

North Dakota State Water Commission

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

September 17, 2012
1:00 P.M., CDT

AGENDA

- A. Roll Call
- B. Consideration of Agenda -- *Information pertaining to the agenda items is available on the State Water Commission's website at <http://www.swc.nd.gov>*
- C. **Consideration of Draft Minutes of Following SWC Meetings:**
 - 1) **June 13, 2012 State Water Commission Meeting** **
 - 2) **June 20, 2012 SWC Audio Conference Call Meeting** **
 - 3) **July 30, 2012 SWC Audio Conference Call 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
 - 3) **Motions of Approval for Supplemental Funding for 2011-2013 and 2013-2015 Bienniums** **
- E. Missouri River:
 - 1) Project Update
 - 2) South Bismarck/Mandan Flood Risk Reduction:
 - a) **Heart River** **
 - b) **Bismarck Flood Control Channel** **
- F. Cost Share Policy Committee Report/Recommendations
- G. Consideration of Following Requests for State Cost Participation:
 - 1) **Canadian International Boundary Roadway Dike - Pembina County** **
 - 2) **Cass County Drain No. 13 Channel Improvements, Phase V** **
 - 3) **Cass County Drain No. 41 Extension and Crossing Improvements** **
 - 4) **Devils Lake Flood Risk Management Project** **
 - 5) **Sargent County Drain No. 4 Reconstruction** **
 - 6) **Trill County Drain No. 62 - Wold Drain Construction Project** **
 - 7) **Lower Sheyenne River Watershed Retention Plan** **
 - 8) **Elm River Watershed Retention Plan** **
 - 9) **Wild Rice River Watershed Retention Plan** **
 - 10) **Recertification of Horace to West Fargo Diversion Levee System** **
 - 11) **Recertification of West Fargo Diversion Levee System** **
 - 12) **Individual Rural/Farmstead Ring Dike Construction Program** **
 - 13) **Yorktown-Maple Drainage Improvement District No. 3 - Dickey Co.** **

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- H. Fargo Moorhead Metropolitan Area Flood Risk Management Project Update
- I. Devils Lake:
 - 1) Hydrologic and Projects Update
 - 2) ***Low Water Crossing, Sheyenne River (Gleason/Eddy County)*** **
- J. Southwest Pipeline Project:
 - 1) Project Update
 - 2) ***REM Request - Dickinson Water Treatment Plant Rehabilitation*** **
 - 3) ***Supplemental Intake Water Permit Application*** **
 - 4) ***Contract 7-1C/7-8H, Hydraulic Improvements North of Dickinson and South Fryburg Service Area*** **
- K. Northwest Area Water Supply (NAWS) Project:
 - 1) Project Update
 - 2) ***Interim Water Rates for 2013*** **
- L. Mouse River Enhanced Flood Protection Project:
 - 1) Project Update
 - 2) ***Renville County LiDAR Collection*** **
- M. Western Area Water Supply Project:
 - 1) Project Update
 - 2) ***Armstrong Water Solutions, Inc. Lease*** **
- N. Garrison Diversion Conservancy District Report
- O. Other Business:
 - 1) ***Funding Authorization to Conduct Performance Audit of State Engineer's Regulation of Industrial Water Use in North Dakota*** **
 - 2) ***State Engineer's Salary*** **
- P. 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

September 17, 2012

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on September 17, 2012. Governor Jack Dalrymple, Chairman, called the meeting to order at 1:00 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
Arne Berg, Member from Starkweather
Maurice Foley, Member from Minot
Larry Hanson, Member from Williston
Jack Olin, Member from Dickinson
Douglas Vosper, Member from Neche

STATE WATER COMMISSION MEMBERS ABSENT:

Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck
Harley Swenson, Member from Bismarck
Robert Thompson, Member from Page

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 September 17, 2012 State Water Commission meeting was presented; there were no modifications to the agenda.

It was moved by Commissioner Berg, seconded by Commissioner Olin, and unanimously carried, that the agenda be accepted as presented.

**CONSIDERATION OF DRAFT MINUTES
OF JUNE 13, 2012 STATE WATER
COMMISSION MEETING - APPROVED**

The draft final minutes of the June 13, 2012 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Foley, seconded by Commissioner Berg, and unanimously carried, that the draft final minutes of the June 13, 2012 State Water Commission meeting be approved as prepared.

**CONSIDERATION OF DRAFT MINUTES
OF JUNE 20, 2012 STATE WATER
COMMISSION AUDIO CONFERENCE
CALL MEETING - APPROVED**

The draft final minutes of the June 20, 2012 State Water Commission audio conference call meeting were approved by the following motion:

It was moved by Commissioner Foley, seconded by Commissioner Berg, and unanimously carried, that the draft final minutes of the June 20, 2012 State Water Commission audio conference call meeting be approved as prepared.

**CONSIDERATION OF DRAFT MINUTES
OF JULY 30, 2012 STATE WATER
COMMISSION AUDIO CONFERENCE
CALL MEETING - APPROVED**

The draft final minutes of the July 30, 2012 State Water Commission audio conference call meeting were approved by the following motion:

It was moved by Commissioner Foley, seconded by Commissioner Berg, and unanimously carried, that the draft final minutes of the July 30, 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 July 31, 2012, reflecting 54 percent of the 2011-2013 biennium, were presented and discussed by David Laschkewitsch, State Water Commission's Director of Administrative Services. 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 \$379,209,704, leaving an unobligated balance of \$24,786,878 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 \$174,228,473 through August, 2012 and are currently \$70,229,520 or 67.5 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.

On September 20, 2012, the North Dakota Office of Management and Budget will present the status of the state's general fund before the Legislative Budget Section. Governor Dalrymple explained that the revised revenue forecast for the 2011-2013 biennium indicate the revenues could exceed the current projections. 2011 Senate Bill 2020, Section 4, the State Water Commission's appropriation bill, provides "that any additional amounts in the resources trust fund and the water development trust fund that become available are appropriated to the state water commission for the purpose of defraying the expenses of that agency, for the biennium beginning July 1, 2011, and ending June 30, 2013. The state water commission shall request and receive budget section approval prior to the expenditure of any funds in excess of the funding appropriated in S.B. 2020."

Secretary Sando referenced several water supply and infrastructure projects within the state that requires additional funding in order to forward the projects to completion to meet the needs of the citizens. Based on project needs provided by Secretary Sando, Governor Dalrymple suggested it would be appropriate for the State Water Commission to instruct the secretary to the Commission to prepare a draft proposal for the Commission's consideration for supplemental revenues that may become available to the State Water Commission in the 2011-2013 biennium.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission instruct the secretary to the Commission to prepare a draft proposal for the Commission's consideration for supplemental revenues that may become available to the State Water Commission in the 2011-2013 biennium.

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

Governor Dalrymple discussed the projected revenue forecast for the 2013-2015 biennium, indicating that revenues could significantly exceed the projections. The State Water Commission and the North Dakota Water Coalition are recommending a plan of projects and funding priorities that total approximately \$375 million for the 2013-2015 biennium. Governor Dalrymple recommended that the State Water Commission instruct the secretary to the Commission to work with the North Dakota Water Coalition to develop an optional plan of projects and funding priorities, above the recommended \$375 million plan for the 2011-2013 biennium, that could be considered if supplemental revenues become available in the 2013-2015 biennium.

It was moved by Commissioner Olin and seconded by Commissioner Hanson that the State Water Commission instruct the secretary to the Commission to work with the North Dakota Water Coalition to develop an optional plan of projects and funding priorities, above the recommended \$375 million plan for the 2013-2015 biennium, that could be considered if supplemental revenues become available in the 2013-2015 biennium.

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

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

The Missouri River report was provided, which is detailed in the staff memorandum, dated September 5, 2012, and attached hereto as ***APPENDIX "C"***.

***APPROVAL OF FUNDS FOR SOUTH
BISMARCK/MANDAN FLOOD RISK
REDUCTION, HEART RIVER (\$225,000);
AND, APPROVAL OF FUNDS FOR
ADDITIONAL USGS GAGE TO AID IN
EMERGENCY AWARENESS
(\$8,000 ANNUAL MAINTENANCE)
(SWC Project No. 1392)***

Because of concerns that arose due to changes to the Missouri River as a result of the Great Flood of 2011, federal and state representatives toured the Missouri River on August 29, 2012. The tour was to evaluate if potential hazards existed that could increase the risk of flooding due to ice jams or other obstructions, and to determine what

actions could be taken. Some of the concerns identified were: the sandbar that had developed in front of the storm sewer outfall for south Bismarck, sandbar deposits on river bends, snags in the Sibley Island bend area, and the sandbar that evolved at the confluence of the Heart River and the Missouri River.

The sandbar at the confluence of the Heart River and the Missouri River has the potential to block ice flows that are evacuating from the Heart River during the spring thaw. If ice flows are blocked, there is a potential for flooding to occur in and south of Mandan. Options have been evaluated, and an alternative has been selected to attempt to reduce the risk of ice jams at the mouth of the Heart River which includes three facets: 1) construct a pilot channel on the north end of the sandbar located at the confluence of the Heart River and the Missouri River; 2) remove the shallow areas from the channel leading to the Heart River; and 3) shave and reshape the south end of the sandbar to a slope of approximately 10:1. The estimated total cost for the project is \$300,000. Dredging of sandbars is typically considered as an ineligible expense under the State Water Commission's cost share policy.

Due to the irregular slope that occurs during ice affected flow, it was determined that an additional U.S. Geological Survey gage would enhance emergency management for the cities and state. The estimated total cost of the USGS gage is approximately \$20,000 for installation and \$8,000 for annual maintenance. The U.S. Army Corps of Engineers indicated it would not participate due to limited funding, and it was the Corps opinion that the additional gage would not aid in the operation of their dams.

It was the recommendation of Secretary Sando that in an attempt to reduce the flood risk due to potential ice jamming, that the State Water Commission consider an exception to the cost share policy and approve a 75 percent state cost participation of the construction costs not to exceed an allocation of \$225,000. Secretary Sando also recommended that the State Water Commission approve the request to participate in funding for an additional USGS gage to aid in emergency situational awareness in an amount not to exceed \$8,000 plus 1-3 percent for inflation per year hereafter for annual maintenance.

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

1) approve state funds of 75 percent of the construction costs, not to exceed an allocation of \$225,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to manipulate the sandbar at the confluence of the Heart River and the Missouri River to reduce the flood risk due to potential ice jamming. This action is contingent upon the availability of funds, and that the secretary to the State Water Commission be authorized to award the contract to the lowest responsive bidder, contingent upon the recommendations of the project engineer and the secretary to the State Water Commission, and review/approval by the Commission's legal counsel; and

2) approve state funds not to exceed an annual allocation of \$8,000, plus 1-3 percent for inflation per year hereafter for the maintenance costs, for an additional U.S. Geological Survey gage to aid in emergency situational awareness. This action is contingent upon the availability of funds.

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

CITY OF BISMARCK FLOOD CONTROL CHANNEL PROJECT - APPROVAL OF STATE COST PARTICIPATION IN CONSTRUCTION COSTS OF DREDGING SANDBAR (\$187,500); AND AMENDMENT TO MOTION APPROVED ON JUNE 13, 2012 TO INDICATE BURLEIGH COUNTY COMMISSION AS PROJECT SPONSOR (SWC Project No. 1392)

On June 13, 2012, the State Water Commission approved a request from the Burleigh County Water Resource District for state cost participation for 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. (Note: The project should have been approved to the Burleigh County Commission rather than the Burleigh County Water Resource District.) The project is in the development phase and Burleigh County is leading the design and construction administration of the project as part of the flood control grade raise project on Tavis road.

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 outlet of the south Bismarck storm water channel was 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. Dredging of the sandbars is not typically considered an eligible expense under the State Water Commission's cost share policy; therefore, dredging was not considered eligible for cost share participation at the June 13, 2012 State Water Commission meeting.

Because of the significant flooding on the Missouri River in 2011, Secretary Sando requested that the State Water Commission consider an exception to its cost share policy and allow a 75 percent cost share of the eligible construction costs for the Bismarck flood control channel. The total estimated construction costs are \$250,000 (75 percent state cost participation would be \$187,500).

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

- 1) approve state cost participation of 75 percent of the eligible costs not to exceed an allocation of \$187,500 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Burleigh County Commission to fund the construction costs for dredging the Bismarck flood control channel project. This action is contingent upon the availability of funds; and***
- 2) amend its original motion approved on June 13, 2012 to indicate the Burleigh County Commission as the project sponsor in lieu of the Burleigh County Water Resource District.***

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

**STATE WATER COMMISSION COST
SHARE POLICY APPROVALS RELATING
TO POLICY NAME CHANGE; RING DIKE
LANDOWNER RESPONSIBILITY; AND
COST OVERRUNS
(SWC Project No. 1753)**

The State Water Commission's cost share policy committee and others met on September 17, 2012. Items of discussion included a name change to the cost share policy committee; pre-application process; ring dike landowner responsibilities; cost overruns; and un-

authorized industrial water use in western North Dakota

The cost share policy committee members were informed of regulatory issues regarding the unauthorized industrial water use in western North Dakota. The committee discussed options for the violation of provisions for the appropriation of water; no action was taken by the committee at this meeting.

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

Cost Share Policy Committee Name Change:

On June 23, 2008, the State Water Commission passed a motion that all previously appointed rural flood control, flood control, ring dike, and cost share policy committees be dissolved and consolidated, and referred to as the cost share policy committee. Other items have been discussed during cost share policy committee meetings which are not included in the policy.

It was the recommendation of the cost share policy committee that the name and functions of the 'cost share policy committee' be changed to the 'policy committee' to allow further discussion of general policy issues.

Ring Dike Landowner Responsibility:

Since 2009, the Natural Resource Conservation Service (NRCS) has been providing cost share assistance for the construction of ring dikes. Recognizing the flood control benefits provided when built to the State Water Commission's minimum design standard, ring dikes constructed under the NRCS Environmental Quality Incentive Program (EQIP) are eligible for cost share assistance from the Commission. Under the current cost share policy, the Commission reimburses landowners 20 percent of the NRCS construction payment.

By providing additional cost share assistance to landowners participating in the NRCS program, it was not the Commission's intent that the landowner receive 100 percent of the cost of constructing a ring dike on their property as has occurred in some cases.

It was the recommendation of the cost share policy committee that the current policy for ring dikes constructed under the NRCS program be amended as follows:

Landowners enrolled in the Natural Resource Conservation Service (NRCS) Environmental Quality Incentive Program (EQIP) who intend to construct rural/farmstead ring dikes meeting the Commission's elevation design criteria are eligible for cost share reimbursement of 20 percent of the NRCS construction payment, limited to a combined NRCS and State Water Commission contribution of 80 percent of total project costs.

Cost Overruns:

The current cost share policy authorizes the State Engineer to approve cost overruns equal to or less than 10 percent of the total amount approved for the project, not to exceed \$50,000.

It was the recommendation of the cost share policy committee that the State Engineer be authorized to approve cost overruns not to exceed \$50,000.

It was moved by Commissioner Hanson and seconded by Commissioner Vosper that the State Water Commission approve the recommendations, as presented, relating to the cost share policy name change, ring dike landowner responsibility, and cost overruns, effective September 17, 2012.

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

**INTERNATIONAL BOUNDARY
ROADWAY DIKE PROJECT -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION (\$200,000)
(SWC Project No. 1401)**

On March 11, 2004, the State Water Commission approved a request from the Pembina County Water Resource District for a 50 percent state cost participation of the eligible costs not to exceed an allocation of \$200,000 from the

funds appropriated to the State Water Commission in the 2003-2005 biennium for the legal costs and action of a lawsuit filed on behalf of Pembina county and others against the Minister of Canadian Conservancy and others seeking a court order for the removal of the dike that extends approximately 30 miles along the Canadian border west from Pembina. The dike was constructed between 1946 and 1966 and causes considerable flood damages to North Dakota landowners. The legal action was estimated to cost \$400,000 in United States funds.

On March 22, 2006, the State Water Commission approved a request from the Pembina County Water Resource District for a 50 percent state cost participation not to exceed an additional allocation of \$100,000 from the funds appropriated to the State Water Commission in the 2005-2007 biennium for the plaintiff's legal and expert costs in the District's legal action to remove the international boundary roadway dike project. The total state cost allocation approved is \$300,000 and, since 2004, payments have been made to the Pembina County Water Resource District totalling \$247,569, leaving a balance of \$52,431.

The State Water Commission provided a letter of intent to Pembina county on May 1, 2006 indicating the Commission's consent that \$175,000 would be reserved to cover any costs assessed to the plaintiffs. To date, the State Water Commission has not approved specific funding for this reserve.

The lawsuit case is anticipated to go to trial in the spring/summer of 2013. An estimate from the Canadian attorneys shows an additional \$400,000 is required for legal and trial expenses. A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation of 50 percent not to exceed an additional allocation of \$200,000 in the District's legal action to remove the Canadian border dike and recover damages to public property caused by the dike project.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation of 50 percent, not to exceed an additional allocation of \$200,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Pembina County Water Resource District for their legal action to remove the Canadian border dike and to recover damages to public property caused by the dike project. The Commission's affirmative action would increase the total state cost participation to \$500,000.

It was moved by Commissioner Vosper and seconded by Commissioner Berg that the State Water Commission approve state cost participation of 50 percent, not to exceed an additional allocation of \$200,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Pembina County Water Resource District for the District's legal action to remove the Canadian border dike and to recover damages to public property caused by the dike project. This action is contingent upon the availability of funds.

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

**CASS COUNTY DRAIN NO. 13
CHANNEL IMPROVEMENTS, PHASE V -
CONDITIONAL APPROVAL OF STATE
COST PARTICIPATION (\$217,000)
(SWC Project No. 1069)**

A request from the North Cass-Rush River Joint Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Cass County Drain No. 13 channel improvements project,

Phase V. The proposed project consists of reconstructing approximately 2.75 miles of

the channel located southeast of Argusville, N.D. within Harwood township in Cass county. The drainage channel would begin at the culvert crossing on Cass County Highway 4 on the north side of Section 9 and continue upstream to the west edge of Section 18.

The District held several meetings over multiple years after the local residents expressed their concerns over the erosion and deterioration of the Drain No. 13 channel, and decided to reconstruct approximately 11.1 miles of legal drain in phases. Phase I of this project, starting at the outfall into the Red River and upstream, was designed in 1999; Phase II was designed in 2000; Phase III in 2002; and Phases IV and V were designed in 2003. Phase IV was a project on Cass County Highway 4 where a structural plate pipe arch was placed under the highway. The remaining channel work (Phase V) was not completed.

The 2012 channel improvements project would be the final phase of work to be completed in the reconstruction of legal Drain No. 13. The newly constructed channel will have a channel capacity to match the existing channel that has already been constructed both upstream and downstream of the project, and will help to reduce the chance of erosion to the channel due to the poor soils within the project area.

The project engineer's total cost estimate is \$780,000, of which \$482,222 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$217,000). 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, 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 \$217,000.

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 \$217,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the North Cass-Rush River Joint Water Resource District to support the Cass County Drain No. 13 channel improvements project, Phase V.

It was moved by Commissioner Foley and seconded by Commissioner Berg 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 \$217,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the North Cass-Rush River Joint Water Resource District to support the Cass County Drain No.

13 channel improvements project, Phase V. This action is contingent upon the availability of funds, satisfaction of the required drain permit, and receipt of the final engineering plans.

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

***CASS COUNTY DRAIN NO. 41
EXTENSION AND CROSSING
IMPROVEMENTS - REQUEST FOR
STATE COST PARTICIPATION
WITHDRAWN
(SWC Project No. 1091)***

The proposed Cass County Drain No. 41 extension and crossing improvements project is located in the SW1/4 of Section 6, Township 142 North, Range 51 West, for the purpose of allowing water in the northeast corner of Section 12 to flow into Drain No. 41. The

extension would consist of a culvert from Section 12 to Section 6, with 4,000 feet of new channel on the south side of Section 6 to tie into the existing drain. It is also proposed to replace the existing crossings along the drain. The total project cost estimate is \$305,000. A request from the North Cass Water Resource District was submitted in August, 2012 for state cost participation.

The North Cass Water Resource District conducted public input meetings to develop the project and put the project out for an assessment district vote, which failed to pass. It was the recommendation of Secretary Sando, and concurred to by the State Water Commission, that the request from the North Cass Water Resource District for state cost participation be withdrawn.

***DEVILS LAKE FLOOD RISK
MANAGEMENT PROJECT -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION (\$3,279,815)
(SWC Project No. 416-02)***

On August 12, 1996, the city of Devils Lake entered into a contract with the U.S. Army Corps of Engineers for additional flood control (Devils Lake levee system) measures to reduce the risk of flood damages at the city of Devils Lake

and the surrounding area. The existing embankment has been raised several times and is currently at elevation 1460 feet msl.

The proposed federal project would raise the height of the levee from 1460 feet msl to a minimum of 1465 feet msl and to a maximum of 1468 feet msl. The Corps of Engineers initially proposed three phases of construction at an estimated total cost of \$113,000,000, with a 75 percent federal/25 percent non-federal cost share (\$28,250,000). At 1468 feet msl, the levee would protect the city from a maximum lake level of 1459 feet msl, which allows 9 feet for wave action and freeboard.

Phase I involved raising approximately 8,800 feet of existing embankment along Creel Bay, the area with the highest wave run-up, and replacing the Creel Bay pump station. In addition to the raise, the Corps modified the levee to meet dam safety standards. The cost estimate for Phase I was \$23,200,000 and required a 25 percent non-federal match of \$5,800,000.

The 2001 legislative session approved House Bill 1015 authorizing the State Water Commission to use up to \$5,000,000 to provide cost share for constructing and improving the levees at Devils Lake.

On December 6, 2002, the State Water Commission approved an allocation not to exceed \$4,074,202 from the funds appropriated to the State Water Commission in the 2001-2003 biennium (H.B.1015). On May 9, 2007, the State Water Commission reduced the state's financial obligation by \$1,440,000 for the Devils Lake City Dam/Levee Raise, Phases I-III, and reallocated that amount (\$1,440,000) to the Devils Lake water supply project. This action provided a total state financial obligation of \$2,634,202 for the Devils Lake City Dam/Levee Raise project.

On August 18, 2009, the State Water Commission approved a 50 percent state cost participation for the non-federal match for the Devils Lake City Dam/Levee Raise, Phase I, not to exceed an additional allocation of \$2,900,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020).

