ENGINEER AND SECRETARY



<b>Table 2 – Design Work on Upcoming NAWS Construction Contracts</b>		
	Bid Opening	Contract Cost Estimate
2-4A Westhope	Summer 2012	\$7,160,000
2-3C Renville Corner	Winter 2013	\$5,900,000
2-4B Souris	Spring 2013	\$4,715,000

Contract 2-2D - The contract covers 62 miles of pipeline for the Mohall/Sherwood/All Seasons pipeline. The contract was awarded to American Infrastructure, Colorado. The Contract Surety, EMC took over the contract and hired S.J. Louis Construction to complete the remaining work. This project was substantially complete October 27, 2011 350 days after the substantial completion date. The final punch list is currently being sent to the Surety for final completion and contract closeout.

Contract 2-3A – The contract covers 13 miles of 24” pipeline between the north side of Minot to the Minot Air Force Base. Work began in early September 2011. The contractor, S.J. Louis, is making good progress and is roughly 55% complete. The contractor has requested a revised completion date of October 2012 but intends to be finished in September.

Contract 2-3B – The contract covers the 13 miles of 16” pipeline north of the Minot Air Force Base along Highway 83 to provide service to Upper Souris Water District at their treatment plant and at Glenburn. Work began in late August and is approximately 90% complete. This contract should be completed this June.

Contract 7-1A – The Federal Court on October 25, 2010, approved construction in the Minot Water Treatment Plant with the piping and filters. The SCADA telemetry system for the Northern Tier has been incorporated into this contract, as well as the design and programming for the SCADA for the entire project. The contract was awarded to PKG Contractors, and Main Electric. All asbestos abatement has been completed in both filter bays. The filters in the newer filter bay will be online in by mid-June. Demolition will begin on the older filter bay after the newer filters have satisfactorily passed all tests. The base of the new equalization basin has been placed. The SCADA controls for the Water Treatment Plant have been witness tested at the factory.

Contract 2-4A – This contract will cover the 20 miles between Renville Corner at the intersection of Highway 83 and Highway 5 and the City of Westhope. This pipeline will serve multiple connections to All Seasons Rural Water including the City of Westhope. Final plans and specs should be ready by the end of May.

Contract 2-3C – This contract will cover 18 miles between Forfar and Renville Corner including a pipeline to the City of Lansford and will complete the looped portion of the Northern Tier of the NAWS system. This pipeline will be instrumental to provide additional service to areas of

growth on the system and providing peak day flows once water is available from Lake Sakakawea.

Contract 2-4B – This contract will cover 17 miles between the Westhope and Souris. This is roughly half of the pipeline to the City of Bottineau. Contract 2-4C will continue the pipeline to Bottineau and include the necessary booster pump stations to eventually serve Bottineau. Our intention is to design the pipeline and associated facilities to they are ready to go once we have clarification on the EIS and injunction.

#### City of Bottineau

We received the attached letter from the City of Bottineau requesting water service from the NAWS system. Under the Interim Water Supply Agreement with the City of Minot, we cannot provide average day demand water supply to the City of Bottineau. Delivering water by the end of 2012 is not possible. We could possibly get the pipe in the ground by the end of 2013 or possibly early to mid 2014, depending on funding and results of the EIS.

TSS:TJF/237-4



City of Bottineau  
115-6<sup>th</sup> Street West, Suite #3  
Bottineau, ND 58318  
Phone# 701-228-3232  
Fax# 701-228-2543

Northwest Area Water Supply Advisory Committee

C/O State Water Commission  
900 E. Boulevard Avenue  
Bismarck, ND 58505-0850

Attn: Robert Schempp, Chairman

Mr. Schempp,

On behalf of the City of Bottineau and its residents I am requesting the Northwest Area Supply Advisory Committee to expedite the proceedings for the construction of the water line needed to serve the City of Bottineau.

At the meeting held in Minot on March 26, 2012 the Committee agreed on moving forward with the design of the pipeline without committing to the construction of the same. The water supply for the City is provided by a well field. Three of the wells have been closed, while three more cannot be used due to the presence of uranium in the water. Currently the existing water supply is unable to meet peak demand for the City.

Similarly to most communities in Northwest North Dakota, the City of Bottineau is seeing an increase in oil activity with the related growth. There are plans being presented to city officials to provide for the construction of 50 residential units which will only exacerbate the water issue.

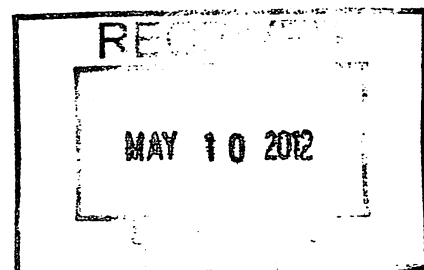
We are requesting the advisory committee to deliver the water allocated to the City of Bottineau, as it is defined in our contract, by the end of the 2012 construction season. We are aware that our request may seem abrupt, but we would not press the issue if it wasn't for the safety and well being of our community.

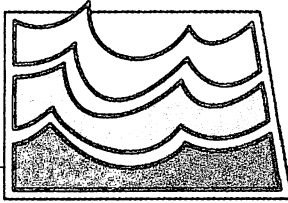
We hope that you will consider and grant our request.

On behalf of the City of Bottineau and its residents, I would like to thank you for your time and consideration.

Sincerely,

Douglas Marsden, Mayor





JUNE 13, 2012

# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** ~~TS~~ Todd Sando, P.E., Chief Engineer-Secretary  
**SUBJECT:** Western Area Water Supply – Project Update  
**DATE:** May 30, 2012

The Western Area Water Supply Authority (Authority) has water service contracts with each community and rural water system member that will be served by the system. The Authority did approve the water depot locations. The Independent Water Providers, through Steve Mortenson, has still expressed concern over the 13-mile corner location and the amount of water service that would be available at that location.

### Design Work

The Authority has provided plans and specifications for the Williston Water Treatment Facility Expansion Phase III. The project will expand the facility capacity from 10 to 14 million gallons per day. The project is to be bid June 8, 2012, and completion by May 2014. Also being evaluated is using a blended water option to go from 14 to 21 millions gallons per day.

### Funding

The State Water Commission has made payment on \$17.4 million of Authority approved project expenses. The Authority has requested the next \$50 million loan from the Bank of North Dakota. The Authority is pursuing construction and design work that does obligate more than the first \$25 million loan at this time, however the Authority believes they will have the second loan in place before actual payments will be needed. The original project cost estimate was \$150 million and has been updated to \$170 million due to increase demand in the rural areas and increase in construction costs.

### Construction Update

State Water Commission staff reviewed and approved specific plans and specifications on the projects shown on the attached table. Construction contracts have been awarded for five system reservoirs, the pipeline from Williston to Ray, the pipeline from Williston to Watford City, and the pipeline from R&T Water to the city of Crosby and BDW Rural Water. Majority of the contracts are to be completed by the end of 2012. Also the construction of the McKenzie County Phase IV rural distribution project was started this spring and will serve western McKenzie County. The contract is to be completed in three parts at various dates ending in August 2014.

TS:MK/1973

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

JACK DALRYMPLE, GOVERNOR  
CHAIRMAN

TODD SANDO, P.E.  
CHIEF ENGINEER AND SECRETARY

TODD SANDO, P.E.  
SECRETARY AND STATE ENGINEER

**State Water Commission - Western Area Water Supply Project Update**

Progress through April 2012

May-30-2012

<b>Project</b>	<b>Contractor</b>	<b>Cost</b>	<b>Completed</b>	<b>Completion</b>
<b>Res No. 1 to Bakken Ind. Park Pipeline</b> 30" to 24" pipeline NW of Williston	Merryman Excavation	\$4,055,539.17	\$3,986,128.17	Est 5/31/12
<b>NW Williston Reservoir - Ph I</b> 5 MG Storage	Natgun Corporation	\$4,444,400.00	\$590,765.00	Est 9/30/12
<b>R&amp;T Regioal Service Pipeline To Crosby/BDW</b> 26 miles of 14" to 8" pipeline from Wildrose to Crosby	Wagner Construction	\$4,583,325.00	\$1,027,077.91	Est 10/31/12
<b>Regioal Water Service Phase II Pipeline To Ray</b> 30 miles of 24" to 20" pipeline to Ray.	S.J. Louis Construction	\$14,223,592.00	\$0.00	Est 11/30/12
<b>Regioal Water Service Phase II Pipeline To Watford City</b> 30 miles of 24" to 20" pipeline to Watford City.	Ryan Construction	\$12,041,805.00	\$0.00	Est 11/30/12
<b>Regioal Water Service Phase II Pump Station/ Meter Vault</b>  Heading south Williston: 4.5 MGD Station at Lewis and Clark -6-15-2013, 4.5 MGD Station at Indian Hills - 4/30/2013,4.5 MGD Station at Alexander -6/30/2013 6 MGD Station at 13 mile comer - 6/30/2013; 3 MGD Station at Ray By-Pass -3/31/2013	Gen- John T Jones Const Mech- Cofell's Plumbing & Heating Elec- John's Refrigeration & Elec	\$5,049,000.00 \$420,000.00 \$2,192,600.00	\$0.00	
<b>Regional Water Service Ph II Reservoirs</b> 0.5 MG reservoirs at Wildrose - 8-31-12; 0.5 MG reservoirs at Alexander 11-30-12; 0.5 MG reservoirs at Arnegard 11-30-12 2 MG reservoirs at 13-mile corner 10-30-12; 2 MG reservoirs at Ray 10-30-12	Engineering America, Inc	\$5,199,000.00	\$0.00	
<b>McKenzie System IV</b> 20" to 2" pipeline west of Alexander	Merryman Exavation	\$7,207,783.00	\$108,000.00	
<b>US 2 to County Hwy No. 7 Watermain</b> 24" to 12" pipeline west side Williston	Metro Construction	\$3,986,068.58	\$3,986,068.58	Completed 12/11
<b>26<sup>th</sup> St Pump Station</b> Increase discharge pressure	John T Jones Construction	\$761,640.20	\$761,640.20	5/4/12
	<b>Total Construction</b>	<b>\$64,164,752.95</b>	<b>\$10,459,679.86</b>	
<b>Engineering</b>			<b>\$8,739,066.10</b>	
<b>Legal</b>			<b>\$236,854.74</b>	
<b>Easements</b>			<b>\$422,859.74</b>	
	<b>Total Other</b>		<b>\$9,398,780.58</b>	
	<b>Total</b>	<b>\$64,164,752.95</b>	<b>\$19,858,460.44</b>	<b>\$84,023,213.39</b>

