Meeting To Be Held At
State Office Building
Lower Level Conference Room
Bismarck, North Dakota

March 28, 2011
1:30 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 (select 'News and Information')*

C. Consideration of Draft Minutes of December 10, 2010 SWC Meeting **

D. State Water Commission Financial Updates:
1) Agency Program Budget Expenditures
2) 2009-2011 Biennium Resources Trust Fund and Water Development Trust Fund Revenues

E. Consideration of Following Requests for Cost Share:
1) Mulberry Drain Reconstruction 2011-Cavalier County **
2) Pembina County Drain No. 55 **
3) Sheyenne River Diversion Pump Station **
4) Velva Levee System Certification Analysis **
5) Walsh County Legal Drain 71 and 71-1-2011 Construction **
6) Walsh County Legal Drain No. 72 2011 Construction **
7) Wild Rice Snag and Clear Project - Richland County **
8) NDSU-Williston Research Extension Center **
9) Traill Drain No. 28 (Nelson Drain) Extension Project **
10) Cost Share Policy Committee Report

F. International Boundary Roadway Dike - Pembina County **

G. North Dakota Drinking Water State Revolving Loan Fund **

H. Fargo Moorhead Metropolitan Feasibility Study Update

I. 2011 Spring Flood Outlook

J. Devils Lake:
1) Hydrologic Update
2) Devils Lake Outlet Project Update
3) Rapid Deployment Stream Gages **
4) Debris Removal Update
5) Devils Lake Downstream Acceptance Program **

K. Southwest Pipeline Project:
   1) Project Update
   2) Contract 5-16, Center Elevated Tank **
   3) Contract 4-3A/4-4A, Generator for Jung Lake and Pump for Ray Christensen Pump Station **
   4) Missouri West Water System-Water Service Contract **
   5) City of Beach Water Service Contract Amendment **

L. Northwest Area Water Supply (NAWS) Project Update

M. 2011 Legislative Session Update

N. Missouri River:
   1) Project Update
   2) Missouri River Joint Board **

O. Garrison Diversion Conservancy District

P. Other Business

Q. 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

March 28, 2011

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on March 28, 2011. Governor Jack Dalrymple, Chairman, called the meeting to order at 1:30 P.M., and requested Todd Sando, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Dalrymple announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:
Governor Jack Dalrymple, Chairman
Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck
Arne Berg, Member from Devils Lake
Maurice Foley, Member from Minot
Jack Olin, Member from Dickinson
Harley Swenson, Member from Bismarck
Robert Thompson, Member from Page
Douglas Vosper, Member from Neche

STATE WATER COMMISSION MEMBER ABSENT:
Larry Hanson, Member from Williston

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 There being no additional items for the agenda, Governor Dalrymple announced the agenda approved as presented.

CONSIDERATION OF DRAFT MINUTES OF DECEMBER 10, 2010 STATE WATER COMMISSION MEETING - APPROVED

The draft minutes of the December 10, 2010 State Water Commission meeting were approved by the following motion:

> ***It was moved by Commissioner Olin, seconded by Commissioner Foley, and unanimously carried, that the draft minutes of the December 10, 2010 State Water Commission meeting be approved as prepared.***

STATE WATER COMMISSION BUDGET EXPENDITURES, 2009-2011 BIENNIUM

In the 2009-2011 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 January 31, 2011 reflecting 79 percent of the 2009-2011 biennium, were presented and discussed by David Laschkewitsch, State Water Commission accounting manager. The expenditures, in total, are within the authorized budget amounts. ***SEE APPENDIX "A"***

The Contract Fund spreadsheet, attached hereto as ***APPENDIX "B"***, provides information on the committed and uncommitted funds from the Resources Trust Fund, the Water Development Trust Fund, and the general fund project dollars. The total amount allocated for projects is $202,073,572, leaving a balance of $1,940,627 available to commit to projects.

RESOURCES TRUST FUND AND WATER DEVELOPMENT TRUST FUND REVENUES, 2009-2011 BIENNIUM

Oil extraction tax deposits into the Resources Trust Fund total $110,490,483 and are currently $31,342,295, or 39.6 percent above budgeted revenues.

Deposits into the Water Development Trust Fund (tobacco settlement) total $9,367,589 in the 2009-2011 biennium and are currently $505,679, or 5.1 percent below the budgeted revenues. The next scheduled payment into the Water Development Trust Fund is in April, 2011.

MULBERRY CREEK DRAIN 2011 IMPROVEMENT RECONSTRUCTION PROJECT, PHASE III - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION ($226,118) (SWC Project No. 1438)

On March 22, 2006, the State Water Commission approved a request from the Cavalier County Water Resource District for state cost participation in the Mulberry Creek drain improvement and the reconstruction project as a rural flood control project at 35 percent of the eligible costs not to exceed an allocation of $88,107 in the 2005-2007 biennium (H.B.

1021). Phase I of the project was originally estimated to cost $251,735. This is a rural flood control project designed to control floodwaters by providing for the removal of runoff.

Mulberry Creek drain was originally constructed in 1979 and is approximately 31 miles in length. The headwaters of the drain are located approximately 5 miles southeast of Langdon and flows in a northerly direction to the Canada border. Mulberry Creek empties into the Pembina River at a point approximately 4 miles north of the United States-Canada border. The District is reconstructing the drain in phases as funding permits.

On March 17, 2008, the State Water Commission conditionally approved an additional state cost participation for Phase II as a rural flood control project at 35 percent of the eligible costs not to exceed an allocation of $61,920 in the 2007-2009 biennium (S.B. 2020).

The project engineer's revised cost estimate for Phase I was $325,038, of which $322,938 was determined eligible for state cost participation as a rural flood control project at 35 percent of the eligible costs ($113,028). The increased costs resulted from excavation and sloping to reconstruct an additional mile of the drain. On December 5, 2008, the State Water Commission approved an additional allocation of $24,921 (eligible costs of $113,028 less $88,107 approved on March 22, 2006) from the 2007-2009 biennium (S.B. 2020) for Phase I.

A request from the Cavalier County Water Resource District was presented for the State Water Commission's consideration for state cost participation for improvement reconstruction of a portion of Mulberry Creek drain, Phase III. Approximately seven and one-half miles of drain improvements will be constructed between the south boundary of Section 12, Township 162 North, Range 61 West, and the east boundary of Section 8, Township 161 North, Range 60 West.

The project engineer's cost estimate for Phase III is $575,315, of which $502,484 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($226,118). 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 project engineering plans.

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 $226,118 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Mulberry Creek drain improvement reconstruction project, Phase III. The Commission's affirmative action would increase the total state cost participation to $401,066.

It was moved by Commissioner Berg and seconded by Commissioner Swenson 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 $226,118 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Cavalier County Water Resource District for the Mulberry Creek drain improvement reconstruction project, Phase III. This action is contingent upon the availability of funds, satisfaction of the required drain permit, and receipt of the final project engineering plans.

This action increases the total state cost participation to $401,066 for the Mulberry Creek drain improvement reconstruction project.

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

PEMBINA COUNTY DRAIN NO. 55 IMPROVEMENT RECONSTRUCTION 2011 - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION ($88,868) (SWC Project No. 1161)

A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the improvement reconstruction of a portion of Pembina County Drain No. 55. The proposal consists of reconstructing the last mile of the drain and the outlet to effectively remove sheetwater runoff from agricultural land.

Pembina County Drain No. 55 was constructed in 1949 and is approximately 4 miles in length. The proposed improvement project involves reconstructing the lower portion of the drain in Sections 35 and 36, Township 159 North, Range 51 West. The drain outlets into the Red River in Section 36. The channel will be improved by reconstructing the original 8-foot bottom width to a 16-foot bottom width. The depth of the drain will be maintained as originally designed establishing a workable grade. The right side slope will be improved from the original 2:1 design to 3:1. The District is also working with the Burlington Northern Railroad to resolve issues relating to the railroad crossing in Section 35.

The project engineer's cost estimate is $287,034, of which $197,484 is determined as eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($88,868). Maintenance funds will be used to finance the local share of the project costs. 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 project engineering plans. The request before the State Water Commission is for a 45 percent state cost participation in the amount of $88,868.

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 $88,868 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Pembina County Drain No. 55 improvement reconstruction 2011 project.

It was moved by Commissioner Berg and seconded by Commissioner Swenson 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 $88,868 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Pembina County Water Resource District to support the Pembina County Drain No. 55 improvement reconstruction 2011 project. This action is contingent upon the availability of funds, satisfaction of the required drain permit, and receipt of the final project engineering plans.

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

SHEYENNE DIVERSION EXTERIOR PUMP STATION 2011 INSTALLATION - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION ($60,750) (SWC Project No. 1344)

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation to install a pump station that will discharge agricultural runoff into the Sheyenne diversion channel.

The project consists of installing a PTO-driven pump to accommodate draining of agricultural lands on the exterior of the Sheyenne diversion channel by allowing them to discharge into the channel when the existing gravity flow is blocked. The state permitting requirements are currently in review.

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

The project engineer's total estimated cost of the project is $165,000, of which $135,000 is determined to be eligible for cost share participation as a flood control project at 45 percent of the eligible costs ($60,750). Although pump stations for agricultural drainage are considered as a rural flood control ineligible cost share item, this project is considered as a function of the flood control Sheyenne diversion low-flow channel improvements and reconstruction project. The request before the State Water Commission is for a 45 percent state cost participation in the amount of $60,750.

It was the recommendation of Secretary Sando that the State Water Commission approve conditional state cost participation as a flood control project at 45 percent of the eligible costs, not to exceed an allocation of $60,750 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the 2011 installation of the Sheyenne diversion exterior pump station.

It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve conditional state cost participation as a flood control project at 45 percent of the eligible costs, not to exceed an allocation of $60,750 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the 2011 installation of the Sheyenne diversion exterior pump station. This action is contingent upon the availability funds, satisfaction of the permit requirements, and approval of final engineering plans.

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

CITY OF VELVA 2011 FLOOD CONTROL LEVEE SYSTEM CERTIFICATION ANALYSIS - APPROVAL OF STATE COST PARTICIPATION ($102,000) (SWC Project No. 347)

A request from the City of Velva was presented for the State Water Commission's consideration for state cost participation for a Federal Emergency Management Agency (FEMA) levee system evaluation for the Souris River flood control improvements. In accordance with the National Flood Insurance Program (NFIP) regulations, communities seeking recognition of a levee system as providing protection on NFIP maps must provide data and documentation demonstrating compliance with regulations set forth in the Code of Federal Regulations (CFR) in Title 44, Chapter 1, Section 65.10. Once compliance with CFR has been completed, the levee system will be accredited on NFIP maps reflecting the appropriate risk zones for levee-impacted areas. Accreditation is not a guarantee or warranty of performance of the levee system during a flooding event, it is a determination that the levee system meets the minimum design, operation, and maintenance standards set forth in the regulations. A letter of agreement with FEMA was executed by the City of Velva on September 11, 2009 to label the levee as a Provisionally Accredited Levee (PAL). The levee system evaluation must be completed prior to September 11, 2011.

The flood control project improvements on the Souris River, Velva, North Dakota, were authorized under the provisions of the Flood Control Act (Public Law 91-611) and approved on December 31, 1970. The improvements were completed in 1984 and includes about 1.94 miles of earthern levees, seven emergency closures, raising a portion of Prospect Avenue, and a 6,500-foot channel modification of the Souris River.

The total estimated cost of the engineering analysis is $206,000, of which $170,000 is determined as eligible for state cost participation of 60 percent ($102,000). The request before the State Water Commission is for a 60 percent state cost participation in the amount of $102,000.

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 $102,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the City of Velva for their 2011 flood control levee system certification analysis.

It was moved by Commissioner Foley and seconded by Commissioner Goehring that the State Water Commission approve state cost participation at 60 percent of the eligible costs, not to exceed an allocation of $102,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the City of Velva to support their 2011 flood control levee system certification analysis. This action is contingent upon the availability of funds.

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

WALSH COUNTY LEGAL ASSESSMENT DRAIN NO. 71 AND LATERAL 71-1 2011 CONSTRUCTION PROJECT - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION ($304,141) (SWC Project No. 1969)

A request from the Walsh County Water Resource District was presented for the State Water Commission's consideration for state cost participation to construct Walsh County Legal Assessment Drain No. 71 and Lateral 71-1. The proposed project consists of constructing a five-mile long drain in Section 14, Township 158 North, Range 53 West, and a five-mile long lateral in Section 12, Township 158 North, Range 53 West to address sheetwater runoff from cropland.

The drain and lateral will be constructed with a maximum cut of 4.2 feet, 3:1 side slopes, and an 8-foot bottom width. The drain is designed for a 10-year event and has a drainage area of approximately 6,920 acres. It is anticipated that construction will be completed by December of 2011.

The project engineer's cost estimate is $804,869, of which $675,869 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($304,141). The proposed project was submitted for conditional approval pending an assessment vote, which is scheduled for the spring of 2011, and satisfaction of SWC drain permit No. 3754, which is being processed. The State Water Commission's cost share policy provides for conditional approval of rural flood control projects subject to satisfaction of the conditions. The request before the State Water Commission is for a 45 percent state cost participation in the amount of $304,141.

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 $304,141 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B 1020), for the Walsh County Legal Assessment Drain No. 71 and Lateral 71-1 2011 construction project.

It was moved by Commissioner Goehring and seconded by Commissioner Vosper 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 $304,141 from the funds appropriated to the State Water Commission

in the 2009-2011 biennium (H.B 1020), to the Walsh County Water Resource District to support the Walsh County Legal Assessment Drain No. 71 and Lateral 71-1 2011 construction project. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required permits, and receipt of the final engineering plans.

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

WALSH COUNTY LEGAL ASSESSMENT DRAIN NO. 72 2011 CONSTRUCTION PROJECT - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION ($144,807) (SWC Project No. 1970)

A request from the Walsh County Water Resource District was presented for the State Water Commission's consideration for state cost participation to construct the Walsh County Legal Assessment Drain No. 72. The proposed project consists of constructing a six and one-half mile long drain in Section 15, Township 158 North, Range 53 West to reduce flood damage to agricultural properties by removing sheetwater runoff from cropland.

The proposed drain will be constructed with a maximum cut of 3.5 feet, 3:1 side slopes, and an 8-foot bottom width. The drain is designed for a 10-year event with a drainage area of approximately 2,478 acres. It is anticipated that construction will be completed by December of 2011.

The project engineer's cost estimate is $418,293, of which $321,793 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($144,807). The proposed project was submitted for conditional approval pending an assessment vote, which is scheduled for the spring of 2011, and satisfaction of SWC drain permit No. 3751, which is being processed. The State Water Commission's cost share policy provides for conditional approval of rural flood control projects subject to the satisfaction of conditions. The request before the State Water Commission is for a 45 percent state cost participation in the amount of $144,807.

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 $144,807 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B 1020), for the 2011 Walsh County Legal Assessment Drain No. 72 construction project.

It was moved by Commissioner Berg and seconded by Commissioner Swenson 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 $144,807 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B 1020), to the Walsh County Water Resource District to support the 2011 Walsh County Legal Assessment Drain No. 72 construction project. This action is contingent upon the availability of funds, a positive assessment vote, satisfaction of the required permits, and receipt of the final engineering plans.

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

WILD RICE RIVER 2011 SNAG AND CLEAR PROJECT, REACH 2 (RICHLAND COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($47,500) (SWC Project No. 1842)

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation in their project to snag and clear the Wild Rice River, Reach 2. On December 10, 2010, the State Water Commission approved an allocation of $33,500 for Reach 1, which is anticipated for completion in April of 2011.

The proposed snagging and clearing project will consist of the removal of log jams and other woody debris. The proposed work will include the removal of all fallen trees in the channel or in danger of falling in the channel, driftwood, snags, and loose stumps and trunks in Sections 12 and 13, Township 131 North, Range 51 West, and Sections 7, 17, and 18, Township 131 North, Range 50 West.