On September 1, 2009, the State Water Commission approved an additional allocation not to exceed \$20,825,798 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020).

On August 17, 2011, the State Water Commission approved an additional allocation not to exceed \$10,500,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), increasing the total state cost financial allocation to \$36,860,000 for the project.

The Corps of Engineers revised estimate to complete this project is \$167,800,000, resulting in a cost overrun of \$20,162,872. The non-federal share of this increase would be 25 percent (\$5,040,718). The North Dakota Department of Transportation contributed \$1,760,903 to the project, an additional amount of \$3,279,815 is required. A request from the city of Devils Lake was presented for the State Water Commission's consideration for state cost participation not to exceed an additional \$3,279,815 for the non-federal share required to complete the Devils Lake Flood Risk Management project.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation not to exceed an additional allocation of \$3,279,815 for the non-federal share (25 percent) required to complete the Devils Lake Flood Risk Management project. Funding for the additional allocation would be provided by reducing the state's financial allocation by \$3,279,815 for the Devils Lake Gravity Outlet project, and reallocate \$3,279,815 to the Devils Lake Flood Risk Management project. The Commission's affirmative action on this request would increase the total State Water Commission's financial allocation to \$40,139,815.

It was moved by Commissioner Berg and seconded by Commissioner Vosper that the State Water Commission:

- 1) reduce the state's financial allocation by \$3,279,815 for the Devils Lake Gravity Outlet project; and***
- 2) reallocate \$3,279,815 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to the Devils Lake Flood Risk Management project. This action is contingent upon the availability of funds.***

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

This action increases the total State Water Commission's cost financial allocation to \$40,139,815 for the Devils Lake Flood Risk Management project.

**SARGENT COUNTY DRAIN NO. 4
RECONSTRUCTION - CONDITIONAL
APPROVAL OF ADDITIONAL
COST PARTICIPATION (\$64,880)
(SWC Project No. 1219)**

On September 21, 2011, the State Water Commission approved a request from the Sargent County Water Resource District for state cost participation at 45 percent of the eligible costs not to exceed an allocation of \$60,620

from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to support the reconstruction of Sargent County Drain No. 4. An improved floodwater outlet is proposed to take water through the city of Forman, which will then discharge into the Sargent County Drain No. 4. The downstream reaches of the drain need to be reconstructed to account for the improved efficiency of the floodwater outlet and to accommodate the increase in drainage.

The proposed project's final design is nearly completed and the construction costs exceeded the original estimate. The project engineer's revised cost estimate is \$505,000, of which \$278,888 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$125,500). A request from the Sargent County Water Resource District was presented for the State Water Commission's consideration for an additional \$64,880 (eligible costs of \$125,500 less \$60,620 approved on September 21, 2011). The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$64,880.

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 additional allocation of \$64,880 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), for the Sargent County Drain No. 4 reconstruction project. The Commission's affirmative action would increase the total state cost allocation to \$125,500.

It was moved by Commissioner Olin 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 additional allocation of \$64,880 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Sargent County Water Resource District to support the reconstruction of Sargent County Drain No. 4. 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, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

This action increases the total state cost allocation to \$125,500 for the Sargent County Drain No. 4 reconstruction project.

***TRAILL COUNTY DRAIN NO. 62/
WOLD DRAIN - APPROVAL OF
CONDITIONAL STATE COST
PARTICIPATION (\$112,400)
(SWC Project No. 1996)***

considered for the drain. The proposed drain for which cost share participation is requested has a drainage area of 3,500 acres. The alternate proposal has a drainage

A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Traill County Drain No. 62/Wold Drain construction project. Two designs were

area of 2,700 acres. The proposed drain outlets into an unnamed coulee to the north branch of the Goose River in the NE1/4 of Section 30, Township 147 North, Range 51 West. The entire watershed consists of cropland with the exception of several roads and farmsteads.

The proposed drain is designed to have a bottom width of 8 feet with side slopes of 4:1; the alternate plan is designed for a channel bottom width from 8 feet to 4 feet with side slopes of 4:1. All existing culverts will be removed and replaced with new corrugated metal culverts. The channel is approximately 3.85 miles in length and will consist of approximately 31 acre-feet of storage at design flow. The proposed project will have a minimal effect to any identified wetlands; the identified wetlands will not be drained by this project.

The project engineer's total cost estimate is \$314,837, of which \$249,777 is determined eligible for cost share participation as a rural flood control project at 45 percent of the eligible costs (\$112,400). 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 \$112,400.

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 \$112,400 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to support the Traill County Drain No. 62/Wold Drain construction project.

It was moved by Commissioner Hanson 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 \$112,400 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Traill County Water Resource District to support the Traill County Drain No. 62/Wold Drain construction 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, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

**LOWER SHEYENNE RIVER
WATERSHED RETENTION PLAN -
APPROVAL OF STATE COST
PARTICIPATION (\$80,000)
(SWC Project No. 2012)**

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation for their Lower Sheyenne River Watershed Retention Plan. The District has

made an effort to investigate retention to assist in solving flooding issues, which included the five-foot pool raise of Baldhill Dam, and a study focusing on mainstem retention options.

The District is interested in continuing its efforts working toward retention by developing a comprehensive Lower Sheyenne River Watershed Retention Plan. The study will result in a distributed retention plan throughout the Sheyenne River watershed between Baldhill Dam and the outlet to the Red River and compare the plan to previously identified mainstem retention opportunities. 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 Sheyenne River mainstem.

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

The total estimated cost of the Lower Sheyenne River Watershed Retention Plan is \$160,000, of which all is determined eligible for state cost participation as an engineering feasibility study at 50 percent of the eligible costs (\$80,000). The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$80,000.

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 \$80,000 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 Lower Sheyenne River Watershed Retention Plan.

It was moved by Commissioner Foley and seconded by Commissioner Berg 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 \$80,000 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 Lower Sheyenne River Watershed Retention Plan. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

***ELM RIVER WATERSHED RETENTION
PLAN - APPROVAL OF STATE COST
PARTICIPATION (\$75,000)
(SWC Project No. 2012)***

A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for state cost participation for their Elm River Watershed Retention Plan.

The District made an effort to investigate retention to assist in solving flooding issues. An assessment district has been created to maintain its three existing NRCS dams, and emergency action plans have been completed for the dams. The District is interested in investigating the potential for other sites that can be identified in the watershed.

The District would like to continue its efforts working toward retention by developing a comprehensive Elm River Watershed Retention Plan. The study will result in a distributed retention plan 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 Elm 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; identify all previously studied and proposed retention sites and update contributing watershed areas using LiDAR; identify and evaluate new retention sites; hydrologic modeling; and drafting of the final report.

The total estimated cost of the Elm River Watershed Retention Plan is \$150,000, of which all is determined eligible for state cost participation as an engineering feasibility study at 50 percent of the eligible costs (\$75,000). The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$75,000.

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 \$75,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Traill County Water Resource District to support the Elm River Watershed Retention Plan.

It was moved by Commissioner Olin and seconded by Commissioner Berg 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 \$75,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Traill County Water Resource District to support the Elm River Watershed Retention Plan. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

***WILD RICE RIVER WATERSHED
RETENTION PLAN - APPROVAL OF
STATE COST PARTICIPATION (\$90,000)
(SWC Project No. 2013)***

A request from the Richland-Cass Joint Water Resource District was presented for the State Water Commission's consideration for state cost participation for their Wild Rice River Watershed

Retention Plan. The District made an effort to investigate retention to assist in solving flooding issues, which included studies involving the Antelope Creek sub-watershed, and a mainstem site near Mantador, Site WR160B where a geotechnical investigation is currently being conducted.

The District would like to continue its efforts working toward retention by developing a comprehensive Wild Rice River Watershed Retention Plan. The study will result in a distributed retention plan throughout the entire watershed, and objectives and priorities to meet the peak flow reduction on the Wild Rice 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; identify all previously studied and proposed retention sites and update contributing watershed areas using LiDAR; identify and evaluate new retention sites; hydrologic modeling; and drafting of the final report.

The total estimated cost of the Wild Rice River Watershed Retention Plan is \$180,000, of which all is determined eligible for state cost participation as an engineering feasibility study at 50 percent of the eligible costs (\$90,000). The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$90,000.

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 \$90,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Richland-Cass Joint Water Resource District to support the Wild Rice River Watershed Retention Plan.

It was moved by Commissioner Berg and seconded by Commissioner Vosper 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 \$90,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Richland-Cass Joint Water Resource District to support the Wild Rice River Watershed Retention Plan. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

RE-CERTIFICATION OF HORACE TO WEST FARGO DIVERSION LEVEE SYSTEM - APPROVAL OF STATE COST PARTICIPATION (\$72,600) (SWC Project No. 2009-02)

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation in their costs for re-certification of the Horace to West Fargo diversion levee system. FEMA has been updating its Flood Insurance Rate Maps (FIRM) as part of the map modernization process. As part of the new Cass County Flood Insurance Study (FIS), FEMA is requiring that the levee system incorporated into the West Fargo diversion project be re-certified by a professional engineer. If the levees are not re-certified, FEMA will not show any areas behind the levee as protected from the base flood. Communities impacted include Horace, West Fargo, and Fargo, and Stanley township.

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation in their costs for re-certification of the Horace to West Fargo diversion levee

For FEMA to accredit the levee on the new FIRM, the District must provide documentation that shows the levee meets federal requirements as per 44 CFR 65.10. If the levee is not certified, all residences shown as protected from the base flood will be required to purchase flood insurance, which would have a significant economic impact on the communities. The levee is currently listed as a Provisionally Accredited Levee (PAL). The District has until May 16, 2013 to have the levee accredited. If that is not accomplished, FEMA will decertify the levee and mandate flood insurance for the area mapped into the base flood floodplain.

In June, 2012, the State Engineer approved \$42,835 for the geotechnical analysis for the re-certification of the levee system. The District has completed gathering the available documentation and is ready to proceed with the analysis necessary to complete the report. The total cost estimate of the project is \$183,607, of which \$121,000 is determined eligible for state cost participation at 60 percent of the eligible costs (\$72,600). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$72,600.

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 allocation of \$72,600 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for the Horace to West Fargo diversion levee system re-certification.

It was moved by Commissioner Hanson and seconded by Commissioner Foley that the State Water Commission approve state cost participation at 60 percent of the eligible costs, not to exceed an allocation of \$72,600 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 Horace to West Fargo diversion levee system re-certification. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

**RE-CERTIFICATION OF WEST
FARGO DIVERSION LEVEE
SYSTEM - APPROVAL OF STATE
COST PARTICIPATION (\$91,400)
(SWC Project No. 2003-02)**

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation in their costs for re-certification of the West Fargo diversion levee system.

FEMA has been updating its Flood Insurance Rate Maps (FIRM) as part of the map modernization process. As part of the new Cass County Flood Insurance Study (FIS), FEMA is requiring that the levee system incorporated into the West Fargo diversion project be re-certified by a professional engineer. If the levees are not re-certified, FEMA will not show any areas behind the levee as protected from the base flood. Communities impacted are West Fargo and Fargo.

For FEMA to accredit the levee on the new FIRM, documentation must be provided that shows the levee meets federal requirements for levees as per 44 CFR 65.10. It is the District's responsibility to provide

this data. If the levee is not certified, all residences shown as protected from the base flood will be required to purchase flood insurance, which would have a significant economic impact on the communities. The levee is currently listed as a Provisionally Accredited Levee (PAL). The District has until May 16, 2013 to have the levee accredited. If that is not accomplished, FEMA will decertify the levee and mandate flood insurance for the area mapped into the base flood floodplain.

In July, 2012, the State Engineer approved \$45,879 for the geotechnical analysis for the re-certification of the levee system. The District has completed gathering the available documentation and is ready to proceed with the analysis necessary to complete the report. The total cost estimate of the project is \$213,535, of which \$152,333 is determined eligible for state cost participation at 60 percent of the eligible costs (\$91,400). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$91,400.

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 allocation of \$91,400 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for the West Fargo diversion levee system re-certification.

It was moved by Commissioner Berg and seconded by Commissioner Vosper that the State Water Commission approve state cost participation at 60 percent of the eligible costs, not to exceed an allocation of \$91,400 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 West Fargo diversion levee system re-certification. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

**RED RIVER BASIN NON-NATURAL
RESOURCES CONSERVATION
SERVICE RURAL/FARMSTEAD
RING DIKE PROGRAM -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION (\$200,000)
(SWC Project No. 1638)**

On June 23, 2009, the State Water Commission approved an allocation not to exceed \$400,000 for the construction of individual ring dikes around rural residences/farmsteads in the Red River basin for those ring dikes not being constructed under the Natural Resources Conservation Service's ring dike program.

Floods have caused extensive damage and property owners have recognized the need and desire to have their home and outbuildings protected from future floods.

On June 23, 2009, the State Water Commission also approved an allocation of \$200,000 to provide a 50 percent cost share assistance to agricultural producers, contracting through the water resource districts, for projects approved under the Natural Resource Conservation Service's ring dike development program.

Under the State Water Commission's program (non-NRCS funded), rural/farmstead ring dikes will be constructed to criteria developed by the Commission. A dike permit will be required if the imprint of the dike consists of a volume of 50 acre-feet or more of water. The proposed ring dikes do not require engineering services, although a survey may be necessary to set elevations. Reimbursement is limited to 60 percent of the actual eligible costs, limited to a maximum of \$40,000 per ring dike. Administration and legal expenses are ineligible for cost share assistance.

On November 12, 2009, the State Water Commission approved an allocation not to exceed an additional \$400,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the water resource districts within the Red River basin to support the non-Natural Resources Conservation Service's rural/farmstead ring dike program.

It was the recommendation of Secretary Sando that the State Water Commission approve an additional allocation not to exceed \$200,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the water resource districts within the Red River basin to support the non-Natural Resources Conservation Service's rural/farmstead ring dike program. The Commission's affirmative action would increase the total state cost allocation to \$1,000,000 for the individual rural/farmstead ring dike program; and \$200,000 for the Natural Resources Conservation Service's ring dike development program.

It was moved by Commissioner Foley and seconded by Commissioner Hanson that the State Water Commission approve an additional allocation not to exceed \$200,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the water resource districts within the Red River basin to support the non-Natural Resources Conservation Service rural/farmstead ring dike program. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

This action increases the total state cost allocation to \$1,000,000 for the individual rural/farmstead ring dike program; and \$200,000 for the Natural Resources Conservation Service's ring dike development program.

**YORKTOWN-MAPLE DRAINAGE
IMPROVEMENT DISTRICT NO. 3
(DICKEY COUNTY) - CONDITIONAL
APPROVAL OF ADDITIONAL STATE
PARTICIPATION (\$111,705)
(SWC Project No. 1101)**

On September 21, 2011, the State Water Commission approved a request from the Dickey County Water Resource District for state cost participation to support the Yorktown-Maple Drainage Improvement District No. 3 project as a rural flood control project at 45 percent

of the eligible costs not to exceed an allocation of \$242,795 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020). The closed basin was inundated by rising floodwaters and multiple roadways were overtopped. The project consists of a channel through Yorktown and Maple townships with discharge into Dickey County Drain No. 1 and the Maple River conveying the water out of the closed basin to alleviate the problem.

Following the Commission's cost share participation approval on September 21, 2011, landowners along the course of the proposed channel were made aware of existing U.S. Fish and Wildlife Service wetland easements on their property which would be impacted by the project. The project design was modified to prevent adverse impacts to the wetland easements. The project engineer's revised cost estimate is \$1,154,000, of which \$787,778 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$354,500). A request from the Dickey County Water Resource District was presented for the State Water Commission's consideration for an additional state cost participation in the amount of \$111,705 (eligible costs of \$354,500 less \$242,795 approved on September 21, 2011). The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$111,705.

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 additional allocation of \$111,705 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to support the Yorktown-Maple Drainage Improvement District No. 3 project. The Commission's affirmative action would increase the total state cost allocation to \$354,500.

It was moved by Commissioner Olin and seconded by Commissioner Berg 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 additional allocation of \$111,705 from

the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Dickey County Water Resource District to support the Yorktown-Maple Drainage Improvement District No. 3 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, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

This action increases the total state cost allocation to \$354,500 for the Yorktown-Maple Drainage Improvement District No. 3 project.

***FARGO-MOORHEAD (FM) AREA
DIVERSION PROJECT REPORT
(SWC Project No. 1928)***

On April 3, 2012, the St. Paul Army Corps of Engineers signed the Record of Decision (ROD) on the Fargo-Moorhead (FM) Area Diversion Project's Final Feasibility Report and Environmental Impact Study (FEIS). The ROD by the Corps of Engineers states that the Diversion Project is technically feasible and economically justified in accordance with environmental statutes. In signing the ROD, the Corps also approved the project for construction, pending congressional authorization, certified that the project serves the public interest and outweighs adverse effects, and completes the National Environmental Policy Act (NEPA) process.

It is anticipated that Congress could take action on the project in 2013. If the project is authorized, the Corps of Engineers could execute a partnership agreement with the Flood Diversion Board of Authority, which would allow processes to begin for construction and the acquisition of properties. Construction could begin in 2014 and is expected to take several years to complete.

The proposed project would involve the construction of a 35-mile long diversion channel located in North Dakota that would direct floodwaters around the Fargo-Moorhead metropolitan area. The project would temporarily store up to 200,000 acre-feet of water immediately upstream of the diversion channel inlet in order to minimize downstream impacts. The plan would remove much of the Fargo-Moorhead area from the Federal Emergency Management Agency's regulatory floodplain. If the project is built, the diversion would significantly reduce flood damage and flood risk, but it would not completely eliminate the flood risks.

Representatives from the St. Paul Army Corps of Engineers and the proposed project provided a technical project update, of which the outline is attached hereto as ***APPENDIX "D"***.

**DEVILS LAKE HYDROLOGIC,
AND PROJECTS UPDATES
(SWC Project No. 416-15)**

The Devils Lake hydrologic report, and project updates were provided, which are detailed in the staff memorandum, dated August 31, 2012, and attached hereto as **APPENDIX "E"**.

**DEVILS LAKE WEST END OUTLET -
GLEASON CROSSING UPGRADE (EDDY
COUNTY) - FREEBORN TOWNSHIP
BOARD, PROJECT SPONSOR
SWC Project No. 416-7)**

In 2010, two crossings were identified in Eddy county as impacted when the Devils Lake west end outlet capacity was increased from 100 cubic feet per second (cfs) to 250 cfs. On December 10, 2010, the State Water Commission

approved an allocation not to exceed \$500,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020) to support the upgrade of the Langley crossing (previous referred to as Crossing A).

The Eddy County Commission did not have an interest in upgrading Crossing B. Therefore, at its meeting on December 10, 2010, the State Water Commission tabled a motion that state funds not be allocated for the upgrade of Crossing B (referred to as the Gleason crossing), located in Section 35, Township 150 North, Range 62 West, in Eddy county.

A petition containing over 800 signatures was presented in 2011 to the State Water Commission by Mr. and Mrs. Gleason. The Eddy County Commission agreed to be the local sponsor for the project, and that Freeborn township would be responsible for the project maintenance.

At the direction of the State Water Commission, the staff evaluated alternatives because of the concerns that the crossing had limited traffic and is on private land without public right-of-way. The estimated cost for upgrading the crossing to an additional 250 cfs capacity was \$60,000 with the work performed by the Commission's construction crew and equipment. On March 7, 2012, the State Water Commission approved an allocation not to exceed \$60,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Eddy County Commission to support the Gleason crossing upgrade.

Following the Commission's cost share approval on March 7, 2012, the Eddy County Commission retracted its support of the project and withdrew from participating as the local project sponsor. The Freeborn Township Board agreed to be the local project sponsor.

It was the recommendation of Secretary Sando that the State Water Commission amend its motion approved on March 7, 2012 to indicate the Freeborn Township Board as the local project sponsor in lieu of the Eddy County Commission.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission amend its motion approved on March 7, 2012 to indicate the Freeborn Township Board as the local project sponsor in lieu of the Eddy County Commission.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

***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 September 4, 2012 and attached hereto as ***APPENDIX "F"***.

***SOUTHWEST PIPELINE PROJECT -
DICKINSON WATER TREATMENT
PLANT REHABILITATION - APPROVAL
OF REM FUNDS (\$719,714.70)
(SWC Project No. 1736-99)***

The Southwest Water Authority collects and maintains a reserve fund for replacement and extraordinary maintenance. This fund, required by authorizing legislation, exists to fund replacement and maintenance of items that exceed

annual budgeted amounts. Expenditures from this fund are to be authorized by the State Water Commission.

Work is substantially complete on the Dickinson water treatment plant rehabilitation project. The amount billed to date is \$806,441.85, which has been paid by the Southwest Water Authority. On December 9, 2011, the State Water Commission approved the reimbursement of \$86,727.15 for the scraper drive for the Dickinson water treatment plant rehabilitation project; the reimbursable balance is \$719,714.70.

A request from the Southwest Water Authority was presented for the State Water Commission's determination that the Dickinson water treatment plant rehabilitation repairs are extraordinary maintenance and that the balance of \$719,714.70 be reimbursed from the reserve fund for replacement and extraordinary maintenance. This is a budgeted item for the replacement and extraordinary maintenance fund for 2012. The Southwest Water Authority board of directors approved the request at its August 6, 2012 meeting.

It was the recommendation of Secretary Sando that the State Water Commission concur in the determination that the Dickinson water treatment plant rehabilitation project repairs are extraordinary maintenance, and that \$719,714.70 be reimbursed to the Southwest Water Authority from the reserve fund for replacement and extraordinary maintenance.

It was moved by Commissioner Olin and seconded by Commissioner Foley that the State Water Commission concur in the determination that the Dickinson water treatment plant rehabilitation project repairs are extraordinary maintenance, and that \$719,714.70 be reimbursed to the Southwest Water Authority from the reserve fund for replacement and extraordinary maintenance.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

***SOUTHWEST PIPELINE PROJECT -
SUPPLEMENTAL INTAKE, AMEND-
MENT TO WATER PERMIT NO. 3688
(SWC Project No. 1736)
(SWC Water Permit No. 3688)***

The conditional water permit for the Southwest Pipeline Project authorizes the use of 17,100 acre-feet of water from Lake Sakakawea at a maximum rate of withdrawal of 10,590 gallons per minute (SWC Water Permit No. 3688).