<b>Report Name</b>	<b>Phase I - IV Executive Construction Summary</b>
<b>Capital Costs Incurred Through Date</b>	<b>4/30/2012</b>

	<b>Business Plan Estimate</b>	<b>Best Estimate To-Date</b>	
<b>Phase I</b>			
Task Order No. 4 - Regional Water Service Phase I Pipeline	\$ 10,225,000	\$ 10,343,451	*1
Task Order No. 5 - Regional Water Service Phase I Reservoir	\$ 5,000,000	\$ 5,646,004	*1
Task Order No. 6 - Regional Water Service to Crosby/BDW	\$ 4,000,000	\$ 5,898,989	*1
Task Order No. 7 - Regional Water Service System IV - Phase I	\$ 3,700,000	\$ 9,284,078	*1
Task Order No. 8 - Board Development and Administration	\$ -	\$ 631,571	*5
<b>Phase II</b>			
Task Order No. 10 - Williston Water Treatment Facility Expansion	\$ 11,000,000	\$ 13,250,000	
Task Order No. 11 - Transmission Pipeline Improvements	\$ 36,600,000	\$ 36,576,599	
Task Order No. 12 - Reservoirs and Pump Stations	\$ 14,695,000	\$ 15,668,071	
Task Order No. 13 - Hydraulic Modeling	\$ -	\$ 150,000	*5
Task Order No. 14 - Fill Depots	\$ 4,825,000	\$ 5,216,840	
Task Order No. 15 - Rural Water Systems Expansion Study	\$ -	\$ 554,000	*2, *5
Task Order No. 15a-1 - WRWD West Expansion Engineering	\$ -	\$ 312,000	
Task Order No. 16 - Right of Way Procurement	\$ -	\$ 1,200,000	*3
<b>Phase II (A) *4</b>			
Task Order No. 7 - Reg Water Service System IV - Phase II (a)	\$ -	\$ 6,765,000	
Task Order No. 10 - Williston WTP Expansion from 14 - 21 mg	\$ 21,000,000	\$ 15,325,000	
Task Order No. 11 - Transmission Pipeline Improvements	\$ 4,700,000	\$ 5,089,818	
Task Order No. 12 - Reservoirs and Pump Stations	\$ -	\$ 1,536,059	
Task Order No. 14 - Fill Depots	\$ -	\$ 2,321,159	
Task Order No. 15 - Rural Water System Expansion	\$ 9,000,000	\$ 3,532,896	*2
Task Order No. 15a-1 - WRWD West Expansion	\$ -	\$ 5,007,335	
Task Order No. 16 - Right of Way Procurement	\$ -	\$ 300,000	*3
Phase III Engineering, Legal, and Administrator	\$ 4,330,000	\$ 4,459,900	
<b>Phase III</b>			
Williston Phase II By-Pass Transmission Lines	\$ 8,460,000	\$ 8,713,800	
Williston Intake Expansion from 14mg to 21mg Service to Grenora	\$ 11,700,000	\$ 12,051,000	
	\$ 810,000	\$ 834,300	

	<b>Business Plan Estimate</b>	<b>Best Estimate To-Date</b>
<b>Phase I Totals</b>	\$ 22,925,000	\$ 31,804,092
<b>Phase II Totals</b>	\$ 67,120,000	\$ 72,927,510
<b>Phase I - II Total</b>	\$ 90,045,000	\$ 104,731,602
<b>Phase II (A) Total</b>	\$ 39,030,000	\$ 44,337,168
<b>Phase III Totals</b>	\$ 20,970,000	\$ 21,599,100
<b>Phase II (A) - III Totals</b>	\$ 60,000,000	\$ 65,936,268
<b>Phase I - III Totals</b>	\$ 150,045,000	\$ 170,667,870

\*1 - A portion of basic engineering services were paid with the \$1.5M State Water Commission grant provided to McKenzie County Water Resource District. These fees are not included in the estimated total project cost so as to only track estimated loan dollars utilized for the project.

\*2 - Task Order No. 15 is expected to be much greater than originally estimated; Phase III includes a component of the additional growth in scope, and a future component is expected to be significantly larger (approximately \$60M).

\*3 - An increase of Task Order No. 15 could increase the estimated cost of right of way procurement due to a larger rural water system expansion.

\*4 - Phase II (A) consists of Phase II and Phase III projects that have been grouped together for future reprioritization by WAWSA.

\*5 - Recommended for reimbursement from cash from operations.

**GROUND LEASE AGREEMENT**

**THIS GROUND LEASE AGREEMENT** (this "Agreement") is dated as of February 3, 2012 (herein referred to as the "Effective Date"), and is by and between **ARMSTRONG SERVICE, INC.**, a Michigan corporation (herein referred to as "Armstrong"), as lessee, and **the WESTERN AREA WATER SUPPLY AUTHORITY**, a political subdivision of North Dakota, as lessor (herein referred to as "the Authority").

**RECITALS:**

**WHEREAS**, the State of North Dakota has established the Western Area Water Supply Authority in order to develop projects to transfer needed water resources from the Missouri River to communities and industrial users in Western North Dakota;

**WHEREAS**, the Authority owns the real property in Williams County, North Dakota described on Exhibit A attached hereto (the "Site");

**WHEREAS**, Armstrong, along with its affiliated companies, including Armstrong International, Inc., are engaged in providing intelligent system solutions in the field of hot water, steam, and air for industrial, government and institutional customers;

**WHEREAS**, Armstrong offers unique, patented water heaters (the "Armstrong Heaters") that can heat water using natural gas in a manner that is substantially more efficient than the conventional methods for heating water at fracing sites, and use of the Armstrong Heaters would result in cost savings, use less fuel, and result in lower emissions as compared to the methods currently in use; in addition, Armstrong offers unique services relating to station management and loading that can optimize the logistics costs of oil companies;

**WHEREAS**, The Authority and Armstrong believe that the Authority's water sales at the Site would be substantially enhanced by Armstrong's ability to offer the option of pre-heated water, loading service and dedicated reserve capacity, providing a lower cost, environmentally efficient option to parties engaged in the fracing process;

**WHEREAS**, the Authority had planned to construct a water loading and distribution station on the site and Armstrong approached the Authority with a request to lease certain premises on the Site sufficient to construct a water heating annex to the Authority's proposed water loading and distribution station;

**WHEREAS**, after exploring the market for hot water sales at an Armstrong hot water annex at the Site, Armstrong believes the demand for hot water sales at the Site will consume the entire capacity of the Authority-planned water loading and distribution station;

**WHEREAS**, upon completion of the site work at the Site, Armstrong shall construct and install certain infrastructure and equipment necessary for the completion and commissioning of a water loading and distribution station dedicated to hot water sales (the “Station”) at which the Authority will make industrial water sales and Armstrong will provide water heating, loading and related services (the “Services”);

**WHEREAS**, Armstrong and the Authority have entered into a Master Water Station Agreement dated as of even date herewith (the “Master Agreement”), and intend that this Agreement shall be the Definitive Agreement (as defined in the Master Agreement) for the Leased Premises under the terms of the Master Agreement and the Station shall be a Designated Station (as defined in the Master Agreement),

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the parties covenant and agree as follows:

## **ARTICLE I** **LEASED PREMISES.**

**Section 1.1 Leased Premises.** In consideration of the Rent to be paid and the other obligations to be performed by Armstrong under this Agreement, the Authority hereby demises and leases to Armstrong, and Armstrong hereby leases and takes from the Authority, the premises designated as the “Leased Premises” on the description of the Site in Exhibit A attached hereto (the “Leased Premises”), together with the Authority’s interest in and to any easements appurtenant to the Leased Premises to the extent that such appurtenant easements benefit and are necessary to the occupancy of the Leased Premises, construction and operation of the Station, and the provision of the Services by Armstrong.