The project engineer's cost estimate is $95,000, of which all is determined to be eligible for state cost participation as a snag and clear project at 50 percent of the eligible costs ($47,500). Maintenance funds will be used to finance the local share of the project. The request before the State Water Commission is for a 50 percent state cost participation in the amount of $47,500.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a snag and clear project at 50 percent of the eligible costs, not to exceed an allocation of $47,500 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Wild Rice River (Richland County) 2011 snag and clear project, Reach 2.

It was moved by Commissioner Olin and seconded by Commissioner Thompson that the State Water Commission approve state cost participation as a snag and clear project at 50 percent of the eligible costs, not to exceed an allocation of $47,500 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Richland County Water Resource District to support the Wild Rice River 2011 snag and clear project, Reach 2. This action is contingent upon the availability of funds.

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

NDSU-WILLISTON RESEARCH EXTENSION CENTER - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION ($60,050) (SWC FILE PS/IRR/NES)

On May 1, 2002, the State Water Commission approved a request from the North Dakota State University-Williston Research Extension Center for state cost participation of 40 percent of the eligible costs not to exceed an allocation of $239,500 for the pumping, conveyance, and distribution infrastructure related to the development of an irrigation research facility in Nesson Valley in Williams county.

The project consists of 160 acres on which multi-discipline research is carried on by several entities including the Williston Research Extension Center (WREC), NDSU Agriculture & Biosystems Engineering Department, Montana State University Eastern Agricultural Research Center, and USDA-ARS Northern Plains Laboratory in Sidney, Montana.

The proposal from the North Dakota State University to enhance the irrigation research efforts at the Williston Research Extension center was presented for the State Water Commission's consideration for state cost participation. The funds will be used to: 1) purchase and install a variable rate irrigation control instrumentation package on a third linear move sprinkler system for the NDSU Nesson Valley Irrigation Research and Development project; 2) purchase and install a Valley Basestation 2 on three linear irrigation systems to remotely monitor irrigation status; and 3) purchase and install a drip irrigation system to support horticultural research carried on at the Williston Research Extension Center. The estimated total project cost is $120,100. The request before the State Water Commission is for a 50 percent state cost participation for irrigation development not to exceed an additional allocation of $60,050.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as an irrigation project at 50 percent of the eligible costs, not to exceed an additional allocation of $60,050 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020) to support the enhancement of research efforts at the Williston Research Extension Center. The Commission's affirmative action would increase the total state cost participation to $299,550.

It was moved by Commissioner Goehring and seconded by Commissioner Olin that the State Water Commission approve state cost participation as an irrigation project at 50 percent of the eligible costs, not to exceed an additional allocation of $60,050 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020) to North Dakota State University to support the enhancement of research efforts at the Williston Research Extension Center. This action is contingent upon the availability of funds.

This action increases the total state cost participation to $299,550 for the North Dakota State University-Williston Research Extension Center.

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

TRAILL COUNTY DRAIN NO. 28 2011 EXTENSION AND IMPROVEMENTS - CONDITIONAL APPROVAL OF STATE COST PARTICIPATION ($336,007) (SWC Project No. 1245)

A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for cost share participation in their project to extend and improve a portion of Traill County Drain No. 28. The drain will be extended into Sections 25, 26, and 27, Hillsboro Township. Because the project is located adjacent to the Red River, it will serve to decrease flooding on the main stem of the Red River, and accelerate the drainage of the local water ahead of the main stem flood peak which will empty the channel to provide for additional storage.

The improvement reconstruction will be located in Sections 31, 32, and 33, Herberg Township. The proposed improvements and extension will be constructed with a bottom width of 10 feet, 4:1 side slopes, and a maximum cut of 4 feet. Eligible project work consists of culvert installations and riprap at crossings, excavation, spoil bank leveling, and seeding.

The project engineer's estimated cost is $1,630,000, of which $746,683 is determined to be eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($336,007). The request before the State Water Commission is for a 45 percent state cost participation in the amount of $336,007.

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 $336,007 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the 2011 extension and improvements reconstruction of Traill County Drain No. 28.

It was moved by Commissioner Vosper 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 $336,007 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the 2011 extension and improvements reconstruction of Traill County Drain No. 28. This action is contingent upon the availability of funds, satisfaction of the required permits, and receipt of the final engineering plans.

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

Cost share assistance was initially requested for improvements in Sections 34 and 35, Herberg Township, Traill County. According to Drain Permit No. 2675, the proposed work is the same dimensions of the improvement reconstruction project completed in 1994 and, therefore, it was determined to be operations and maintenance which is not considered eligible for state cost assistance.

Representatives from the Traill County Water Resource District requested an audience before the State Water Commission to provide technical information and seek reconsideration of the eligibility of the work in Sections 34 and 35 of Herberg Township for state cost participation as an "improvement" to the existing drain rather than "operations and maintenance" to the existing drain. The characteristics of the proposed project work includes a shifting of the channel alignment to provide increased stability of the road slope; flattening of the field slope to provide a stable slope to minimize erosion; widening of the channel bottom; and increasing the hydraulic capacity of the new channel. Governor Dalrymple directed the secretary to the State Water Commission and the staff to revisit the issue.

STATE WATER COMMISSION COST SHARE POLICY, PROCEDURE, AND GENERAL REQUIREMENTS - APPROVALS RELATING TO RING DIKES COST SHARE (SWC Project No. 1753)

The State Water Commission's cost share policy committee and others met on March 28, 2011. Items of discussion and recommendations included: general review of the cost share policy, storm water management projects, and the ring dike policies.

The Commission's ring dike policy and the Natural Resources Conservation Service (NRCS) Environmental Quality Incentive Program (EQIP) were discussed. For those landowners who choose to build a ring dike under the NRCS EQIP program, the cost share policy committee agreed to provide cost share assistance of 20 percent of the NRCS's construction payment for those ring dikes that meet the Commission's design elevation criteria.

The committee decided to remove the current requirement that all ring dikes be required to have a culvert and flap gate installed for internal drainage. It will now be the landowner's responsibility on how they choose to deal with internal drainage. Although no longer required, culverts and gates installed for internal drainage will be considered eligible costs. All other methods to address internal drainage will remain ineligible for cost share.

The following recommendation was presented for the State Water Commission's consideration to modify the Cost Share Policy, Procedure, and General Requirements, Projects Eligible for Cost Share, I. Rural Flood Control Projects, B. Ring Dikes, to include the following language: "Landowners enrolled in the Natural Resources Conservation Service's Environmental Quality Incentive Program (EQIP) who intend to construct rural/farmstead ring dikes, which comply with the State Water Commission's elevation design criteria, are eligible for a cost share reimbursement of 20 percent of the NRCS construction payment."

The State Water Commission members concurred with the committee recommendation, and also directed the secretary to the Commission and the staff to review those requests that have been submitted to the State Water Commission since January 1, 2010 for cost share eligibility.

It was moved by Commissioner Berg and seconded by Commissioner Swenson that the Cost Share Policy, Procedure, and General Requirements (Projects Eligible for Cost Share, I. Rural Flood Control Projects, B. Ring Dikes), be modified as recommended, and that the secretary to the Commission and the staff review those requests that have been submitted to the State Water Commission since January 1, 2010 for cost share eligibility.

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

INTERNATIONAL BOUNDARY ROADWAY DIKE (PEMBINA COUNTY) - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION ($13,000) (SWC Project No. 1401)

On August 20, 2010, the North Dakota State Water Commission was served with a Third Party Claim by the Municipalies of Rhineland and Stanley seeking contribution and indemnity from the third parties for their alleged actions (along with those of the plaintiffs) in increasing the flow of water in the Pembina River, which caused or contributed to the damages claimed by the plaintiffs. Other third party claims include the construction of dikes along the Pembina River to limit or prevent breakout flows that would naturally occur resulting in increased flow of water northward; third parties created or acquiesced to the creation of embankments in Pembina County that block the eastward movement of surface water and divert flows northward; and, that Pembina County constructed County Road 55 to prevent or limit water overflowing in the Pembina River from moving southward. The Third Party Claim also alleges that the actions of the third parties have increased water flows and caused or contributed to the flooding and resulting damage complained of by the plaintiffs.

Because the court is located in Winnipeg, Colin MacArthur and John Martens, solicitors with the Canadian law firm of Aikins, MacAulay & Thorvaldson, LLP, have been representing the State Water Commission (and Pembina County, Cavalier County Water Resource District, and several individuals) in preliminary motions to get the State Water Commission dismissed from the lawsuit filed against it as a third-party defendant. A hearing was held on the matter on February 3, 2011.

The initial cost estimate received from the solicitors for this case was $30,000, which was approved by the State Water Commission on September 1, 2010. The solicitors have submitted a billing for $35,776.30 and estimate approximately an additional $5,000 in fees to conclude the case, assuming there is no appeal. A request was presented for the State Water Commission's consideration for an additional $13,000 (payment for the current billing and the remainder of the anticipated bill for the case).

It was the recommendation of Secretary Sando that the State Water Commission approve an additional allocation not to exceed $13,000 for the International boundary roadway dike lawsuit. The Commission's affirmative action would provide a total state cost participation of $43,000.

It was moved by Commissioner Foley and seconded by Commissioner Vosper that the State Water Commission approve an additional allocation not to exceed $13,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 2010) for the International boundary roadway dike lawsuit. This action is contingent upon the availability of funds.

This action increases the total state cost participation to $43,000 for the International boundary roadway dike lawsuit.

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

SAFE DRINKING WATER ACT - APPROVAL OF PROJECT PRIORITY LIST IN FY 2011 INTENDED USE PLAN, DATED MARCH 7, 2011 (SWC File AS/HEA)

The Drinking Water State Revolving Loan Fund was authorized by Congress in 1996 under the Safe Drinking Water Act with the intention of assisting public water systems in complying with the Act. Funding in North Dakota for public water systems is in the form of a loan program administered by the Environmental Protection Agency through the North Dakota Department of Health. North Dakota Century Code ch. 61-28.1, Safe Drinking Water Act, gives the Department the powers and duties to administer and enforce the Safe Drinking Water program and to administer the program.

Section 1452(b) of the Safe Drinking Water Act requires each state to annually prepare an Intended Use Plan. The plan is to describe how the state intends to use the funds to meet the program objectives and further the goal of protecting public health. A public review period is required prior to submitting the annual plan to the Environmental Protection Agency as part of the capitalization grant application process. The North Dakota Department of Health held public hearings on the draft Intended Use Plan on February 14, 2011; no comments were received.

The State Water Commission's role in the program is defined in subsections 3 and 4 of ch. 61-28.1-12. Subsection 3 states that the Department shall administer and disburse funds with the approval of the State Water Commission. Subsection 4 states that the Department shall establish assistance priorities and expend grant funds pursuant to the priority list for the Drinking Water State Revolving Loan Fund after consulting with and obtaining the approval of the State Water Commission.

David Bruschwein, North Dakota Department of Health, presented the Fiscal Year 2011 Intended Use Plan for the North Dakota Drinking Water Revolving Loan Fund, dated March 7, 2011, for the State Water Commission's consideration. The 2011 Intended Use Plan is attached hereto as ***APPENDIX "C"***. The comprehensive project priority list includes 153 projects, with a cumulative total project cost of $412,900,000 for Fiscal Years 1997 through 2011. The fundable list for Fiscal Year 2011 includes 8 projects at a cost of $18,600,000.

It was the recommendation of Secretary Sando that the State Water Commission approve the project priority list for Fiscal Year 2011 as listed in the Intended Use Plan, dated March 7, 2011, and authorize the North Dakota Department of Health to administer and disburse Fiscal Years 1997 through 2011 program funds pursuant to the Fiscal Year 2011 Intended Use Plan.

It was moved by Commissioner Olin and seconded by Commissioner Vosper that the State Water Commission approve the project priority list for Fiscal Year 2011 as listed in the Intended Use Plan, dated March 7, 2011, and authorize the North Dakota Department of Health to administer and disburse Fiscal Years 1997 through 2011 program funds pursuant to the Fiscal Year 2011 Intended Use Plan.

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

FARGO-MOORHEAD METROPOLITAN FEASIBILITY STUDY REPORT (SWC Project No. 1928)

Project representatives provided a report on the Fargo-Moorhead Metropolitan Feasibility Study, and presented testimony, attached hereto as ***APPENDIX "D"***, that was provided to the 2011 Legislature in support of Senate Bill 2020 requesting funding for permanent flood protection in Cass County.

2011 SPRING FLOOD REPORT (SWC Project No. 1431-12)

The 2011 potential spring flood outlook and hydrologic conditions were discussed, which are summarized in a State Water Commission staff memorandum dated March 14, 2011, and attached hereto as ***APPENDIX "E"***.

DEVILS LAKE HYDROLOGIC UPDATE (SWC Project No. 416-10)

As of March 10, 2011, the water surface elevation for Devils Lake was 1451.75 feet msl. From the record elevation on Devils Lake of 1452.05 feet msl on June 27,2010, the lake fell to 1451.38 feet msl by December 10, 2010 before rising 0.37 feet to its current elevation. The total storage of Devils Lake, including Stump Lake is 3.67 million acre-feet and the area is 180,000 acres, which is an increase of 280,000 acre-feet of storage and an area of 16,000 acres from a year ago.

The National Weather Service provided the following long-range outlook for Devils Lake including Stump Lake. The values are valid for the time period of February 27 through September 29, 2011:

Long-Range Outlook for Devils Lake Rising

Chance	90%	50%	10%
Devils Lake (ft- msl)	1453.9	1454.7	1455.7

The National Operational Hydrologic Remote Sensing Center of the National Weather Service has developed and currently maintains an airborne gamma radiation snow survey program to acquire data to develop snow water equivalent estimates. Analysis of gamma data, as well as other data, is used to develop maps of snow water equivalent estimates. The snow water equivalent estimate on March 2, 2011 was 3.6 inches.

NORTH DAKOTA DEVILS LAKE OUTLET PROJECT REPORT (SWC Project No. 416-10)

The State of North Dakota pursued an emergency phased outlet project from West Bay to the Sheyenne River. Construction commenced in the fall of 2002, and operation of the outlet began on August 15, 2005 within the guidelines of the North Dakota Pollutant Discharge Elimination System (NDPDES) water quality discharge permit and the authorized modifications issued by the North Dakota Department of Health. The NDPDES water quality discharge permit had an expiration date of June 30, 2008, which was extended through June 30, 2013.

On June 24, 2009, the North Dakota Department of Health rescinded the water quality discharge permit and changed the water quality constraint to 450 mg/L at Bremen instead of 15 percent above the baseline. This allowed for 100 cubic feet per second of discharge until July 6, 2009 and then the discharge varied from 35 to 50 cubic feet per second. On July 15, 2009, the Department implemented an emergency rule for a segment of the Sheyenne River changing the sulfate standard from 450 mg/L to 750 mg/L. The outlet discharge was increased to 100 cubic feet per second since that time with some minor interruptions for maintenance.

On August 18, 2009, the State Water Commission approved an allocation not to exceed $16,500,000 for the expansion of the Devils Lake outlet to 250 cubic feet per second (cfs) using the Round Lake alternative. The upgrading of the state outlet to 250 cubic feet per second was completed in June, 2010.

The final North Dakota Department of Health's ruling on the Sheyenne River sulfate standards was approved by EPA on September 16, 2010. The standards to be followed are the same as the "emergency standards" followed since 2009. The EPA ruling indicating that it has no jurisdiction or authority to enforce water quality standards on a water-to-water transfer such as the Devils Lake outlet, should provide additional flexibility in the operation of the outlet, although the downstream uses will need to be maintained.

In order to increase the removal of water from Devils Lake, on October 26, 2010, the State Water Commission approved 100 percent of the estimated proposed engineering design costs of $1,500,000 for the west end Devils Lake outlet upgrade, $2,200,000 for the Devils Lake east end outlet, and $500,000 for the geotechnical investigation from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020).

Maintenance was completed over the 2011 winter months on the existing west end outlet that included rock lining of some of the open channel segments. The outlet will be in order to pump up to 250 cfs as soon as the Sheyenne River falls below flood flows this spring.