The current intake for the Southwest Pipeline Project is a shared facility with Basin Electric Power Cooperative (BEPC). The water supply agreement with BEPC restricts the flow rate for the Southwest Pipeline Project at 10,590 gallons per minute (gpm). To date, the project has used an annual maximum of 4,446 acre-feet of water. With the cities and rural population in western North Dakota experiencing rapid growth due to the recent oil boom, the need for clean drinking water is also growing. The total raw water needed for the project is estimated to be higher than 10,590 gpm, although the annual use will be lower than the permitted 17,100 acre-feet.

The current capacity at the Dickinson water treatment plant is 12 million gallons per day (MGD), with 6 MGD contracted for the city of Dickinson and 6 MGD for the remainder of the project. Six (6) MGD can serve a population of 24,000 at a design capacity of 250 gallons per capita per day (gpcd). A recent study conducted by Kadrmas Lee Jackson indicates a planning level estimate of 42,500 residents in the city of Dickinson by 2036, with populations in other communities in the project area growing also. To meet the growing needs, it is estimated that the Dickinson water treatment plant would need to be upgraded by an additional 6 MGD (4,167 gpm). In addition to the treated water needs, the project currently has raw water contracts totaling 580 gpm which includes Red River Energy at 480 gpm.

The projected raw water needs for the project are estimated at 17,305 gpm; the existing conditional water permit is for 10,590 gpm, which requires an increase of 6,715 gpm to meet the growing demands. Basin Electric Power Cooperative does not wish to amend the existing water supply agreement to increase the flow rate. This would necessitate the need for a new supple-

mental intake with a point of diversion located in the NE1/4NE1/4 of Section 14, Township 146 North, Range 88 West, Mercer county, for the Southwest Pipeline project. The total annual use is estimated to be less than the permitted 17,100 acre-feet of water, therefore, an amendment to conditional water permit No. 3688 is required.

It was the recommendation of Secretary Sando that the State Water Commission authorize the Commission's chairman to execute an application to the Office of the State Engineer for an amendment to conditional water permit No. 3688, with the point of diversion specified in the NE1/4NE1/4 of Section 14, Township 146 North, Range 88 West, Mercer county.

It was moved by Commissioner Berg and seconded by Commissioner Olin that the Chairman of the State Water Commission be authorized to execute an application to the Office of the State Engineer for an amendment to conditional water permit No. 3688, with the point of diversion specified in the NE1/4NE1/4 of Section 14, Township 146 North, Range 88 West, Mercer county.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

**SOUTHWEST PIPELINE PROJECT -
AUTHORIZE AWARD OF CONTRACTS
7-1C/7-8H, HYDRAULIC IMPROVEMENTS
NORTH OF DICKINSON AND SOUTH
FRYBURG REGIONAL SERVICE AREA
(SWC Project No. 1736-99)**

Southwest Pipeline Project, Contract 7-1C includes furnishing and installing approximately 8.5 miles of 8" and 6" ASTM D2241 gasketed joint pipe, a prefabricated steel control/PRV vault, and a prefabricated concrete tank control vault north of Dickinson to increase

the capacity in the New Hradec and Davis Buttes service area. The project engineer's estimate for this contract is \$900,000.

Southwest Pipeline Project Contract 7-8H includes furnishing and installing 5 miles of 6" PVC pipe from near the Fryburg tank to a 6" line south of Belfield. The pipe installation would increase pressure to the existing Contract 7-8D customers and would allow the addition of customers north and south of Belfield. The project engineer's estimate for this contract is \$280,000.

Contracts 7-1C and 7-8H are combined because of the short stretches of pipe involved and to save on administrative costs. Bids are scheduled for advertisement the week of September 17, with the bid opening scheduled for October 10, 2012. Contract 7-1C will be funded with the 2011-2013

biennium State Water Commission allocation to the Southwest Pipeline Project, and Contract 7-8H will be partially funded up to \$231,378 with the USDA grant and the remainder will be funded from the 2011-2013 biennium State Water Commission allocation to the Southwest Pipeline Project.

Because of the limited time period available for construction after the bid opening, it was the recommendation of Secretary Sando that the secretary to the State Water Commission be authorized to award Southwest Pipeline Project Contracts 7-1C/7-8H, Hydraulic Improvements North of Dickinson and the South Fryburg Service Area, to the lowest responsive bidder, contingent upon the recommendations of the project engineer and the secretary to the State Water Commission, and review/approval by the Commission's legal counsel.

It was moved by Commissioner Olin and seconded by Commissioner Vosper that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project Contracts 7-1C/7-8H, Hydraulic Improvements North of Dickinson and the South Fryburg Regional Service Area, to the lowest responsive bidder, contingent upon the recommendations of the project engineer and the secretary to the State Water Commission, and review/approval by the Commission's legal counsel.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. 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 September 4, 2012, and attached hereto as **APPENDIX "G"**.

**NORTHWEST AREA WATER
SUPPLY (NAWS) PROJECT -
APPROVAL OF INTERIM WATER
RATES FOR CITY OF MINOT AND
NAWS REGION CITIES FOR 2013
(SWC Project No. 237-04)**

The Northwest Area Water Supply (NAWS) project water service contracts recognize that the water rates for the NAWS project are to be determined by the State Water Commission. The project water rate is based on capital costs, supply and treatment costs, operation

and maintenance costs, and reserve for replacement and extraordinary maintenance (REM).

The following proposed NAWS project interim water rates for the city of Minot and the NAWS region cities for 2013 were presented for the State Water Commission's consideration:

<u>Capital Costs:</u>	\$0.00 per 1,000 gallons
<u>Supply and Treatment Costs:</u>	City of Minot: \$0.00 per 1,000 gallons
	NAWS region: \$1.24 per 1,000 gallons
<u>Operation and Maintenance Costs:</u>	City of Minot: \$0.26 per 1,000 gallons
	NAWS region: \$0.95 per 1,000 gallons
<u>Replacement and Extraordinary Maintenance:</u>	\$0.15 per 1,000 gallons

It was the recommendation of Secretary Sando that the State Water Commission approve the following NAWS interim water rates for the 2013 calendar year: city of Minot - \$0.41 per 1,000 gallons; NAWS region - \$2.34 per 1,000 gallons.

It was moved by Commissioner Hanson and seconded by Commissioner Foley that the State Water Commission approve the following Northwest Area Water Supply project interim water rates for the 2013 calendar year:

<i>City of Minot:</i>	<i>\$0.41 per 1,000 gallons</i>
<i>NAWS region:</i>	<i>\$2.34 per 1,000 gallons</i>

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

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

The Mouse River Enhanced Flood Protection project status report was provided, which is detailed in the staff memorandum dated September 4, 2012 and attached hereto as ***APPENDIX "H"***.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - APPROVAL OF STATE COST PARTICIPATION FOR RENVILLE COUNTY LIDAR COLLECTION (\$100,000) (SWC Project No. 1300)

Through the Silver Jackets program, the State Water Commission has been participating with a consortium of federal agencies in a joint LiDAR collection effort to identify if there is mutual benefit and interest of a collection for a given area of the state. In 2011, a collection

effort involved the upper James River basin which included Rolette and McHenry counties and specifically the Mouse River corridor in Bottineau county.

The Commission staff and the program managers are working with the U.S. Army Corps of Engineers and the Natural Resources Conservation Service (NRCS) relative to acquiring LiDAR on the Mouse River through Renville county that would include 12 townships for a total of 432 square miles. Cost share contributions would include: State Water Commission - \$100,000; and the NRCS would contribute the remainder of the cost to collect Renville county and portions of Bottineau county that were not included in the 2011 collection effort. This data, combined with the previous collections, will provide 100 percent LiDAR coverage for the entire Mouse River basin in North Dakota. The LiDAR, coupled with aerial imagery collected during the flood in 2011, will provide a valuable tool to assist with flood protection measures and other efforts in the Mouse River valley. A letter of support was provided from the Souris River Joint Water Resource Board.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation not to exceed an allocation of \$100,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the U.S. Army Corps of Engineers to fund the LiDAR collection effort for the Mouse River corridor through Renville county.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve state cost participation not to exceed an allocation of \$100,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the U.S. Army Corps of Engineers to fund the LiDAR collection effort for the Mouse River corridor through Renville county. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

**WESTERN AREA WATER SUPPLY
(WAWS) PROJECT STATUS REPORT
(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.

On July 30, 2012, the State Water Commission approved an additional \$10,000,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for project construction, for a total state funds allocation of \$110,000,000, authorized in 2011 House Bill 1206. The Commission also approved the Williams Rural Water West Expansion project, for a total overall Western Area Water Supply project plan approval of \$119,000,000.

The Western Area Water Supply project status report was provided, which is detailed in the staff memorandum, dated September 6, 2012, and attached hereto as **APPENDIX "I"**.

**WESTERN AREA WATER SUPPLY
(WAWS) PROJECT - APPROVAL OF
ARMSTRONG WATER SOLUTIONS,
INC. LEASE AGREEMENT
(SWC Project No. 1973)**

The Western Area Water Supply (WAWS) Authority owns real property in Williams County, North Dakota, and has 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.

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

Armstrong Water Solutions, Inc. (Armstrong), a Michigan corporation, 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 authorizing 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's Water Supply Cost Share Policy, referred to in the legislation, was approved by the State Water Commission on June 13, 2012. Water depots for industrial use receiving water from the 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. 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.

The initial agreements presented to the State Water Commission 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 were of concern with the Commission members.

The amended and restated Memorandum of Understanding, Amendment to Master Agreement, and the Lease Agreement were reviewed by the Commission staff. The Lease Agreement between the Western Area Water Supply Authority and Armstrong Water Solutions, Inc., was presented for the State Water Commission consideration and approval. In discussion, the State Water Commission members generally agreed that their issues of concerns were resolved.

It was moved by Commissioner Berg and seconded by Commissioner Hanson that the State Water Commission approve the lease agreement between the Western Area Water Supply Authority and Armstrong Water Solutions, Inc. SEE APPENDIX "J"

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

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

The Garrison Diversion Conservancy District will host a conference on October 2, 2012 in Fargo, North Dakota, to address the issue of drought in the Red River valley. Drought experts from

across the nation are invited to talk about the important ways to prepare for a drought and recognize the risks it brings. The conference will provide information to North Dakota's policymakers and to the public about the need for drought preparation.

***REGULATION OF INDUSTRIAL
WATER USE IN THE STATE OF
NORTH DAKOTA - APPROVAL OF
ALLOCATION TO CONDUCT
PERFORMANCE AUDIT (\$99,700)
(SWC Project No. 1400)***

On June 21, 2012, a motion was made before the Legislative Audit and Fiscal Review Committee for the State Auditor to conduct or contract for a performance audit of the Office of the State Engineer's regulation of industrial water use in the State of North Dakota. The scope of work included the following elements:

- 1) Review of laws, rules, regulations policies, procedures, and processes;
- 2) Monitoring water usage limitations and levels relating to industrial water use and aquifer levels;
- 3) Temporary authorizations for holders of existing irrigation water permits to use water for industrial uses and extension of temporary authorizations;
- 4) Temporary surface water permits for industrial use;
- 5) Establishment, imposition and collection of penalties; and
- 6) Enforcement of the State Engineer's metering and reporting policies.

The cost of the performance audit is estimated at \$100,000 which is to be paid by the State Water Commission. The State Auditor's office determined the scope of the performance audit, and received one bid from KPMG LLP, Minneapolis, MN, to conduct the performance audit in the amount of \$99,700. The audit is anticipated to be completed by January 15, 2013.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed \$99,700 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to KPMG LLP, Minneapolis, MN to conduct a performance audit of the Office of the State Engineer's regulation of industrial water use in North Dakota.

It was moved by Commissioner Berg and seconded by Commissioner Hanson that the State Water Commission approve an allocation not to exceed \$99,700 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to KPMG LLP, Minneapolis, MN to conduct a performance audit of the Office of the State Engineer's regulation of industrial water use in North Dakota. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

APPROVAL OF STATE ENGINEER'S SALARY, EFFECTIVE JULY 1, 2012

The State Water Commission members were informed during their July 30, 2012 meeting, that the Office of the State Auditor had completed its biennial audit of the State Water Commission. A recommendation was made to ensure compliance with the North Dakota Century Code 61-03-01 in that the State Water Commission is setting the State Engineer's salary.

On July 30, 2012, the State Water Commission passed a motion that the State Engineer's salary be increased based on the Legislature's salary increments for state employees of three percent for each year of the 2011-2013 biennium, effective July 1, 2012; and, that the State Water Commission solicit the assistance of the Office of Management and Budget in the preparation of an analysis of comparable salaries of state agency directors for the Commission's consideration at its next meeting. Commissioner Foley reported that the Commission's directive of July 30, 2012 was completed.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve an annual salary of \$135,000 for Todd Sando, North Dakota State Engineer, effective July 1, 2012.

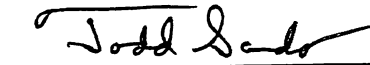
Commissioners Berg, Foley, Hanson, Olin, Vosper, and Governor Dalrymple voted aye. Governor Dalrymple announced the motion unanimously carried.

There being no further business to be considered by the State Water Commission, Governor Dalrymple adjourned the meeting at 4:10 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 JULY 31, 2012
 BIENNIUM COMPLETE: 54%

APPENDIX "A"
 September 17, 2012

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	4-Sep-12 PROGRAM TOTALS
ADMINISTRATION				
Allocated	1,926,299	1,303,575		3,229,874
Expended	1,031,578	517,832		1,549,410
Percent	54%	40%		48%
			Funding Source:	
			General Fund:	1,462,507
			Federal Fund:	86,904
			Special Fund:	0
PLANNING AND EDUCATION				
Allocated	1,285,138	212,198	99,000	1,596,336
Expended	562,235	64,371	46,911	673,517
Percent	44%	30%	47%	42%
			Funding Source:	
			General Fund:	538,052
			Federal Fund:	79,624
			Special Fund:	55,841
WATER APPROPRIATION				
Allocated	3,949,169	446,511	1,130,000	5,525,680
Expended	2,076,728	286,652	455,504	2,818,885
Percent	53%	64%	40%	51%
			Funding Source:	
			General Fund:	2,664,031
			Federal Fund:	4,188
			Special Fund:	150,666
WATER DEVELOPMENT				
Allocated	5,634,922	9,772,937	265,000	15,672,859
Expended	2,739,005	4,247,878	148,357	7,135,240
Percent	49%	43%	56%	46%
			Funding Source:	
			General Fund:	3,303,982
			Federal Fund:	1,060,276
			Special Fund:	2,770,983
STATEWIDE WATER PROJECTS				
Allocated			375,881,750	375,881,750
Expended			167,197,695	167,197,695
Percent			44%	44%
			Funding Source:	
			General Fund:	0
			Federal Fund:	198,480
			Special Fund:	166,999,215
ATMOSPHERIC RESOURCE				
Allocated	901,205	712,307	4,694,692	6,308,204
Expended	489,520	179,836	885,346	1,554,703
Percent	54%	25%	19%	25%
			Funding Source:	
			General Fund:	619,778
			Federal Fund:	0
			Special Fund:	934,925
SOUTHWEST PIPELINE				
Allocated	437,264	6,201,500	38,744,857	45,383,621
Expended	272,705	1,541,328	19,856,556	21,670,588
Percent	62%	25%	51%	48%
			Funding Source:	
			General Fund:	0
			Federal Fund:	14,043,203
			Special Fund:	7,627,386
NORTHWEST AREA WATER SUPPLY				
Allocated	604,626	5,235,500	49,976,971	55,817,097
Expended	255,971	2,327,226	13,493,782	16,076,979
Percent	42%	44%	27%	29%
			Funding Source:	
			General Fund:	0
			Federal Fund:	2,208,640
			Special Fund:	13,868,339
PROGRAM TOTALS				
Allocated	14,738,623	23,884,528	470,792,270	509,415,421
Expended	7,427,743	9,165,124	202,084,151	218,677,018
Percent	50%	38%	43%	43%
FUNDING SOURCE: ALLOCATION EXPENDITURES REVENUE				
GENERAL FUND	14,995,199	8,588,350	GENERAL FUND:	60,535
FEDERAL FUND	53,984,383	17,681,314	FEDERAL FUND:	19,205,493
SPECIAL FUND	440,435,838	192,407,354	SPECIAL FUND:	200,692,428
TOTAL	509,415,420	218,677,018	TOTAL:	219,958,456

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

Jul-12

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
CITY FLOOD CONTROL					
FARGO/RIDGEWOOD	50,941	50,941	0	0	50,941
FARGO	66,473,088	66,473,088	21,955,259	0	44,517,829
GRAFTON	7,175,000	7,175,000	0	0	7,175,000
MINOT	4,476,750	4,476,750	2,499,988	0	1,976,762
WAHPETON	1,013,000	1,013,000	0	0	1,013,000
FLOODWAY PROPERTY ACQUISITIONS					
MINOT	17,750,000	17,750,000	0	0	17,750,000
BURLINGTON	1,071,345	1,071,345	1,039,000	0	32,345
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
SAWYER	184,260	184,260	0	0	184,260
LISBON	645,000	645,000	0	0	645,000
UNOBLIGATED SB 2371	9,310,245			9,310,245	0
				0	
FLOOD CONTROL					
BURLEIGH COUNTY	1,282,400	1,282,400	0	0	1,282,400
RICE LAKE RECREATION DISTRICT	2,842,200	2,842,200	0	0	2,842,200
RENWICK DAM	1,246,571	1,246,571	0	0	1,246,571
WATER SUPPLY					
REGIONAL & LOCAL WATER SYSTEMS	26,652,898	25,517,910	8,784,737	1,134,988	16,733,173
VALLEY CITY WATER TREATMENT PLANT	15,386,800	15,386,800	13,913,485	0	1,473,315
FARGO REVERSE OSMOSIS PILOT STUDY	15,000,000	15,000,000	285,348	0	14,714,652
RED RIVER WATER SUPPLY	62,224	62,224	0	0	62,224
WESTERN AREA WATER SUPPLY	25,000,000	25,000,000	25,000,000	0	0
SOUTHWEST PIPELINE PROJECT	24,019,199	24,019,199	7,627,386	0	16,391,813
NORTHWEST AREA WATER SUPPLY	19,432,008	19,432,008	8,113,911	0	11,318,097
IRRIGATION DEVELOPMENT					
	3,608,353	1,097,422	876,189	2,510,931	221,233
GENERAL WATER MANAGEMENT					
OBLIGATED	27,247,312	27,247,312	4,653,196	0	22,594,116
UNOBLIGATED	2,924,697			2,924,697	0
DEVILS LAKE					
BASIN DEVELOPMENT	92,340	92,340	15,635	0	76,705
DIKE	12,254,788	12,254,788	12,254,158	0	630
OUTLET	2,420,212	2,420,212	1,520,229	0	899,983
OUTLET OPERATIONS	6,215,627	6,215,627	2,640,734	0	3,574,893
DL TOLNA COULEE DIVIDE	4,366,720	4,366,720	4,261,738	0	104,982
DL EAST END OUTLET	71,848,290	62,942,273	55,117,458	8,906,017	7,824,814
DL GRAVITY OUTFLOW CHANNEL	17,000,000	17,000,000	33,346		16,966,654
DL JOHNSON FARMS STORAGE	125,000	125,000	0	0	125,000
WEATHER MODIFICATIONS					
	894,314	894,314	472,119	0	422,195
TOTALS	403,996,582	379,209,704	171,063,915	24,786,878	208,145,789