**Section 1.2 Lessor Reservations.** The Authority excepts and reserves easements and rights-of-way upon, over, under, across and in the Leased Premises for the purpose of exercising any of the Authority’s rights and performing any of the Authority’s duties under this Agreement and other agreements between the parties; and the Authority excepts and reserves the right to enter the Leased Premises for the purpose of inspecting the same to assure Armstrong’s compliance with the provisions of this Agreement, so long as such entry does not materially interfere with the Services.

## **ARTICLE II** **USE OF THE LEASED PREMISES**

**Section 2.1. Use of the Leased Premises.** Armstrong, at its expense, shall design, build, operate and maintain the Station (excluding the equipment and improvements designated as the “Authority Land Purchase Agreement Improvements” on Exhibit B (collectively, the “Authority Land Purchase Agreement Improvements”)) on the Leased Premises. The Station shall include all equipment and infrastructure necessary or required for a water loading and distribution



station with a capacity equal to the Monthly Committed Quantity and the provision of the Services in connection with all of that capacity, including, without limitation, the following:

- a. Armstrong water heating and water loading equipment (the "Armstrong Equipment") which shall consist of Armstrong Heaters, a storage tank for heated water, pumps, a back-up power generator, as well as the connection to a source of natural gas and electricity from the applicable utilities; Armstrong may also install a liquid propane gas tank for back-up fuel supply.
- b. The Station shall include not less than six (6) fill lanes.
- c. The Armstrong Equipment shall be secured to a suitable pad (or other acceptable foundation or building structure) to be constructed within the Leased Premises.
- d. The Armstrong Infrastructure and Equipment shall include at least six (6) loading spouts for dispensing water to trucks in the fill lanes, and may include a fixed or mobile office and suitable security fencing.

**Section 2.2. Additional Considerations.** Certain Armstrong Equipment and accessories shall be constructed so that they can be removed from the site and re-installed at another location if desired. During the Term Armstrong may not remove any of the Armstrong Infrastructure and Equipment that is needed for a functioning cold water depot. Armstrong may implement future expansion of the Station and its capacity, subject to the Authority's approval, which shall not be unreasonably denied or delayed. In addition, Armstrong may extend the availability of its Services to include the heating of water being piped from the Station directly to an industrial customer's location off site.

### **ARTICLE III** **OBLIGATIONS OF THE PARTIES**

**Section 3.1. Armstrong's Obligations.** Armstrong shall be obligated to perform the following:

- a. Armstrong shall be responsible for the cost of installing and operating the infrastructure and equipment listed on Exhibit B as the "Armstrong Infrastructure and Equipment" (the "Armstrong Infrastructure and Equipment"). Armstrong shall begin construction and installation at such time as it has received annual commitments from customers to purchase at least 200,000 barrels of heated water per month at the Station in the aggregate.
- b. Once the Station is completed, Armstrong shall be responsible to perform the Services, accordance with the terms of the Master Agreement, as well as a separate Water Service Agreement with customers.
- c. Except as expressly provided herein or in a separate agreement, Armstrong makes no warranties, express or implied, including without limitation, implied warranties of merchantability or fitness for a particular purpose, or any guaranty of sales or revenues related to the Station.

- d. If at any time the average monthly sales of hot water during a calendar quarter at the Station are less than 50% of the Monthly Committed Quantity, the Authority may require that 2 fill lanes at the Station be made available for the sale of cold water until such time as the average monthly sales of hot water during a calendar quarter again equal or exceed 50% of the Monthly Committed Quantity.

**Section 3.2. The Authority's Obligations.** The Authority shall be obligated to perform the following:

- a. The Authority shall perform and install the Authority Land Purchase Agreement Improvements on Exhibit B.
- b. The Authority Land Purchase Agreement Improvements are intended to be sufficient to bring the water supply to the Leased Premises sufficient to meet the Minimum Committed Quantity. In the event The Authority's total water supply shall be insufficient to meet all of the needs of all of its members and all of the other purchasers of water from the Authority, or in the event there otherwise is a shortage of water, The Authority may allocate its water supply to purchasers of water on such basis as The Authority establishes in its sole discretion and The Authority shall have no liability for failing to deliver any quantity of water to the Leased Premises. Absent an emergency situation, the Authority shall not make commitments to third parties that would make the Minimum Committed Quantity not available at the Station.
- c. Provide installation and maintenance of metering equipment included in the Authority Land Purchase Agreement Improvements for water that is sold to customers at the Station. Both the Authority and Armstrong shall have access to, and the right to read meters at mutually agreeable times. The terms of billing for water and other services to customers are addressed in, and shall be subject to the Master Agreement.
- d. The Authority shall provide the utility service included in the Authority Land Purchase Agreement Improvements, however, that Armstrong shall be responsible for all monthly utility usage charges and fees.

The "Monthly Committed Quantity" (as defined in the Master Agreement) for the Station is 1.2 million barrels per month (excluding pipeline projects in which water is piped from the Station directly to a customer).

#### **ARTICLE IV** **LESSEE EASEMENTS.**

**Section 4.1 Grant of Easements.** The Authority shall grant to Armstrong such access and utility easements as are necessary for Armstrong to construct, own and operate the Station

including the connection to natural gas utilities. The Authority shall further arrange for any necessary easements over, under, through, across or upon property owned by third parties (collectively referred to as "Lessee Easements").

**Section 4.2** Armstrong Obligations with Respect to the Lessee Easements. Armstrong shall at all times use its commercially reasonable efforts to keep the Lessee Easements free and clear from obstructions and impediments placed there by Armstrong.

## **ARTICLE V**

### **TERM.**

**Section 5.1** Term. The term of this Agreement (such period is herein referred to as the "Term") shall commence on and as of the Effective Date and, unless this Agreement is earlier terminated pursuant to the provisions of **Section 5.2** hereof, shall expire on the Fifth (5<sup>th</sup>) anniversary of the Effective Date (herein the 5<sup>th</sup> anniversary shall be referred to as the "Lease Expiration Date"). During the 180 day period prior to the Lease Expiration Date, Armstrong shall have the exclusive right to negotiate renewal terms with the Authority and during such period the Authority will not enter into negotiations with any party to provide services the same or similar to the Services at the Station. If the parties are unable to reach mutually acceptable renewal terms during such time, then this Agreement shall expire on the Lease Expiration Date. Notwithstanding this Section 5.1, provided that no Armstrong Event of Default shall have occurred and remain unremedied, Armstrong shall have the option to extend the term of this Agreement an additional two years past the Fifth (5<sup>th</sup>) anniversary. Armstrong may exercise this option by written notice given to the Authority at least ninety (90) days prior to the end of the initial five year term. If Armstrong exercises this option, the Lease Expiration Date shall be deemed to be the seventh anniversary of the Effective Date and the exclusive negotiation period shall occur during the 180 day period prior to such Lease Expiration Date. Upon the expiration or termination of this Agreement, the Authority shall reimburse Armstrong in accordance with Section 19.1 for Armstrong Infrastructure and Equipment, that is not removed by Armstrong. The Authority shall make such reimbursement not later than 30 days after the expiration or termination of this Agreement.

**Section 5.2** Earlier Termination. This Agreement may be terminated on a date (herein referred to as the "Earlier Termination Date") prior to the Lease Expiration Date under the following circumstances:

- (a) by mutual agreement of the Authority and Armstrong;
- (b) by the Authority in accordance with the provisions of **ARTICLE XVI** hereof upon the occurrence of an Armstrong Event of Default;
- (c) by Armstrong in accordance with the provisions of **ARTICLE XVII** hereof upon the occurrence of a Authority Event of Default;
- (d) pursuant to **ARTICLE XVIII** hereof; or

(e) upon the occurrence of an Event of Condemnation which results in termination as described in **ARTICLE XX** hereof.

**Section 5.3 Effect of Termination.** Upon expiration or termination of this Agreement, Armstrong shall surrender the Leased Premises to the Authority, in accordance with **Section 19.1.**

## **ARTICLE VI**

### **RENT.**

**Section 6.1 Rent.** In consideration for the demise and lease by the Authority of the Leased Premises and the grant by the Authority of the Lessee Easements, Armstrong shall pay to the Authority a monthly lease rental fee of \$100, which is due and payable on the first of each month during the Term (herein referred to as "Rent").

## **ARTICLE VII**

### **REAL ESTATE TAXES AND OTHER ASSESSMENTS.**

**Section 7.1 The Authority to Pay Real Estate Taxes and Other Assessments.** The Authority shall pay any and all real property taxes, special assessments and other governmental charges of any kind or nature whatsoever, whether general or special, ordinary or extraordinary or foreseen or unforeseen, which are now or are hereafter levied, assessed or imposed with respect to the real estate comprising the Leased Premises, including, the Lessee Easements (herein called "Real Estate Taxes and Other Assessments").