The sulfate concentration from February 24, 2011 below Baldhill Dam was tested at 401 mg/L. This concentration is lower than the January 26, 2011 reading of 46 mg/L. Concentrations of sulfate should lower quickly with the expected high flows on the Sheyenne River this spring.

Work is also in progress in studying an increase of 100 cfs discharge from the west end of Devils Lake. A potential difficulty of a west end outlet increase is the need to continue pumping during the construction of the additional 100 cfs.

The proposed east end outlet channel with gravity flow would take East Devils Lake water to the Sheyenne River. The proposed alternative route begins on East Devils Lake, runs east southeast 5.5 miles and outlets into Tolna Coulee. The final route is being developed to avoid wetlands and other hindrances and will require field reconnaissance to determine the preferred route. The general alternative consists of a pumping station at East Devils Lake to pump the 250 cfs discharge over a high point where it can flow downhill to Tolna Coulee. Buried pipe will be used for most of the route as the cost is less than tunneling and is more desirable than the open channel. At this time, the cost estimate is $60 - $90 million dollars depending on the final route and alternative.

The cost to increase the capacity to 350 cfs will be determined and compared to the cost of expanding the west end outlet. These cost comparisons, along with the results of the water quality modeling being done by the U.S. Geological Survey to determine downstream impacts, will be used to determine which outlet to increase to 350 cfs.

The Corps of Engineers and the State Water Commission are working on the design of a control structure on Tolna Coulee, which is the natural outlet for Devils Lake at 1458 feet msl. The Corps developed a conceptual control structure made of sheet pile. The structure that the State Water Commission is considering is a control structure in the center of the sheet pile structure consisting of stop logs that can control discharge should erosion occur. Until erosion occurs, the control structure would not modify the discharge from the lake. If the lake exceeds an elevation of 1458 feet msl, the existing topography and lake level would determine the discharge. The geotechnical firm selected for the soils investigation on Tolna Coulee is Terracon.

Landowners adjacent to the Sheyenne River downstream of the outlet are concerned about the impacts caused by the increased flows. The 2011 Devils Lake Mitigation Plan has been developed to address potential downstream problems that result from the operation of the outlet.

APPROVAL FOR PURCHASE OF SIX RAPID DEPLOYMENT STREAM GAGES ($65,830.00) AND GRANT REIMBURSEMENT OF ($55,955.50) (SWC Project No. 1431-11)

Following the flood of 2009, it became apparent that any additional information that could be acquired on streamflows in critical areas in a timely manner would be of great value. An example is the emergency actions at Cottonwood Creek Dam in 2009. A rapid deployment stream gage was installed at the dam and the data the gage collected was posted on the U.S. Geological Survey's (USGS) web site. This data made it possible to detect the leveling off of the reservoir and, after that point with the pool dropping, more aggressive measures could be safely taken to protect what remained of the spillway.

Funds were made available for flood mitigation grants following the 2009 flood. An application was approved to purchase six rapid deployment gages, which have been installed at Burlington, Minot, Logan, Beaver Creek below Jamestown, the Highway 46 crossing of the Sheyenne River below Kathryn, and the James River near Manfred.

The total estimated cost of the gages is $65,830.00. Under the grant program, 75 percent of these funds are provided by FEMA and 10 percent by the Department of Emergency Services, leaving an obligation for the

State Water Commission of $9,874.50. The grant is a reimbursement requiring the State Water Commission to make full payment and submit documentation for the reimbursement of $55,955.50 ($65,830.00-total cost, less $9,874.50-State Water Commission share).

Because these gages will be valuable and flexible tools in flood responses, it was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed $65,830.00 for full payment from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the purchase of six rapid deployment stream gages, and submit documentation for the reimbursement of $55,955,50 ($65,830.00-total cost, less $9,874.50-State Water Commission share).

It was moved by Commissioner Goehring and seconded by Commissioner Thompson that the State Water Commission approve an allocation not to exceed $65,830.00 for full payment from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the purchase of six rapid deployment stream gages, and submit documentation for the reimbursement of $55,955,50 ($65,830.00-total cost, less $9,874.50-State Water Commission share). This action is contingent upon the availability of funds.

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

DEVILS LAKE DEBRIS REMOVAL (SWC Project No. 1882-04)

Devils Lake has been rising since 1993 and, over the last decade, has continually achieved record elevations. Because of this rise, many structures have been inundated or are very near to the water's edge. The Commission staff estimated in October, 2010 that over 100 landowners will have over 700 structures affected between an elevation of 1451 feel msl and 1454 feet msl. The Commission staff are currently cataloguing structures up to an elevation of 1458 feet msl because of forecasted record raises in Devils Lake.

North Dakota Century Code § 61-03-21.3 states that *"If the state engineer finds that buildings, structures, boat docks, debris, or other manmade objects, except a fence or corral, situated in, on the bed of, or adjacent to waters that have been determined to be navigable by a court are, or are imminently likely to be, a menace to life or property or public health or safety, the state engineer shall issue an order to the person responsible for the object. The order must*

specify the nature and extent of the conditions, the action necessary to alleviate, avert, or minimize the danger, and a date by which that action must be taken. If the state engineer determines that an object covered by flood insurance is imminently likely to be a menace to life or property or public health or safety, the date specified in the order for action to be taken may not precede the date on which the person is eligible to receive flood insurance proceeds. If a building, structure, boat dock, debris, or other manmade object, except a fence or corral, is partially or completely submerged due to the expansion of navigable waters, the person responsible is the person who owns or had control of the property on which the object is located or the person who owned or had control of the property immediately before it became submerged by water."

A bill was introduced in the North Dakota Legislature in January, 2011, that would alter the language of § 61-03-21.3. **Removal, modification, or destruction of dangers in, on the bed of, or adjacent to navigable waters.** If the current statute is amended as proposed, the changes will provide the State Engineer with more flexibility to address the issues in Devils Lake relating to inundated structures.

DEVILS LAKE OUTLET AWARENESS PROJECT MANAGER - APPROVAL OF ADDITIONAL FUNDS THROUGH JUNE 30, 2011 ($4,400) (SWC Project No. 416-05)

In 1998, the State Water Commission, the Garrison Diversion Conservancy District, the Devils Lake Basin Joint Water Resource Board, and the Forward Devils Lake Corporation initiated cost sharing in a contract securing the services of the Devils Lake outlet awareness project manager, which is occupied by Joe Belford. The downstream education efforts provide a critical mechanism to dispense factual information and for people downstream to communicate their concerns.

On June 23, 2009, the State Water Commission approved a 33 percent state cost participation not to exceed an allocation of $42,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Devils Lake Basin Joint Water Resource Board to support the Devils Lake outlet awareness project manager from July 1, 2009 through June 30, 2011.

Because the Devils Lake flood issues have resulted in an increased demand for travel for the assistance of the downstream awareness project manager, a request from the Devils Lake Joint Water Resource Board was presented for the State Water Commission's consideration for an allocation not to exceed an additional $4,400, from the funds appropriated to the State Water Commission to continue funding for the Devils Lake outlet awareness project manager from July 1, 2009 through June 30, 2011.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed an additional $4,400, from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020) to continue funding for the Devils Lake outlet awareness project manager from July 1, 2009 through June 30, 2011.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve an allocation not to exceed an additional $4,400, from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Devils Lake Basin Joint Board to continue funding for the Devils Lake outlet awareness project manager from July 1, 2009 through June 30, 2011. This action is contingent upon the availability of funds.

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

SOUTHWEST PIPELINE PROJECT - CONTRACT AND STATUS REPORT (SWC Project No. 1736)

The following Southwest Pipeline Project status report was provided:

Oliver-Mercer-North Dunn Regional Service Area:

Contract 2-8B, main transmission line from Hazen to Stanton and Beulah to Center elevated tank. The total estimated project cost is $5,100,000. Bids were opened for contract 2-8B on May 12, 2010, the contract was awarded to Kamphuis Pipeline Co., Grand Rapids, MI, in the amount of $3,888,095. Submittals are being processed on this contract. The contractor plans to begin boring work in March and has mobilized equipment to the job site. The substantial completion date is June 15, 2011.

Contract 2-8C/D, main transmission line from Center elevated tank to Center. This contract will consist of 38.1 miles of PVC pipeline and will take water from the Center elevated tank to the City of Center and south to the Missouri West water system north of New Salem. The total estimated project cost is $5,300,000. The design work is complete. Easements are currently being obtained for this contract, the Bureau of Reclamation policy requires all easements to be in place 30 days prior to the advertisement for bids. Efforts are underway to seek clarification from the Bureau of Reclamation regarding clearing and grubbing/mowing of the pipeline alignment to prevent disturbing potential migratory bird nesting habitat.

Contract 3-1C, Oliver-Mercer-North Dunn water treatment plant membrane equipment procurement. The total estimated project cost is $2,500,000. Bids were opened for contract 3-1C on November 20, 2009, the State Water Commission authorized the award of the contract on December 11, 2009, to Wigen Water Technologies, Inc., Chaska, MN, in the amount of $2,251,250. The contract includes furnishing the membrane filtration and membrane softening systems along with the design phase and construction phase engineering services.

The design phase of the project has been completed. The membrane equipment will be delivered during construction of the plant and installed by the building contractor with supervision by Wigen and Toray Industries, Inc., the membrane supplier. The delivery date is dependent upon PKG's progress on the water treatment plant building.

Contract 3-1D, Oliver-Mercer-North Dunn water treatment plant building and membrane equipment installation. Bids were opened for contract 3-1D on August 19, 2010. The total estimated project cost is $11,100,000. The State Water Commission authorized the award of General, Mechanical, and Electrical construction contracts on September 1, 2010 to PKG Contracting, Inc., Fargo, N.D. ($7,236,900), Cofell's Plumbing and Heating, Inc., Bismarck, N.D. ($600,000), and Edling Electric, Inc., Bismarck, N.D. ($1,209,360), respectively. The contract documents were executed on October 1, 2010, and work commenced in October, 2010. The substantial completion date is December 31, 2011.

Contract 3-1E, Oliver-Mercer-North Dunn water treatment plant concentrate disposal facility. The total estimated project cost is $2,500,000. The purpose of this facility will be to dispose of the reverse osmosis concentrate from the softening process. It will include a pipeline from the treatment plant back to the lake and a discharge facility in the lake. A permit from the Corps of Engineers has allowed access for survey and cultural resource work, survey work will be required on their property next spring prior to the Piping Plover nesting period with construction being performed after the nesting period. The design and cultural resource work has been performed for the remainder of the pipeline alignment.

Contract 4-3A/4-4A, Jung Lake and Ray Christensen pump station upgrades. This contract will consist of supplying and installing a back up generator and related switch/gear at the Jung Lake pump station and the installation of a high capacity pump for the west zone at the Ray Christensen pump station. The total estimated project cost is $480,000. The bids were opened for contract 4-3A/4-4A on March 24, 2011. The State Water Commission will consider award of the contract under a separate item on March 28, 2011.

Contract 5-15A, Zap potable reservoir. The total estimated project cost is $1,400,000. Contract 5-15A was bid on May 19, 2010, the State Water Commission authorized the award of contract 5-15A on June 1, 2010 to Maguire Iron, Inc., Sioux Falls, S.D., in the amount of $1,175,000. Site work began in October, 2010, and the reservoir erection is scheduled during January through April, 2011.

Contract 5-16, Center Elevated Tank. Contract 5-16 will be for the construction of a 750,000 gallon elevated tank with an overflow height of 185 feet located south of Beulah and west of Center. The total estimated project cost is $1,800,000. The bids were opened for contract 5-16 on March 3, 2011. The State Water Commission will consider award of the contract under a separate item on March 28, 2011.

Contract 7-9C, Zap service area rural distribution line, Phase I. Contract 7-9C will consist of approximately 157 miles of PVC rural distribution pipeline and will serve 263 users including rural users, coal plants, and mines. The total estimated project cost is $5,100,000. A submittal plan has been received for this contract. Easements are currently being obtained for this contract, the Bureau of Reclamation policy requires all easements to be in place 30 days prior to the advertisement for bids. Efforts are underway seeking clarification from the Bureau of Reclamation regarding clearing and grubbing/mowing of the pipeline alignment to prevent disturbing potential migratory bird nesting habitat.

Oliver-Mercer-North Dunn regional service area contracts under design: Contracts under design for the Oliver-Mercer-North Dunn regional service area include:

Contract 2-8E, main transmission line from Oliver-Mercer-North Dunn regional service area water treatment plant to Killdeer Mountains area. This contract will consist of 44.5 miles of PVC pipeline and will be the main transmission line for the Dunn Center service area. The capacity of this line will likely be increased to serve oil industry, specifics of which are currently under investigation.

Contract 7-9D, Zap service area rural distribution line, Phase II, consists of 140 miles of PVC pipeline serving 232 users. The estimated total project cost is $5,800,000. The cultural work will be performed in 2011 in anticipation of bidding in late fall/winter of 2011.

Little Missouri River Washout:

A specific authorization was executed directing Bartlett & West to develop a solution to the Little Missouri River erosion near the Badlands Ministries Bible Camp and the Harold Hugelin ranch south of Medora. Geotechnical investigations were performed in March, 2011, and there appears to be a suitable material to tie into beneath the river sand to achieve the desired goal of preventing future erosion and returning the river to its previous course. A remediation/mitigation plan is due to the Corps of Engineers on April 18, 2011.

SOUTHWEST PIPELINE PROJECT - OLIVER-MERCER-NORTH DUNN REGIONAL SERVICE AREA, CENTER ELEVATED TANK - AUTHORIZE AWARD OF CONTRACT 5-16 (SWC Project No. 1736)

On March 3, 2011, bids were opened for Southwest Pipeline Project contract 5-16, Oliver-Mercer-North Dunn regional service area, Center elevated tank. Contract 5-16 will consist of a 750,000 gallon elevated reservoir with a height to overflow of 175 feet. The contract documents stipulate a substantial completion date of July 15, 2012.

The bid form was divided into two schedules, a composite style, (Bid Schedule I), and the pedestal spheroid style tank (Bid Schedule II). Five bid packages were received for contract 5-16 containing four bids for the composite style tank from Landmark Structures, Inc., Fort Worth, TX; Chicago Bridge and Iron Constructors, Inc., Bolingbrook, IL; Phoenix Fabricators & Erectors, Inc., Avon, IL; and Caldwell Tanks, Inc., Louisville, KY; and three bids for the pedestal spheroid style tank from CB&I Constructors, Inc., Bolingbrook, IL; Caldwell Tanks, Inc., Louisville, KY; and Maguire Iron, Inc., Sioux Falls, SD. All bids appeared to be in order and all were opened. The apparent low bid received for the Bid Schedule I - composite style tank was $1,492,000 submitted by Landmark Structures, Inc., Fort Worth, TX. The composite style tank estimate in the preliminary engineering report was $1,788,000.

The contract documents allow the State Water Commission to select the most advantageous bid. Based on the project engineer's review, the bid received from Landmark Structures, Inc. appears to be in accordance with the advertisement for construction bid and the bid documents, and is considered to be a responsible and responsive bid. It was the recommendation of the project engineer to award contract 5-16 to Landmark Structures, Inc., Fort Worth, TX, based on Bid Schedule I - composite style tank. The award of contract and notice to proceed are dependent on the satisfactory completion and submission of the contract documents by Landmark Structures, concurrence from the Garrison Diversion Conservancy District, and review/approval by the Commission's legal counsel.

Landmark Structures, Inc., has had one previous contract on the Southwest Pipeline Project, contract 5-4, Jung Lake elevated tank, completed in 1999 at 600,000 gallons and 205 feet to overflow with a final contract amount of $882,045. Additionally, Bartlett & West has had experience with Landmark Structures on elevated tank contracts for other owners in North Dakota, most recently the Parshall, New Town and Mandaree composite style elevated tanks currently under construction for the Fort Berthold rural water system. With their bid package, Landmark provided information on 117 composite tanks completed in the last five years and 41 currently under construction.