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

PROGRAM OBLIGATION

Approved SWC By	No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jul-12 Balance
City Flood Control:								
SWC	1927	5000	City of Fargo	Fargo/Ridgewood Flood Control Project	6/22/2005	50,941	0	50,941
SB 2020	1928	5000	City of Fargo	Fargo Flood Control Project	6/23/2009	66,473,088	21,955,259	44,517,829
SWC	1771	5000	City of Grafton	Grafton Flood Control Project	3/11/2010	7,175,000	0	7,175,000
SB 2371	1974	5000	Souris River Joint WRD	Mouse River Enhanced Flood Control Project Phase I	9/21/2011	2,500,000	2,499,988	12
SB 2371	1974	5000	Souris River Joint WRD	Mouse River Enhanced Flood Control Project Phase II	6/13/2012	1,828,000	0	1,828,000
SB 2371	1974	5000	Souris River Joint WRD	Mouse River Enhanced Flood Control Project Phase III	6/13/2012	98,750	0	98,750
SB 2371	1974-06	5000	Souris River Joint WRD	Mouse River Enhanced Flood Control	12/9/2011	50,000	0	50,000
SWC	518	5000	City of Wahpeton	Wahpeton Flood Control	7/1/2011	1,013,000	0	1,013,000
Subtotal City Flood Control						79,188,779	24,455,247	54,733,532
Floodway Property Acquisitions:								
SB 2371	1993-05	5000	City of Minot	Minot Phase 1 - Floodway Acquisitions	1/27/2012	17,750,000	0	17,750,000
SB 2371	1987-05	5000	City of Burlington	Burlington Phase 1 - Floodway Acquisitions	1/27/2012	1,071,345	1,039,000	32,345
SB 2371	1523-05	5000	Ward County	Ward County Phase 1 & 2 - Floodway Acquisitions	1/27/2012	11,500,000	0	11,500,000
SB 2371	1504-05	5000	Valley City	Valley City Phase 1 - Floodway Acquisitions	12/9/2011	3,000,000	0	3,000,000
SB 2371	1992-05	5000	Burleigh Co. WRD	Burleigh Co. Phase 1 - Floodway Acquisitions	3/7/2012	1,425,000	0	1,425,000
SB 2371	2000-05	5000	City of Sawyer	Sawyer Phase 1 - Floodway Acquisitions	6/13/2012	184,260	0	184,260
	1991-05	5000	City of Lisbon	Lisbon - Floodway Acquisition	3/7/2012	645,000	0	645,000
Subtotal Floodway Property Acquisitions						35,575,605	1,039,000	34,536,605
Flood Control:								
SB 2371	1992-01	5000	Burleigh Co. WRD	Burleigh County's Tavis Road Storm Water Pump Static	6/13/2012	1,282,400	0	1,282,400
	1997	5000	Rice Lake Recreation D	Rice Lake Flood Control	6/13/2012	2,842,200	0	2,842,200
SWC	849	5000	Pembina Co. WRD	Rerwick Dam Rehabilitation	5/17/2010	1,246,571	0	1,246,571
Subtotal Flood Control						5,371,171	0	5,371,171
Water Supply Advances:								
SWC	2373-09	5000	Garrison Diversion	South Central RWD (Phase II)	6/23/2008	160,069	160,069	0
	2373-31	5000	Garrison Diversion	North Central Rural Water Consortium (Anamoose/Ben)	6/23/2008	3,295,000	2,276,676	1,018,324
	2373-24	5000	Garrison Diversion	Trails Regional Rural Water (Phase III)	8/18/2009	2,355,670	1,252,568	1,103,102
Water Supply Grants:								
	2373-17	5000	City of Parshall	City of Parshall	6/23/2008	490,452	0	490,452
	2373-18	5000	R & T Water Supply	Ray & Tioga Water Supply Association	12/17/2008	1,868,153	1,868,153	0
	2373-25	5000	Garrison Diversion	McKenzie Phase II	6/23/2009	868,327	0	868,327
	2373-28	5000	Garrison Diversion	McKenzie Phase IV	3/11/2010	2,352,244	2,352,244	0
	2373-29	5000	City of Wildrose	City of Wildrose - Crosby Water Supply	7/28/2010	97,218	0	97,218
	2373-32	5000	North Central Rural Water	North Central Rural Water Consortium (Berthold-Carpio)	6/21/2011	3,150,000	13,000	3,137,000
	2373-33	5000	Stutsman Rural WRD	Stutsman Rural Water System	6/21/2011	6,800,000	603,900	6,196,100
	2373-35	5000	Grand Forks - Traill WR	Grand Forks - Traill County WRD	6/13/2012	3,700,000	0	3,700,000
Subtotal Water Supply						25,137,133	8,526,609	16,610,524
HB No. 1305 Permanent Oil Trust Fund								
	2373-21	5000	BDW Water Systems	Burke, Divide, Williams Water District	6/23/2009	189,415	66,766	122,649
	2373-22	5000	R & T Water Supply	Ray & Tioga Water Supply Association	6/23/2009	191,362	191,362	0
Subtotal Permanent Oil Trust Fund						380,777	258,128	122,649
	2373-26	5000	Valley City	Valley City Water Treatment Plant	8/18/2009	15,386,800	13,913,485	1,473,315
	1984	5000	City of Fargo	Fargo Water Treatment Plant Reverse Osmosis Pilot St	6/13/2012	15,000,000	285,348	14,714,652
	1912	5000	Garrison Diversion	Red River Valley Water Supply Project	3/17/2008	62,224	0	62,224
HB 1206	1973	5000	Bank of ND	Western Area Water Supply	7/1/2011	25,000,000	25,000,000	0
	1736-05	8000	Mutiple	Southwest Pipeline Project	7/1/2011	24,019,199	7,627,386	16,391,813
	2374	9000	Mutiple	Northwest Area Water Supply	7/1/2011	19,432,008	8,113,911	11,318,097
Subtotal Water Supply						98,900,231	54,940,129	43,960,102
Irrigation Development:								
SWC	1389	5000	Bank of ND	BND AgPace Program	10/23/2001	98,907	28,555	70,352
SWC	AOC/IRA	5000	ND Irrigation Association	ND Irrigation Association	8/16/2011	100,000	50,000	50,000
SWC	1968	5000	Garrison Diversion	2009-11 McClusky Canal Mile Marker 7.5 Irrigation Proj	6/1/2010	898,515	797,634	100,881
Subtotal Irrigation Development						1,097,422	876,189	221,233
General Water Management								
Hydrologic Investigations:						900,000		
SWC	1400/12	3000	Houston Engineering	Houston Engineering Water Permit Application Review	10/10/2010	8,500	6,372	2,128
SWC	1400/13	3000	Houston Engineering	Houston Engineering Water Permit Application Review	11/7/2011	17,000	12,778	4,222
	859	3000	Lori Bjorgen	Lori Bjorgen - Alternat Well Monitor	8/23/2012	0	0	0
	862	3000	Arlotta Herman	Arlotta Herman - Well Monitor	8/23/2012	2,624	2,624	0
	967	3000	Holly Messmer - McDan	Holly Messmer - McDaniel	4/19/2012	0	0	0
	1690	3000	Holly Messmer - McDan	Holly Messmer - McDaniel	4/19/2012	3,120	3,120	0
	1703	3000	Thor Brown	Thor Brown - Well Monitor	3/27/2012	3,614	3,614	0
	1707	3000	Thor Brown	Thor Brown - Well Monitor	4/26/2011	1,818	1,818	0
	1761	3000	Gloria Roth	Gloria Roth - Well Monitor	6/1/2011	690	690	0
	1761	3000	Fran Dobits	Fran Dobits - Well Monitor	6/1/2011	366	366	0
	1395A	3000	U. S. Geological Survey	US Geological Survey, US Dept. Of Interior Investigatio	10/18/2011	432,303	324,227	108,076
	1395D	3000	U. S. Geological Survey	Eaton Irrigation Project on the Souris River	7/13/2012	15,300	0	15,300
	1395	3000	U. S. Geological Survey	US Geological Survey, US Dept. Of Interior Upgrade of	4/14/2011	2,670	2,670	0
Hydrologic Investigations Obligations Subtotal						488,005	358,279	129,726
Remaining Hydrologic Investigations Authority						411,995		
Hydrologic Investigations Authority Less Payments								

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
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PROGRAM OBLIGATION

Approved SWC By	No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jul-12 Balance
General Projects Obligated						24,532,682	2,480,286	22,052,395
General Projects Completed						1,814,630	1,814,630	0
Subtotal General Water Management						27,247,312	4,653,196	22,594,116
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Devils Lake Basin Development:								
SWC	416-01	5000	Joe Belford	Devils Lake Basin Joint Water Resource Manager	6/15/2011	60,000	0	60,000
SWC	416-02	5000	City of Devils Lake	City of Devils Lake Levee System Extension & Raise	7/1/2011	12,254,788	12,254,158	630
SWC	416-05	2000	Joe Belford	Devils Lake Outlet Awareness Manager	6/16/2011	32,340	15,635	16,705
SWC	416-07	5000	Multiple	Devils Lake Outlet	7/1/2011	2,420,212	1,520,229	899,983
SWC	416-10	4700	Operations	Devils Lake Outlet Operations	7/1/2011	6,215,627	2,640,734	3,574,893
SWC	416-13	5000	Multiple	DL Tolna Coulee Divide	7/1/2011	4,366,720	4,261,738	104,982
SWC	416-15	5000	Multiple	DL East End Outlet	7/1/2011	62,942,273	55,117,458	7,824,814
SWC	416-17	5000	Multiple	DL Emergency Gravity Outflow Channel	9/21/2011	17,000,000	33,346	16,966,654
SWC	416-18	5000	ND Game & Fish	DL Johnson Farms Water Storage Site	6/10/2011	125,000	0	125,000
Devils Lake Subtotal						105,416,960	75,843,298	29,573,662
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SWC		7600		Weather Modification	7/1/2011	894,314	472,119	422,195
TOTAL						379,209,704	171,063,915	208,145,789

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

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jul-12 Balance	
HB	1020	1932	5000	2005-07	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment Drain	8/30/2005	500,000	0	500,000
HB	2305	1963	5000	2009-11	Emmons County WRD	Beaver Bay Embankment Feasibility Study	8/10/2009	258,406	14,535	243,871
SB	2020	1986	5000	2011-13	USDA-APHIS ND Wildlife Ser	USDA-APHIS North Dakota Wildlife Services - anim	6/1/2011	250,000	119,087	130,913
SB	2020	1131	5000	2009-11	Nelson Co. WRD	Flood Related Water Projects	6/1/2011	250,000	86,260	163,740
SE	1175-1933	5000	2011-13	Ward Co. WRD	DFIRM Project - Mouse River Hydrology	8/10/2012	42,034	0	42,034	
SE	2003	5000	2011-13	Southeast Cass WRD	Re-Certification of the West Fargo Diversion Levee	7/26/2012	45,879	0	45,879	
SE	1732	5000	2011-13	City of Beulah	Beulah Dam Emergency Action Plan	7/26/2012	20,440	0	20,440	
SE	2005	5000	2011-13	Grand Forks Co. WRD	Turtle River Dam #8 2012 EAP	6/29/2012	10,000	0	10,000	
SE	2002	5000	2011-13	Grand Forks Co. WRD	Trutlev River Dam #4 2012 EAP	6/29/2012	10,000	0	10,000	
SE	1303	5000	2011-13	Sargent Co WRD	Shortfoot Creek Preliminary Soils Analysis & Hydraul	6/29/2012	47,500	0	47,500	
SE	2003	5000	2011-13	Southeast Cass WRD	Re-Certification of the Horace to West Fargo Diversi	6/29/2012	42,835	0	42,835	
SE	2008	5000	2011-13	City of Mapleton	Mapleton Flood Control Levee Project	6/29/2012	24,410	0	24,410	
SE	1998	5000	2011-13	Grand Forks Co. WRD	Upper Turtle River Dam #1 2012 EAP	6/28/2012	10,000	0	10,000	
SE	1577	5000	2011-13	Burleigh Co. WRD	Fox Island 2012 Flood Hazard Mitigation Evaluation	5/22/2012	23,900	0	23,900	
SE	1814	5000	2011-13	Richland Co. WRD	Sheneye 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	1988	5000	2011-13	Barnes Co WRD	Sheneye Riverbank Encroachment Study Project	3/16/2012	22,875	0	22,875	
SE	1296	5000	2011-13	Pembina Co. WRD	Pembina Co. WRD/ Goschke Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1296	5000	2011-13	Pembina Co. WRD	Pembina Co. WRD/ Bourbanis Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1296	5000	2011-13	Pembina Co. WRD	Pembina Co WRD/ Weiler Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1296	5000	2011-13	Pembina Co. WRD	Pembina Co WRD/ Herzog Dam 2012 EAP	2/6/2012	10,000	0	10,000	
SE	1403	5000	2011-13	ND Water Resource Researc	ND Water Resources Research Institute - Fellowship	2/1/2012	13,850	0	13,850	
SE	1296	5000	2011-13	Pembina Co. WRD	PembinaCo. WRD/Willow Creek Dam 2012 EAP	1/27/2012	10,000	0	10,000	
SE	1312	5000	2011-13	Walsh Co. WRD	Walsh Co. WRD/Bylin Dam 2011 EAP	12/15/2011	14,800	0	14,800	
SE	1312	5000	2011-13	Walsh Co. WRD	Walsh Co. WRD/ Union Dam 2011 EAP	12/15/2011	10,000	0	10,000	
SE	1312	5000	2011-13	Walsh Co. WRD	Walsh Co. WRD/ Skyrud Dam 2011 EAP	12/15/2011	10,000	0	10,000	
SE	1312	5000	2011-13	Walsh Co. WRD	Walsh Co. WRD/ Melstad Dam 2011 EAP	12/15/2011	9,088	0	9,088	
SE	1312	5000	2011-13	Walsh Co. WRD	Walsh Co. WRD / Matejcek Dam 2011 EAP	12/14/2011	5,360	0	5,360	
SE	391	5000	2011-13	Sargent Co WRD	Sargent Co WRD, Silver Lake Dam Emergency Rep	10/12/2011	2,800	0	2,800	
SE	1313	5000	2011-13	Ward Co. WRD	Ward Co. 2011 LIDAR Review & Data Creation Prod	10/11/2011	16,311	0	16,311	
SE	1303	5000	2011-13	Sargent Co WRD	Shortfoot Creek Watershed Feasibility Study	9/15/2011	8,390	0	8,390	
SE	1301	5000	2011-13	City of Wahpeton	City of Wahpeton Water Reuse Feasibility Study/Ric	9/8/2011	2,500	0	2,500	
SE	PS/WRD/MR.	5000	2011-13	Missouri River Joint Board	Missouri River Joint Water Board, (MRJWB) Start up	8/2/2011	20,000	4,437	15,563	
SE	1965	5000	2011-13	Dept. of Emergency Services	ND Silver Jackets Team Charter & Action Plan	7/1/2011	5,657	5,656	0	
SE	PS/WRD/USF	5000	2011-13	Upper Sheyenne River Joint	Upper Sheyenne River WRB Administration (USRJW	6/15/2011	6,000	0	6,000	
SE	1607	5000	2011-13	Ward Co. WRD	Flood Inundation Mapping of Areas Along Souris & D	6/15/2011	13,011	0	13,011	
SE	501	5000	2009-11	Dickey Co WRD	Pheasant Lake Dam Emergency Action Plan	4/20/2011	9,600	0	9,600	
SE	1301	5000	2009-11	City of Lidgerwood	City of Lidgerwood Engineering & Feasibility Study fo	2/4/2011	15,850	0	15,850	
SE	1967	5000	2009-11	Grand Forks Co. WRD	Grand Forks County Legal Drain No. 55 2010 Contru	11/30/2010	9,652	0	9,652	
SE	1431	5000	2009-11	NDDOT	NDDOT Aerial Photography - MULTIPLE	11/19/2010	39,279	39,279	0	
SE	1291	5000	2009-11	Mercer Co. WRD	Mercer County WRD Knife River Snagging & Clearin	11/1/2010	20,000	0	20,000	
SE	AOC/RRC	5000	2009-11	Red River Basin Commission	Red River Basin "A River Runs North"	6/30/2010	5,000	0	5,000	
SE	642	5000	2009-11	Morton Co. WRD	Sweetbriar Dam Emergency Action Plan	5/17/2010	15,200	0	15,200	
SE	269	5000	2009-11	Grand Forks Co. WRD	Forville Dam Emergency Action Plan/GF CO.	3/3/2010	9,600	0	9,600	
SE	PBS	5000	2009-11	Lake Agassiz RC & D	PBS Documentary on Soil Salinity/Lake Agassiz RC i	1/29/2010	1,000	0	1,000	
SE	847	5000	2009-11	Maple River WRD	Absaraka Dam Safety Analysis	8/31/2009	5,719	0	5,719	
SE	1842	5000	2009-11	Southeast Cass WRD	SCWRD Wild Rice River Snagging & Clearing	5/28/2009	4,331	0	4,331	
SWC	1979	5000	2011-13	Southeast Cass WRD	Wild Rice River Riverbank Stabilization Project	6/13/2012	41,632	0	41,632	
SWC	1878-02	5000	2011-13	Maple River WRD	Upper Maple River Dam Environmental Assessment	6/13/2012	112,500	0	112,500	
SWC	1344	5000	2011-13	Southeast Cass WRD	Sheneye Diversion Phase VI - Weir Improvements	6/13/2012	225,050	0	225,050	
SWC	1344	5000	2009-11	Southeast Cass WRD	Sheneye Diversion Exterior Pump Station	6/13/2012	84,090	47,426	36,664	
SWC	829	5000	2011-13	Rush River WRD	Rush River Watershed Retention Plan	6/13/2012	67,500	0	67,500	
SWC	1806-02	5000	2011-13	City of Argusville	Re-Certification of the City of Argusville Flood Contro	6/13/2012	216,200	0	216,200	
SWC	2007	5000	2011-13	Maple River WRD	Pontiac Township Improvement District No. 73 Proj	6/13/2012	500,000	0	500,000	
SWC	2010	5000	2011-13	Barnes Co WRD	Meadow Lake Outlet	6/13/2012	500,000	0	500,000	
SWC	1344	5000	2009-11	Southeast Cass WRD	Horace Diversion Channel Site A (Section 7 - Phase	6/13/2012	1,812,822	0	1,812,822	
SWC	227	5000	2011-13	Eaton Flood Irrigation District	District's Mouse River Riverbank Stabilization Project	6/13/2012	120,615	0	120,615	
SWC	1523	5000	2011-13	Ward Co. WRD	Countryside Villas/Whispering Meadows Drainage Im	6/13/2012	157,211	0	157,211	
SWC	228	5000	2011-13	City of Bismarck	Bismarck City's Storm Water Outfall Construction Pr	6/13/2012	186,000	0	186,000	
SWC	1063	5000	2011-13	Rush River WRD	Amenia Township Improvement District Drain No. 74	6/13/2012	459,350	0	459,350	
SWC	1504	5000	2011-13	Valley City	Valley City Flood Risk Management Feasibility Study	3/7/2012	115,244	0	115,244	
SWC	1444	5000	2011-13	City of Pembina	US Army Corps of Eng Section 408 Review City Floo	3/7/2012	108,000	0	108,000	
SWC	1227	5000	2011-13	Trail Co. WRD	Mergenthal Drain No. 5 Reconstruction	3/7/2012	84,670	0	84,670	
SWC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diversion Project	3/7/2012	43,821	0	43,821	
SWC	PS/WRD/JAN	5000	2011-13	James River Joint WRD	James River Engineering Feasibility Study Phase 1	3/7/2012	160,482	0	160,482	
SWC	1989	5000	2011-13	Barnes Co WRD	Hobart Lake Outlet Project	3/7/2012	266,100	0	266,100	
SWC	1138	5000	2011-13	Pembina Co. WRD	Drain No. 8 Reconstruction Project	3/7/2012	123,725	0	123,725	
SWC	1396	5000	2011-13	U.S. Geological Survey	(USGS) Missouri River Geomorphic Assessment	3/7/2012	140,000	10,000	130,000	
SWC	1968	5000	2011-13	Garrison Diversion	McClusky Canal Mile Marker 7.5 Irrigation Project Ph	12/14/2011	898,515	0	898,515	
SWC	1941	5000	2011-13	Walsh Co. WRD	Walsh County Drain No. 4a Cost Overrun	12/9/2011	9,759	0	9,759	
SWC	1918	5000	2001-13	Maple River WRD	Normanna Township Improvement District No. 71	12/9/2011	287,900	0	287,900	
SWC	1983	5000	2001-13	City of Harwood	City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,500	
SWC	1979	5000	2011-13	Southeast Cass WRD	Southeast Cass WRD Wild Rice Riverbank Stabilizat	10/21/2011	149,568	0	149,568	
SWC	1296	5000	2011-13	Pembina Co. WRD	Cook Bridge Riverbank Stabilization	10/21/2011	36,649	0	36,649	
SWC	829	5000	2011-13	Rush River WRD	Rush River WRD Berlin's Township Improvement Dis	10/19/2011	500,000	0	500,000	
SWC	1978	5000	2011-13	Richland & Sargent Joint WR	Richland & Sargent WRD RS Legal Drain No. 1 Exte	10/19/2011	245,250	0	245,250	
SWC	1224	5000	2011-13	Trail Co. WRD	Preston Floodway Reconstruction Project	10/19/2011	208,570	0	208,570	
SWC	275	5000	2011-13	City of Fort Ransom	City of Fort Ransom Engineering Feasibility Study	10/19/2011	40,000	0	40,000	
SWC	CON/WILL-C.	5000	2011-13	Garrison Diversion	Will/Carlson Project	10/17/2011	70,000	15,920	54,080	
SWC	1101	5000	2011-13	Dickey Co. WRD	Yorktown-Maple Drainage Improvement Dist No. 3	9/21/2011	242,795	0	242,795	
SWC	1252	5000	2011-13	Walsh Co. WRD	Walsh Co. Reconstruction Drain No. 97	9/21/2011	50,551	0	50,551	
SWC	1975	5000	2011-13	Walsh Co. WRD	Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	111,116	0	111,116	
SWC	568	5000	2011-13	Southeast Cass WRD	Sheneye River Snagging & Clearing Reaches 1-3	9/21/2011	255,750	0	255,750	
SWC	1842	5000	2011-13	Southeast Cass WRD	SCWRD Wild Rice River Snagging & Clearing	9/21/2011	99,000	0	99,000	
SWC	829	5000	2011-13	Rush River WRD	Rush River Dam Preliminary Soils & Hydraulic Stuc	9/21/2011	57,500	0	57,500	

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
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Resources Trust Fund