**Section 7.2 The Authority's and Armstrong's Separate Taxes.** Nothing contained in this Agreement shall be construed to require a party hereto to pay any franchise, estate, inheritance, succession, capital stock, income, personal property or other tax imposed by applicable laws on the other party. During the Term, Armstrong shall pay all taxes and assessments of any nature whatsoever levied on Armstrong Infrastructure and Equipment.

## **ARTICLE VIII**

### **REPRESENTATIONS AND WARRANTIES OF ARMSTRONG.**

Armstrong represents and warrants the following:

**Section 8.1 Status, Power and Authority.** Armstrong is a corporation duly formed, validly existing and in good standing under the laws of the State of Michigan and has all requisite corporate power and authority to own and operate its properties and to carry on its business as now conducted and as proposed to be conducted and enter into and carry out the terms of this Agreement.

**Section 8.2** Due Authorization; No Conflict or Default. The execution, delivery and performance by Armstrong of this Agreement have been duly authorized by all necessary corporate action on the part of Armstrong, and none of such execution, delivery or performance shall violate any law, governmental rule, regulation or order binding on Armstrong or the Articles of Incorporation of Armstrong or contravene the provisions of, or constitute a default under any mortgage, loan agreement, deed of trust, or other agreement or contract to which Armstrong is a party by which it or its properties may be bound.

**Section 8.3** Due Execution and Delivery; Valid and Legally Binding Obligation. This Agreement has been duly executed and delivered by the duly authorized representatives of Armstrong and constitutes the valid and legally binding obligation of Armstrong.

**Section 8.4** No Consents. No consent, approval or authorization of, or declaration or filing with, any governmental authority on the part of Armstrong is required as a condition to the valid execution, delivery or performance of this Agreement by Armstrong.

## **ARTICLE IX**

### **REPRESENTATIONS AND WARRANTIES OF THE Authority.**

The Authority represents and warrants the following:

**Section 9.1** Status, Power and Authority. The Authority is a government body, validly existing and in good standing under the laws of the State of North Dakota, owns the Leased Premises, and has all requisite power and authority to own and operate its properties and to carry on its business as now conducted and as proposed to be conducted, and enter into and carry out the terms of this Agreement.

**Section 9.2** Due Authorization; No Conflict or Default. The execution, delivery and performance by the Authority of this Agreement have been duly authorized by all necessary action on the part of the Authority and its Commissioners, and none of such execution, delivery or performance shall violate any law, governmental rule, regulation or order binding on the Authority or contravene the provisions of, or constitute a default under any statute, law, regulation, ordinance, order, decree or other legal or governmental requirement, or any agreement or contract to which the Authority is a party by which it or its properties may be bound.

**Section 9.3** Legal, Valid and Binding Obligation. This Agreement has been duly executed and delivered by the duly authorized representatives of the Authority and constitutes the valid and legally binding obligation of the Authority.

**Section 9.4** No Consents. No consent, approval or authorization of, or declaration or filing with, any governmental authority on the part of the Authority is required as a condition to the valid execution, delivery or performance of this Agreement by the Authority.

**Section 9.5 Title.** Upon the Effective Date, Armstrong will have a valid leasehold estate in and to the Leased Premises, free and clear of all liens.

**Section 9.6 Compliance with Law.** The Authority has maintained the Leased Premises and the Lessee Easements in compliance with applicable Law. Without limiting the generality of the foregoing, the Leased Premises is in compliance in all material respects with all applicable laws and including federal, state and local environmental laws, and, during the last three (3) years with respect to the Leased Premises, the Authority has no knowledge of any noncompliance with, nor has the Authority received any notices of violation of such laws or federal, state or local environmental laws.

**ARTICLE X**  
**NO VIOLATIONS OF APPLICABLE LAWS;**  
**COMPLIANCE WITH THE AUTHORITY'S RULES; AND PERMITS.**

**Section 10.1 No Violation of Applicable Laws.** Armstrong shall not make or permit any use of the Leased Premises or the Lessee Easements that:

(a) violates any applicable laws, rule, regulation or permit, except where such violation would not reasonably be expected to have a material adverse effect on the Authority or the Leased Premises; or

(b) renders void or voidable, or causes an increase in the rates for, any insurance then in force pursuant to the provisions of this Agreement.

**Section 10.3 Permits.** Armstrong shall obtain and maintain, at Armstrong's sole cost and expense, all permits from time to time required for the lawful conduct of its business on the Leased Premises and the Lessee Easements relating to the construction, ownership and operation of the Station.

**ARTICLE XI**  
**LIENS.**

**Section 11.1 Mechanics' Liens.** Except as otherwise provided by written agreement, Armstrong shall not have any right, power or authority to bind the Authority or any property or improvements of the Authority for the payment of any monies for any labor or material furnished to Armstrong or claimed to have been furnished to Armstrong in connection with work of any character performed or claimed to have been performed by or at the direction or sufferance of Armstrong or for any other claims arising in connection with the construction, ownership and operation of the Station, or to render the Authority's estate or interest in the Leased Premises or

render the Leased Premises itself liable for any claims for any labor, material or service or for any charge or expense incurred in connection therewith.

**Section 11.2 Satisfaction and Release of Liens.** If any lien shall be filed against any of the Authority's estate or interest in the Leased Premises by any person claiming by, through or under Armstrong, including, but not limited to, liens arising by reason of a non-payment by Armstrong of any debt or other obligation for which Armstrong is liable, then Armstrong shall procure and deliver to the Authority a full and complete cancellation and discharge thereof, or, at the Authority's option, bonding in an amount sufficient to secure full and complete cancellation or discharge thereof. If Armstrong shall fail to procure and deliver a full and complete cancellation and discharge (or, at the Authority's option, bonding in an amount sufficient to secure full and complete cancellation and discharge) of any such lien to the Authority within thirty (30) days after notice from the Authority requesting the same, then the Authority may, but shall not be required to, discharge or remove the same by deposit or payment. The amount so deposited or paid by the Authority shall become due and payable by Armstrong to the Authority immediately upon the giving of notice of such deposit or payment to Armstrong.

## **ARTICLE XII** **IMPROVEMENTS AND MODIFICATIONS.**

**Section 12.1 Improvements and Modifications.** Armstrong is authorized to make improvements and modifications to the Leased Premises related to the intended use of the Leased Premises as set forth in **ARTICLE III** and provided that:

(a) all such improvements or modifications are consistent with the terms and purpose of this Agreement and shall be conducted and completed in compliance with (i) applicable laws and permits and (ii) all requirements of any insurance company providing property and casualty or liability insurance with respect to the Leased Premises;

(b) prior to constructing any improvements or substantial modifications of the Station, Armstrong shall submit plans to the Authority for its approval, which shall not be unreasonably denied or delayed;

(c) once commenced, the work to complete any modifications shall be prosecuted with reasonable dispatch; and

(d) Armstrong shall cause all contractors to maintain workers' compensation insurance and all other insurance customary for similar types of construction contracts and covering all potential claimants, including, but not limited to, all persons employed in connection with the work with respect to whom death or injury claims could be asserted against the Authority, Armstrong or the Leased Premises. All such insurance shall be issued by a company or companies authorized to do business in the State of North Dakota

## **ARTICLE XIII** **DAMAGE AND RESTORATION.**

**Section 13.1 Damage to and Restoration of the Station.** As used herein, a “Casualty Loss” shall mean any one or more of the following events with respect to the Station: (a) the loss of all or substantially all of the Station or the use thereof due to destruction or damage beyond economical repair or the rendition of the Station permanently unfit for normal use for any reason whatsoever; or (b) anything that results in an insurance settlement with respect to the Station on the basis of total loss or constructive total loss. An Event of Condemnation shall not be regarded as a “Casualty Loss.” If a Casualty Loss occurs, then the following provisions shall apply:

(a) As soon as reasonably practicable, Armstrong shall make a determination as to whether: (i) the Station or such portion thereof that has been affected by the Casualty Loss, can be rebuilt, repaired or restored to permit operation of the Station on a basis that is not materially different from the basis upon which they were operated immediately prior to the Casualty Loss; and (ii) the Casualty Proceeds are sufficient to permit such rebuilding, repair and/or restoration. As used herein, “Casualty Proceeds” means all insurance proceeds or other amounts actually received on account of a Casualty Loss, except proceeds of business interruption insurance.;

(b) If a determination is made pursuant to **Section 14.1(a)** above that: (i) the Station cannot be rebuilt, repaired and/or restored to permit operation on a basis that is not materially different from the basis upon which it was operated immediately prior to the Casualty Loss; or (ii) that the Casualty Proceeds that are available to Armstrong for such rebuilding, repair and/or restoration, are not sufficient to permit such rebuilding, repair and/or restoration, then Armstrong shall be entitled to retain all of the Casualty Proceeds and Armstrong shall have the option to terminate this Agreement by giving the Authority a notice of such termination; provided, however, that the Authority shall have the option of requiring Armstrong to remove the Armstrong Infrastructure and Equipment and restoring the Leased Premises to substantially the same condition as existed prior to the construction of the Station, provided that Armstrong shall not be required to remove any building structures, foundations, underground piping, concrete pads or other infrastructure that is not reasonably practicable to remove. The effective date of such termination shall be the date such notice as deemed to be given pursuant to **Section 25.1** hereof; and

(c) If a determination is made pursuant to **Section 14.1(a)** above that: (i) the Station can be rebuilt, repaired and/or restored to permit operation on a basis that is not materially different from the basis upon which it was operated immediately prior to the Casualty Loss; and (ii) the Casualty Proceeds that are available to Armstrong for such rebuilding, repair and/or restoration, are sufficient to permit such rebuilding, repair and/or restoration, then Armstrong shall promptly commence any restoration work and shall diligently pursue the same to completion, subject to a reasonable allowance for the time needed to adjust any insurance claims. Before Armstrong shall commence the restoration or let any contracts therefor, and at all times during the course of the restoration, Armstrong shall comply with the applicable provisions of the Lease.