It was the recommendation of Secretary Sando that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project contract 5-16, Oliver-Mercer-North Dunn regional service area - Center elevated tank, to Landmark Structures, Inc., Fort Worth, TX, based on Bid Schedule I - composite style tank, in the amount of $1,492,000.

it was moved by Commissioner Goehring and seconded by Commissioner Olin that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project contract 5-16, Oliver-Mercer-North Dunn regional service area - Center elevated tank, to Landmark Structures, Inc., Fort Worth, TX, based on Bid Schedule I - composite style tank, in the amount of $1,492,000. This action is contingent upon the satisfactory completion and submission of the contract documents by Landmark Structures, concurrence from the Garrison Diversion Conservancy District, and review/approval by the Commission's legal counsel.

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

SOUTHWEST PIPELINE PROJECT - JUNG LAKE AND RAY CHRISENSEN PUMP STATIONS - AUTHORIZE AWARD OF CONTRACT 4-3A/4-4A (SWC Project No. 1736)

On March 24, 2011, bids were opened for Southwest Pipeline Project contract 4-3A/4-4A, Jung Lake and Ray Christensen pump stations upgrades.

In compliance with North Dakota Century Code § 48-01.1-06, the contract was divided into separate prime bids for the General (Bid Schedule I) and Electrical (Bid Schedule II) portions of the work. The work under the General bid schedule consists of removing a single 50 HP pump and furnishing and installing a 100 HP pump at the Ray Christensen pump station, and

relocating the existing 1,000 gallon external propane tank at the Jung Lake pump station. Work under the Electrical bid schedule consists of replacing the pump circuit breaker and installing electrical conductors, conduit and connections at the Ray Christensen pump station, and removing three constant speed starters, furnishing and installing a single 350 HP VFD, furnishing and installing a 400 KW standby diesel engine generator, furnishing and installing an automatic transfer switch, and installing electrical conductors, conduit and connections at the Jung Lake pump station. The Electrical contract also includes flash hazard studies at both pump stations. The contract documents stipulates a substantial completion date of November 30 2011.

Three bids were received for contract 4-3A/4-4A. One bid was received for Bid Schedule I - General Construction from PKG Contracting, Inc., Fargo, ND. Two bids were received for Bid Schedule II - Electrical Construction from Berger Electric, Inc., Dickinson, ND, and Edling Electric, Inc., Bismarck, ND. The apparent low bid for Bid Schedule I - General Construction was $152,000 - PKG Contracting, Inc., Fargo, ND, and for Bid Schedule II - Electrical Construction was $ 308,648 - Berger Electric, Inc., Dickinson, ND. While the general bid was higher than the engineer's estimate ($114,500), the electrical bid was lower than the engineer's estimate ($364,000), so the total combined contract is less than the total estimate. Both low bidders have a positive working experience on the Southwest Pipeline Project.

The contract documents allow the State Water Commission to select the most advantageous bids. Based on the project engineer's review, the bids received from PKG Contracting, Inc. (General Construction) and Berger Electric, Inc. (Electrical Construction) appear to be in accordance with the advertisement for construction bids and the bid documents, and are considered to be responsible and responsive bids. It was the recommendation of the project engineer to award contract 4-3A/4-4A - General Construction, to PKG Contracting, Inc. in the amount of $152,000, and contract 4-3A/4-4A - Electrical Construction, to Berger Electric, Inc. in the amount of $308,648. The award of contract and notice to proceed are dependent on the satisfactory completion and submission of the contract documents by PKG Contracting, Inc. and Berger Electric, Inc., and review/approval by the Commission's legal counsel.

It was the recommendation of Secretary Sando that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project contract 4-3A/4-4A - General Construction, to PKG Contracting, Inc. in the amount of $152,000, and contract 4-3A/4-4A - Electrical Construction, to Berger Electric, Inc. in the amount of $308,648.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission authorize the secretary to the State Water Commission to award Southwest Pipeline Project contract 4-3A/4-4A - General Construction, to PKG

Contracting, Inc. in the amount of $152,000, and contract 4-3A/4-4A - Electrical Construction, to Berger Electric, Inc. in the amount of $308,648. This action is contingent upon the satisfactory completion and submission of the contract documents by PKG Contracting, Inc., and Berger Electric, Inc., and review/approval by the Commission's legal counsel.

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

SOUTHWEST PIPELINE PROJECT - APPROVAL OF WATER SERVICE CONTRACT WITH MISSOURI WEST WATER SYSTEM (SWC Project No. 1736-05)

The Missouri West Water System has requested a water service contract from the State Water Commission and the Southwest Water Authority for the delivery of potable treated water from the Southwest Pipeline Project.

The contract specifies a minimum annual purchase of 40 million gallons based on the maximum flow rate of 200 gallons per minute. Missouri West has requested a graduated minimum purchase of 12 million gallons in the first year of the contract, 24 million gallons in the second year, and 40 million gallons for all subsequent years to allow them to make infrastructure modifications and adjust the flows in the western portion of their system to properly utilize the flows from the Southwest Pipeline Project.

It was the recommendation of Secretary Sando that the State Water Commission authorize the secretary to the State Water Commission to finalize and execute the Missouri West Water System water service contract.

It was moved by Commissioner Swenson and seconded by Commissioner Olin that the State Water Commission authorize the secretary to the State Water Commission to finalize and execute the Southwest Pipeline Project water service contract with the Missouri West Water System. SEE APPENDIX "F".

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

SOUTHWEST PIPELINE PROJECT - APPROVAL OF CONTRACT 1736-5, AMENDMENT NUMBER 4, CITY OF BEACH WATER SERVICE CONTRACT (SWC Project No. 1736-05)

On December 6, 1982, the City of Beach entered into a water service contract with the State Water Commission and the Southwest Water Authority for the delivery of potable treated water from the Southwest Pipeline Project. The city originally signed up for a blending contract, the contract has since been modified to a sole source contract. When the water service contract was previously amended, the minimum purchase was removed but the maximum flow rate was not modified to the proper value.

Southwest Pipeline Project Contract 1736-5, Amendment Number 4, was presented for the State Water Commission's consideration to amend Section VI.B.2 as follows: "The maximum flow rate to be provided by the Commission to the City shall not exceed ~~31.0~~ 200.0 gallons per minute."

It was the recommendation of Secretary Sando that the State Water Commission authorize the secretary to the State Water Commission to finalize and execute Southwest Pipeline Project, Amendment Number 4, to Contract 1736-5, City of Beach water service contract.

It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission authorize the secretary to the State Water Commission to finalize and execute Southwest Pipeline Project Contract 1736-5, Amendment Number 4, City of Beach water service contract. SEE APPENDIX "G"

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

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

The following Northwest Area Water Supply (NAWS) project status report was provided:

Supplemental Environmental Impact Statement (EIS): The Bureau of Reclamation selected Cardno ENTRIX as the firm to complete the supplemental environmental impact statement for the Northwest Area Water Supply project. The Bureau has experience with this firm with issues before the State Department and other more-involved environmental issues. The Bureau will be

negotiating the terms of the contract and providing information concerning the NAWS project through mid-April, 2011, at which point of contact should be in place to begin drafting the report.

Manitoba and Missouri Lawsuit:

On March 5, 2010, U.S. District Judge Rosemary Collyer issued a decision to continue the injunction on the NAWS project. Judge Collyer had previously allowed construction of the pipeline, but not the treatment facilities. Judge Collyer asked the Bureau of Reclamation to further address two issues, the cumulative impacts of water withdrawal on the water levels of Lake Sakakawea and the Missouri River, and the consequences of biota transfer into the Hudson Bay basin including Canada.

On October 25, 2010, Judge Rosemary Collyer issued a decision to allow construction on the improvements in the Minot water treatment plant to proceed, however, she did not allow design work to continue on the intake.

Design and Construction Contracts:

Contract 2-2C: The contract work covers 52 miles of pipeline for the Kenmare-Upper Souris segment. The State Water Commission authorized the award of contract 2-2C to Northern Improvement Company, Fargo, ND, on September 30, 2008. Water service to Kenmare was started on December 7, 2009, and water service to the Upper Souris Water District at the Donnybrook turnout started on December 22, 2009. The seeding for portions of the contract were completed, however, there are several areas requiring reseeding. Contract closeout is expected following the final seeding.

Contract 2-2D: The contract work covers 62 miles of pipeline for the Mohall/Sherwood/All Seasons segment. Bids were opened for contract 2-2D on July 14, 2009. The State Water Commission authorized the secretary to the Commission to award contract 2-2D to American Infrastructure from Colorado on August 18, 2009. There remains 2,000 feet of pipe to be placed. The contractor provided notice of voluntary default. Working with their bonding company, EMC, to have the remaining work completed, and provide to EMC contact information for all subcontractors and suppliers who worked on the project and have not been reimbursed. The substantial completion date was October 15, 2010, with final completion on November 15, 2010.

Contract 2-2E: This contract covers connections of the community of Burlington and the West River Water and Sewer District to the NAWS pipeline. The contract was awarded to Steen Construction & Associates, Inc., Stanley, N.D., on November 13, 2009, in the amount of $471,782. Water service to the West River Water District started on June 22, 2010, and to Burlington on August 11, 2010.

Contract 2-3A: This contract covers 13 miles of 24-inch pipe connecting the Air Force Base to the north side of Minot. The contract cost estimate is $5,850,000. On December 10, 2010, the State Water Commission authorized the award of contract 2-3A to S. J. Louis Construction, Inc., Rockville, MN in the amount of $5,854,600. The contractor will begin work on the contract in the spring of 2011.

Contract 2-3B: This contract has 13 miles of pipe north of the Minot Air Force Base to provide service to the Upper Souris Water District at their treatment plant and at Glenburn. The contract cost estimate is $3,700,000. On December 10, 2010, the State Water Commission authorized the award of contract 2-3B to S. J. Louis Construction, Inc., Rockville, MN in the amount of $3,747,982. The contractor will begin work in the spring of 2011.

Contract 5-2C: The contract work includes a 1 million gallon storage reservoir near Kenmare. The substantial completion was July 1, 2010, with final completion in August 1, 2010. The tank is in service. Testing of the cathodic protection will be completed in June, 2011.

Design on Contract 7-1A: On October 25, 2010, the federal court approved construction in the Minot water treatment plant with the piping and filters. The plans and specifications should be ready for advertisement in the spring of 2011.

SIXTY-SECOND LEGISLATIVE ASSEMBLY (2011) UPDATE

The Sixty-second Legislative Assembly of North Dakota (2011) considered legislation relating to the State Water Commission's appropriation for the 2011-2013 biennium, western area water supply funding and appropriations, issues relating to water resource districts, irrigation, and other water-related issues which are outlined in the Commission staff memorandum, dated March 16, 2011, attached hereto as ***APPENDIX "H".***

House Bill 1206 creates the Western Area Water Supply Authority and authorizes the Western Area Water Supply Project (WAWS). The bill, in its present form, authorizes the Authority to build the project using bond proceeds guaranteed by the State of North Dakota. The Authority is required to report to the State Water Commission and provide updates on the bidding, planning, construction, operating, and financial status of the project. The Authority is also required to present the overall plan and contract plans and specifications to the Commission for concurrence. If the project defaults on their bond payments, the Commission becomes the governing board and takes ownership of the project. The bill also requires the Authority to repay the Commission up to $30 million of loan funding after retiring the bond debt. The bill has passed the House and hearings held in the Senate Industry, Business and Labor committee.

Concerns relative to House Bill 1206 were voiced by Steven Mortenson and Bill Sheldon representing the Independent Water Providers, attached hereto as ***APPENDIX "I"***. The Providers expressed support of the necessary infrastructure for western North Dakota, and alluded to the State Water Commission's credentials for constructing previous extensive water supply infrastructure. Mr. Mortenson stated, in part, "The Commission has the experience, ability, resources, and management to construct the WAWS infrastructure with significant savings." He urged the Commission "to pass a resolution opposing House Bill 1206 in its present form, that the project be built by the State Water Commission until possession is given to the local authority, and that the funds be restored to the Resources Trust Fund after the project is paid for."

Governor Dalrymple acknowledged draft resolutions that were presented for the State Water Commission's consideration relative to 2011 House Bill 1206, resolution on construction, and resolution on the Resources Trust Fund. Discussion pursued on the draft resolutions which resulted in offering of the following motion:

> ***It was moved by Commissioner Berg and seconded by Commissioner Vosper that the State Water Commission approve draft resolutions relative to 2011 House Bill 1206 relating to the Western Area Water Supply construction and the Resources Trust Fund.***
>
> ***Commissioners Berg, Foley, Olin, Thompson, and Vosper voted aye. Commissioners Goehring, Swenson, and Governor Dalrymple voted nay. Recorded votes were 5 ayes; 3 nays. Governor Dalrymple announced the motion carried.***
>
> ***Resolution No. 2011-03-525, 2011 House Bill 1206, Western Area Water Supply, Resolution on Construction, and Resolution No. 2011-03-526, 2011 House Bill 1206, Western Area Water Supply, Resolution on Resources Trust Fund, attached hereto as APPENDIX "J" .***

MISSOURI RIVER REPORT
(SWC Project No. 1392)

The Missouri River report was provided, which is detailed in the staff memorandum, dated March 15, 2011, and attached hereto as ***APPENDIX "K"***.

The update report on March 28, 2011 indicated the system storage in the six mainstem reservoirs was 61.4 million acre-feet (MAF); Lake Sakakawea was at elevation 1840.0 feet; and Garrison releases averaged

26,000 cubic feet per second in February, 2011. House Concurrent Resolution No. 3019, relating to the Corps of Engineers attempts to charge water users of North Dakota for storage that is not needed, passed the Senate on March 22, 2011.

MISSOURI RIVER JOINT WATER BOARD - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION ($7,500) FOR NORTH DAKOTA REPRESENTATION ON MISSOURI RIVER RECOVERY IMPLEMENTATION COMMITTEE (MRRIC) (SWC File PS/WRD/MRJ)

Section 5018 of the Water Resources Development Act of 2007 authorizes the Secretary of the Army to establish a Missouri River Recovery Implementation Committee (MRRIC). The committee will serve as a collaborative forum to develop a shared vision and comprehensive plan for the restoration of the Missouri River ecosystem. The committee's membership is comprised of representatives of federal agencies, tribes, states, and stakeholders from throughout the Missouri River basin. Recommendations will be provided to federal, tribal, state, local and private entities in the basin on efforts to recover threatened and endangered species and to restore their habitats while sustaining the river's many uses.

The Corps of Engineers appointed Terry Fleck to represent the upper basin stakeholder interests relative to recreation on the MRRIC. Costs associated with Mr. Fleck's representation of the State of North Dakota on MRRIC were originally estimated at $20,000 for 2009. The proposed sources of funding included the State Water Commission (50 percent, $10,000); the Garrison Diversion Conservancy District (25 percent, $5,000); and other state and local entities (25 percent, $5,000). On December 5, 2008, the State Water Commission approved an allocation not to exceed $10,000 to the Missouri River Joint Water Board to support the costs associated with Terry Fleck's representation on MRRIC. Because of additional travel expenses incurred for committee representation, the State Engineer approved an additional $10,000 on June 30, 2009 (2009-2011 biennium) to the Missouri River Joint Water Board.

Additional expenses of $15,000 are anticipated in 2011 to support Mr. Fleck's efforts on the committee as the representative of the upper basin recreation. A request from the Missouri River Joint Water Board was presented for the State Water Commission's consideration for a 50 percent state cost participation in the amount of an additional $7,500 in the 2009-2011 biennium.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation of 50 percent of the eligible costs, not to exceed an additional allocation of $7,500 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Missouri River Joint Water Board to assist with travel expenses associated with

Terry Fleck's representation of the State of North Dakota on the Missouri River Recovery Implementation Committee (MRRIC). The Commission's affirmative action would increase the total state cost participation to $27,500.

It was moved by Commissioner Foley and seconded by Commissioner Vosper that the State Water Commission approve state cost participation of 50 percent of the eligible costs, not to exceed an additional allocation of $7,500 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Missouri River Joint Water Board to assist with travel expenses associated with Terry Fleck's representation of the State of North Dakota on the Missouri River Recovery Implementation Committee (MRRIC). This action is contingent upon the availability of funds.