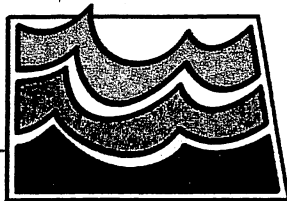
GENERAL PROJECT OBLIGATIONS

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jul-12 Balance
SWC	1101	5000	2011-13	Dickey-Sargent Co WRD	Riverdale Township Improvement District #2 - Dickey	9/21/2011	500,000	0	500,000
SWC	1705	5000	2011-13	Red River Joint Water Resou	Red River Joint WRD Watershed Feasibility Study - f	9/21/2011	60,000	0	60,000
SWC	1859	5000	2011-13	ND Dept of Health	ND Dept of Health Non-Point Source EPA Pollution F	9/21/2011	200,000	38,656	161,344
SWC	980	5000	2011-13	Maple River WRD	Maple River Watershed Food Water Retention Study	9/21/2011	82,500	0	82,500
SWC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	9/21/2011	500,000	0	500,000
SWC	1219	5000	2011-13	Sargent Co WRD	District Drain No. 4 Reconstruction Project	9/21/2011	60,620	0	60,620
SWC	1219	5000	2011-13	Sargent Co WRD	City of Forman Floodwater Outlet	9/21/2011	348,070	316,598	31,472
SWC	1070	5000	2011-13	Maple River WRD	Cass County Drain No. 14 Improvement Recon	9/21/2011	415,610	55,665	359,945
SWC	1101	5000	2011-13	Traill Co. WRD	Brokke Drain No. 30, Ervin Township	9/21/2011	23,660	0	23,660
SWC	1968	5000	2011-13	Maple River WRD	Absaraka Dam Improvement Rehabilitation Project	8/12/2011	114,783	0	114,783
SWC	AOC/RRBC	5000	2011-13	Red River Basin Commission	Red River Basin Commission Contractor	8/2/2011	200,000	100,000	100,000
SWC	PS/WRD/MR.	5000	2011-13	Missouri River Joint Board	Missouri River Joint Water Board (MRRIC) T. FLECK	8/2/2011	40,000	18,229	21,771
SWC	1878-02	5000	2011-13	Maple River WRD	Upper Maple River Dam Project Development & Prel	7/19/2011	187,710	0	187,710
SWC	1392	5000	2011-13	U.S. Geological Survey	U. S. Geological Hydrographic Survey of the Missour	6/15/2011	55,000	53,000	2,000
SWC	1344	5000	2011-13	Southeast Cass WRD	Southeast Cass Sheyenne River Diversion Low-Flow	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 Joint Water Resou	Red River Basin Flood Control Coordinator Position	6/10/2011	36,000	0	36,000
SWC	AOC/WEF	5000	2011-13	ND Water Education Foundat	North Dakota Water Magazine	6/10/2011	36,000	18,000	18,000
SWC	1970	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain #	3/28/2011	144,807	105,692	39,115
SWC	1969	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain #	3/28/2011	304,141	0	304,141
SWC	1245	5000	2009-11	Traill Co. WRD	Traill Co. Drain No. 28 Extension & Improvement Pr	3/28/2011	336,007	0	336,007
SWC	PS/IRR/NES	5000	2009-11	NDSU	NDSU Williston Research Extension Center - purcha	3/28/2011	60,050	23,335	36,715
SWC	1161	5000	2009-11	Pembina Co. WRD	Drain 55 Improvement Reconstruction	3/28/2011	88,868	0	88,868
SWC	347	5000	2009-11	City of Velva	City of Velva's Flood Control Levee System Certificat	3/28/2011	102,000	0	102,000
SWC	1842	5000	2009-11	Southeast Cass WRD	SCWRD Wild Rice River Snagging & Clearing	12/10/2010	100,625	71,680	28,945
SWC	568	5000	2009-11	Southeast Cass WRD	SCWRD Sheyenne River Snagging & Clearing Projec	12/10/2010	362,250	184,467	177,783
SWC	1164	5000	2009-11	Pembina Co. WRD	Pembina County Drain No. 64 Outlet Area Improvem	12/10/2010	41,480	0	41,480
SWC	1878-02	5000	2009-11	Maple-Steele Joint WRD	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	Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	646	5000	2009-11	City of Fargo	Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	0	44,280
SWC	646	5000	2009-11	City of Fargo	Christine Dam Recreation Retrofit Project	10/26/2010	184,950	0	184,950
SWC	1882-07	5000	2009-11	NDSU	NDSU Development of SEBAL	9/1/2010	15,244	0	15,244
SWC	1667	5000	2009-11	Traill Co. WRD	Goose River Snagging & Clearing	9/1/2010	12,890	0	12,890
SWC	847	5000	2009-11	Maple River WRD	Swan-Buffalo Detention Dam No. 12 Flood Control D.	7/28/2010	114,783	0	114,783
SWC	1966	5000	2009-11	City of Oxbow	City of Oxbow Emergency Flood Fighting Barrier Sys	6/1/2010	188,400	0	188,400
SWC	1244	5000	2009-11	Traill Co. WRD	Traill Co. Drain No. 27 (Moen) Reconstruction & Exte	3/11/2010	678,485	330,367	348,118
SWC	1577	5000	2009-11	Mercer Co. WRD & City of H	Hazen Flood Control Levee (1517) & FEMA Accredit:	3/11/2010	449,500	264,516	184,984
SWC	1313	5000	2009-11	Ward Co. WRD	City of Minot/Ward Co. Aerial Photo & LIDAR	3/11/2010	186,780	0	186,780
SWC	322	5000	2009-11	ND Water Education Foundat	ND Water: A Century of Challenge	2/22/2010	36,800	0	36,800
SWC	847	5000	2009-11	Maple River-Rush River Joint	Swan Creek Diversion Channel Improvement Recon	12/11/2009	76,528	0	76,528
SWC	1792	5000	2009-11	Southeast Cass WRD	SE Cass Wild Rice River Dam Study Phase II	12/11/2009	130,000	0	130,000
SWC	1964	5000	2009-11	UND	Hydraulic Effects of Rock Wedges Study- UND	11/12/2009	11,651	11,457	194
SWC	1401	5000	2009-11	Pembina Co. WRD	International Boundary Roadway Dike Pembina	9/21/2009	227,431	0	227,431
SWC	1232	5000	2009-11	Traill Co. WRD	Traill Co. Drain No. 13 Channel Extension Project	8/18/2009	23,575	0	23,575
SWC	1960	5000	2009-11	Ward Co. WRD	Puppy Dog Coulee Flood Control Diversion Ditch Cor	8/18/2009	796,976	0	796,976
SWC	1785	5000	2009-11	Maple River WRD	Maple River Dam EAP	8/18/2009	25,000	0	25,000
SWC	1088	5000	2009-11	Maple River WRD	Cass County Drain No. 37 Improvement Recon	8/18/2009	92,668	0	92,668
SWC	1069	5000	2009-11	North Cass Co. WRD	Cass County Drain No. 13 Improvement Reconstruct	8/18/2009	122,224	0	122,224
SWC	1882-01	5000	2009-11	Devils Lake Basin Joint WRB	(ESAP) Extended Storage Acreage Program	8/18/2009	63,554	0	63,554
SWC	1638	5000	2009-11	Mutiple	Red River Basin Non-NRCS Rural/Farmstead Ring C	6/23/2009	424,262	300,798	123,464
SWC	528	5000	2009-11	Williams Co. WRD	McGregor Dam Emergency Action Plan	6/23/2009	25,000	0	25,000
SWC	1921	5000	2007-09	Morton Co. WRD	Square Butte Dam No. 6/(Harmon Lake) Recreation	3/23/2009	852,251	0	852,251
SWC	642-05	5000	2007-09	Mutiple	Sweetbriar Creek Dam Project	3/6/2009	148,956	60,691	88,265
SWC	620	5000	2007-09	Lower Heart WRD	Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SWC	928/988/1508	5000	2007-09	Southeast Cass WRD	Southeast Cass WRD Bois, Wild Rice, & Antelope	6/23/2008	60,000	0	60,000
SWC	1093	5000	2007-09	Southeast Cass WRD	Cass Co. Drain No. 45 Extension Project	3/17/2008	124,757	0	124,757
SWC	1932	5000	2005-07	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	8/30/2005	1,012,219	0	1,012,219
TOTAL							24,532,682	2,480,286	22,052,396

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

COMPLETED GENERAL PROJECTS

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jul-12 Balance
HB 1020	322		5000 2009-11	Red River Basin Commis	Long-Term Red River Flood Control Solutions Study (A	6/23/2009	7,720	7,720	0
SE	867-01		5000 2011-13	NDSU	NDSU Soil & Water Sampling for Assessment of Effect	5/12/2012	7,225	7,225	0
SE	1814		5000 2011-13	Richland Co. WRD	Sheyenne River Snagging & Clearing Project/Logjam b	4/19/2012	15,000	13,860	1,140
SE	AOC/ARB/ND:		5000 2011-13	NDSU	NDSU Dept of Soil Science - NDAWN Center	2/27/2012	3,200	3,200	0
SE	1312/1933		5000 2001-13	Ulteig Engineers	Walsch Co. WRD/Digital Flood Insurance Rate Map Pr	2/16/2012	8,356	8,356	0
SE	AOC/BSC		5000 2011-13	Bismarck State College	Bismarck State College - ND Water Quality Monitoring	2/7/2012	2,000	2,000	0
SE	1312/929		5000 2011-13	Fischer Land Surveying	Fischer Land Surveying & Engineering/Harriston Towns	12/12/2011	6,000	6,000	0
SE	266		5000 2011-13	Nelson Co. WRD	Tolna Dam 2011 EAP, Nelson County WRD	8/23/2011	9,600	8,540	1,060
SE	1378		5000 2011-13	Barnes Co. WRD	Clausen Springs Dam Emergency Action Plan /Barnes	8/23/2011	20,000	0	20,000
SE	1971		5000 2011-13	U.S. Geological Survey	DES Purchase of Mobile Stream Gages (2 temporary st	7/19/2011	8,000	8,000	0
SE	929		5000 2009-11	Walsh Co. WRD	Walsh Co. -Chyle Dam EAP	5/6/2011	10,000	7,546	2,454
SE	1433		5000 2009-11	Walsh Co. WRD	Whitman Dam Emergency Action Plan	4/14/2011	10,000	8,348	1,652
SE	1289		5000 2009-11	McKenzie Co Weed Cont	McKenzie Co. Weed Control on Sovereign Lands	3/4/2011	11,705	11,705	0
SE	929		5000 2009-11	Walsh Co. WRD	Walsch Co. -Soukop Dam EAP	3/2/2011	10,000	7,760	2,240
SE	1842		5000 2009-11	Richland Co. WRD	Richland Co. - Ph 2- Wild Rice River Snagging & Cleari	2/1/2011	15,000	11,603	3,397
SE	571		5000 2009-11	Oak Creek WRD	Oak Creek Snagging & Clearing Project	1/28/2011	5,000	5,000	0
SE	839		5000 2009-11	Traill Co. & Steele Co. W	Elm River Detention Dam No. 1 EAP	1/10/2011	12,160	8,440	3,720
SE	839		5000 2009-11	Traill Co. WRD	Elm River Detention Dam No. 3 EAP	12/6/2010	12,160	7,162	4,998
SE	1131		5000 2009-11	Traill Co. WRD	Elm River Detention Dam No. 2 Emergency Action Plar	12/6/2010	12,160	8,310	3,850
SE	1396		5000 2009-11	Dale Frink	Dale Frink Consultant Services Agreement	10/26/2010	18,600	0	18,600
SE	1577		5000 2009-11	Burleigh Co. WRD	Burleigh Co - Fox Island 2010 Flood Hazard Mitigation I	8/9/2010	11,175	0	11,175
SE	AOC/ARB/ND:		5000 2009-11	NDSU	NDSU Dept of Soil Science - NDAWN Center	3/8/2010	3,000	3,000	0
SE	1625		5000 2009-11	ND Game & Fish	Sovereign Lands Rules - ND Game & Fish	2/23/2010	6,788	0	6,788
SE	985		5000 2009-11	Grand Forks Co. WRD	Kolding Dam Emergency Action Plan	5/29/2009	9,600	5,960	3,640
SE	568		5000 2007-09	Barnes Co. WRD	Barnes Co/Sheyenne River Snagging & Clearing Projec	4/11/2008	5,000	0	5,000
SWC	1444		5000 2011-13	City of Pembina	City of Pembina's Flood Control FEMA Levee Certificati	3/20/2012	21,344	21,344	0
SWC	1267		5000 2011-13	U.S. Army Corps of Eng.	Bottineau County LiDAR Collect/ Mike Hall	10/19/2011	97,000	97,000	0
SWC	1413		5000 2011-13	Traill Co. WRD	Traill Co/Buffalo Coulee Snagging & Clearing	9/21/2011	25,000	14,960	10,040
SWC	1603		5000 2011-13	Cass Co. WRD	Rush River Drain No. 69, Armenia Township, Cass Co.	9/21/2011	313,500	0	313,500
SWC	1667		5000 2011-13	Traill Co. WRD	Traill Co./Goose River Snagging & Clearing	9/21/2011	48,000	48,000	0
SWC	1806-01		5000 2011-13	City of Argusville	City of Argusville Flood Control Levee Project	9/21/2011	25,432	25,375	57
SWC	1438		5000 2009-11	Cavalier Co. WRD	Mulberry Creek Drain Partial Improv Phase III	3/28/2011	226,118	209,875	16,243
SWC	1842		5000 2009-11	Richland Co. WRD	Richland Co. Wild Rice River Snagging & Clearing Proj	3/28/2011	47,500	47,466	34
SWC	1971		5000 2009-11	U.S. Geological Survey	DES Purchase of Mobile Stream Gages	3/28/2011	16,457	16,457	0
SWC	846		5000 2009-11	Morton Co. WRD	Morton Co.Square Butte Dam No. 5 EAP	12/10/2010	24,000	20,930	3,070
SWC	1378		5000 2009-11	Barnes Co. WRD	Clausen Springs Dam Emergency Spillway Repair	10/26/2010	790,975	770,746	20,229
SWC	1299		5000 2009-11	City of Fort Ransom	City of Fort Ransom Riverbank Stabilization	9/1/2010	60,803	47,205	13,598
SWC	1413		5000 2009-11	Traill Co. WRD	Traill Co/Buffalo Coulee Snagging & Clearing	9/1/2010	26,000	19,659	6,341
SWC	1932		5000 2009-11	Nelson Co. WRD	Peterson Slough into Dry Run Emergency	5/28/2010	32,150	32,150	0
SWC	1180		5000 2009-11	Richland Co. WRD	Richland Co. Drain No. 7 Improvement Reconstruction	3/11/2010	71,933	11,389	60,544
SWC	1331		5000 2009-11	Richland Co. WRD	Richland Co. Drain No. 14 Improvement Reconstructio	3/11/2010	116,988	16,549	100,439
SWC	1942		5000 2009-11	Walsh Co. WRD	Walsh County Assessment Drain 10, 10-1, 10-2	9/21/2009	37,267	13,544	23,723
SWC	327		5000 2009-11	Mountrail Co. WRD	White Earth Dam EAP	8/18/2009	25,000	25,000	0
SWC	1068		5000 2009-11	Rush River WRD	Cass County Drain No. 12 Improvement Reconstructur	8/18/2009	741,600	0	741,600
SWC	1953		5000 2009-11	Walsh Co. WRD	Walsh County Drain No. 73 Construction Project	8/18/2009	109,919	109,919	0
SWC	AOC/RRBC		5000 2009-11	Red River Basin Commis	Red River Basin Commission Contractor	7/1/2009	100,000	100,000	0
SWC	PS/WRD/MR.J		5000 2011-13	Missouri River Joint WRB	Missouri River Joint Water Board (MRRIC) T. FLECK	6/30/2009	6,470	6,470	0
SWC	PS/WRD/MR.J		5000 2007-09	Missouri River Joint WRB	Missouri River Joint Water Board, (MRJWB) Start up	12/5/2008	14,829	10,857	3,972
TOTAL							3,217,733	1,814,630	1,403,103



North Dakota State Water Commission

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer/Secretary
SUBJECT: Missouri River Update
DATE: September 5, 2012

Surplus Water

On August 28, the Corps held a public meeting to gather public comments on the Surplus Water Reports that were released for the 5 reservoirs, excluding Lake Sakakawea, and to gather comments on what the scope should be for an allocation study. The State of North Dakota remains adamantly opposed to any efforts that usurp the States' ability to appropriate the water that rightfully belongs to the people of North Dakota and to charge for the natural flows within the State boundaries. Statements made by the Lieutenant Governor, Chief Deputy Attorney General, Congressional Delegation, a Water Commissioner, the State Engineer, and several Water Commission staff opposing these efforts are attached to this memo.

System/Reservoir Status –

On September 4, system storage in the six mainstem reservoirs was 54.1 million acre-feet (MAF), 2.7 MAF below the base of flood control. This is 3.1 MAF below the average system storage for the end of August, and 9.2 MAF less than last year. The August runoff forecast for 2012 is 21.0 MAF, 85% of normal.

On September 4, Lake Sakakawea was at an elevation of 1834.6 feet msl, 2.9 feet below the base of flood control. This is 9.5 feet lower than a year ago and 3.5 feet below its average end of August elevation. The minimum end of August elevation was 1812.1 feet msl in 2006, and the maximum end of August elevation was 1851.2 feet msl in 1975. Releases from the reservoir will average 20,700 cfs through September and then be reduced to 17,000 cfs this fall.

The elevation of Lake Oahe was 1600.3 feet msl on September 4, 7.2 feet below the base of flood control. This is 13 feet lower than last year and 2.0 feet lower than the average end of August elevation. The minimum end of August elevation was 1570.3 feet msl in 2006, and the maximum end of May elevation was 1617.1 feet msl in 1997.

The elevation of Ft. Peck was 2233.7 feet msl on September 4, 0.3 feet below the base of flood control. This is 7.8 feet lower than a year ago and 2 feet higher than the average end of August elevation. The minimum end of August elevation was 2200.9 feet msl in 2004, and the maximum end of August elevation was 2248.5 feet msl in 1975. 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 four days. The test will help engineers determine whether a subdrain system beneath the spillway is functioning properly.

The snowpack peaked in the “Total above Fort Peck” reach on April 9 at 97% of the normal April 15 peak. The snowpack peaked in the “Total Fort Peck to Garrison” reach on March 22 at 88% of the normal April 15 peak.

On July 1, System Storage was at 57.6 MAF, which is greater than the July 1 full service storage check of 57.0 MAF. Therefore, the navigation season will be full length and full service. Although, the September 1 storage check will likely dictate minimum winter releases of 12,000 cfs from Gavins Point, starting December 1.

AOP

Typically the Corps releases a draft Annual Operating Plan for the upcoming year in late September. Public comments will be taken in October, details have yet to be released.

MRRIC

During the July MRRIC meeting, MRRIC came to tentative consensus on two recommendations. The first tentative consensus recommendation to the Corps was regarding the Corps’ FY 13 work plan for the Recovery Program, the second tentative consensus recommendation to the Corps encouraged the federal agencies to expedite efforts to save emergent sandbar habitat so that construction of emergent sandbar habitat can be avoided as long as possible.

Beyond the plenary group MRRIC has several working groups, including the Science and Adaptive Management (SAM) working group, Tern and Plover working group, communication work group among others.

Currently, the SAM group is working to develop charge questions for the Independent Science Advisory Panel regarding the Conceptual Ecological Models (CEMs) the Corps has developed for the Pallid Sturgeon.

Section 33

Under the Section 33 program, the Corps has started bank stabilization repairs on Hogue Island. The repairs are anticipated to be completed in mid October. Originally Section 33 was to have \$3 million dedicated to it for FY 12, however funding has been cut, currently there is no more funding available. If any other projects or sloughing easements are to be funded the Corps will need additional funding.

South Bismarck/Mandan Flood Risk Reduction

The winter of 2011-2012 proved to be fairly mild by North Dakota standards, therefore the post 2011 Missouri River did not experience the full effects an ice covered river. The river froze in at the Bismarck gage in January, thawed and then froze again in late February. Both of these freeze-in events demonstrated disproportionate impacts that did not fully register at the Bismarck Gage. During the January freeze-in, the Fox Island Boat ramp experienced stages that would be equivalent to stages of approximately 12.5 feet to 13 feet on the Bismarck Gage, whereas, the Bismarck Gage only peaked at a stage of 11.2 feet. The freeze-in that occurred late February caused high water in the Tokash Timberhaven area, flooding several fields, this event was barely noticeable on the Bismarck Gage.

Due to the concerns that arose because of the changes to the river as a result of the great flood of 2011, a group including Governor's Office Staff, Congressional Staff, a Water Commissioner, the State Engineer, Water Commission staff, USGS staff, and Corps staff, toured the Missouri River south of Bismarck and Mandan on August 29. The tour was to evaluate if potential hazards exist that could increase the risk of flooding due to ice jams or other obstructions, and determine what, if any, actions could be taken. Some concerns that were identified and discussed were: the sandbar that developed in front of the storm sewer outfall for South Bismarck, sandbar deposits on river bends, snags in the Sibley Bend Area, and the sandbar that evolved at the confluence of the Heart River and the Missouri River.

The sandbar that has developed in front of the storm sewer outfall for South Bismarck has diminished the ability for the South Bismarck storm sewer system to evacuate runoff into the river. If a substantial storm were to occur South Bismarck could experience considerable flooding due to the blocked storm sewer outlet. This issue is discussed further in a separate memorandum.

There was also a concern about excessive sandbar deposits on river bends decreasing river conveyance. Through inspection, these concerns were alleviated due to the fact that the river was flowing at 24,500 cfs with no readily visible problem.

The snags that have accumulated at Sibley Bend prove to be a detriment to navigating, and could potentially be problematic for any sort of ice or debris flow. However, at this time there are few alternatives that could efficiently and effectively rectify this situation.

Beyond structural solutions, a need for a clear, concise emergency communication plan between the Corps, the State, and the Cities was expressed. Included in the emergency communication plan should be trigger points that will clearly define what party is responsible for disseminating information and in what format.

In addition, due to the irregular slope that occurs during ice affected flow, it was determined that it would be prudent to aid in developing an accurate situational awareness to enhance emergency management for the cities and State. An additional gage will contribute to emergency managers ability to communicate potential risks. The Corps has been asked to participate in funding an additional gage, although it was made clear during the tour that the Corps will not. The Corps will not participate due to lack of funding and their opinion that the additional gage would not aid in the operation of their dams. An additional gage would cost approximately \$20,000 to install and \$8,000 annually to maintain. If a long term (5+ years) commitment to maintain the gage is made, the USGS will waive the installation cost.

The sandbar at the confluence of the Heart River and the Missouri River has the potential to block ice flows that are evacuating from the Heart River during the spring thaw. If ice flows are blocked, there is a potential for flooding to occur in and south of Mandan. Options have been evaluated and an alternative has been chosen to attempt to reduce the risk of ice jams at the mouth of the Heart River. There are three facets to this alternative. The first facet is to construct a pilot channel on the north end of the sandbar, located at the confluence of the Heart River and Missouri River, using a dozer. The pilot channel will be approximately 1,200 feet long, with a 20 ft bottom width and 10:1 side slopes. The elevation of the pilot channel bottom will be

approximately 1621.0 ft (NAVD '88). The volume of material to be manipulated during construction of this channel is approximately 11,000 cubic yards (CY). Construction will be initiated on the landside of the sandbar to eliminate excessive material from entering the Missouri River. The material excavated will be placed on the sandbar and worked in to the natural terrain of the sandbar. The second facet of this project is to remove the shallow areas from the channel leading to the Heart River. The area of concern will be cut to an elevation of approximately 1618.0 ft (NAVD'88), totaling an approximate volume of 2,000 CY. The material removed will be placed and smoothed on the sandbar. Finally, the third part of this project will be to shave and reshape the south end of the sandbar to a slope of approximately 10:1. Quantities for this final effort will be approximately 300 CY. This alternative will cost approximately \$300,000. The 404 and Sovereign Land permit applications are being drafted and will be turned in as soon as the applications are complete. If anything is to be done to reduce the risk of ice jams next spring it is imperative for this project to move quickly

Dredging of sandbars is generally considered ineligible for cost-share assistance, however because of the Great Flood of 2011, I request the State Water Commission make an exception and pay 75% of the construction cost to manipulate the sandbar at the confluence of the Heart River and Missouri River in an attempt to reduce flood risk. The estimated total cost of this project will be \$300,000.

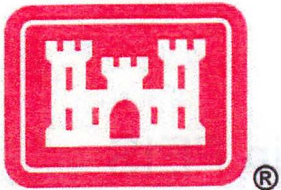
I recommend the State Water Commission approve the request for the State to participate in efforts to attempt to reduce flood risk due to potential ice jamming, at an amount not exceed \$225,000 from the 2011-2013 appropriated funds. Furthermore, I recommend the State Water Commission approve the request for the State to participate in funding an additional USGS gage to aid in emergency situational awareness at an amount not to exceed \$8,000 plus 1-3% for inflation per year hereafter. This approval is subject to the entire contents of the recommendation contained herein and the availability of funds.