**Section 13.2 Termination Due to Legal Prohibition on Restoration.** Notwithstanding anything contained in **Sections 14.1** above, if the Station cannot be restored because of a legal prohibition on doing so, then, Armstrong shall have the option to terminate this Lease, by giving a notice of termination to the Authority at any time after Armstrong determines such legal prohibition exists, in which case this Lease shall terminate as of the effective date of the termination in the same manner as set forth in **Section 13.1** above.

**ARTICLE XIV**  
**INSURANCE.**

**Section 14.1 Armstrong Insurance.**

(a) Armstrong, at its own expense, shall provide and keep in force the following insurance:

(i) Statutory Workers' Compensation Insurance covering Armstrong employees in full compliance with the North Dakota Workers' Compensation laws.

(ii) Commercial General Liability Insurance including contractual liability and products/completed operations liability coverage with a combined single limit of \$1,000,000 per occurrence.

(iii) Automobile Liability Insurance covering all owned, hired and non-owned vehicles with a combined single limit of \$1,000,000 per occurrence.

(iv) All Risk Property and Boiler and Machinery Insurance covering the Armstrong Infrastructure and Equipment on a replacement cost basis.

(b) All insurance policies shall be issued by insurers reasonably acceptable to The Authority. Each policy required to be provided by Armstrong pursuant to this Agreement shall name the Authority as an additional insured, and shall have attached thereto endorsements (i) that such policy shall not be canceled, modified, reduced or surrendered without at least thirty (30) days' prior written notice to the Authority; and (ii) that no act or omission of Armstrong shall invalidate the interest of such Person entitled to such notice. Armstrong shall furnish the Authority with certificates of such policies, upon request. All deductibles shall be for the account of, and shall be payable by, Armstrong.

**Section 14.2 The Authority Insurance.**

(a) The Authority, at its own expense, shall provide and keep in force the following insurance:

(i) Statutory Workers' Compensation Insurance covering the Authority employees in full compliance with the North Dakota Workers' Compensation laws.

(ii) Commercial General Liability Insurance including contractual liability and products/completed operations liability coverage with a combined single limit of \$1,000,000 per occurrence.

(iii) Automobile Liability Insurance covering all owned, hired and non-owned vehicles with a combined single limit of \$1,000,000 per occurrence.

(b) All insurance policies shall be issued by insurers reasonably acceptable to Armstrong. Each policy required to be provided by the Authority pursuant to this Agreement shall name Armstrong as an additional insured, and shall have attached thereto endorsements (i) that such policy shall not be canceled, modified, reduced or surrendered accepted without at least thirty (30) days' prior written notice to Armstrong; and (ii) that no act or omission of the Authority shall invalidate the interest of such Person entitled to such notice. The Authority shall furnish Armstrong with certificates of such policies and whenever required shall satisfy Armstrong that such policies are in full force and effect. All deductibles shall be for the account of, and shall be payable by, the Authority.

**Section 14.3 Waiver of Subrogation.** Armstrong and the Authority hereby mutually waive any and all rights of recovery against one another for real or personal property loss or damage occurring to the Leased Premises or the Station, or any part thereof or any personal property therein from perils insured against under the all risk coverage and other property insurance policies existing for the benefit of the respective Parties and will assure that such insurance under **Section 15.1** and **Section 15.2** permits waiver of liability and contains a waiver of subrogation.

## **ARTICLE XV INDEMNIFICATION.**

**Section 15.1 General Indemnification.** The Authority and Armstrong respectively as Indemnitor each agrees to indemnify and hold harmless the other, as Indemnitee, and its respective officers, directors, employees, and agents from any liability, loss, expenses or damage for injury to persons or property arising out of or resulting from any negligent or unlawful acts or omissions of the Indemnitor, its subcontractors, or their agents, servants or employees, or from Indemnitor's breach of its obligations hereunder.

**Section 15.2. Environmental Indemnification.** The Authority and Armstrong respectively as Indemnitor, each agrees to indemnify and hold harmless the other, as Indemnitee, and its affiliated corporations and their respective officers, directors, employees, affiliates, agents and assigns from any liability, loss, expenses, or damage for injury to persons or property arising out of or resulting from (a) the spill, discharge, emission, release or threatened release into the

environment of any hazardous materials or any materials regulated by environmental governmental authorities, caused by Indemnitor, its agents, employees or representatives; and (b) Indemnitor's non-compliance with any environmental law, rule, regulation or other requirement.

**Section 15.3 Survival.** This ARTICLE XVI shall survive the expiration or earlier termination of this Ground Lease.

**ARTICLE XVI**  
**ARMSTRONG EVENTS OF DEFAULT; THE AUTHORITY'S REMEDIES.**

**Section 16.1 Armstrong Events of Default.** The occurrence of any of the following events shall constitute an "Armstrong Event of Default" on the part of Armstrong under this Lease:

(a) any representation or warranty made by Armstrong in this Lease shall have been false, misleading or incorrect in any material respect when made or delivered; or

(b) the failure of Armstrong to remit funds to the Authority that are due pursuant to this Agreement or any related agreement that is not cured within 10 days;

(c) Armstrong shall default in any material respect in the performance of any obligation to be performed by Armstrong under this Agreement (other than a payment obligation), which default is not remedied within ninety (90) days after receipt by Armstrong of written notice thereof from the Authority; provided, however, that if such default cannot reasonably be cured within such ninety (90) day period and Armstrong has commenced and is diligently pursuing such cure within such ninety (90) day period, then Armstrong shall have an additional period of time (not to exceed 180 days after receipt of written notice of such default from the Authority) to cure such default (herein referred to as the "Extended Cure Period") and the Authority may not terminate this Agreement during the Extended Cure Period;

(d) the filing, or the consent to the filing, of a petition for relief or reorganization or arrangement or any other petition in bankruptcy by Armstrong, for liquidation or to take advantage of any bankruptcy or insolvency law of any jurisdiction; or Armstrong shall make an assignment for the benefit of creditors; or Armstrong shall consent to the appointment of a custodian, receiver, trustee, or other officer with similar powers, for substantially all of Armstrong' property or be adjudicated insolvent; or an order for relief shall be entered against Armstrong in any case or proceeding for liquidation or reorganization or otherwise to take advantage of any bankruptcy or insolvency law of any jurisdiction, or ordering the dissolution, winding up or liquidation of all or any part of Armstrong' property; or any petition for any such relief shall be filed against Armstrong and shall not be dismissed within sixty (60) days; or

**Section 16.2 The Authority's Remedies.**

(a) Upon the occurrence of any Armstrong Event of Default that is not cured within an applicable cure period pursuant to Section 16.1, the Authority may, at its option and without prejudice to any other right, remedy or recourse afforded to the Authority under any provision hereof or at law, elect to terminate this Lease by giving a notice of termination to Armstrong and/or the Authority may exercise any other right or remedy it may have at applicable Law or in equity on account of such Armstrong Event of Default, in all cases subject to the limits of liability in Article XXIII hereof. In such event, the Earlier Termination Date shall be the date specified in such notice of termination.

(b) The exercise by the Authority of any right or remedy against Armstrong or the Leased Premises shall not preclude the simultaneous or successive exercise against Armstrong or the Leased Premises of any other right or remedy provided for herein or permitted by applicable laws or in equity, whether or not such rights or remedies are consistent or inconsistent with any other right or remedy.

(c) Notwithstanding any other provision of this Agreement, the parties agree that in the event of any failure or interruption in the provision of Services as indicated in **Section 3.1(b)**, that is not cured within the time set forth in **Section 16.1(c)**, the Authority's sole and exclusive remedy shall be to terminate this Lease.