This action increases the total state cost participation to $27,500 to the Missouri River Joint Water Board to support the travel expenses of Terry Fleck to serve on the Missouri River Recovery Implementation Committee.

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

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

The Dakota Water Resources Act of 2000 authorized the Secretary of the Interior to conduct a comprehensive study of the water quantity and quality needs of the Red River valley in North Dakota and possible options for meeting those needs. The Act identified two project-related studies: the *Report on Red River Valley Water Needs and Options,* and the *Red River Valley Water Supply Project Environmental Impact Statement (EIS).* The Bureau of Reclamation completed the *Report on Red River Valley Water Needs and Options.* The State of North Dakota and the Bureau jointly prepared the EIS. Governor Hoeven designated the Garrison Diversion Conservancy District to represent the state in this endeavor.

The final EIS was available to the public on December 28, 2007. The Secretary of the Interior executed a memorandum on January 15, 2009 disclosing the following: the project selected to meet the needs of the Red River Valley is the preferred alternative, pipeline from the McClusky Canal to Lake Ashtabula; and, the identified treatment processes are adequate to meet the requirements of the Boundary Waters Treaty. The U.S. State Department requested that the Bureau of Reclamation delay executing the Record of Decision until discussions with Canada have been concluded.

The March 1, 2011 status report relating to the specific efforts of the Red River Valley Water Supply project, were provided by Dave Koland, Garrison Diversion Conservancy District general manager, which is attached hereto as ***APPENDIX "L"***.

There being no further business to come before the State Water Commission, Governor Dalrymple adjourned the meeting at 5:30 P.M.

Jack Dalrymple, Governor
Chairman, State Water Commission

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

STATE WATER COMMISSION
ALLOCATED PROGRAM EXPENDITURES
FOR THE PERIOD ENDED JANUARY 31, 2011
BIENNIUM COMPLETE: 79%

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	15-Mar-11 PROGRAM TOTALS
ADMINISTRATION				
Allocated	1,812,056	1,212,732		3,024,788
Expended	1,413,136	684,051		2,097,187
Percent	78%	56%		69%
			Funding Source:	
			General Fund:	1,986,881
			Federal Fund:	110,307
			Special Fund:	0
PLANNING AND EDUCATION				
Allocated	1,192,175	208,511	99,000	1,499,686
Expended	921,586	116,173	73,348	1,111,107
Percent	77%	56%	74%	74%
			Funding Source:	
			General Fund:	886,690
			Federal Fund:	144,329
			Special Fund:	80,088
WATER APPROPRIATION				
Allocated	3,633,879	483,162	1,078,935	5,195,976
Expended	2,785,127	345,964	659,189	3,790,280
Percent	77%	72%	61%	73%
			Funding Source:	
			General Fund:	3,131,972
			Federal Fund:	0
			Special Fund:	658,307
WATER DEVELOPMENT				
Allocated	5,041,486	4,837,457	225,000	10,103,943
Expended	3,786,779	4,794,642	203,836	8,785,257
Percent	75%	99%	91%	87%
			Funding Source:	
			General Fund:	3,528,102
			Federal Fund:	2,274,109
			Special Fund:	2,983,047
STATEWIDE WATER PROJECTS				
Allocated			203,185,070	203,185,070
Expended			59,501,542	59,501,542
Percent			29%	29%
			Funding Source:	
			General Fund:	0
			Federal Fund:	80,557
			Special Fund:	59,420,984
ATMOSPHERIC RESOURCE				
Allocated	854,950	712,830	4,694,692	6,262,472
Expended	670,257	270,407	1,247,013	2,187,677
Percent	78%	38%	27%	35%
			Funding Source:	
			General Fund:	639,945
			Federal Fund:	0
			Special Fund:	1,547,733
SOUTHWEST PIPELINE				
Allocated	400,498	1,665,314	37,556,958	39,622,770
Expended	328,870	2,009,855	7,307,152	9,645,877
Percent	82%	121%	19%	24%
			Funding Source:	
			General Fund:	0
			Federal Fund:	5,161,873
			Special Fund:	4,484,004
NORTHWEST AREA WATER SUPPLY				
Allocated	530,958	6,229,700	50,289,114	57,049,772
Expended	354,997	3,422,080	16,228,028	20,005,105
Percent	67%	55%	32%	35%
			Funding Source:	
			General Fund:	0
			Federal Fund:	9,604,384
			Special Fund:	10,400,722
PROGRAM TOTALS				
Allocated	13,466,002	15,349,706	297,128,769	325,944,477
Expended	10,260,752	11,643,173	85,220,108	107,124,033
Percent	76%	76%	29%	33%

FUNDING SOURCE:	ALLOCATION	EXPENDITURES	REVENUE	
GENERAL FUND	14,124,223	10,173,590	GENERAL FUND:	154,411
FEDERAL FUND	67,070,358	17,375,558	FEDERAL FUND:	17,366,616
SPECIAL FUND	244,749,896	79,574,885	SPECIAL FUND:	80,373,514
TOTAL	325,944,477	107,124,033	TOTAL:	97,894,541

APPENDIX "B"
March 28, 2011

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 BIENNIUM

Jan-11

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
CITY FLOOD CONTROL					
FARGO/RIDGEWOOD	2,084,750	2,084,750	2,033,809	0	50,941
FARGO	45,000,000	45,000,000	0	0	45,000,000
FARG0/MOOREHEAD STUDY	300,000	300,000	300,000	0	0
GRAFTON	7,175,000	7,175,000	0	0	7,175,000
WATER SUPPLY	44,381,621	44,381,621	13,110,687	0	31,270,935
PERMANENT OIL TRUST FUND	2,442,000	2,442,000	1,617,901	0	824,099
IRRIGATION DEVELOPMENT	1,605,370	1,605,370	150,532	0	1,454,838
GENERAL WATER MANAGEMENT					
OBLIGATED	20,308,528	20,308,528	7,356,512	0	12,952,016
UNOBLIGATED	1,940,627			1,940,627	0
MISSOURI RIVER MANAGEMENT	372,000	372,000	24,619	0	347,381
FLOOD CONTROL					
BALDHILL DAM	92,832	92,832	6,138	0	86,694
RENWICK DAM	1,478,190	1,478,190	0	0	1,478,190
UPPER MAPLE RIVER DAM	112,500	112,500	0	0	112,500
RED RIVER WATER SUPPLY	3,200,000	3,200,000	2,982,035	0	217,965
DEVILS LAKE					
BASIN DVELOPMENT	102,000	102,000	24,447	0	77,553
DIKE	25,350,000	25,350,000	4,848,000	0	20,502,000
OUTLET	15,961,325	15,961,325	12,827,482	0	3,133,843
OUTLET OPERATIONS	4,900,000	4,900,000	2,953,079	0	1,946,921
DL USGS MODEL STUDY	16,000	16,000	0	0	16,000
DL TOLNA COULEE DIVIDE	500,000	500,000	27	0	499,973
CITY OF MINNEWAUKAN	15,000	15,000	15,000	0	0
DL EAST END OUTLET	2,200,000	2,200,000	84	0	2,199,916
NELSON COUNTY	636,064	636,064	8,492	0	627,572
WEATHER MODIFICATIONS	225,000	225,000	0	0	225,000
SOUTHWEST PIPELINE PROJECT	12,782,474	12,782,474	4,414,032	0	8,368,442
NORTHWEST AREA WATER SUPPLY	10,832,918	10,832,918	2,448,878	0	8,384,040
TOTALS	204,014,199	202,073,572	55,121,754	1,940,627	146,951,818

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium

PROGRAM OBLIGATION

Approve By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Jan-11* Balance
			City Flood Control:				
SWC	1927	5000	Fargo/Ridgewood Flood Control Project	6/22/2005	2,084,750	2,033,809	50,941
SWC	1928	5000	Fargo Flood Control Project	6/23/2009	45,000,000	0	45,000,000
SWC	583	5000	Fargo/Moorhead Study	3/29/2010	300,000	300,000	0
SWC	1771	5000	Grafton Flood Control Project	3/11/2010	7,175,000	0	7,175,000
			Subtotal City Flood Control		***54,559,750***	***2,333,809***	***52,225,941***
SWC			***Water Supply Advances:***				
	2373-04	5000	Lakota WS (Tri-Co WD)	7/17/2007	212,065	202,062	10,003
	2373-09	5000	South Central RWD (Phase II)	6/23/2008	2,350,000	864,052	1,485,948
	2373-13	5000	All Seasons Rural Water - (Upham)	7/17/2007	76,734	76,734	0
	2373-15	5000	North Central Rural Water Consortium (S. Benson Cou	12/7/2007	916,000	863,120	52,880
	2373-31	5000	North Central Rural Water Consortium (Anamoose/Ben	6/23/2008	3,295,000	0	3,295,000
	2373-27	5000	Traill Regional Rural Water (Phase I)	1/25/2008	3,199,000	3,157,885	41,115
	2373-16	5000	Traill Regional Rural Water (Phase II)	6/23/2008	2,305,748	2,158,854	146,894
	2373-24	5000	Traill Regional Rural Water (Phase III)	8/18/2009	2,750,000	316,034	2,433,966
			Water Supply Grants:				
	2373-19	5000	City of Washburn Water Supply	4/28/2009	1,500,000	1,320,764	179,236
	2373-17	5000	City of Parshall	6/23/2008	1,920,274	1,208,671	711,603
	2373-18	5000	Ray & Tioga Water Supply Association	12/17/2008	4,200,000	1,319,146	2,880,854
	2373-25	5000	McKenzie Phase II	6/23/2009	1,500,000	631,673	868,327
	2373-28	5000	McKenzie Phase IV	3/11/2010	3,500,000	220,077	3,279,923
	2373-30	5000	McKenzie WAWS	10/26/2010	0	0	0
	2373-26	5000	Valley City Water Treatment Plant	8/18/2009	15,386,800	0	15,386,800
	2373-29	5000	City of Wilrose - Crosby Water Supply	7/28/2010	1,270,000	771,615	498,385
			Subtotal Water Supply		***44,381,621***	***13,110,687***	***31,270,935***
			HB No. 1305 Permanent Oil Trust Fund				
	2373-21	5000	Burke, Divide, Williams Water District	6/23/2009	985,000	767,920	217,080
	2373-22	5000	Ray & Tioga Water Supply Association	6/23/2009	864,000	332,994	531,006
	2373-23	5000	City of Wildrose	6/23/2009	593,000	516,986	76,014
			Subtotal Permanent Oil Trust Fund		***2,442,000***	***1,617,901***	***824,099***
			Irrigation Development:				
SWC	1389	5000	BND AgPace Program	10/23/2001	194,439	75,532	118,907
SWC	AOC/IRA	5000	ND Irrigation Association	7/20/2009	100,000	75,000	25,000
SWC	1968	5000	2009-11 McClusky Canal Mile Marker 7.5 Irrigation Proj	6/1/2010	1,310,931	0	1,310,931
			Subtotal Irrigation Development		***1,605,370***	***150,532***	***1,454,838***
			General Water Management				
			Hydrologic Investigations:		***880,000***		
SWC	1400/7	3000	Houston Engineering Water Permit Application Review	4/2/2009	1,325	800	525
	1400/8	3000	Houston Engineering Water Permit Application Review	6/2/2009	7,500	7,473	27
	1400/9	3000	Houston Engineering Water Permit Application Review	1/1/2010	6,759	6,759	0
	1400/10	3000	Houston Engineering Water Permit Application Review	1/0/1900	5,870	5,870	1
	1400/11	3000	Houston Engineering Water Permit Application Review	10/10/2010	6,500	6,249	251
	862	3000	Arletta Herman	4/7/2008	2,856	2,856	0
	1690	3000	Mary Lou McDaniel	5/6/2009	4,301	4,301	0
	1703	3000	Neil Flaten	4/7/2008	4,771	4,771	(0)
	1707	3000	Neil Flaten	4/7/2008	3,628	3,628	(0)
	1714	3000	David Robbins	5/7/2009	1,143	1,143	0
	1761	3000	Gloria Roth	5/6/2009	1,208	1,208	0
	1761	3000	Fran Dobits	4/7/2008	2,001	2,001	0
	1393	3000	US Geological Survey, US Dept. Of Interior StreamStat	7/16/2009	39,008	26,010	12,998
	1395A	3000	US Geological Survey, US Dept. Of Interior Stream Gag	11/12/2009	381,980	381,980	0
	1395	3000	US Geological Survey, US Dept. Of Interior Investigatio	10/1/2010	410,907	102,727	308,180
	1395	3000	US Geological Survey, US Dept. Of Interior Water Qual	10/21/2009	13,205	0	13,205
	1395D	3000	US Geological Survey, US Dept. Of Interior Eaton Irriga	10/1/2009	15,300	15,300	0
			Hydrologic Investigations Obligations Subtotal		***908,261***	***573,074***	***335,187***
			Remaining Hydrologic Investigations Authority		***(28,261)***		
			Hydrologic Investigations Authority Less Payments				
			General Projects Obligated		***17,104,478***	***4,459,388***	***12,645,090***
			General Projects Completed		***2,324,050***	***2,324,050***	***0***
			Subtotal General Water Management		***20,308,528***	***7,356,512***	***12,952,016***

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium

PROGRAM OBLIGATION

Approve By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Jan-11* Balance
			Missouri River Management:				
SWC	1943	5000	Missouri River Siltation Assessment Study	10/12/2006	30,000	0	30,000
SWC	1963	5000	Beaver Bay Embankment Feasibilitly Study	8/10/2009	342,000	24,619	317,381
			Subtotal		***372,000***	***24,619***	***347,381***
			Flood Control:				
SWC	300	5000	Baldhill Dam Flood Pool Raise	4/30/1998	92,832	6,138	86,694
SWC	849	5000	Renwick Dam Rehabilitation	5/17/2010	1,478,190	0	1,478,190
SWC	1878-02	5000	Upper Maple River Dam Project Dev & Preliminary Enç	9/29/2008	112,500	0	112,500
			Subtotal Flood Control		***1,683,522***	***6,138***	***1,677,384***
			Red River Water Supply:				
SWC	1912	5000	2007-09 (GDCD'S) Red River Valley Water Supply Pro	3/17/2008	3,000,000	2,982,035	17,965
SWC	1912	5000	2009-11 (GDCD's) RRVWSP Value Engineering Study	6/1/2010	200,000	0	200,000
			Subtotal		***3,200,000***	***2,982,035***	***217,965***
			Devils Lake Basin Development:				
SWC	416-01	5000	2009-11 Devils Lake Basin Joint Water Resource Man:	6/23/2009	60,000	0	60,000
SWC	416-02	5000	City of Devils Lake Levee System Extension & Raise	12/6/2002	25,350,000	4,848,000	20,502,000
SWC	416-05	2000	2009-11 Devils Lake Outlet Awareness Manager	6/23/2009	42,000	24,447	17,553
SWC	416-07	5000	Devils Lake Outlet	2/20/2002	15,961,325	12,827,482	3,133,843
SWC	416-10	4700	Devils Lake Outlet Operations	8/18/2009	4,900,000	2,953,079	1,946,921
SE	416-11	5000	USGS/US Dept of Interior UnTRIM model on water-qua	8/13/2010	16,000	0	16,000
SWC	416-13	5000	DL Tolna Coulee Divide	10/26/2010	500,000	27	499,973
SWC	416-14	5000	City of Minnewaukan Flood Risk Reduction Analysis St	6/3/2010	15,000	15,000	0
SWC	416-15	5000	DL East End Outlet	10/26/2010	2,200,000	84	2,199,916
SWC	1932**	5000	Michigan Spillway Rural Flood Assessment Drain	8/30/2005	508,492	8,492	500,000
SWC	1932**	5000	Nelson Co. Emergency Pumping Peterson to Dry Run	5/23/2010	112,219	0	112,219
SWC	1131*	5000	Nelson County Central Hamlin Rural Flood Control	9/17/2009	8,940	0	8,940
SWC	1131	5000	Nelson County Channel Maintenance & Misc	9/17/2009	6,413	0	6,413
			Devils Lake Subtotal		***49,680,389***	***20,676,612***	***29,003,777***
SWC		***7600***	***Weather Modification***	7/1/2009	***225,000***	***0***	***225,000***
SWC	***1736***	***8000***	***Southwest Pipeline Project***	7/1/2009	***12,782,474***	***4,414,032***	***8,368,442***
SWC	***2374***	***9000***	***Northwest Area Water Supply***	7/1/2009	***10,832,918***	***2,448,878***	***8,384,040***
			TOTAL		***202,073,572***	***55,121,754***	***146,951,818***