BE:KC/1392

Fargo-Moorhead Metropolitan Flood Risk Management Project

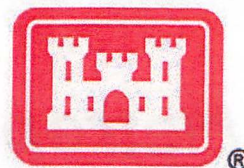
ND State Water Commission

September 17, 2012



US Army Corps of Engineers
BUILDING STRONG





Analysis since September 2011:

- ✓ In-Town Levees (More Flow through Town)
 - ✓ Minimize impacts to the environment
 - ✓ Reduce frequency and duration of operation

- ✓ Addition of Gates on the Inlet
 - ✓ Provide greater flexibility in project operation
 - ✓ Reduce upstream impacts

- ✓ Southern Alignment Options
 - ✓ Value Engineering-13 (USACE)
 - ✓ North of confluence of Wild Rice river (Local Sponsor)
 - ✓ South of Oxbow (Local Sponsor)

- ✓ All options maintained negligible downstream impacts as in FEIS

In Town Levees to Mitigate Impacts Due to Project Operation

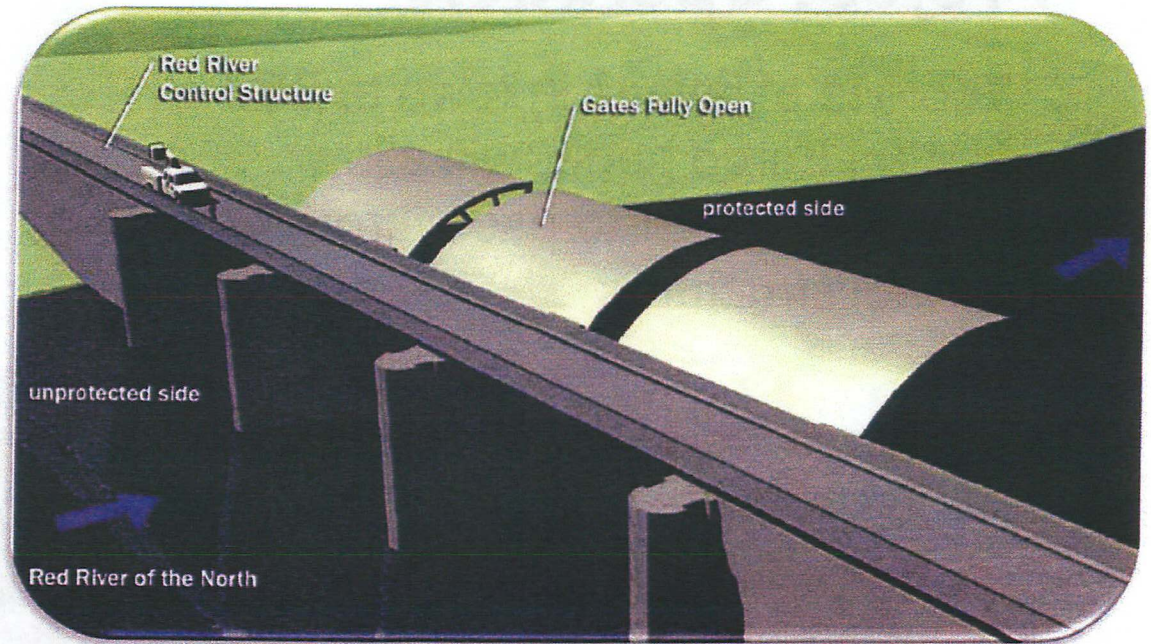
- ✓ The use of levees in town to 35 feet (at Fargo gage) will allow additional water to pass through control structures
 - ✓ Allows Project to operate less frequently
 - ✓ Reduces connectivity and geomorphology concerns
 - ✓ Significantly reduces the probability of summer operation



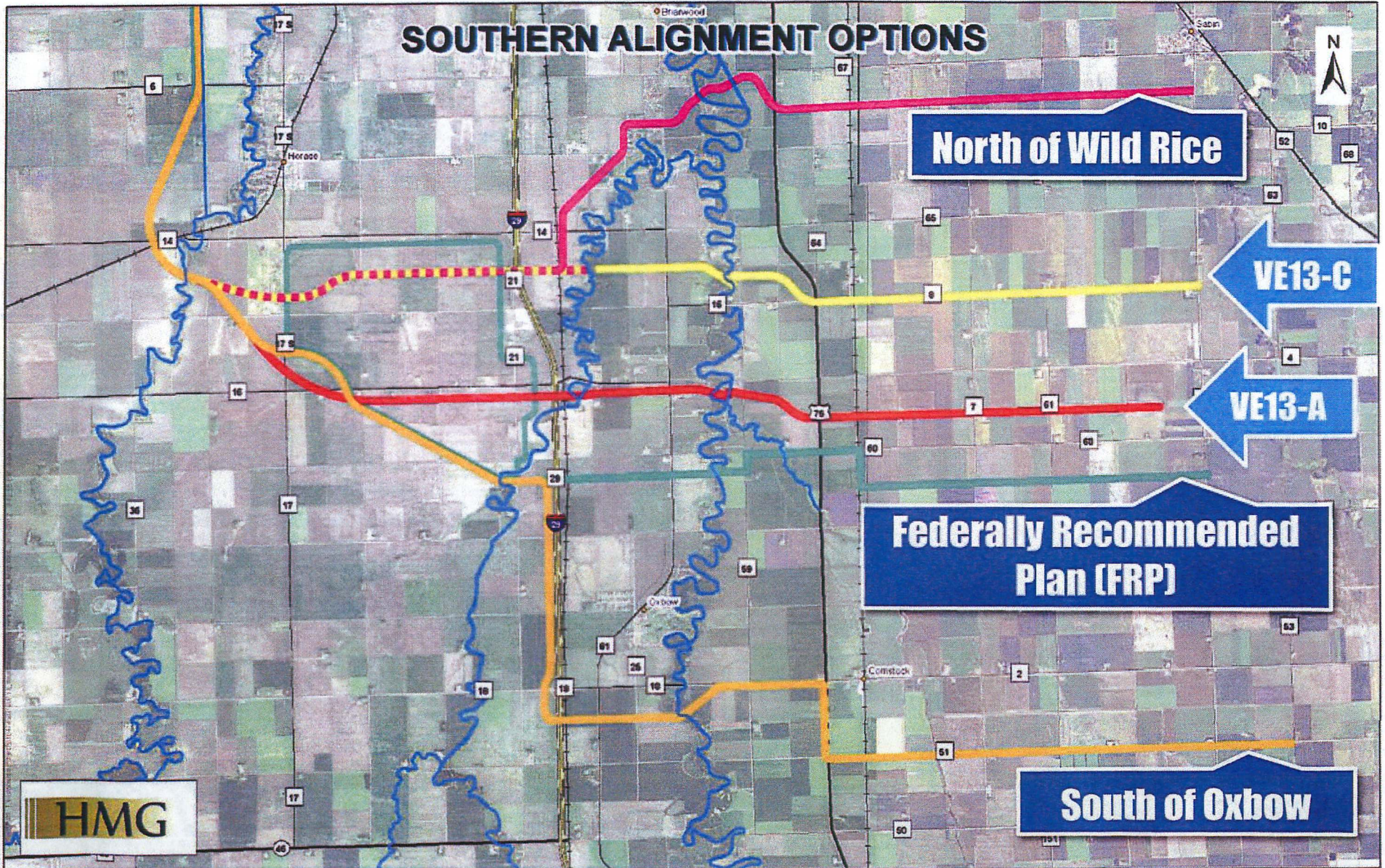
Grand Forks Floodwall

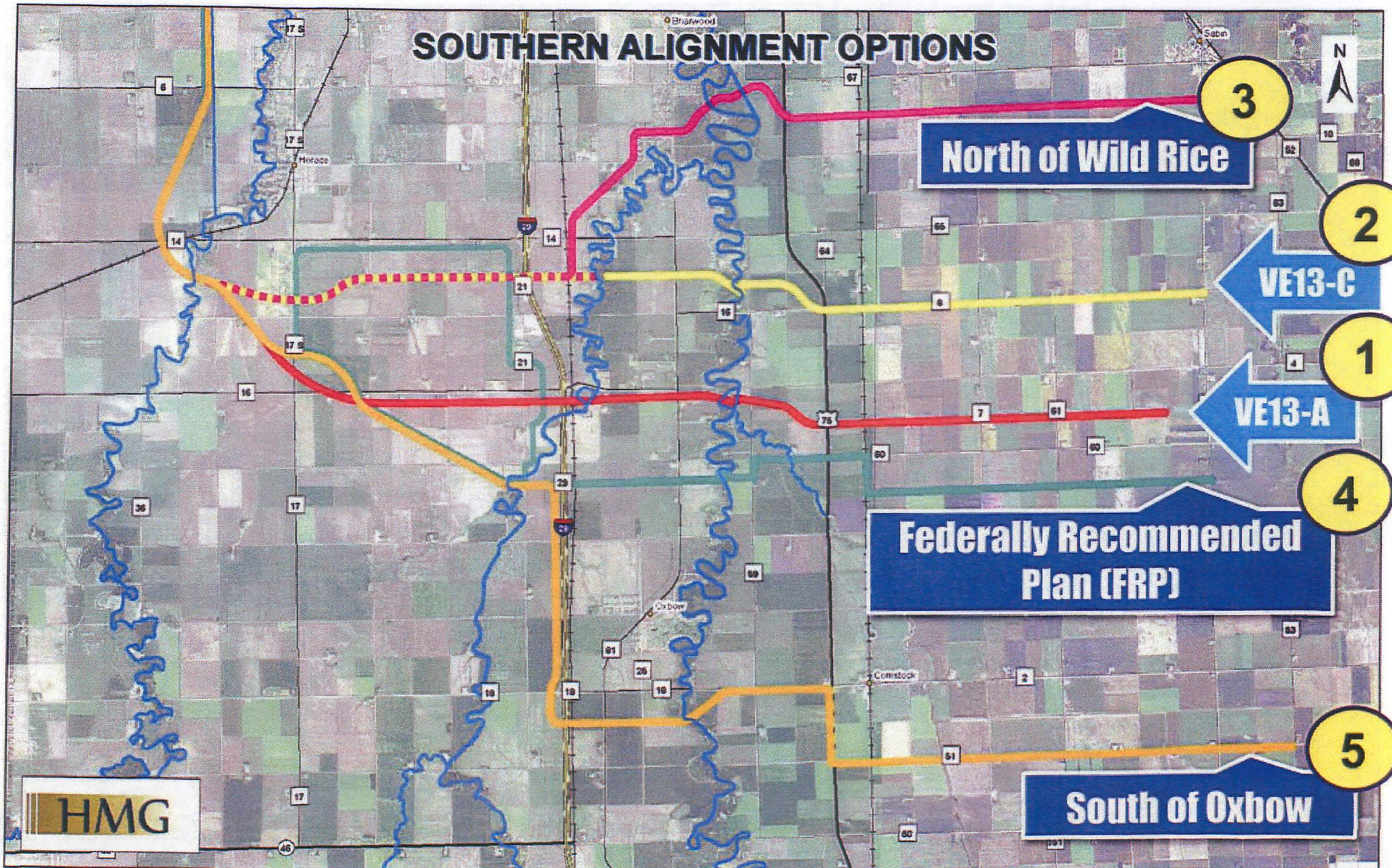
Gates on Diversion Inlet Structure

- ✓ Feasibility Study included 90 foot fixed weir
- ✓ Advantages of adding adjustable gates
 - ✓ Reduces upstream staging elevation
 - ✓ Adds flexibility in operation
 - ✓ Provides more control of flow (within design constraints)



Red River Control Structure

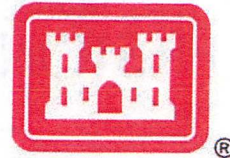
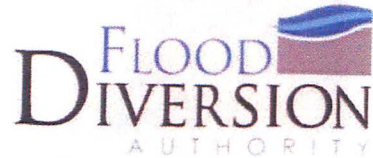






Cost Savings

Options	Savings
Federally Recommended Plan	---
VE13-A	\$53M
VE13-C	\$40M
North of Wild Rice River with Oxbow Levee	\$6M
South of Oxbow	(\$29)



Impact Reductions – Richland and Wilkin Co.

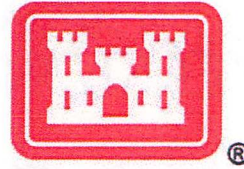
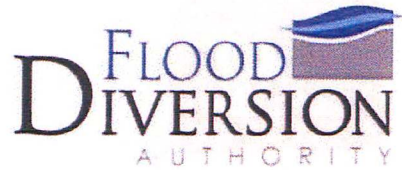
- ✓ Preferred Alternative would reduce impacts:
- ✓ A vast majority of additional-depth impacts are between 0 and 1 foot
- ✓ For Richland County:
 - ✓ 3 Residential Structures impacted
 - ✓ 1000 acres impacted
- ✓ For Wilkin County:
 - ✓ 2 Residential Structures impacted
 - ✓ 1000 acres impacted
- ✓ Results based on large, less-frequent events. No impacts during 10-year event
- ✓ Additional duration of flooding approximately 2-7 days



Corps of Engineers Preferred Alternative

- ✓ Proceed with proposals to:
 - ✓ Construct in-town levees to a stage of 35-feet
 - ✓ Construct gates on diversion inlet structure
 - ✓ Proceed with Alignment A

- ✓ Preferred alternatives will:
 - ✓ Reduce impacts to upstream area (Richland/Wilkin Counties)
 - ✓ Maintain the downstream impacts as described in the FEIS
 - ✓ Reduce impacts to farming (summer floods)
 - ✓ Minimize impacts to the environment (connectivity and geomorphology)
 - ✓ Reduce long-term project risk
 - ✓ Reduce long-term project operation and maintenance
 - ✓ Reduce overall project cost by \$53 million



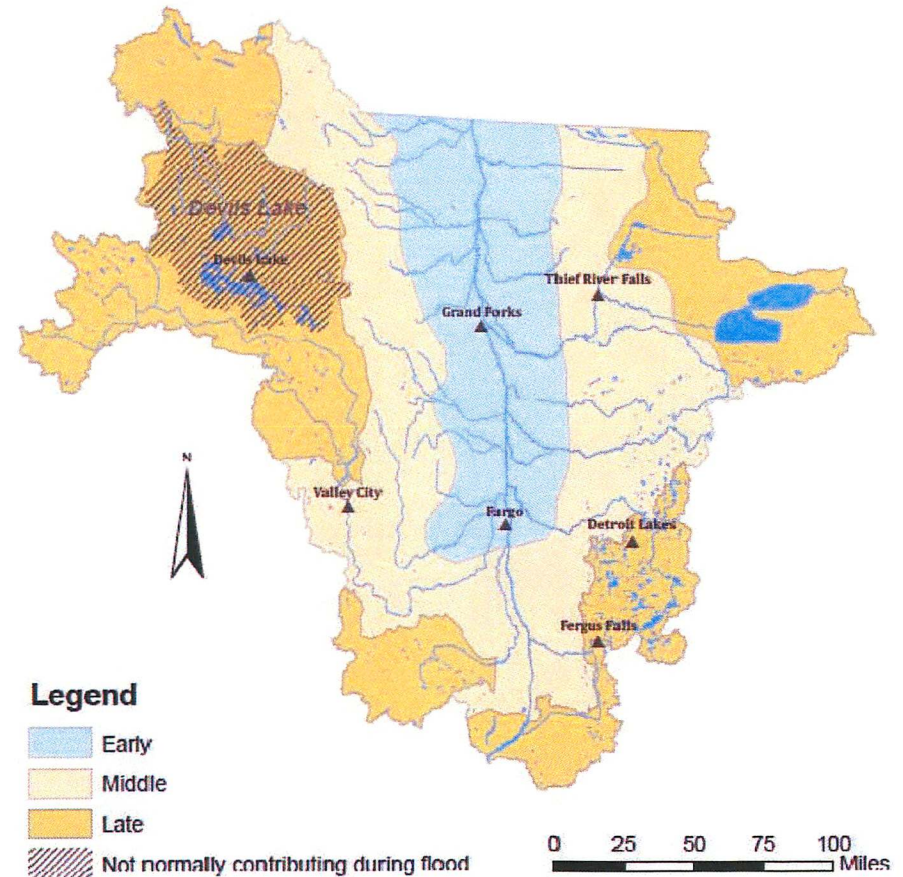
Path Forward

- ✓ September 13, 2012: Public Meetings
- ✓ September 13 – October 10 2012: Diversion Authority public comment period
- ✓ **October 11, 2012: Recommendation from Diversion Authority**
- ✓ November 2012: Corps begins National Environmental Policy Act (NEPA) process – with public input
- ✓ 2013: NEPA process complete and decision is finalized

Why not *Distributed Storage/Retention?*

- ✓ Distributed storage is not as effective –
 - ✓ Requires storing more water (400-600,000 acre feet)
 - ✓ Requires impacting more land (60,000 acres 10 feet deep)
 - ✓ Requires construction of more dams
 - ✓ Costs more (up to \$900 million)

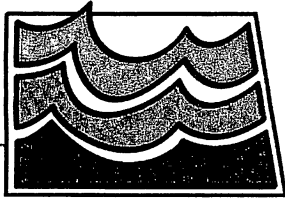
- ✓ Location of storage matters
 - ✓ Storage in Mantador, ND area (40,000 acre feet) no benefits to Fargo – benefits to Great Bend.
 - ✓ Needs to be in “Middle” area
 - ✓ Large storage sites would need to be in all subwatersheds
 - ✓ Local Benefits – secondary benefits to Red are extra



September 17 2012 FM Metro Diversion Discussion

Summary of Various Options:


- The Diversion Board of Authority plans to select their recommended option for a Southern Alignment on October 11, 2012.
 - The Corps preferred plan nearly eliminates the need for the storage area to affect land in Richland County.
 - Approximately 1,000 acres of small impact and 3 homes affected during a 1% (100 year flood)
 - No homes affected during a 2% (50 year) flood
 - There may be low cost solutions to such as farmstead ring dikes for the 3 affected homes.
 - The plan significantly affects the 170 homes in the Oxbow, Hickson and Bakke Communities as well as other individual farms in the storage area.
 - Moving the alignment north would affect more homes because of increased density as you go north closer to the Fargo-Moorhead City limits.
 - Moving south of Oxbow significantly reduces the total number of homes impacted, but moves most of the storage area into Richland and Wilkin Counties. It also introduces additional risks and environmental questions.
-



North Dakota State Water Commission

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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: August 31, 2012

Hydrologic Update

The Devils Lake water surface elevation has been falling consistently 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)	1452.1	1452.6	-0.5	1453.9	-1.8
Area (acres)	183,000	189,000	-6,000	204,000	-15,000
Volume (acre-feet)	3.74 million	3.83 million	-93,000	4.09 million	-350,000

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

This outlet has operated at the maximum of 250 cfs throughout the month of July and August except for two days when the pumps were shut off to spray widgeon grass. The spraying was successful.

The water volume release for April was 6,263 ac-ft and 8,286 ac-ft for May, 12,755 ac-ft for June and 13,644 ac-ft for July for a total of 40,984 ac-ft for the four months. August release numbers will be available by the meeting.

East End Outlet

The construction of this outlet is complete, and it has been operating at 320 to 330 cubic feet per second since the middle of June. It is operating with 4 of the 5 pumps because with all five pumps running, it would exceed its permitted operating capacity.

The water volume release for June was 3,489 ac-ft and 18,182 for July for a total of 21,680 ac-ft. August release numbers will be available by the meeting.

JACK DALRYMPLE, GOVERNOR
CHAIRMAN

TODD SANDO, P.E.
CHIEF ENGINEER AND SECRETARY

The latest sulfate level below Baldhill dam was 602 mg/L on August 28th. This is an increase from August 22nd when the level was 579 mg/L. Near Cooperstown the sulfate level in the Sheyenne River was 809 mg/L on August 22nd and 799 mg/L on August 28th.

The Governor by executive order waived the water quality criteria temporarily as an emergency situation. The water quality will continue to be monitored. This order expires on December 31,2012.

Emergency Gravity Water Transfer Channel

At their meeting on August 8th, the Devils Lake Joint Water Resource Board voted to discontinue their sponsorship of this project.

Tolna Coulee Control Structure

The work on this project is complete. In July one row of stop logs was removed to due to the lowering water level on Devils Lake. According to the operating plan the top of the stop logs must remain between one and two feet below the water surface until a natural overflow occurs. We anticipate removing another row of stop logs the week of September 10th as the water continues to recede.

TS:JK:DLN:mmb/416-15


September 17, 2012



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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: September 4, 2012

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

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

The plant started producing fully softened water on May 1, 2012. The OMND WTP is currently serving the cities of Stanton, Hazen, Zap and Center. The OMND WTP celebration was held on August 22, 2012. The contractors are working on the punch list items and final change orders are being developed.

Contract 3-1C Membrane Procurement: The membranes are performing as expected. The contract will be closed out after the contractor provides the clean-in place training for the membranes.

Contract 3-1E OMND Water Treatment Plant Concentrate Disposal Facility: The contractor, Carstensen Contracting Inc., is working on final punch list items and administrative items.

Contract 2-8A Main Transmission Line from WTP to Zap and Hazen: Final close out of the contract is still pending since the contractor, Titus Excavating does not agree with the final contract quantities despite having signed the final change order.

Contract 5-15A Zap Potable Reservoir: Contract 5-15A had a substantial completion date of June 15, 2011. The tank was considered substantially complete on November 3, 2011. All parties have executed a final change order, incorporating 30 days of liquidated damages and the addition of non-skid tape to the roof to improve safety for O&M staff. The contract will be closed out after the contractor completes pending administrative items.

Contract 2-8B Main Transmission Line from Hazen to Stanton and Beulah to Center Elevated Tank: Only the startup of the standby generator remains for the contract closeout.

Contract 5-16 Center Elevated Tank: Punch list items have been forwarded to Landmark Construction.

Contract 2-8C/D Main Transmission Line from Center Elevated Tank to Center: The City of Center has two tank control vaults as the city has two pressure zones. The City of Center's north tank was filled with the water from the OMND WTP on August 20th and the south tank was filled on August 22rd. Service to the Missouri West Water System will begin next week.