**ARTICLE XVII**

**THE AUTHORITY EVENTS OF DEFAULT; ARMSTRONG' REMEDIES.**

**Section 17.1 The Authority Events of Default.** The occurrence of any of the following events shall constitute an "The Authority Event of Default" on the part of the Authority under this Lease:

(a) any representation or warranty made by the Authority in this Agreement shall have been false, misleading or incorrect in any material respect when made or delivered;

(b) the failure of the Authority to remit funds to Armstrong that are due pursuant to this Agreement or any related service agreement, that is not cured within 10 days; or

(c) The Authority shall default in any material respect in the performance of any other obligation to be performed by the Authority under this Agreement (other than a payment obligation), which default is not remedied within ninety (90) days after receipt by the Authority of written notice thereof from Armstrong; provided, however, that if such default cannot reasonably be cured within such ninety (90) day period and the Authority has commenced and is diligently pursuing such cure within such ninety (90) day period, then the Authority shall have an Extended Cure Period to cure such default and Armstrong may not terminate this Lease during the Extended Cure Period; or

(c) the filing, or the consent to the filing, of a petition for relief or reorganization or arrangement or any other petition in bankruptcy by the Authority, for liquidation or to take advantage of any bankruptcy or insolvency law of any jurisdiction; or the Authority shall make an assignment for the benefit of creditors; or the Authority shall consent to the appointment of a custodian, receiver, trustee, or other officer with similar powers, for substantially all of the Authority's property or be adjudicated insolvent; or an order for relief shall be entered against the Authority in any case or proceeding for liquidation or reorganization or otherwise to take advantage of any bankruptcy or insolvency law of any jurisdiction, or ordering the dissolution, winding up or liquidation of all or any part of the Authority's property; or any petition for any such relief shall be filed against the Authority and shall not be dismissed within sixty (60) days.

**Section 17.2 Armstrong' Remedies.**

(a) Upon the occurrence of any the Authority Event of Default, Armstrong may, at its option and without prejudice to any other right, remedy or recourse afforded to Armstrong, elect to terminate this Lease by giving a notice of termination to the Authority and/or Armstrong may exercise any other right or remedy it may have at law or in equity on account of such the Authority Event of Default. In such event, the Earlier Termination Date shall be the date specified in such notice of termination.

(b) The exercise by Armstrong of any right or remedy shall not preclude the simultaneous or successive exercise of any other right or remedy provided for herein or permitted by applicable law or in equity, whether or not such rights or remedies are consistent or inconsistent with any other right or remedy.

**ARTICLE XVIII  
FORCE MAJEURE.**

**Section 18.1 Event of Force Majeure.** Neither party shall be responsible for damages or delays caused by acts of God, labor disputes, acts of a government authority (other than the Authority), acts of a public enemy, fire, flood, abnormal weather conditions, earthquakes or any other events that could not have been reasonably foreseen, or which are beyond the control of the affected party, its agents, contractors, or suppliers (an "Event of Force Majeure").

**Section 18.2 Termination for Force Majeure.** If an Event of Force Majeure prevents a party from performing its obligations hereunder for more than ninety (90) consecutive days, then either party may terminate this Agreement upon thirty (30) days prior written notice to the other party.

**ARTICLE XIX**  
**SURRENDER OF LEASED PREMISES.**

**Section 19.1 Surrender of the Leased Premises.** Armstrong shall, upon the Lease Expiration Date or Earlier Termination Date, whichever shall first occur, surrender the Leased Premises (and, thereby, the Lessee Easements) to the Authority without delay and Armstrong shall execute and deliver to the Authority any and all documents reasonably requested by the Authority to evidence the termination of this Agreement. For a period of 30 days following the termination or expiration of this Agreement, the Authority shall have the option to purchase all or any of the Armstrong Infrastructure and Equipment that is necessary or useful for a functioning cold water depot for the applicable Purchase Price. Notwithstanding the foregoing and for purposes of clarity, the Authority shall not have the right to purchase any Armstrong Heaters or any other Armstrong Infrastructure and Equipment that is used primarily for the purpose of heating water and not needed for a functioning cold water depot. Within 30 days after the termination or expiration of this Agreement, the Authority shall designate in writing the Armstrong Infrastructure and Equipment that the Authority wishes to purchase (the "Remaining Assets"). Armstrong shall remove the Armstrong Infrastructure and Equipment that is not designated as the Remaining Assets, but shall not be responsible to remove underground piping, any building, tanks, concrete pad, or road work or related infrastructure that has been installed by Armstrong to serve the Station but cannot reasonably be removed. The Authority agrees that it will not use such items for operation of a water depot unless they are designated as "Remaining Assets." Upon removal of any equipment not purchased, the Authority shall pay Armstrong the purchase price for the Remaining Assets. "Purchase Price" means with respect to any asset the original cost of construction of such asset. The Purchase Price shall be paid within sixty (60) days of the Lease Expiration Date or Earlier Termination Date.

**ARTICLE XX**  
**CONDEMNATION.**

**Section 20.1 Condemnation.** If the whole of the Leased Premises shall be condemned or taken for any public or quasi-public use or purpose, under any statute or by right of eminent domain, or by private purchase in lieu thereof (herein referred to as an "Event of Condemnation"), then and in that event, the Term shall cease and terminate from the date of possession of the Leased Premises by such condemning authority. If the Event of Condemnation results in the taking of only a portion of the Leased Premises and Armstrong can continue to operate the Station, the Authority will, if reasonable and practical, lease additional, contiguous land at the Leased Premises to replace the portion so condemned; it being understood that Armstrong will have a claim in condemnation for the taking of the business and the business assets. If the whole or any portion of any Lessee Easement shall be condemned or taken for any public or quasi-public use or purpose, under any statute or by right of eminent domain, or by private purchase in lieu thereof, then in that event, the Authority shall relocate said Lessee Easement, if feasible.

**ARTICLE XXI**  
**QUIET ENJOYMENT.**

**Section 21.1 Quiet Enjoyment.** The Authority covenants with Armstrong that upon Armstrong's performing, observing and keeping all of the terms, covenants, conditions, agreements and obligations of this Agreement on Armstrong's part to be so performed, observed and kept, Armstrong shall quietly hold, occupy and enjoy the Leased Premises and the Lessee Easements during the Term of this Lease.

**ARTICLE XXII**  
**LIABILITIES OF THE PARTIES.**

**Section 22.1 Limitations of Damages and Liability.**

(a) In no event will either party have any liability to the other party for loss of profits, business interruption, claims for labor, or incidental, special, consequential, indirect or punitive damages of any type arising under this Lease, whether the claim be based in contract, tort, warranty, strict liability or otherwise. Neither party shall be liable to the other party for the payment of a claim for direct damages to the extent that such a party has received payment for such a claim from another source, and any payment obligation payable by a party shall be net of any insurance proceeds available to the other party.

(b) Notwithstanding any provision to the contrary set forth in this Lease, in no event shall Armstrong's liability for any and all losses exceed the amounts available under applicable insurance policies of Armstrong that are required to be maintained by Armstrong under Article XV hereof, regardless of the form of action or legal theory under which liability may be asserted.

**ARTICLE XXIII**  
**DISPUTE RESOLUTION.**

**Section 23.1 By the Parties.** The parties agree: (a) to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner; and (b) to provide each other with reasonable access during normal business hours to any and all non-privileged records, information and data pertaining to any such dispute.

**Section 23.2 Failure to Resolve.** If any dispute is not resolved between the parties pursuant to **Section 23.1** within thirty (30) days from the date on which the parties began to attempt to resolve such dispute, then the dispute may be submitted to an appropriate forum in accordance with Section 24.3.

**Section 23.3 Consent to Jurisdiction.** Each of the parties hereto hereby consents to the jurisdiction of the courts of the State of North Dakota and/or the United States District Court for

the District of North Dakota, as well as to the jurisdiction of all courts to which an appeal may be taken from such courts, for the purpose of any suit, action or other proceeding arising hereunder or with respect to the transactions contemplated hereby, and expressly waives any and all objections it may have as to venue, including, without limitation, the inconvenience of such forum, in any of such courts. In addition, to the extent that such Party may lawfully do so, each of the parties hereto consents to the service of process by personal service or U.S. certified or registered mail, return receipt requested, addressed to such party as set forth in **Section 25.1** hereof.

**Section 23.4 No Suspension of Performance.** During the period of any dispute described in this **ARTICLE XXIV**, neither party shall suspend performance.

**ARTICLE XXIV  
MISCELLANEOUS PROVISIONS.**

**Section 24.1 Notices.** All notices and other communications required or permitted hereunder shall be in writing and shall be deemed given or delivered when delivered personally, by registered or certified mail, by legible facsimile transmission or by overnight courier (fare prepaid) addressed as follows:

If to the Authority:	Western Area Water Supply Authority PO Box 1306 Williston, ND 58802 Attn: Jaret Wirtz
----------------------	--

With copies to:	Vogel Law Firm 218 N.P. Avenue Fargo, N.D. 58102 Attention: Tami Norgard Phone: 701-237-6983 Fax: 701-237-0847
-----------------	---

If to Armstrong:	Armstrong Service, Inc. 221 Armstrong Blvd. Three Rivers, Michigan 49093 Attention: Dan Musson Phone: Fax:
------------------	---

With copies to:	Armstrong Service, Inc. 8615 Commodity Circle, Suite 17 Orlando, FL 32819 Attention: John Kealy Phone:
-----------------	--



Fax:

Armstrong Service, Inc.  
2081 East Ocean Boulevard  
4<sup>th</sup> Floor  
Stuart, FL 34996  
Attention: J. Thomas Morris  
Phone: 772-286-7175  
Fax: 772-286-1001

or to such other address or facsimile number as such party may indicate by a notice delivered to the other parties hereto. Notice shall be deemed received the same day (when delivered personally), five (5) days after mailing (when sent by registered or certified mail), the same business day (when sent by facsimile), and the next business day (when delivered by overnight courier). A party to this Lease may change its address to which all communications and notices may be sent hereunder by addressing notices of such change in the manner provided.