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approvec By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Jan-11* Balance
SE	269	5000	2010 Fordville Dam Emergency Action Plan/GF CO.	3/3/2010	9,600	0	9,600
SWC	281	5000	2009-11 Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	322	5000	2009-11 Red River Basin Mapping Initiative/Tri-College LiDAR	6/23/2009	300,000	244,596	55,404
SWC	322	5000	2009-11 Long-Term Red River Flood Control Solutions Study	6/23/2009	500,000	348,790	151,210
SWC	322	5000	ND Water: A Century of Challenge	2/22/2010	34,300	0	34,300
SWC	327	5000	2009-11 White Earth Dam EAP	8/18/2009	25,000	0	25,000
SWC	528	5000	2009 McGregor Dam Emergency Action Plan	6/23/2009	25,000	0	25,000
SE	568	5000	2008 Sheyenne River Snagging & Clearing Project	4/11/2008	5,000	0	5,000
SWC	568	5000	2009-11 SCWRD Sheyenne River Snagging & Clearing Project	12/10/2010	362,250	0	362,250
SWC	620	5000	2008 Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SE	642	5000	2009-11 Morton Co/Sweetbriar Dam Emergency Action Plan	5/17/2010	15,200	0	15,200
SWC	642-05	5000	2007-09 Sweetbriair Creek Dam Project	3/6/2009	683,400	647,718	35,682
SWC	646	5000	2009-11 Christine Dam Recreation Retrofit Project	10/26/2010	184,950	0	184,950
SWC	646	5000	2009-11 Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	0	44,280
SE	829	5000	2009-11 Rush River Watershed Detention Site Engineering Feasibility Study	8/10/2010	11,990	0	11,990
SE	839	5000	2009-11 Elm River Detention Dam No. 1 EAP	1/10/2011	12,160	0	12,160
SE	839	5000	2009-11 Elm River Detention Dam No. 3 EAP	12/6/2010	12,160	0	12,160
SWC	846	5000	2009-11 Morton Co.Square Butte Dam No. 5 EAP	12/10/2010	24,000	0	24,000
SWC	847	5000	2007-09 Swan Ceek FC Diversion Ditch	6/23/2008	1,640,992	1,585,680	55,312
SE	847	5000	2009-11 Swan-Buffalo Detention Dam No. 12 Emergency Action Plan	10/18/2009	20,000	0	20,000
SWC	847	5000	2009-11 Swan-Buffalo Detention Dam No. 12 Flood Control Dam Safety Project	7/28/2010	114,783	0	114,783
SE	847	5000	2009-11 Absaraka Dam Safety Analysis	8/31/2009	5,719	0	5,719
SWC	847	5000	2009-11 Swan Creek Diversion Channel Improvement Reconstruction	12/11/2009	76,528	0	76,528
SWC	928/988/1508	5000	2007-09 Southeast Cass WRD Bois, Wild Rice, & Antelope	6/23/2008	60,000	0	60,000
SE	985	5000	2009-11 Kolding Dam Emergency Action Plan	5/29/2009	9,600	0	9,600
SWC	1068	5000	2009-11 Cass County Drain No. 12 Improvement Reconstruction	8/18/2009	500,000	0	500,000
SWC	1069	5000	2009-11 Cass County Drain No. 13 Improvement Reconstruction	8/18/2009	145,472	23,248	122,224
SWC	1070	5000	2009-11 Cass County Drain No. 14 Improvement Recon	8/18/2009	500,000	78,547	421,453
SWC	1080	5000	2007-09 Cass County Drain No. 27 Improvement Recon	10/24/2007	94,197	0	94,197
SWC	1088	5000	2009-11 Cass County Drain No. 37 Improvement Recon	8/18/2009	158,535	74,112	84,423
SWC	1093	5000	2007-09 Cass Co. Drain No. 45 Extension Project	3/17/2008	150,800	26,043	124,757
SWC	1164	5000	2009-11 Pembina County Drain No. 64 Outlet Area Improvement	12/10/2010	41,480	0	41,480
SWC	1180	5000	2009-11 Richland Co. Drain No. 7 Improvement Reconstruction	3/11/2010	130,681	58,748	71,933
SWC	1232	5000	2009-11 Traill Co. Drain No. 13 Channel Extension Project	8/18/2009	23,575	0	23,575
SWC	1244	5000	2009-11 Traill Co. Drain No. 27 (Moen) Reconstruction & Extension	3/11/2010	500,000	0	500,000
SWC	1289	5000	2007-09 Noxious Weed McKenzie County -Sovereign	10/24/2007	7,247	0	7,247
SE	1291	5000	2009-11 Mercer County WRD Knife River Snagging & Clearing	11/1/2010	20,000	0	20,000
SWC	1299	5000	2009-11 City of Lisbon's Mapping & Survey for FEMA Buyouts	3/29/2010	30,000	6,522	23,478
SWC	1299	5000	2009-11 City of Fort Ransom Riverbank Stabilization	9/1/2010	60,803	0	60,803
SE	1131	5000	2009-11 Elm River Detention Dam No. 2 Emergency Action Plan	12/6/2010	12,160	0	12,160
SE	1301	5000	2009-11 City of Lidgerwood Engineering & Feasibility Study for Flood Control	11/29/2010	17,049	0	17,049
SWC	1313	5000	2009-11 City of Minot/Ward Co. Aerial Photo & LiDAR	3/11/2010	186,780	0	186,780
SWC	1328	5000	2007-09 Cass Co. Drain No. 23 Area Improvement	7/17/2007	35,980	0	35,980
SWC	1331	5000	2009-11 Richland Co. Drain No. 14 Improvement Reconstruction	3/11/2010	183,364	66,376	116,988
SWC	1344	5000	2009-11 Southeast Cass Sheyenne River Diversion Low Flow Channel Improve	3/11/2010	2,037,600	0	2,037,600
SE	1346	5000	2009-11 Mt. Carmel Dam Emergency Action Plan	5/5/2010	9,600	0	9,600
SWC	1378	5000	2009-11 Clausen Springs Dam Emergency Spillway Repair	10/26/2010	790,975	43,983	746,992
SE	1396	5000	2009-11 Dale Frink Consultant Services Agreement	10/26/2010	20,000	600	19,400
SWC	1401	5000	2009-11 International Boundary Roadway Dike Pembina	9/21/2009	260,238	19,938	240,300
SWC	1401	5000	2009-11 International Boundary Roadway Dike Pembina	9/1/2010	30,000	0	30,000
SWC	1403	5000	2009-11 ND Water Resources Research Institute 2011-12 Fellowship Program	12/10/2010	13,850	0	13,850
SWC	1413	5000	2009-11 Traill Co/Buffalo Coulee Snagging & Clearing	9/1/2010	26,000	0	26,000
SWC	1431	5000	2007-09 (S.B. 2020) 2009 Emergency Flood Control	4/28/2009	100,000	40,390	59,610
SWC	1431	5000	2009-11 DES Purchase of Mobile Stream Gages	9/13/2010	11,214	0	11,214
SWC	1438	5000	2007-09 Mulberry Creek Drain Partial Improv Phase II	3/17/2008	46,816	23,029	23,787
SWC	1444	5000	2009-11 City of Pembina's Flood Control FEMA Levee Certification	3/11/2010	27,156	0	27,156
SWC	1461	5000	2009-11 Pembina River Bank Stabilization Project	3/11/2010	64,383	0	64,383
SWC	1509	5000	2009-11 Sheyenne River Watershed Flood Water Detention Study	7/20/2009	75,000	63,464	11,536
SE	1535	5000	2009-11 Lake Agassiz Resource Conservation & Development Council - Soil Sa	2/22/2010	1,000	0	1,000
SE	1577	5000	2009-11 Burleigh Co - Fox Island 2010 Flood Hazard Mitigation Evaluation	8/9/2010	11,175	0	11,175
SWC	1577	5000	2009-11 Hazen Flood Control Levee (1517) & FEMA Accreditation	3/11/2010	567,700	0	567,700
SE	1625	5000	High Water Mark Delineation Methods & Guidelines	10/24/2007	54,048	0	54,048
SWC	1625	5000	OHWM Delineations MT/ND Border Yellowstone & Missouri	10/29/2008	75,000	0	75,000
SE	1625	5000	2009-11 Sovereign Lands Rules - ND Game & Fish	2/23/2010	10,000	3,213	6,788
SE	1625	5000	2009-11 NDDOT Aerial Photography - Missouri River	11/19/2010	5,200	0	5,200
SWC	1638	5000	2009-11 Red River Basin Non-NRCS Rural/Farmstead Ring Dike Program	6/23/2009	800,000	302,526	497,474
SWC	1657	5000	2009-11 City of Enderlin's Flood Control FEMA Levee Certification	3/11/2010	100,578	0	100,578
SWC	1667	5000	2009-11 Traill Co/Goose River Snagging & Clearing	9/1/2010	48,000	0	48,000
SWC	1705	5000	2009-11 Red River Basin Flood Control Coordinator Position	7/24/2009	36,000	0	36,000
SWC	1785	5000	2009-11 Maple River Dam EAP	8/18/2009	25,000	0	25,000
SE	1785	5000	2009-11 Sweetbriar Dam EAP	2/17/2010	15,200	0	15,200
SWC	1792	5000	2009-11 SE Cass Wild Rice River Dam Study Phase II	12/11/2009	130,000	0	130,000
SE	1842	5000	2009-11 SCWRD Wild Rice River Snagging & Clearing	5/28/2009	20,000	15,669	4,331
SWC	1842	5000	2009-11 SCWRD Wild Rice River Snagging & Clearing	12/10/2010	100,625	0	100,625
SWC	1842	5000	2009-11 Richland Co. Wild Rice River Snagging & Clearing	12/10/2010	33,500	0	33,500
SWC	1859	5000	2009-11 Section NPS 319 ND Health Dept	8/18/2009	200,000	70,895	129,105
SWC	1878-02	5000	2009-11 Maple-Steele Upper Maple River Dam PE & PD	12/10/2010	75,210	0	75,210
SWC	1882-01	5000	2009-11 (ESAP) Extended Storeage Acreage Program	8/18/2009	142,250	2,936	139,314

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approvec By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Jan-11* Balance
SWC	1882-07	5000	2009-11 NDSU Development of SEBAL	9/1/2010	61,404	0	61,404
SWC	1921	5000	2007-09 Square Butte Dam No. 6/Recreational Facility	3/23/2009	882,030	0	882,030
SWC	1934	5000	2007-09 Traill County WRD Elm River Snagging	12/7/2007	24,500	0	24,500
SWC	1934	5000	2007-09 Elm River Snagging & Clearing Project Trial	12/5/2008	3,266	0	3,266
SWC	1941	5000	2007-09 Walsh County Assessment Drain 4A Construction	9/21/2009	81,594	81,594	0
SWC	1942	5000	2007-09 Walsh County Assessment Drain 10, 10-1, 10-2	9/21/2009	273,056	235,789	37,267
SE	1943	5000	2009-11 Missouri River/Oahe Delta Flood Hazard Mitigation Evaluation Project	8/10/2009	12,000	0	12,000
SWC	1953	5000	2009-11 Walsh County Drain No. 73 Construction Project	8/18/2009	96,990	0	96,990
SWC	1960	5000	2009-11 Puppy Dog Flood Control Drain Construction	8/18/2009	796,976	0	796,976
SE	1961	5000	2009-11 Pembina County Drain No. 69 Extenstion Construction Project	8/10/2009	7,793	0	7,793
SWC	1964	5000	2009-11 Hydraulic Effects of Rock Wedges Study- UND	11/12/2009	50,000	28,908	21,092
SWC	1965	5000	2009-11 ND Silver Jackets Team Charter & Action Plan	11/12/2009	75,000	22,881	52,119
SWC	1966	5000	2009-11 City of Oxbow Emergency Flood Fighting Barrier System	6/1/2010	188,400	0	188,400
SE	1967	5000	2009-11 Grand Forks County Legal Drain No. 55 2010 Contruction	11/30/2010	9,652	0	9,652
SWC	1131*	5000	Nelson County Central-Hamlin Rural Flood	9/17/2009	47,020	37,541	9,479
SWC	1932**	5000	Michigan Spillway Rural Flood Assessment	8/30/2005	1,012,219	80,069	932,150
SE	PBS	5000	2009-11 PBS Documentary on Soil Salinity/Lake Agassiz RC & D	1/29/2010	1,000	0	1,000
SE	AOC/ARB/NDS	5000	2009-11 NDSU Dept of Soil Science - NDAWN Center	3/8/2010	6,000	3,000	3,000
SE	AOC/RRBC	5000	2009-11 Red River Basin "A River Runs North"	6/30/2010	5,000	0	5,000
SWC	AOC/RRBC	5000	2009-11 Red River Basin Commission Contractor	7/1/2009	200,000	150,000	50,000
SWC	AOC/WEF	5000	2009-11 North Dakota Water Magazine	7/20/2009	36,000	18,000	18,000
SE	AOC/WRD	5000	2009-11 Water Managers Handbook	3/22/2010	16,500	0	16,500
SWC	CON/WILL-CA	5000	2009-11 Will & Carlson Consulting Contract	8/24/2009	70,000	33,055	36,945
SE	PS/WRD/MRJ	5000	Missouri River Joint Water Board, Start up	12/5/2008	14,829	0	14,829
SE	PS/WRD/MRJ	5000	Missouri River Joint Water Board (MRRIC) T. FLECK	6/30/2009	20,000	21,030	(1,030)
SE	PS/WRD/USR	5000	2009-11 Upper Sheyenne River WRB Administration	7/10/2009	12,000	500	11,500
			TOTAL		17,104,478	4,459,388	12,645,090