SWC Memorandum: SWPP Project Update

September 17, 2012

Page 2 of 4

Contract 7-9C Zap Service Area (SA) 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. The preconstruction conference for this contract was held on June 15, 2012. The contractor began work on the 6" pipeline in the Stanton area on August 6, 2012. The contractor plow train started installing pipeline North of Hazen on August 22, 2012. The project has a substantial completion date of October 1, 2012 for the initial 301 users. All parties have executed Change Orders (CO) 1 and 2, which add total 22 users. CO 2 also extends the completion date by 30 days for the users added by CO 1 and 2.

Contract 7-9D Zap Service Area Rural Distribution Line Phase II: This contract was bid on April 27, 2012 and was awarded to Swanberg Construction Inc. of Valley City on June 13th 2012. The preconstruction conference for this contract was held on August 23, 2012 and construction is expected to start after the Labor Day weekend. This contract has an intermediate completion date of November 1, 2012 for a portion of the service area encompassing the 10" diameter piping and branch lines serving 120 users. The substantial completion date for this contract is August 1, 2013.

Contract 7-9E/ 7-9F Center SA Rural Distribution System: The next rural service area which will be bid on the project is the east Center SA (Contract 7-9F). The SWA Board of Directors decided to bid the east Center SA (Contract 7-9F) before the west Center SA (Contract 7-9E) as the current cost per service unit in the Contract 7-9E area is higher than the feasibility criteria. The delay in bidding the west Center SA will afford the SWA additional time to sign up more users to reduce the per service unit cost. Contract 7-9F is currently being designed, and a cultural resource survey is scheduled for this fall. Contract 7-9F may be bid this winter depending on funding availability.

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

During the June election the citizens of the City of Killdeer voted to authorize Killdeer City Commission to negotiate an agreement for service from the SWPP. The city has requested an allocation of 750 gpm to meet an anticipated population growth of 4000 people. The 2010 census for Killdeer was 751 but the City feels they are already serving double that population and have numerous housing subdivisions and commercial projects under development. A draft agreement providing an initial 450 gpm capacity to meet the city's current needs was provided to the city. In response the city requested some form of written documentation to reserve 750 gpm capacity. The SWA is developing a Memorandum of Agreement which reserves to city the 750 gpm capacity and specifies how the reserved capacity would be allocated should other parties have need of the excess capacity.

Other Contracts

Contract 7-1C Hydraulic Improvements in the Davis Buttes and New Hradec SA: This contract includes furnishing and installing 8.5 miles of 8" and 6" ASTM D2241 gasketed joint pipe, a

SWC Memorandum: SWPP Project Update

September 17, 2012

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prefabricated steel Control/PRV vault, and a prefabricated concrete tank control vault north of Dickinson, to increase the capacity in the New Hradec and Davis Buttes service area. The engineer's estimate for this contract is \$900,000. Cultural resources survey and easement acquisition are underway. We hope to advertise this contract soon.

Contract 8-1A New Hradec Tank: This contract includes furnishing and installing a single 296,000-gallon welded steel or glass coated bolted steel water storage reservoir. We have an option agreement in place for the tank site. The geotechnical exploration at the tank site will be done this fall and we hope to advertise the contract this winter.

Contract 7-8H Hydraulic Improvements in the South Fryburg SA: On July 2, 2012 we received a letter from USDA regarding \$231,378 remaining to be drawn from grant #24 which was for the 7-8D South Fryburg SA. After investigation by Bartlett & West/AECOM it was found that installation of 5 miles of 6" PVC from near the Fryburg tank to a 6" line South of Belfield would increase pressure to the existing 7-8D customers and would also allow addition of customers north and south of Belfield. Cultural resources survey and easement acquisition are underway and we plan to combine this contract with Contract 7-1C to save some administrative costs and we hope to bid it soon.

Contract 4-3A/4-4A Jung Lake and Ray Christensen Pump Station Upgrades: This contract was split into general and electrical contracts. The general contract is complete. The electrical contract is substantially complete with some administrative items remaining. The short circuit analysis conducted for the Ray Christensen Pump Station noted three breakers in the south zone motor control center installed with the original construction, are insufficient to withstand a short circuit without damage. Discussions among SWC staff, SWA staff, and Bartlett and West on how to proceed are ongoing.

Project Update

Existing Intake Air Handling Units (AHU): At the existing intake location, the HVAC equipment was not upgraded when pumps were upgraded. The higher demand on the system warranted longer pump run times. This has generated excessive heat, which the existing HVAC system is not able to handle. The intake currently has a 25-ton AHU. Analysis indicates another 20-ton AHU is needed. Cost estimates for the additional equipment are being developed and if the total cost is under \$100,000 the equipment might not have to be advertised for bids, which would save some time. We hope to have this done before the next peak usage season.

Secondary Raw Water Intake: Bartlett & West/AECOM is working on the design of the secondary raw water intake. The intake is being designed for 7000 gpm capacity. The initial design located the intake adjacent to the existing Basin Electric Power Cooperative (BEPC) Intake and the SWPP booster pump station within the BEPC's existing pipeline easement. The Corps of Engineers directed us to put the caisson and pump building within BEPC's easement. BEPC has justifiable concerns over having infrastructure over their easement. We have sent a letter proposing a new location north of SWPP's raw water pipeline, placing mostly within the SWPP's easement. However, because of the necessary size of the building, it is still encroaching BEPC's easement by 10 ft. After getting a response from BEPC, we plan to have a meeting to

SWC Memorandum: SWPP Project Update

September 17,2012

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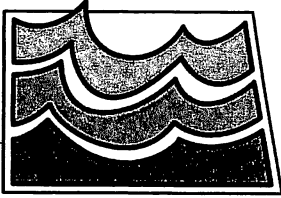
discuss the location with the Corps and the Bureau. We are hoping to have the intake bid next year.

City Annexations: When infrastructure built by the State for the project is abandoned, it has been a practice to collect the depreciated cost of the infrastructure from the customer abandoning it since the State loses capital repayment from them. Population growth because of the oil boom has resulted in the expansion, or plan for expansion, of many cities in southwest North Dakota by annexation. This affects the SWPP since some rural customers currently served by the SWPP are annexed by the city. Some cities like Dickinson and Richardton have agreed the existing SWPP rural customers will remain as rural customers even though they are or will be served by the city's distribution system. Since the State will continue to receive the capital repayment, the depreciated cost of the lost infrastructure will not be collected from the city or developer.

When the rural customers become city's customers, the SWA plans to have agreements with the cities to recover the lost operating and maintenance revenue because of the difference in rate structure between rural customers and contract customers.

Request for water from Montana Dakota Utilities (MDU): A meeting was held with officials of MDU to discuss options for providing 200 gpm of process water to a proposed diesel refinery located between Dickinson and South Heart. MDU has been encouraged to seek treated wastewater from Dickinson, which is planned for completion in Spring 2014. A non-firm back up supply of raw water is available from the SWPP in the event of a problem at the Dickinson wastewater treatment facility. This supply could be provided through a pipeline running from near the SWA water depot to the Dickinson wastewater treatment facility. MDU would also like to have 10 gpm potable water supply from the project. This can be provided from the existing New England SA distribution system. As an alternative, providing 10 gpm supply from the 2-5A MTL is proposed. This would require increasing the pipe size to 6 inches and this could be used as second back up.

Dickinson WTP Study: Work on the capital improvements study for the Dickinson WTP is ongoing. The report from Bartlett & West/AECOM is expected this fall. Based on information received from Bartlett & West/AECOM, the most advantageous solution to upgrade the capacity of the WTP is to build a 6 MGD plant near the existing plant. This plant can be upgraded incrementally to a higher capacity when the existing 12 MGD plant wears out and can no longer be used.



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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: ~~SA~~ Todd Sando, P.E., Chief Engineer-Secretary
SUBJECT: NAWS – Project Update
DATE: September 4, 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 will be completed this winter and the final EIS next summer.

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

Table 1 - NAWS Contracts under Construction				
Contract	Contract Award	Contractor	Contract Amount	Remaining Obligations
2-2D Mohall	7/24/09	American Infrastructure, CO In Default – Being taken on by the Bonding Co - EMC	\$5,196,586.13	\$289,013.74
2-3A Minot AFB	1/4/11	S.J. Louis Construction	\$6,260,367.55	\$1,156,361.40
2-3B Upper Souris/Glenburn	1/4/11	S.J. Louis Construction	\$3,869,311.61	\$353,522.16
7-1A Minot WTP Filter Rehab and SCADA	11/30/11	PKG Contracting, Inc. Main Electric, Inc.	\$8,118,911.17	\$3,231,096.69
Total Remaining Construction Contract Obligations				\$5,029,993.99

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

Contract 2-2D - This contract includes 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 punch list items are complete with only landowner releases necessary before contract closeout.

Contract 2-3A – This contract includes 13 miles of 24” ductile iron pipeline between the north side of Minot and the Minot Air Force Base and 2000 feet of PVC pipe connecting to Minot’s North Hill Reservoir. Work began in early September 2011. All pipe is in the ground and the contractor is currently in the process of pigging the pipeline prior to hydrostatic testing and disinfection/flushing. The City of Minot’s North Hill reservoir began receiving water from pipeline installed on this contract in July. Upon completion this contract will also provide service to the Minot Air Force Base, North Prairie Rural Water near Ruthville, and all customers on the 2-3B contract.

Contract 2-3B – This contract covers 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 and North Prairie Rural Water near the Minot Air Force Base. All pipe is in the ground and hydrostatically tested and will be disinfected and flushed in conjunction with the Contract 2-3A pipeline.

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. The work on the 1960’s filter bay is complete and they are in service. The contractor is currently working on the wash water troughs in the 1950’s filter bay and will begin work in the corresponding piping gallery after the electrical contractor has installed the related conduits and wiring. The new equalization basin has been placed and plumbed and is currently being backfilled. The SCADA towers at the existing sites across the Northern Tier have been installed. Witness testing and installation of the telemetry system is scheduled for this fall.

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. We are awaiting concurrence from the Bureau of Reclamation to advertise this contract.

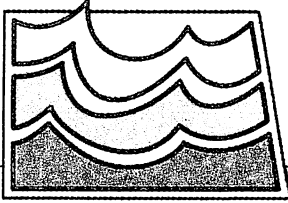
Contract 2-3C – This contract will cover 18 miles between Forfar and Renville Corner including a pipeline to the City of Lansford and will complete the looped portion of the Northern Tier of the NAWs system. This pipeline will provide additional service to areas of growth on the system and add operation flexibility and redundancy to the system in the interim and will be necessary to address growth in the project area and to provide 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.

We are currently in discussion with the City of Minot and Houston Engineering over the next round of improvements at the Minot Water Treatment Facility. The initial plan was to rehabilitate the solids contact basins over the low use season, but current base demands in Minot and on NAWs have grown to the point where we feel we will need to install a new solids contact basin to handle the base flows prior to rehabilitating the current ones. We are also discussing the lime sludge handling facility improvements necessary but that depends largely on the source water, which is dependent upon the finding of the Supplemental Environmental Impact Statement.

TSS:TJF/237-4

September 17, 2012




North Dakota State Water Commission

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

FROM:  Todd Sando, P.E., Chief Engineer/Secretary

SUBJECT: Mouse River Enhanced Flood Control Project

DATE: September 4, 2012

The Preliminary Engineering in the rural reaches is proceeding, this work includes an analysis of the USGS stream gages on the mainstem and tributaries, which has been undertaken to understand the influence of the tributaries on the mainstem. Hydrologic modeling is also under way to study runoff responses and timing of the tributary watersheds. These efforts will help to define appropriate measures for dealing with the problems in the valley outside the communities. Hydraulic modeling will follow when the LiDAR, which was collected last fall, is delivered.

Coordinating with the communities included in the Feb. 29 Preliminary Engineering Report is also underway. A Phasing and Scaling Workshop was held in Minot on August 24. Representatives of the City of Minot, the Souris River Joint Water Resources Board and the engineering team attended this workshop. A memo from Jason Westbrook, BARR Engineering, summarizing this meeting is attached. There was detailed discussion of the scaling of the project components and on the optimum sequence of their construction.

The IJC's International Souris River Board has established a Task Force, which is working on the Plan of Study (POS) for a basin wide approach. An outline and initial draft of POS was presented to the Board chairs at June 20, 2012 ISRB meeting. The Task Force has developed a strategy for accomplishing the work. This will be incorporated into the unfinished draft.

A stakeholders communications process and a peer review process is being developed. The Task Force participated in a 2 day meeting hosted by the SWC and Barr Engineering in Minneapolis to identify and coordinate studies, modeling and engineering. This information will be useful to the Task Force.

The USACE has submitted a proposal to its Institute for Water Resources and a proposal for improvement to the hydro-meteorological data network for precipitation and streamflow in the basin and dissemination of that data. The project was approved for \$75,000 and the study will be conducted in the next 12 months by the St. Paul District of the USACE. This is an important study that will provide information to the Task Force in accomplishing its work.

USACE is working with the IJC to develop scopes of work for USACE to present to the Task Force in the areas of POS development and completion and provision of project management services. The goal is to have POS final draft to ISRB and IJC for approval and subsequent submission to Governments on October 18 during the IJC's semi-annual meeting in Ottawa.

TS:JTF:mmb/1974



Memorandum

To: File
From: Jason Westbrook
Subject: August 24, 2012 Phasing and Scaling Workshop
Date: September 6, 2012
Project: 34511006.03

Attendees:

City of Minot: Mayor Curt Zimbelman, Councilman Dave Lehner, Lance Meyer, Dan Jonasson, David Waind, Cindy Hemphill

Barr Engineering: Bill Forsmark, Scott Sobiech, Dale Frink, Jason Westbrook

Ackerman-Estvold Engineering: Ryan Ackerman, Dusty Zimmerman, Alan Walter

Souris River Joint Board: David Ashley

State Water Commission: Waylon Erdmann, Tim Fay

Souris Basin Planning Commission: Jason Zimmerman

Steering Committee

There was considerable discussion on the steering committee and the membership. Dave Ashley thought the committee should start small and that members could be added if needed. Also, ad hoc committees could be formed.

There was discussion about including the USACE. It was decided the USACE could be kept informed through the ISRB Task Force. Contacts at the Corps include:

- Craig Evans – Reconnaissance studies
- Terry Zien – Silver Jackets program
- Dan Cimarosti – Regulatory permitting
- Ed Eaton and others – Technical experts

After discussion, it was agreed the Steering Committee should consist of:

1. A representative from Minot – Dave Lehner volunteered

To: File
From: Jason Westbrook
Subject: August 24, 2012 Phasing and Scaling Workshop
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2. A representative from the SRJB – Dave Ashley volunteered
3. An ex-officio member from the NDSWC – Tim Fay volunteered

Project Phasing

The objective of the phasing study is to develop a plan to understand how the project identified within the Preliminary Engineering Report (PER) is likely to be implemented for use in project planning. This will include identifying major task sequencing and interdependence, implementation timelines, critical path tasks, temporal cash flow needs and financial planning.

The project components identified within the PER were summarized in a review of the presentation made to the Minot Committee of the Whole Meeting held on March 7, 2012.

Major elements necessary to implement the PER project were discussed, including:

1. **Planning & Field Work.** Identifying an action plan moving forward and performing additional studies to facilitate project design. Additional studies include, but are not limited to, design topographic surveys, property surveys, geotechnical investigations, cultural resources surveys, wetland delineation, and hazardous, toxic and radioactive waste surveys.
2. **Engineering & Design.** The design of the project identified in the PER is approximately 10% to 15% complete.
3. **Permitting.** Discussion was held regarding the National Environmental Policy Act (NEPA) and its impact on the project. The NEPA process consists of the following elements:
 - a. Purpose and Need
 - b. Alternatives
 - c. Impacts
 - d. Mitigation
 - e. Public Input
 - f. Interagency Coordination
 - g. Documentation

The NEPA trigger is any federal action, whether it is through funding a portion of the project, such as HMGP funds for the water treatment plant portion of the project, or through issuance of a federal permit (USACE 404 Permit for discharge of fill into waters of the US, USACE 408 permit for modifications to an existing federal levee system). There are three classes of action within NEPA – Categorical Exclusion (CatEx), Environmental Assessment (EA) with Finding of No Significant Impact (FONSI), and Environmental Impact Statement (EIS) with Record of Decision (ROD).

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From: Jason Westbrook
Subject: August 24, 2012 Phasing and Scaling Workshop
Date: September 6, 2012
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Project: 34511006.03

4. **Right of Way.** This element of the project is currently underway. The City is currently in the process of acquiring several properties within the project footprint. Cindy Hemphill noted 107 letters were sent to property owners and 89 interested responses were received. The City is taking a second look at additional homes along the existing levee system. The limiting factor for proceeding with acquisitions in their entirety is funding.
5. **Construction.** It is possible that construction may be advanced on particular phases or portions of the project. If the project identified in the PER were to be constructed, it is estimated that the minimum construction timeframe would be 5 years. Phasing of the project will extend the construction timeframe.

The consulting team will lead the financial modeling effort under the direction of the City of Minot finance director. Tasks include identifying a temporal distribution of projected project expenses and potential funding sources. The results of the financial modeling effort will essentially dictate the project implementation schedule.

Potential Standalone Projects

These potential standalone projects were discussed:

1. Water Treatment Plant levee system. This standalone levee system is estimated to cost approximately \$25M and has an estimated benefit-cost ratio of 1.2. Benefits include service to the air force base, hospital, and regional users. City match is 7.5%, not including acquisitions. Design can begin after the project is accepted. CDM – Smith is working with the City. Witt and Associates is working with DES. Barr and CDM should be looking to synergize the environmental work if possible.
2. Bridges – approach NDDOT to get projects on the STIP. Lance to initiate discussions.
3. Railway Avenue.
4. Diversions.
5. Transportation closures – likely would not qualify as standalone projects.
6. Leeds Brecky – would need to first develop a policy to determine if the project element would move forward.
7. River Oaks – need a policy.
8. Apple Grove – need a policy.
9. 6th Street Underpass – Minot may bid this project next spring.
10. Railroad grade raises – Additional discussions are required.

To: File
From: Jason Westbrook
Subject: August 24, 2012 Phasing and Scaling Workshop
Date: September 6, 2012
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Project: 34511006.03

Environmental

The general consensus was that an EIS would be required for the project. Certain features could possibly get by with an EA but the major features, especially those connected to Section 408, would likely need an EIS. Home acquisitions in the diversions may also require an EIS. It was not clear which standalone projects could be constructed without approval of the entire project. There was discussion regarding the duration of a federal permit. Additional clarification on the 404 permit timelines will be provided.

Project Scaling

The overall objective of scaling the project is to identify whether significant cost savings can be realized by designing to lower flow rates. There was consensus to implement the project consistent with the 27,400 cfs footprint included in the Preliminary Engineering Report, including the diversions. The 27,400 cfs footprint allows full implementation of the PER project in the future. Floodwalls would initially be built to the full 27,400 cfs capacity. Barr was asked to generate costs to construct levees to 10k, 15k, and 20k cfs. The scaling results should be presented in a simplified form similar to the PER executive summary.

Follow-Up

Key follow-up tasks (with task leaders) from the phasing dialogue include:

1. Coordination with CDM-Smith, Barr, NDSWC and City of Minot regarding Minot Water Treatment Plant protection project (City of Minot – Cindy).
2. Coordination with Witt & Associates, NDDDES, Barr, NDSWC and City of Minot regarding water surface elevation advisory documents and flow rates (NDSWC – Tim).
3. Coordination with NDDOT regarding bridges and roadways associated with the project (City of Minot – Lance).
4. Develop scope of Phasing Study (Barr – Ryan).
5. Develop scope of Financial Modeling (Barr – Ryan).
6. Develop scope for evaluation of fringe subdivisions and assistance with policy development (Barr – Ryan).
7. Clarify permit timeframes and period of validity (Barr - Jason).
8. Clarify extent of allowable project segmentation from a NEPA perspective (Barr – Jason/Ryan).
9. Identify cumulative effects of phasing (Barr – Jason/Ryan).
10. Develop scope of work for developing 10 kcfs, 15 kcfs, 20 kcfs system opinions of probable cost (Barr-Jason).
11. Engage federal partners to communicate the potential cost savings in scaling (City of Minot / Barr – Jason/Ryan).



North Dakota State Water Commission

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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: September 6, 2012

The Western Area Water Supply Authority (Authority) did approve the water depot locations. The Independent Water Providers has requested and the Authority accepted to enter into mediation to work on the concerns of the Independent Water Providers.

Design Work

The Authority has approved the engineer to prepare plans and specifications for the Williston Water Treatment Facility Expansion Phase 3 Expansion. The project will expand the facility capacity from 10 to 14 million gallons per day.

Funding

The State Water Commission has made payment on \$25 million of Authority approved project expenses. The Bank of North Dakota has made payment on \$15.7 million of Authority approved project expenses from the \$50 million loan from the Bank of North Dakota. The original project cost estimate was \$150 million and has been updated to \$190 million due to increase demand in the rural areas and increase in construction costs. The project expenses through July include construction \$27,904,305, engineering \$11,442,943, easements \$615,647, and legal \$349,327.

Construction Update

State Water Commission staff reviewed and approved specific plans and specifications on the projects shown on the attached table.