**Section 24.2 No Joint Venture or Partnership.** Nothing in this Lease shall constitute or create a joint venture, partnership, agency or any other similar arrangement between the Authority and Armstrong, and neither party is authorized to act as agent for the other party, except as expressly provided in a written agreement.

**Section 24.3 Binding Effect; Assignment.** This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns. Neither party shall assign its rights or delegate its duties hereunder without the prior written consent of the other party, provided that Armstrong may assign its rights and obligations hereunder to a corporate affiliate that agrees to assume all of the obligations of Armstrong hereunder.

**Section 24.4 Construction and Interpretation.** Except as expressly provided otherwise, capitalized terms in this Agreement shall have the same meaning as the meaning as set forth and defined in the Master Station Agreement. Unless the context of this Agreement otherwise requires: (a) words of any gender include each other gender; (b) words using the singular or plural number also include the plural or singular number, respectively; (c) the terms "hereof," "herein," "hereby," "hereto" and similar words refer to this entire Lease and not to any particular Article, Section, Clause, Exhibit, or any other subdivision of this Lease; (d) references to "Article," "Section," "Clause," "Exhibit," are to the Articles, Sections, Clauses, and Exhibits respectively of this Agreement; (e) the words "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to" whether or not they are followed by such phrases or words of like import; (f) references to "this Agreement" or any other agreement or document shall be construed as a reference to such agreement or document as amended, modified or supplemented and in effect from time to time and shall include a reference to any document which amends, modifies or supplements it, or is entered into, made or given pursuant to or in accordance with its terms; and (g) titles or captions of Sections contained in this Lease are inserted only as a matter of convenience and for reference, and in no way define, limit,

extend, describe or otherwise affect the scope or meaning of this Agreement or the intent of any provision hereof. Whenever this Agreement refers to a number of days, such number shall refer to calendar days unless Business Days are specified.

**Section 24.5 Governing Law.** This Lease shall in all respects be governed and construed in accordance with the laws of the State of North Dakota including all matters of construction, validity and performance.

**Section 24.6 Further Assurances.** Each of the parties hereto agrees, upon the request of the other party hereto, from time to time to execute and deliver to such other party all such instruments and documents of further assurance or otherwise as shall be reasonable under the circumstances, and to do any and all such acts and things as may reasonably be required to carry out the obligations of such requested party hereunder and to consummate the transactions provided for herein.

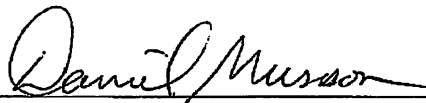
**Section 24.7 Entire Agreement.** This Lease, together with the exhibits hereto, constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements whether written or oral.

**IN WITNESS WHEREOF,** the parties hereto have caused this Lease to be executed by their respective duly authorized representatives as of the date first written above.

**THE WESTERN AREA WATER SUPPLY  
AUTHORITY**

By: \_\_\_\_\_  
Denton Zubke, Chairman

**ARMSTRONG SERVICE, INC.**

By:  \_\_\_\_\_  
Daniel Musson  
President

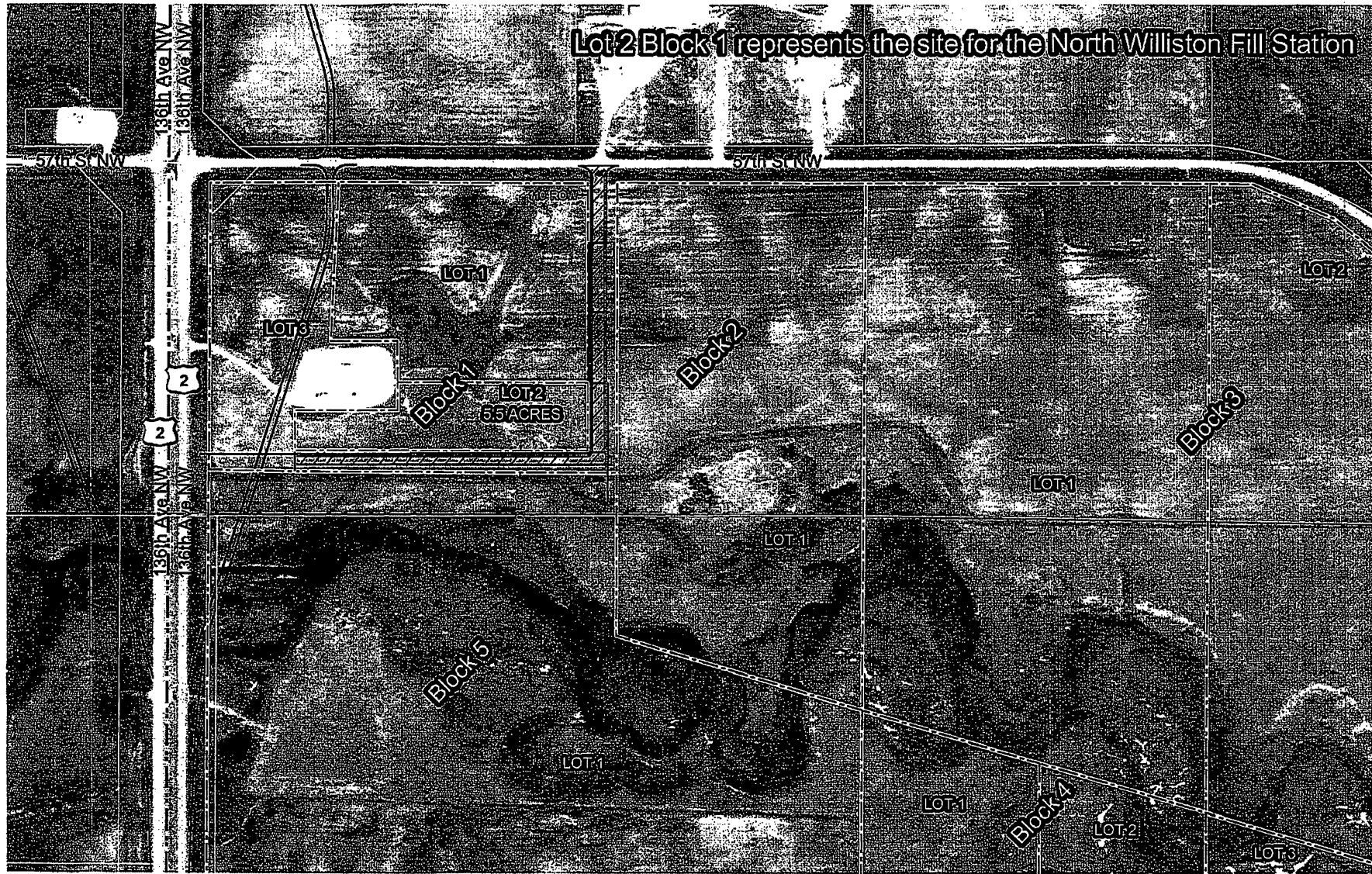
**EXHIBIT A**

**(To Be Supplied)**

**EXHIBIT B**

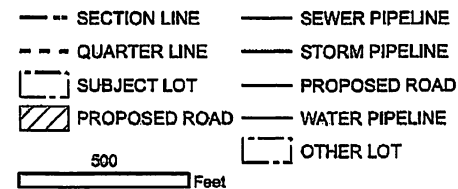
**(To Be Supplied)**

Lot 2 Block 1 represents the site for the North Williston Fill Station



**Exhibit A  
Ground Lease  
Agreement  
North Williston  
Fill Station  
WESTERN AREA WATER  
SUPPLY AUTHORITY**

LAND PURCHASED BY: WAWSA  
MAILING ADDRESS: PO BOX 1306  
WILLISTON, ND 58802-1306  
LEGAL DESCRIPTION:  
LOT 2 BLOCK 1  
SECTION: 13  
TOWNSHIP: 155  
RANGE: 101



N  
W E  
S

Last Updated: 1/24/2012

## **EXHIBIT B**

### **The Authority Land Purchase Improvements:**

Install a water service line to provide water to the property for the Station., which shall supply water to the Station at varying loads. The maximum sustained peak supply rate = 1,200 gpm delivered at 50 psig measured at the point of interconnection with the Armstrong Infrastructure and Equipment. The water supply service shall be capable of delivering water at varying flow rates from 0 to 1200 GPM at 50 psig. The service line may require temporary storage and pumping to reduce transient pressures created by varying flow rates. These improvements are also to be provided on the property if necessary.

The service shall be equipped with back flow prevention if necessary to meet North Dakota Health Department standards..