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept	Initial Approved Date	Total Approved	Total Payments	*Jan-11* Balance
SWC	249	5000 2009 Mott Dam Emergency Action Plan	6/23/2009	25,000	12,757	12,243
SWC	281	5000 2007-09 Three Affiliated Tribes/Fort Berthold Irrigation Study	3/23/2009	80,000	80,000	0
SE	353	5000 2009-11 Cedar Lake Dam, Emergengy Action Plan	7/15/2009	9,600	9,600	0
SE	420	5000 2009 Mirror Lake Dam Safety Repair	10/14/2009	12,220	11,887	333
SE	420	5000 Mirror Lake One-Foot Pool Raise	9/17/2009	18,281	18,281	0
SE	450	5000 2007-09 Sykeston Dam 2008 Emergency Action Plan	11/25/2008	7,839	7,839	0
SE	560	5000 2009 Blacktail Dam Emergency Action Plan	5/28/2009	9,600	6,733	2,867
SWC	568	5000 2009 Sheyenne River Snagging & Clearing Project	12/5/2008	135,000	75,085	59,915
SWC	568	5000 2009-11 Richland Co. Sheyenne River Snagging & Clearing Project	12/11/2009	47,500	35,449	12,051
SWC	568	5000 2009-11 Richland Co. Sheyenne River Snagging & Clearing Project	3/11/2010	47,500	47,409	91
SWC	568	5000 2009 Richland Co. Sheyenne River & Wild Rice River Snagging & Clearing #184	12/11/2009	39,500	28,488	11,012
SWC	568	5000 2009-11 SE Cass Sheyenne River Snaggin & Clearing	3/11/2010	175,473	173,350	2,123
SWC	568	5000 2009-11 Southeast Cass WRD Sheyenne River Snagging & Clearing Project	12/11/2009	165,000	137,888	27,112
SWC	571	5000 2009-11 Oak Creek Bank Stabilization Project	8/18/2009	33,250	25,365	7,885
SWC	576	5000 2009-11 City of Mandan - Missouri River Emergency Bank Stabilization	12/11/2009	33,429	33,370	59
SE	576	5000 2009-11 Mandan City Flood Controls Works	6/18/2010	2,000	2,000	0
SE	586	5000 2009 Short Creek Dam Emergency Action Plan	5/28/2009	9,600	9,600	0
SWC	620	5000 2009-11 City of Manan - Lower Heart River Bank Stabilization	12/11/2009	63,808	63,808	0
SE	662	5000 2009 WCWRD'S Park River Snagging & Clearing Project	6/30/2009	1,948	0	1,948
SE	671	5000 2007-09 Harvey Dam 2008 Emergency Action Plan	11/25/2008	7,840	7,837	3
SWC	847	5000 Maple River - Retention Study Rush River Joint WRD	8/15/2002	25,000	24,927	73
SE	847	5000 2009-11 Swan Buffalo Detention Dam No. 5 Emergency Action Plan	7/20/2009	20,000	11,397	8,603
SE	847	5000 2009-11 Swan Buffalo Detention Dam No. 8 Emergency Action Plan	8/7/2009	20,000	10,496	9,504
SE	870	5000 2009-11 Crown Butte Dam Emergency Action Plan	7/10/2009	9,600	9,600	0
SWC	988	5000 Southeast Cass WRD Antelope Creek Eng Feas	10/12/2006	40,000	40,000	0
SWC	1084	5000 2008 Cass Co. Drain No. 32 Partial Improvement Recon	3/17/2008	68,538	13,150	55,388
SWC	1140	5000 Pembina County Drain No 11 Outlet Improvement	9/21/2009	70,846	70,846	0
SWC	1155	5000 2008 Pembina Co. Drain No. 42 Partial Impr.Recon.	3/17/2008	11,386	11,386	0
SWC	1176	5000 2008 Richland Co. Drain No. 2 Partial Improvement Recon.	3/17/2008	5,791	2,964	2,827
SWC	1238	5000 2009-11 Traill County Drain No. 19 Legal/Ext Outlet	8/18/2009	46,187	46,187	0
SWC	1249	5000 2008 Traill Co. Drain No. 34 Partial Improvement Recon	3/17/2008	255,629	192,250	63,379
SWC	1334	5000 Traill County Drain No. 38 Reconstruction	6/30/2009	57,631	0	57,631
SE	1358	5000 2009-11 Sheep Creek Dam Auxiliary Spillway Restoration	1/10/2011	3,459	3,459	0
SE	1378	5000 2009-11 Clausen Springs Dam Incremental Risk Assessment Report	12/22/2009	9,179	9,179	0
SE	1378	5000 2009-11 Clausen Springs Dam Feasibility Study of Improvement Options	12/10/2009	7,921	7,921	0
SE	1378	5000 2009-11 Clausen Springs Dam Emergency Watershed & Dam Hydraulics Report	8/31/2009	9,418	9,418	0
SWC	1378	5000 2009-11 Barnes Co. Clausen Springs Dam Construction Repair	12/11/2009	1,300,000	0	1,300,000
SE	1382	5000 2009-11Camel Butte Dam Emergency Action Plan	7/24/2009	9,600	9,600	0
SWC	1403	5000 2009-11 ND Water Resources Research Institute Fellowship Program	12/11/2009	13,850	13,850	0
SWC	1413	5000 2009 TCWRD Buffallo Coulee Snagging & Clearing Project	6/23/2009	49,000	28,874	20,126
SWC	1431	5000 2009-11 US Geological Survey - Supplemental Flood Info	3/11/2010	11,000	11,000	0
SWC	1431	5000 2009-11 US Geologoical Survey, DOI Report Describing Peak Discharge Periods	8/5/2009	20,000	20,000	0
SWC	1461	5000 2008 Pembina River Area Bank Stabilization Project	12/5/2008	24,307	0	24,307
SE	1471	5000 2009-11 Erie Dam Emergency Action Plan	7/24/2009	20,000	7,093	12,907
SE	1515	5000 2009-11 US Geological Survey - monitoring gages Cottonwood Creek Dam	10/18/2009	8,260	8,260	0
SWC	1515	5000 2009-11 Cottonwood Creek Dam	7/28/2010	373,440	188,702	184,738
SWC	1523	5000 2008 Souris River Golf Course Area Bank Stabilization	9/29/2008	31,612	31,612	0
SE	1527	5000 2009-11 Daub Dam Emergency Action Plan	8/16/2010	9,600	7,680	1,920
SE	1556	5000 2009 Indian Creek Dam Emergency Action Plan	5/28/2009	9,600	9,600	0
SWC	1572	5000 Burnt Creek Floodway Diversion Channel	4/30/2008	121,091	112,637	8,454
SWC	1591	5000 Revision of Handbook ND Water Managers Proj	4/12/2007	14,750	0	14,750
SE	1625	5000 2009-11 Missouri River Contract - Environmental Service Bartlett & West	9/21/2009	5,900	5,900	0
SWC	1667	5000 2009-11 Traill County Goose River Snagging & Clearing Project	12/11/2009	46,500	30,873	15,627
SE	1808	5000 2009-11 Beaver Creek Dam Emergency Action Plan	7/14/2009	20,000	20,000	0
SE	1808	5000 2009-11 U.S. Dept of Interior/Beaver Creek Gaging Stations	9/7/2010	11,710	11,710	0
SWC	1842	5000 2009-10 SCWRD Wild Rice River Snagging & Clearing	12/11/2009	115,000	72,676	42,324
SE	1849	5000 2008 Tongue River Diversion Channel Rock Project	11/25/2008	19,087	17,994	1,093
SWC	18502	5000 (2008) Drought Disaster Livestock Water Supply	5/14/2008	571,747	157,134	414,613
SWC	1869	5000 2008 McDowell Dam Emergency Action Plan	9/29/2008	25,000	25,000	0
SE	1921	5000 2009 Square Butte Dam No. 6/Emergency Action Plan	3/9/2009	16,000	11,040	4,960
SWC	1936	5000 Nash Drain Extension Construction Proj	10/12/2006	19,913	14,399	5,514
SWC	1947	5000 Cass County Drain No. 62, Maple River WRD	4/30/2008	39,787	3,687	36,100
SWC	1948	5000 2008 Cass Co. Drain No. 67 Construction Project	3/25/2008	334,250	199,888	134,362
SWC	1950	5000 2008 Cypress Creek Drain No. 2 Construction	6/23/2008	22,400	22,400	0
SWC	1951	5000 2007-09 Lynchburg-Buffalo Drain Improvement	8/31/2009	1,000,000	0	1,000,000
SWC	1751-06	5000 2009-11 Southeast Cass WRD/Flood Imagery Project	1/18/2010	30,014	30,014	0
SE	AOC/WI	5000 2010 Summer Water Tours Sponsorship	3/1/2010	2,500	2,500	0
		TOTAL		5,880,891	2,324,050	3,556,841

APPENDIX "C"
March 28, 2011

2011 INTENDED USE PLAN
FOR THE
NORTH DAKOTA DRINKING WATER STATE REVOLVING LOAN FUND

PREPARED BY THE
DRINKING WATER STATE REVOLVING LOAN FUND PROGRAM
MUNICIPAL FACILITIES DIVISION
ENVIRONMENTAL HEALTH SECTION
NORTH DAKOTA DEPARTMENT OF HEALTH

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TABLE OF CONTENTS

ATTACHMENTS

Attachment 1- Eligible and Ineligible Projects and Project-Related Costs Under the Drinking Water State Revolving Loan Fund (DWSRF) Program

Attachment 2- Comprehensive Project Priority List And Fundable List

Attachment 3- Priority Ranking System for Financial Assistance Through the Drinking Water State Revolving Loan Fund (DWSRF) Program

Attachment 4- Nonproject Set-Aside and Loan Fee Activity

A. Introduction

On August 6, 1996, President Clinton signed into law the Safe Drinking Water Act (SDWA) Amendments of 1996 (P.L. 104-182). Section 1452 of the SDWA authorizes a Drinking Water State Revolving Loan Fund (DWSRF) program. It further requires the U.S. Environmental Protection Agency (EPA) to enter into agreements with and make capitalization grants to eligible states to assist public water systems (PWSs) in financing the costs of infrastructure needed to achieve or maintain compliance with the SDWA and to protect public health.

North Dakota's DWSRF allotments for fiscal years (FY) 1997 through 2009 totaled $129,405,100 and the allotment for FY 2010 is $13,573,000. Allotted funds are provided by the EPA through capitalization grants and matched 20% by North Dakota. North Dakota has already applied for and received $1,064,380 of the 2010 capitalization grant for program administration, PWSS administration, and the 2% technical assistance set-aside.

DWSRF funds may be used for: loans, loan guarantees, as a source of reserve and security for leveraged loans (the proceeds of which must be placed in the DWSRF), to buy or refinance existing local debt obligations (publicly-owned systems only) where the initial debt was incurred and construction started after July 1, 1993, and to earn interest prior to disbursement of assistance. To the extent that there are a sufficient number of eligible projects, at least 15 percent of the funds available for construction must be annually used to provide loan assistance to PWSs that serve fewer than 10,000 persons. Up to 30 percent of the funds available for construction may also be used to provide subsidized loans to disadvantaged communities. A portion of the DWSRF allotments may also be used for nonproject set-aside activities such as: administration (up to 4 percent), state program assistance (up to 10 percent), small system technical assistance (up to 2 percent), and local assistance and state programs including the delineation and assessment of source water protection areas (up to 10 percent for any one activity with a maximum of 15 percent for all activities combined).

PWSs eligible for DWSRF assistance include community water systems, both publicly- and privately-owned, and nonprofit noncommunity water systems. Federally-owned PWSs are not eligible to receive DWSRF assistance. Attachment 1 depicts the types of projects and project-related costs that are eligible and ineligible for DWSRF assistance.

Section 1452(b) of the SDWA requires each state to annually prepare an Intended Use Plan (IUP). The IUP must describe how the state intends to use the DWSRF funds to meet the objectives of the SDWA and further the goal of protecting public health. The IUP must be made available to the public for review and comment prior to submitting it to the EPA as part of the capitalization grant application. Specifically, the IUP must include:

1. A priority list of projects, including a description of the projects and the present size of the PWSs served.

2. A description of the criteria and methods to be used for the distribution of funds.

3. A description of the financial status of the DWSRF program, including the use of set-asides along with funds reserved, and the amount of funds that will be used to assist disadvantaged communities; and,

4. A description of the short- and long-term goals of the DWSRF program, including how the capitalization grant funds will be used to ensure compliance and protect public health.

This document is intended to serve as the state of North Dakota's IUP for 2011 and will stay in effect until superseded by a subsequent IUP. As per the authority granted to the North Dakota Department of Health (NDDH) under NDCC Chapter 61-28.1, this document, as amended based on comments received from the public, will be incorporated into a capitalization grant application and submitted to the EPA to further capitalize the state's DWSRF program in the amount of $13,573,000. State match bonds were issued in 2008 to provide the 20 percent match for capitalization grants from FY 2009-FY 2013.

B. Priority List of Projects

Background

States are required to develop and maintain a comprehensive priority list of eligible projects for funding and identify projects that will receive funding in the first year after the capitalization grant award. In determining funding priority, states must ensure, to the maximum extent practicable, that priority for the use of funds be given to projects that: 1) address the most serious risks to human health, 2) are necessary to ensure compliance under the SDWA, and 3) assist systems most in need on a per household basis (i.e., affordability).

Development Process

As part of the IUP development process, all potential DWSRF loan recipients were requested to notify the NDDH if they had a drinking water project not presently on the list for which they were interested in pursuing DWSRF financial assistance. Systems with already ranked and listed projects were requested to provide the NDDH with a written update for each project either not yet under construction, or under construction using other than DWSRF funds. The updates were to include a detailed project description and cost estimate, the amount of DWSRF funds needed, and, as applicable, the anticipated construction start date. In lieu of this information, systems were asked to inform the NDDH if they no longer intended to complete a project, or no longer intended to complete a project using DWSRF assistance. Systems requesting ranking of new projects were provided ranking questionnaires. Requests for project reranking or deletion were evaluated on a case-by-case basis, with ranking

questionnaires provided as needed. Several projects were deleted due to completion (with or without DWSRF assistance) or the acquisition of other funding sources.

Comprehensive Project Priority List

See Attachment 2.

Fundable List

The fundable list represents those projects from the comprehensive project priority list anticipated to receive loan assistance this year. The list of projects is based on anticipated start dates, projected funding needs, and expected available loan funds (see Section E). The list will change if such information or assumptions vary, if higher ranked projects not on the list become ready to proceed, or if projects on the list are bypassed (see Section C). The NDDH is prepared to issue leveraged bonds if the near-term loan demand exceeds funds available.

C. Criteria and Methods for the Distribution of Funds

Background

A DWSRF may provide assistance only for expenditures (excluding operation, maintenance, and monitoring) of a type or category which will facilitate compliance or otherwise significantly further health protection under the SDWA. Projects eligible for DWSRF financial assistance include investments to: address present SDWA exceedances, prevent future SDWA exceedances (of regulations presently in effect), replace aging infrastructure, restructure or consolidate water supplies, and buy or refinance existing debt obligations (publicly-owned systems only) where the initial debt was incurred and construction started after July 1, 1993. Attachment 1 provides additional information concerning the types of projects and project-related costs that are eligible for DWSRF financial assistance.

To the maximum extent possible, states are required to prioritize projects needed for SDWA compliance, projects that provide the greatest public health protection, and those projects that assist systems most in need based on affordability. The information below describes the process used by the NDDH to select projects for potential DWSRF assistance.

Priority Ranking System

The priority ranking system was developed by the NDDH, the state agency with primary enforcement authority for the SDWA. The priority ranking system is designed to ensure that DWSRF funds are focused on projects that address the most serious risks to human health, rectify SDWA compliance problems, and assist those systems most in need based on affordability considerations. The priority ranking system has received both EPA Region VIII and Headquarter concurrence. The priority ranking system will

be amended as needed to reflect the changing nature of the SDWA and the DWSRF Program. Any significant amendments will be presented for public review and comment in an IUP.

Ranking and Project Bypass Considerations

It is the intent of the NDDH that DWSRF funds are directed towards North Dakota's most pressing SDWA compliance problems and public health protection needs. To this end, the NDDH reserves the right to require the separation, if feasible, of project components into separate projects if necessary to focus on critical water supply problems. Project components which are separated will be ranked independently. Projects for existing PWSs, including refinancing projects, will be given preference over projects for the development of new water systems.

Under the SDWA, DWSRF funds may be used to buy or refinance existing local debt obligations (publicly-owned systems only) where the initial debt was incurred and construction started after July 1, 1993. DWSRF assistance requests of this type, if eligible, will be ranked based on the original purpose and success of the constructed improvements. In the event of a tie in project rankings, new projects for existing systems will be given preference over refinancing projects.

The NDDH reserves the right to fund lower-ranked projects ahead of higher-ranked projects based on the considerations below. To the maximum extent possible, the NDDH will work with bypassed projects to ensure that they will be eligible for funding in the following fiscal year. Criteria reviewed in bypassing a project included:

1. Readiness to proceed

2. Willingness to proceed (i.e., applicant withdraws project from consideration, obtains other funding sources, or is nonresponsive)

3. Emergency conditions (i.e., an unanticipated failure occurs requiring immediate attention to protect public health)

4. Financial (includes inability to pay and loan repayment issues), technical, or managerial capability

5. Meet the 15 percent requirement (i.e., funding lower-ranked project would satisfy the requirement that at least 15 percent of the funds available for construction be annually used to provide loan assistance to PWSs that serve fewer than 10,000 persons)

6. Meet the Green Project Reserve requirement of 20% of the FY2010 capitalization grant

7. Initial ranking score cannot be verified.

The NDDH, without going through a public review process, reserves the right to fund unanticipated, non-ranked emergency projects determined to require immediate attention to protect public health. Such assistance will be limited to eligible PWS types and project features, and to situations involving acute contaminants, loss or potential loss of a water supply in the near future, or that otherwise represent an unreasonable risk to health.