TS:MK/1973

State Water Commission - Western Area Water Supply Project Update

Progress through JULY 2012

Sep-06-2012

Project	Contractor	Cost	Payments	Completion
NW Williston Reservoir - Ph 1 5 Million Gallons Storage NW of Williston	Natgun Corporation	\$4,444,400.00	\$3,147,284.59	71% est 9/30/12
R&T Reginoal Service Pipeline To Crosby/BDW 26 miles of 14" to 8" pipeline from Wildrose to Crosby (The original 12" line was increased to a 14" line for increase in domestic signups in this area.)	Wagner Construction	\$4,824,213.12	\$3,892,226.59	81% est 10/31/12
Bulk Water Fill Stations Approximately 8 industrial water depots are included in this phase and will range in size from 2 to 6 fill points, with a fill point averaging delivery of 200 gallons per minute over a 24 hour period.	Lakeshore Toltest Corporation 13-Mile Corner Alexander Indian Hill	\$2,355,709.55	\$0.00	Est 11/30/12
Reginoal Water Service Phase II Pipeline To Ray (R&T Water) 30 miles of 24" to 20" pipeline starting north of Williston and east to Ray.	S.J. Louis Construction	\$14,223,592.00	\$1,959,492.14	14% est 6/1/13
Regional Water Service Phase II Pipeline To Watford City 30 miles of 20" pipeline starting south of Williston and east to Watford City.	Ryan Construction	\$12,041,805.00	\$5,234,919.95	43% est 6/1/13
Regional Water Service Phase II Pump Station/ Meter Vault Heading south Williston: 5.3 MGD Station at Lewis and Clark - 2-28-2013 5.4 MGD Station at Indian Hills - 10/31/2012 5.2 MGD Station at Alexander - 2/28/2013 Heading north Williston: 6.6 MGD Station at 13 mile corner - 2/28/2013 2.1 MGD Station at Ray By-Pass - 2/28/2013	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	\$1,275,101.53 \$21,757.50	25% est 6/20/13
Regional Water Service Ph II Reservoirs 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	\$1,318,581.00	26% est 6/1/13
McKenzie System IV 8" to 2" pipeline west of Alexander - 190 Miles	Merryman Exavation	\$7,207,783.00	\$2,251,693.72	35% Part 1 est 8/15/13 Part 2 est 11/30/13
Williams Rural Water West Expansion Phase 1 Contract 1 - 7.7 miles of 16" pipeline west of Williston Contract 2 - 7.4 miles of 16" to 10" pipeline west of Williston	Niebur Development Inc Western Municipal Construction	\$1,971,818.51 \$1,084,677.50	\$0.00 \$0.00	est 7/31/13
Regional Water Service Phase II Pipeline Watford City By-Pass 14 miles of 16" to 6" pipeline starting west of Watford City and continuing east.	Merrymen Excavation	\$2,988,803.50	\$0.00	est 5/31/13
US 2 to County Hwy No. 7 Watermain 24" to 12" pipeline west side Williston	Metro Construction	\$3,986,068.58	\$3,986,068.58	Completed 12/1/11
Res No. 1 to Bakken Ind. Park Pipeline 30" to 24" pipeline NW of Williston	Merryman Excavation	\$4,055,539.17	\$4,055,539.17	Completed 5/31/12
26th St Pump Station Increase discharge pressure	John T Jones Construction	\$761,640.20	\$761,640.20	Completed 5/4/12
	Total Construction	\$72,806,650.13	\$27,904,304.97	
	Engineering		\$11,442,943.00	
	Legal		\$349,327.00	
	Easements		\$615,647.00	
	Sub Total		\$12,407,917.00	
	Total	\$72,806,650.13	\$40,312,221.97	

LEASE AGREEMENT

THIS LEASE AGREEMENT (this "Lease") is dated as of _____, 2012 (the "Effective Date"), and is by and between **ARMSTRONG WATER SOLUTIONS, INC.**, a Michigan corporation ("Armstrong"), as lessee, and the **WESTERN AREA WATER SUPPLY AUTHORITY**, a political subdivision of North Dakota, as lessor (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 [_____] County, North Dakota described on Exhibit A attached hereto (the "Site");

WHEREAS, the Authority intends to construct a water loading and distribution station on the Site consisting of [_____] fill lanes (the "Station");

WHEREAS, Armstrong desires to lease the Site and the Station and the improvements located thereon and to construct and install certain water heating infrastructure and to thereafter operate the Site and the Station and to offer Armstrong's customers and the public with water heating, loading and related services at the Station (the "Services");

WHEREAS, Armstrong Service, Inc. and the Authority have entered into a Master Water Station Agreement dated as of even date herewith (as amended, the "Master Agreement"), and intend that this Lease 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) (the Master Agreement was subsequently assigned to Armstrong);

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 Lease, for the Term, the Authority hereby demises and leases to Armstrong, and Armstrong hereby leases and takes from the Authority, the Site and the Station together with all improvements and equipment thereon and the Authority's interest in and to any easements appurtenant thereto to the extent that such appurtenant easements benefit and are necessary to the operation and occupancy thereof (collectively, the "Leased Premises").

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 Lease 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 Lease and for the purposes of complying with the Authority's obligations under this Lease and for making water sales.

Section 1.3 Monthly Committed Quantity. The "Monthly Committed Quantity" (as defined in the Master Agreement) for the Station initially shall be an amount equal to 200,000 barrels multiplied by the initial number of Armstrong Lanes at such Station as designated in writing by Armstrong pursuant to Section 2.1, and thereafter, at any time of determination, the Monthly Committed Quantity for the Station at such time of determination shall be an amount equal to 200,000 barrels multiplied by the number of Armstrong Lanes at the Station at such time of determination.

ARTICLE II

USE OF THE LEASED PREMISES

Section 2.1. Use of the Leased Premises. Armstrong shall use the Leased Premises solely as a bulk water loading and distribution station supplied with water from the Authority and for purposes ancillary thereto. Armstrong shall have the exclusive right to provide water heating services on the Leased Premises during the term of this Lease. Armstrong shall use, operate and maintain the Leased Premises in compliance with all legal requirements, including, without limitation, any applicable policies adopted by the North Dakota State Water Commission. The Authority has committed to making a portion of its industrial water supply available to the public. Accordingly, Armstrong shall dedicate at least one fill lane on the Leased Premises as a public self-service fill lane at which the public may purchase cold water from the Authority whether or not they have a contract and without payment of any loading or other charges to Armstrong (each a "Public Self Service Lane"). The fill lanes on the Leased Premises other than the Public Self Service Lanes are referred to as the "Armstrong Lanes." Within 60 days after the Effective Date, Armstrong shall advise the Authority of the number of Lanes on the Leased Premises that will be Armstrong Lanes (such number may not be more than 4). If Armstrong fails to timely notify the Authority of the number of lanes to be Armstrong Lanes, the number of Armstrong Lanes shall be two (2). Loading at a Public Self Service Lane shall be self-service and Armstrong shall have no responsibility for such loading. Metering and billing for water purchased at the Public Self Service Lanes shall be the Authority's responsibility. The Leased Premises are designed to maximize the sale of water. Accordingly, Armstrong shall permit ad hoc water sales of heated and unheated water to the public at the Armstrong Lanes on an as available basis (e.g., at times of low traffic). Such ad hoc sales at the Armstrong Lanes shall be conditioned on the purchaser entering into a standard customer agreement with Armstrong (which shall not include any minimum take requirement) and the Authority's standard water purchase agreement. Armstrong may charge its applicable loading and, if applicable, heating charges, for ad hoc sales to the public at the Armstrong Lanes. The

Authority will provide public notice of availability of water contracts at the Station in accordance with State Water Commission policy.

If at any time after the Commissioning Date while there are 4 or more Armstrong Lanes:

(i) the average monthly sales of water at the Station (excluding sales made at the Public Self Service Lanes at the Station) during any 4 rolling calendar month period are less than 50% of the average Monthly Committed Quantity for such period, the Authority may require that an Armstrong Lane be designated and operated as a Public Self Service, at which time the Monthly Committed Quantity will be reduced by 200,000 barrels; or

If at any time after the Commissioning Date while there are 3 Armstrong Lanes:

(ii) the average monthly sales of water at the Station (excluding sales made at the Public Self Service Lanes at the Station) during any 6 rolling calendar month period is less than 50% of the average Monthly Committed Quantity for such period, the Authority may require that an Armstrong Lane be designated and operated as a Public Self Service, at which time the Monthly Committed Quantity will be reduced by 200,000 barrels.

All of the foregoing are continuing rights to require additional Armstrong Lanes be designated as Public Self Service Lanes and to reduce the Monthly Committed Quantity by 200,000 barrels for each Armstrong Lane converted to a Public Self Service Lane; provided, however, that the Authority may not require more than 1 Armstrong Lane be converted to a Public Self Service Lane in any four month period (if there are 4 or more Armstrong Lanes), and there shall not be less than 2 Armstrong Lane at the Station at any time. If the Armstrong Lanes are reduced from 4 to 3, a further reduction in the Armstrong Lanes (from 3 to 2) may not occur within six months of the date that the Armstrong Lanes were reduced from 4 to 3.

If at any time Armstrong obtains commitments from customers for sales at the Armstrong Lanes at the Station in an aggregate monthly quantity in excess of the Monthly Committed Quantity then in effect, then Armstrong may request that the Authority permit Armstrong to convert a Public Self Service Lane (provided at least one Public Self Service Lane would remain at the Station) to an Armstrong Lane and to increase the Monthly Committed Quantity by 200,000 barrels. The foregoing is a continuing right for Armstrong to request additional Armstrong Lanes and additional Monthly Committed Quantity. The Authority shall not unreasonably deny a request from Armstrong made pursuant to the foregoing; provided, however, that under no circumstances is the Authority obligated to consent to more than one Public Self Service Lane being converted to an Armstrong Lane (or the increase of the Monthly Committed Quantity by more than 200,000 barrels) in any 3 month period. The following is a non-exhaustive list of reasons for which the Authority could reasonably deny a request from Armstrong for an additional Armstrong Lane and additional Monthly Committed Quantity: (1) Armstrong fails to provide the Authority with written, binding commitments from Armstrong's customers to purchase water at the Armstrong Lanes in an aggregate monthly quantity in excess of the 50% of Minimum Monthly Quantity; (2) the Authority has a reasonable belief that the Authority will sell the requested additional Monthly Committed Quantity at the Public Self Service Lanes at the Station or elsewhere; or (3) the Authority does not have sufficient water available to commit to

the requested increase to the Monthly Committed Quantity (e.g., because the Authority has committed the capacity to its customers at the Public Self Service Lanes or elsewhere), as determined by the Authority in its reasonable discretion.

Any Armstrong Lanes that are converted to Public Self Service Lanes shall be used only for the sale of unheated water as long as they are designated as Public Self Service Lanes. For the avoidance of doubt, Armstrong shall not be responsible for operation or maintenance of any Public Self Service Lanes

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 Leased Premises.

ARTICLE III **OBLIGATIONS OF THE PARTIES**

Section 3.1. Armstrong's Obligations. Armstrong shall be obligated to perform the following at its sole cost and expense:

- a. Operate and maintain the Leased Premises and the Armstrong Infrastructure and Equipment in compliance with all legal requirements;
- b. Use the Leased Premises only for the purposes permitted by this Lease;
- c. Pay all utilities charges and fees associated with the operation of the Leased Premises;
- d. Perform the Services, in accordance with the terms of the Master Agreement, as well as a separate Water Service Agreements with its customers;
- e. Perform and install the improvements, infrastructure and equipment described in Exhibit B (the "Armstrong Infrastructure and Equipment") in accordance with Exhibit B and in compliance with all legal requirements and industry, engineering and manufacturer standards;
- f. Keep the Armstrong Infrastructure and Equipment in good operating condition and repair, in compliance with all legal requirements and industry, engineering and manufacturer standards and perform all required or advisable maintenance, repairs and replacements;
- g. Bring a MDU gas supply to the Leased Premises with a peak rate for gas supply equal to [36 – 72] mmbtu/hr, provided that Armstrong, at its option may elect to use fuel sources other than natural gas, such as liquid propane;
- h. Operate the Leased Premises and the Armstrong Infrastructure and Equipment as a fully operational water loading and distribution in accordance with sound industry practice and to use commercially reasonable efforts to maximize water sales; and

- i. Manage and direct the overall truck flow at the Leased Premises to maximize loading and water sales efficiency.

Certain Armstrong Infrastructure and Equipment shall be constructed so that it can be removed from the Leased Premises 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. Moreover, should Armstrong cease offering heated water sales at any fill lane at the Leased Premises, such fill lane shall become a Public Self Service Lane notwithstanding any provision in this Lease requiring there be a minimum of 2 Armstrong Lanes.

“Commissioning Date” means the date on which the Authority’s obligations to perform and install the Authority Improvement are substantially complete and water is available for sale at the Leased Premises at a capacity equal to the Monthly Committed Quantity (the “Water Availability Date”) and the installation of the Armstrong Infrastructure and Equipment is substantially complete. At all times prior to the Commissioning Date, the Authority may operate all fill lanes at the Leased Premises as Public Self Service Lanes and without reserving any capacity for Armstrong customers during such period. In addition, if the Commissioning Date does not occur within eighteen (18) months of the Water Availability Date on account of Armstrong’s failure to cause the installation of the Armstrong Infrastructure and Equipment to be substantially complete by such date, the Authority may terminate this Lease upon written notice to Armstrong.

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, but not sooner than the date of substantial completion of the Station construction under contract with the Authority. If Armstrong is unable to obtain such commitments within twelve (12) months of the Water Availability Date, the Authority, at its option, may terminate this Agreement upon written notice to Armstrong.

Section 3.2. The Authority’s Obligations. The Authority shall be obligated to perform the following at its sole cost and expense:

- a. Perform and install the improvements, infrastructure and equipment described in Exhibit C (the “Authority Improvements”) in accordance with Exhibit C;
- b. Handle all metering and billing for the Public Self Service Lanes; and
- c. Keep the Authority Metering Equipment and other Authority Improvements (other than the Joint Responsibility Improvements) in good operating condition and repair, in compliance with all legal requirements and industry, engineering and manufacturer standards and perform all required or advisable maintenance, repairs and replacements. “Authority Metering Equipment” means the water volume accounting system, including meters and control valves, necessary for the proper

operation of the Public Self Service Lanes, including electrical wiring and conduit and instrumentation and control wiring.

Notwithstanding any commitment to supply the Monthly Committed Quantity or water at any other pressure or flow rate, 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. Pursuant to State Water Commission policy, domestic water supply has priority over industrial water supply in times of shortage. Absent an emergency situation, the Authority shall not make commitments to third parties that would make the Minimum Committed Quantity not available at the Leased Premises. If the allocation of available water among non-domestic users during a shortage is based upon commitment dates, the effective date of this Definitive Agreement shall be used.

Section 3.3. Joint Obligations. The Authority and Armstrong shall be jointly responsible for the costs of the repair and maintenance of the Joint Responsibility Improvements. "Joint Responsibility Improvements" means: grading of the Leased Premises, snow removal, grass cutting, and lighting (utility bills) at the Leased Premises (See Exhibits B & C Also). The Authority shall contract for the repair and maintenance of the Joint Responsibility Improvements at the most efficient cost available, and shall bill Armstrong monthly for Armstrong's proportionate share of the costs of the repair and maintenance of the Joint Responsibility Improvements (with payment due within 30 days of the invoice date). No mark-up, administrative or overhead costs shall be added to the billed costs. The cost of the repair and maintenance of the Joint Responsibility Improvements for a month shall be allocated proportionally between the Authority and Armstrong based on the volume of water sales at the Armstrong Lanes (which are allocated to Armstrong) during such month and the volume of water sales at the Public Self Service Lanes (which are allocated to the Authority) during such month. For example, if the repair and maintenance costs for a month are \$10,000 and the water sold at the Armstrong Lanes during such month represents 60% of the total volume of water sold at the Leased Premises during such month and the water sold at the Public Self Service Lanes during such month represents 40% of the total volume of water sold at the Leased Premises during such month, then Armstrong would be responsible for 60% of the repair and maintenance costs for the Joint Responsibility Improvements for such month and the Authority would be responsible for the remaining 40%.

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 install the Armstrong Infrastructure and Equipment. The Authority shall further arrange for any easements over, under, through, across or

upon property owned by third parties as are necessary for Armstrong to install the Armstrong Infrastructure and Equipment (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 Lease (the “Term”) shall commence on and as of the Effective Date and, unless this Lease is earlier terminated pursuant to the provisions of **Section 5.2** hereof, shall expire on the Fifth (5th) anniversary of the Commissioning Date (the “Lease Expiration Date”). Subject to State Water Commission policies on a competitive request for proposal/selection process, during the 180 day period prior to the Lease Expiration Date, Armstrong shall have the right to negotiate renewal terms with the Authority. 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 Lease an additional two years past the Fifth (5th) 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 Commissioning Date and the exclusive negotiation period shall occur during the 180 day period prior to such Lease Expiration Date.

Section 5.2 Earlier Termination. This Lease 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; or
- (d) pursuant to **ARTICLES XVIII or XX** hereof.

Section 5.3 Effect of Termination. Upon expiration or termination of this Lease, 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 beginning on the first day of the first full calendar month after the Effective Date (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 Lease 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 Lease.

Section 8.2 Due Authorization; No Conflict or Default. The execution, delivery and performance by Armstrong of this Lease 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 Lease 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 Lease 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 Lease.

Section 9.2 Due Authorization; No Conflict or Default. The execution, delivery and performance by the Authority of this Lease have been duly authorized by all necessary action on the part of the Authority and its board, 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 Lease 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 Lease 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, to the actual knowledge of the Authority 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, policy 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 Lease.

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 operation of the Leased Premises and the installation of the Armstrong Infrastructure and Equipment.

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 operation of the Leased Premises or the installation of the Armstrong Infrastructure and Equipment, 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 Lease 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 Leased Premises, 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 Leased Premises. As used herein, a "Casualty Loss" shall mean any one or more of the following events with respect to the Leased Premises: (a) the loss of all or substantially all of the Leased Premises or the use thereof due to destruction or damage beyond economical repair or the rendition of the Leased Premises permanently unfit for normal use for any reason whatsoever; or (b) anything that results in an insurance settlement with respect to the Leased Premises on the basis of substantial or 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, the Authority shall make a determination as to whether: (i) the Leased Premises or such portion thereof that has been affected by the Casualty Loss, can be rebuilt, repaired or restored to permit operation of the Leased Premises 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 by the Authority on account of a Casualty Loss, except proceeds of business interruption insurance.;

(b) If a determination is made pursuant to **Section 13.1(a)** above that: (i) the Leased Premises 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 the Authority for such rebuilding, repair and/or restoration, are not sufficient to permit such rebuilding, repair and/or restoration, then the Authority shall be entitled to retain all of the Casualty Proceeds and the Authority shall have the option to terminate this Lease by giving Armstrong a notice of such termination; and the Authority shall have the option of requiring Armstrong to remove the Armstrong Infrastructure and Equipment, 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 24.1** hereof; and

(c) If a determination is made pursuant to **Section 13.1(a)** above that: (i) the Leased Premises 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 the Authority for such rebuilding, repair and/or restoration, are sufficient to permit such rebuilding, repair and/or restoration, then the Authority 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.

Section 13.2 Termination Due to Legal Prohibition on Restoration. Notwithstanding anything contained in **Sections 13.1** above, if the Leased Premises cannot be restored because of a legal prohibition on doing so, then, the Authority shall have the option to terminate this Lease, by giving a notice of termination to Armstrong at any time after the Authority 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 Lease 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 the Authority. 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.

(iv) All Risk Property and Boiler and Machinery Insurance covering the Authority Improvements on a replacement cost basis.

(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 Lease (other than the policies required by Section 14.2(a)(iv)) 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 Armstrong. 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 Armstrong Infrastructure and Equipment, 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 14.1** and **Section 14.2** permits waiver of liability and contains a waiver of subrogation.

ARTICLE XV INDEMNIFICATION.

Section 15.1 General Indemnification. Armstrong (together with its contractors, employees, agents and other representatives, "Indemnitor") agrees to indemnify and hold harmless the Authority and its officers, board members, employees, and agents and their respective successors and assigns (collectively, "Indemnitee") from any liability, loss, expenses or damage for injury to persons or property arising out of or resulting from any acts or omissions of Indemnitor in connection with Indemnitor's performance of this Lease or from Indemnitor's breach of its obligations hereunder; provided, however, that Indemnitor shall not have an obligation to indemnify Indemnitee for any liability, loss, expenses or damage for injury to persons or property arising directly from the Indemnitee's active acts of negligence, sole negligence or intentional misconduct. Armstrong reserves the right to make claims and seek contribution to the extent allowed by applicable law and subject to the damage and liability limits set forth in Section 22.1.

Section 15.2. Environmental Indemnification. Indemnitor agrees to indemnify and hold harmless Indemnitee 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 and (b) Indemnitor's non-compliance with any environmental law, rule, regulation or other requirement.

Section 15.3 Survival. This **ARTICLE XV** shall survive the expiration or earlier termination of this 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 Lease, the Master Agreement or any other 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 Lease (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 Lease 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

(e) the occurrence of a default or event of default by Armstrong under the Master Agreement.

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 XXII** 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.

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 Lease shall have been false, misleading or incorrect in any material respect when made or delivered;

(b) The Authority shall default in any material respect in the performance of any other obligation to be performed by the Authority under this Lease (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 Lease 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 Lease. Upon termination or expiration of this Lease, Armstrong shall remove the Armstrong Infrastructure and Equipment. Any Armstrong Infrastructure and Equipment that is not removed shall become the property of the Authority. Armstrong shall repair any damage caused by the removal of the same. Notwithstanding the foregoing, Armstrong shall not be responsible to remove underground piping, any building, tanks, concrete pad, or road work or related infrastructure that cannot reasonably be removed and under no circumstances may Armstrong remove any infrastructure or equipment that is necessary for the continued use of the Leased Premises as a functioning cold water depot.

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 Leased Premises, 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 and reasonable and practical.

ARTICLE XXI
QUIET ENJOYMENT.

Section 21.1 Quiet Enjoyment. The Authority covenants with Armstrong that upon Armstrong' performing, observing and keeping all of the terms, covenants, conditions, agreements and obligations of this Lease 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 the Authority have any liability to Armstrong 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 the Authority's liability for any and all losses exceed the amounts available under applicable insurance policies of the Authority that are required to be maintained by such party 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 23.3**.

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 24.1** hereof.

Section 23.4 No Suspension of Performance. During the period of any dispute described in this **ARTICLE XXIII**, 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 Water Solutions, Inc.
 c/o Armstrong Service, Inc.
 221 Armstrong Blvd.
 Three Rivers, Michigan 49093

Attention: Jeff Romig
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
4th 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 Lease 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; provided, however that such assignment shall not relieve Armstrong of its obligations under this Lease.

Section 24.4 Construction and Interpretation. Except as expressly provided otherwise, capitalized terms in this Lease shall have the same meaning as the meaning as set forth and defined in the Master Station Agreement. Unless the context of this Lease 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 Lease; (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 Lease" 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 Lease or the intent of any provision hereof. Whenever this Lease 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 WATER SOLUTIONS, INC.

By: _____
Name: _____

Title: _____

EXHIBIT A

Legal Description of the Site