MDU gas supply shall be provided to the Site to the location of the proposed MDU gas meter adjacent to the ASI building (Peak rate = 80 mmbtu/hr)

Three phase 480 volt electric service shall be provided to the specified meter location for the Armstrong building.

The sanitary sewer service will be brought to the perimeter of the building.

Meters and Controls for truck loading volume measurements and filling control shall be provided for installation by Armstrong

Property improvements shall include installation of roadways to/from the Station. Roads/driveway to be installed inside the Site creating staging lanes at entry and egress from the property.

Roads shall be paved on the Site if required by the City or County Governments.

### **Armstrong Infrastructure and Equipment**

Purchase and construct the building (foundations, erection, insulation and internal configuration of an office/bathroom); concrete floors shall be poured.

Armstrong shall deliver and install water heaters (process piping for the water heaters will include cold water supply, hot water take away, and natural gas).

Armstrong shall: Procure and install the electrical system inside the building to serve lights, office and processing equipment; procure and install standby electrical generators and gas supply piping to fuel the gensets; procure and install loading pumps as required to serve 6 loading lanes; and procure and install two hot water storage tanks, with associated piping and controls.

Armstrong shall procure and install: underground distribution piping from the loading pumps to the 6 truck loading bays, with insulation and heat tracing, and the above grade fill spouts/hoses; and lighting over the loading area for night time filling

Armstrong shall provide for water supply control such that additional storage or surge protection for the water service can be minimized. This may include timed start up and shut down to ramp up or down in 300 gallon per minute increments at a mutually agreeable increment rate.

**To Be Determined (the responsible party is designated in parentheses):**

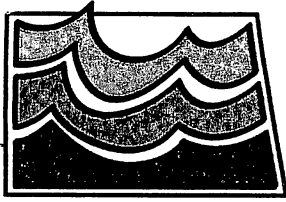
These items of scope are under consideration and may not be included in the initial construction of this station:

Canopy over the loading area (Armstrong)

Concrete pad with drains in the loading area (Armstrong)

Closed loop hydronic heating system for the concrete pad in loading area (Armstrong)

Drainage for recovering spilled water (Armstrong)



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *TSD* Todd Sando, P.E., Chief Engineer/Secretary  
**SUBJECT:** Missouri River Update  
**DATE:** May 29, 2012

### **System/Reservoir Status –**

On May 22, system storage in the six mainstem reservoirs was 56.9 million acre-feet (MAF), 0.1 MAF above the base of flood control. This is 0.2 MAF above the average system storage for the end of May, and 9.9 MAF less than last year. The May runoff forecast for 2012 is 21.6 MAF, 87% of normal.

On May 22, Lake Sakakawea was at an elevation of 1835.3 feet msl, 2.2 feet below the base of flood control. This is 14.6 feet lower than a year ago and 0.8 feet above its average end of May elevation. The minimum end of May elevation was 1808.8 feet msl in 2005, and the maximum end of May elevation was 1853.3 feet msl in 2011. The reservoir elevation is expected to peak at 1837.0 feet msl the end of June. Releases from the reservoir will average 26,000 cfs through May and then be reduced to 24,500 cfs for June

The elevation of Lake Oahe was 1606.8 feet msl on May 22, 0.7 feet below the base of flood control. This is 10.5 feet lower than last year and 1.8 feet higher than the average end of May elevation. The minimum end of May elevation was 1576.5 feet msl in 2005, and the maximum end of May elevation was 1618.8 feet msl in 2011. Reservoir elevations are expected to peak at 1606.7 feet msl the end of June.

The elevation of Ft. Peck was 2236.3 feet msl on May 22, 2.3 feet above the base of flood control. This is 7.2 feet lower than a year ago and 6 feet higher than the average end of May elevation. The minimum end of February elevation was 2199.6 feet msl in 2005, and the maximum end of February elevation was 2248.9 feet msl 2011. Reservoir elevations are expected to peak at 2237.4 feet msl the end of June. Releases will average between 10,000 cfs and 11,500 cfs through the summer. The Corps will conduct a high flow test of the Fort Peck Spillway during the week of September 4. The test will consist of spillway releases of 3,000 cfs up to 30,000 cfs at periodic intervals over a four-day timeframe.

The mountain snowpack water content above Fort Peck on May 21 was 63% of normal. The mountain snowpack water content between Fort Peck and Garrison was 49% of normal. The total mountain snowpack above Fort Peck peaked on April 9 at 97% of the normal April 15 peak. The total mountain snowpack in the Fort Peck to Garrison Reach peaked on March 22 at 88% of the normal April 15 peak.

The Corps of Engineers' basic forecast, 21.6 MAF of runoff, shows a full season, full service navigation season. The actual length of the navigation season will be determined by the amount of water in storage on July 1.

There will be no spring pulse this year, due to last year's flood and the ongoing review of the Gavins Point spring pulse by the Independent Science Advisory Panel.

### **MRRIC**

MRRIC is a committee that was authorized by Congress in the Water Resources Development Act of 2007 (2007 WRDA). The Committee was formed to make recommendation and provide guidance on a study of the Missouri River and its tributaries known as the Missouri River Ecosystem Recovery Plan (MRERP), and activities in the Missouri River recover and mitigation program (MRRP), although MRERP was defunded in December 2011.

The MRRIC has nearly 70 members including representatives from state, tribal, federal, and 28 stakeholders. The stakeholders represent interests such as agriculture, flood control, hydropower, etc. There are representative from local, state, tribal and federal interests throughout the basin. Currently, the Stakeholder group is made up of 16 members from Iowa, Kansas, Missouri, and Colorado; 5 members from Nebraska; 6 members from Montana, Wyoming and South Dakota; and 1 from North Dakota. Terry Fleck is the stakeholder from North Dakota representing Recreation.

There has been some concern due to the excessive amount of sandbars on the river as to what is considered critical habitat. MRRIC would be a forum for stakeholders to be able to influence decisions the Corps and the US Fish and Wildlife Service are making. Vacancy announcements for stakeholder positions will be made in June.

### **Surplus Water**

On May 8, 2012 a memorandum, which is attached, from Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Works, was released. The memorandum directed the Omaha District, among other things, "initiate action immediately to pursue notice and comment rulemaking in accordance with the Administrative Procedure Act to establish a nationwide policy for surplus water uses under Section 6." And "Proceed with any necessary and appropriate water reallocation studies for the Missouri River mainstem reservoirs and finalize these studies at the earliest date possible."

### **Section 33**

Due to the massive amounts of erosion that occurred from last years flood the Corps has allocated three million dollars in 2012 for Section 33 projects. The Section 33 program was authorized by Congress in the Water Resources Development Act (WRDA) of 1988 allowing the Corps of Engineers to assist affected landowners in alleviating the effects of erosion caused by releases from the dams. The authorized measures include maintaining or rehabilitating existing bank stabilization structures, constructing new bank stabilization structures, purchasing affected property, and monetary compensation to affected landowners. Reaches that are eligible for the Section 33 program include 383 miles of open-river in the reaches below the dams. To date, the Corps has made one inspection in North Dakota and is planning to do more.



Under Section 33, The Corps will be repairing the bank stabilization that failed last summer on Hogue Island. The project will be advertised for bid on May 29 and will be open for 30 days.

BE:KC/1392

## **Red River Retention Authority**

State Water Commission – June 13, 2012

Red River Joint Water Resource Districts (RRJWRD) As a 50% partner in the RRRRA the Red River Joint Board has some duties needing assistance.

- Facilitate planning process in certain districts
- Planning tool modeling for potential retention sites
- Disseminate information for the 20% reduction Red River Main Stem per water district and/or watershed or sub-watershed (acre feet expectations per district)
- Aggregate projects for future funding options (Conservation Partnership Funding)
- Delineate other funding options and sources for projects

The Red River Retention Authority can and would be able to provide these services (with partners for the modeling piece – like NRCS for IWI) for the RRJWRD members. These items are above and beyond what the Red River Retention Authority provides for its Minnesota Members.

As you are aware the Red River Retention Authority was created to be able to capitalize on new Federal Funding Opportunities for water retention in the Red River Basin, because we are willing to work as a Basin to utilize retention as part of our long term flood reduction strategy. Multi-State collaboration is a rare occurrence, so this partnership is intended to open new doors for funding options to leverage our state and local funding sources.

### Red River Retention Authority – Other Items

- Consider cost share for NRCS – WRP projects that have a retention component integrated in the project. (Now NRCS provides 75% funding for their 30 easements) Providing cost share to the RRJWRD would help these projects.
- Or could tax credits or tax abatements be used for such projects – or even used for high impact projects with the greatest downstream impacts
- Consider a cost share program for the control structures in field tiling – if the landowner agrees to a water management plan on the timing of water releases.
- Early stage planning dollars is now a difficult hurdle to spur the needed initial look at potential projects
- We need to accelerate our whole process – starting with the planning – project development – project permitting – project completions.
- So if you want new outcomes – that means you generally need some new tools to enable the new outcomes to come to be.

Thank you for all the support to date for local projects and your time today !