Capacity

Section 1452 of the 1996 SDWA Amendments precludes states from providing DWSRF assistance to any eligible PWS that lacks the capacity to maintain SDWA compliance unless the PWS owner or operator agrees to undertake feasible and appropriate changes to ensure compliance over the long term. States are also precluded from providing DWSRF assistance to any eligible PWS that is in significant noncompliance with any requirement of a National Primary Drinking Water Regulation (NPDWR) or variance unless such assistance will ensure compliance. PWS capacity, in the context of the SDWA, refers to the overall technical, managerial, and financial capability of a PWS to consistently produce and deliver drinking water meeting all NPDWRs. The NDDH has the legal authority and responsibility under NDCC Chapter 61-28.1 to ensure PWS capacity.

The NDDH will use the DWSRF loan application as the principal control point for capacity assessment. Information from the loan application, and other available and relevant information (such as SDWA compliance data, sanitary survey reports, and operator certification status), will be evaluated to assess capacity at present and for the foreseeable future. The North Dakota Public Finance Authority (PFA), as financial agent for the DWSRF Program through formal agreement, will evaluate the financial information requested in the loan application. Based upon input provided by the DWSRF Program regarding technical and managerial capability, the PFA will make recommendations to the DWSRF Program concerning financial capability. The final decision regarding overall capacity will made by the DWSRF Program.

As required by the SDWA, DWSRF assistance will be denied to applicants that are in significant noncompliance if it is determined that the project will not ensure compliance. Likewise, DWSRF assistance will be denied to applicants that lack capacity if they are unwilling or unable to undertake feasible and appropriate changes to ensure capacity over the long term. The lack of capacity at the time of loan application will not preclude DWSRF assistance if the project will ensure compliance, or the applicant agrees to implement changes that will rectify capacity problems. On a case-by-case basis, special conditions may be included in loan agreements to rectify compliance and/or capacity problems. As needed and appropriate, the NDDH will utilize other specific legal authorities as control points to ensure capacity. This includes the review and approval of plans and specifications. Under North Dakota Century Code Chapter 61-28.1 and North Dakota Administrative Code Chapters 33-03-08 and 33-18-01, the NDDH is both empowered and required to review and approve plans and specifications for all new or modified drinking water facilities prior to construction.

D. Set-Aside and Fee Activities

Background

Under the SDWA, states are required to set aside a certain percentage of their available DWSRF loan funds to provide financial assistance to small systems. States at their option may also set aside a portion of their federal DWSRF allotment for certain other project and nonproject activities, and assess fees on loans to help support administration costs. A description of the different set-asides and past/proposed activities related to both set-asides and fees follows.

Mandatory Small System Project Set-Aside

States must annually use at least 15 percent of all funds credited to the DWSRF loan fund to provide loan assistance to PWSs that serve fewer than 10,000 people to the extent that there are a sufficient number of eligible projects to fund. States that exceed the 15 percent requirement in any one year are permitted to bank the excess toward future years.

One hundred forty eight (148) loans totaling $283,089,149 have been approved to date. One twenty eight (128) of these loans (totaling $141,113,209 or 50 percent of loan total) represent PWSs that serve fewer than 10,000 people. The NDDH envisions that additional loans will be made to small PWSs based on the comprehensive project list and fundable list (See Attachment 2).

Mandatory Additional Subsidization Set-Aside

New in the 2010 DWSRF capitalization grant is the requirement that at least 30 percent of assistance provided be in the form of additional subsidies. The DWSRF program will provide these additional subsidies as loan forgiveness. The NDDH has the authority under state law, N.D.C.C. Chapter 61-28.1, to provide financial assistance through the DWSRF as authorized by federal law and the USEPA.

Criteria for determining the amount of loan forgiveness is on a project specific basis. Loan forgiveness will be based on the relative future water cost index (RFWCI). The RFWCI is defined as the ratio of expected average annual residential user charge for water service resulting from the project, including costs recovered through special assessments, to the local annual median household income (based on 2000 census data).

Projects with a RFWCI of 2.0 percent or greater will qualify for 60 percent loan forgiveness. Projects with a RFWCI of 1.5 percent to 1.9 percent will qualify for 30 percent loan forgiveness. Projects with a RFWCI less than 1.5 percent will not qualify for any loan forgiveness. Projects that do not qualify for loan forgiveness still qualify for a traditional DWSRF loan. The loan forgiveness cap for any one project is $1.5 million.

Timely progression of additional subsidization projects is required. To ensure this, there will be an application deadline and a binding commitment deadline. If projects identified as receiving additional subsidization do not meet these deadlines the additional subsidization set-aside will be used to fund lower rank projects on the project priority list.

The attached Fundable Project Priority List shows that at least 30 percent ($4,071,900) of the available funding for projects is provided through loan forgiveness. Any subsequent revision to this Fundable Project Priority list will likewise show that at least 30 percent of the available funding for projects will be provided with loan forgiveness.

Mandatory Green Project Reserve (GPR) Set-Aside

New in the 2010 DWSRF capitalization grant is the requirement that, to the extent there are sufficient eligible project applications, not less than 20 percent of the funds provided for projects be used for water efficiency, energy efficiency, green infrastructure, or other environmentally innovative activities. Where it is not clear that a project or component qualifies to be included as counting towards the 20 percent requirement, the files for such projects will contain documentation of the business case on which the project was judged to qualify, as described in the 2010 DWSRF capitalization grant requirements. Projects on the PPL meeting one or more objectives are designated as GPR.

The Fundable List has sufficient projects with qualifying components. Three projects listed on the attached Fundable List appear to contain components qualifying as green infrastructure projects for purposes of this requirement, based upon USEPA guidance. These projects and project components that qualify towards the green project reserve total $5.7 million. The 20 percent requirement is $2,714,600. The DWSRF program has met this requirement. Eligibility of these components will be verified prior to award of financial assistance.

Optional Project Set-Asides

States may provide additional loan subsidies (i.e., reduced interest or negative interest rate loans, principal forgiveness) to benefit communities meeting the definition of "disadvantaged" or which the state expects to become disadvantaged as the result of the project. A disadvantaged community is one in which the entire service area of a PWS meets affordability criteria established by the state following public review and comment. The value of the subsidies cannot exceed 30 percent of the amount of the federal capitalization grant for any fiscal year. The EPA is required to provide guidance to assist states in developing affordability criteria.

The NDDH has not developed a disadvantaged community program, and is not proposing to do so in this IUP. This decision is based primarily upon majority opinions obtained during initial development of the DWSRF Program, and the NDDH's desire to maximize the long-term availability of funds for construction purposes.

Optional Nonproject Set-Asides

States may use a portion of their federal DWSRF allotment (up to specified ceilings) for the following nonproject set-aside activities:

- DWSRF Administration - up to 4 percent
- State Program Administration - up to 10 percent
  -Public Water Supply Supervision (PWSS) Program, source water protection program(s), capacity development program, and operator certification program
- Small System Technical Assistance (serving 10,000 or fewer people) - up to 2 percent
- Local Assistance and Other State Programs - up to 10 percent for any one activity with a maximum of 15 percent for all activities combined
  -Loans to PWSs to acquire land or conservation easements for source water protection programs
  -Loans to community water systems to implement source water protection measures, or to implement recommendations in source water petitions
  -Assist PWSs in capacity development
  -Assist states in developing/implementing an EPA-approved wellhead protection program

States may transfer funds among the nonproject set-aside categories, or between the loan fund and such set-aside categories, provided that the statutory set-aside ceilings are not exceeded. Nonproject set-aside funds may be transferred at any time to the loan fund. However, loan commitments must be made for the transferred funds within one year of the transfer if payments have already been taken for the set-aside funds. Monies intended for the loan fund may be transferred to nonproject set-asides only if no payments have yet been taken for the monies to be transferred. Otherwise, funds in or transferred to the loan fund must be remain in the loan fund. Transfers may be done only if described in an IUP and approved by the EPA as part of a capitalization grant agreement or amendment.

Nonproject Set-Aside and Fee Activity

Attachment 4 depicts nonproject set-aside and fee activity through 2010. The FY 2010 federal DWSRF allotment for North Dakota is assumed to be $13,573,000. The NDDH intends to set aside $1,064,380 of the allotment for non-project activities. The state program administration (PWSS Program) set-aside is $250,000. The 2 percent set-aside is for small system technical assistance ($271,460). The 4 percent set-aside is for DWSRF administration ($542,920). The 4 percent set-aside will be held for ongoing and future DWSRF program administration. The 10 percent set-aside will also be held for ongoing and future PWSS administration. Should the capitalization grant be different from $13,753,000, the set-aside for DWSRF program administration and small system technical assistance will be adjusted to 4 percent and 2 percent, respectively, of the actual capitalization grant awarded.

The NDDH has limited and will continue to limit the usage of set-asides to maximize funds available for construction. Set-aside usage has been restricted to that necessary to administer the program (4 percent set-aside), provide technical assistance to small PWSs (2 percent set-aside), to provide state program administration (10 percent set-aside), and to complete source water assessments mandated under the SDWA (15 percent set-aside).

The state program administration set-aside will be used to help fund administration of the PWSS program. This set-aside requires 1:1 match by the state. One of the sources of funds for this 1:1 match is the 0.5 percent loan administration fee.

The 4 percent set-aside is inadequate to cover the cost of administering the DWSRF Program. Also, Congress will choose at some point to no longer capitalize the program, at which time no new funds will be available for program administration. Based on these considerations, the NDDH considers it both prudent and necessary to set-aside and hold the full 4 percent from each grant, and to hold accumulated loan fees (discussed below), to enable ongoing and future administration of the program.

Funds from the 2 percent set-aside have been used to assist small PWSs in capacity development, financial capacity, operator certification, managerial capacity and source water protection. Funds from this set-aside will continue to be used for these purposes and for new initiatives such as assisting communities determining compliance with the new disinfection byproduct rules. The NDDH closely monitors demand and need for this set-aside to avert over-accumulation of funds.

Under the SDWA, states are permitted to assess fees on loans to support DWSRF administration costs. North Dakota DWSRF loan recipients are required to pay an annual loan administration fee presently set at 0.5 percent of the outstanding loan principal balance. The fee is payable semiannually on each loan payment date. The fees are held under the master trust indenture and are available to pay DWSRF program administration costs allowable under the SDWA. Starting in 2008 these funds will be used as a source of 1:1 match that is required when using the state program administration set-aside to administer the PWSS program. These funds will be used by the DWSRF Program to assist with the PWSS program mission.

E. **Financial Status**

Background

States are required to provide a description of the financial status of their DWSRF Program. The information presented below describes the financial structure of the North Dakota DWSRF, the method used to generate the required state match, transfers between SRF's (State Revolving Loan Funds), the basis for approving loans, loan assistance terms including a discussion concerning market interest rates in North Dakota, sources and intended use of funds, and special considerations for State and Tribal Assistance Grants.

Financial Structure

Bonds for the 20 percent state match are issued by the PFA under a master trust indenture adopted by the Industrial Commission of North Dakota. The PFA may also issue leveraged bonds under the master trust indenture, the proceeds of which can be used to fund loans.

The current demand for DWSRF loan assistance in North Dakota exceeds authorized federal DWSRF allotments and the required state match for those allotments. Under the financial structure initially established for the DWSRF, excess leveraging and higher loan interest rates would be needed to satisfy this excess demand.

A modified financial structure within the existing master trust indenture has been implemented to better satisfy the continuing high demand for DWSRF financial assistance, yet avert excessive leveraging and higher loan interest rates. Under the modified structure, DWSRF allotments and state match bond proceeds will be used first to fund loans. Leveraged bonds will be issued only if loan demand exceeds the amount of DWSRF allotments and state match available for loans or if deemed in the best interest of the program. If leveraged bonds are issued, they will be sized, together with DWSRF allotments and state match, to satisfy current cash flow needs as represented by the projected annual construction costs of eligible projects. This funding approach will expedite loan assistance to more projects that are ready to proceed to construction, avert premature or unnecessary bond issuances, and ensure a more reliable loan repayment stream to satisfy both bond debt service requirements and future loan demand. It is the intent of the NDDH to issue bonds in FY 2011 to meet high loan demand.

The master trust indenture for the DWSRF provides that, in the event there are insufficient amounts available to make scheduled principal and interest payments on outstanding DWSRF bonds when payments are due, the trustee may transfer available excess revenues from the Clean Water State Revolving Fund (CWSRF) to the DWSRF bond fund to meet the deficiency. Following such a transfer, the DWSRF has an obligation to reimburse the CWSRF with future available DWSRF excess revenues.

State 20 Percent Match Requirement

Under the SDWA, states are required to match their DWSRF allotment at an amount at least equal to 20 percent. North Dakota has issued state match bonds to satisfy the FY 1997 through 2013 match requirements.

Transfer of Funds Between DWSRF and CWSRF

At the governor's discretion, a state may transfer up to 33 percent of its DWSRF capitalization grant to the CWSRF or an equal amount from the CWSRF to the DWSRF. Transfers could not occur until at least one year after receipt of the first capitalization grant, which was August 24, 1998. This transfer authority was effective through fiscal year 2001. One-year extensions of this transfer authority were granted

through the Veterans Administration, Housing and Urban Development, and Independent Agencies Appropriation Bill for fiscal years 2002 - 2005. This provision was made permanent in the FY06 appropriation bill. In addition to transferring grant funds, states can also transfer state match, investment earnings, or principal and interest repayments between SRF programs. These types of transfers were authorized by the Governor in 2002 and 2004. A combined total of $14.0 million was transferred from the CWSRF to the DWSRF and $10.0 million was transferred back from the DWSRF to the CWSRF.

Due to strong drinking water project demand, NDDH received authorization to transfer up to an additional $20.0 million from its CWSRF to its DWSRF in 2007. These funds will be transferred to the DWSRF program on an as needed basis. A total of $8,577,672 of this $20.0 million authorization has been transferred into the DWSRF program as of December 31, 2010. The source of CWSRF funds to be transferred will be unrestricted cumulative excess, restricted cumulative excess, FCLA, and grant funds. Since prior transfers have occurred between the two SRFs, NDDH will transfer funds on a net basis, as described by the table below. With this transfer, the DWSRF Program will be able to fund additional drinking water projects during 2011. Transferring funds will not impact DWSRF set-aside funding. The long-term impact to the DWSRF with a $20.0 million transfer from the CWSRF authorized in 2007 is estimated to be an average revolving level increase of $2 million/year (from $19 million/year to $21 million/year) over the next 20 years. Table 1 itemizes the amount of funds transferred to and from the DWSRF program, and the planned transfer for 2011 shown in **bold**.

Table 1 - Amounts Available to Transfer between State Revolving Fund Programs ($ millions)

Year	Transaction Description	Banked Transfer Ceiling	Transferred from DWSRF to CWSRF	Transferred from CWSRF to DWSRF	DWSRF Funds Available for Transfer	CWSRF Funds Available for Transfer
1998	DW Grant	$4.1	---	---	$4.1	$4.1
1998	DW Grant	6.5	---	---	6.5	6.5
2000	DW Grant	9.0	---	---	9.0	9.0
2000	DW Grant	11.5	---	---	11.5	11.5
2001	DW Grant	14.1	---	---	14.1	14.1
2002	DW Grant	16.7	---	---	16.7	16.7
2002	Transfer		10.0	3.0	9.7	23.7
2003	DW Grant	19.4	---	---	12.4	26.4
2003	Transfer		-0-	5.9	18.3	20.5
2004	DW Grant	22.1	---	---	21.0	23.2
2004	Transfer		-0-	2.6	23.6	20.6
2005	DW Grant	24.8	---	---	26.3	23.3
2005	Transfer		0	.1	26.4	23.2
2006	DW Grant	27.5	---	---	29.1	25.9
2006	Transfer		0	1.5	30.6	24.4
2007	DW Grant	30.3	---	---	33.4	27.2
2007	Transfer		0	4.9	38.3	22.3
2008	DW Grant	33.0	---	---	41.0	25.0
2008	Transfer		0	3.0	44.0	22.0
2009	DW Grant	35.7	---	---	46.7	24.7
2009	Transfer		0	0.7	47.7	24.0
2010	DW Grant	40.1	---	---	52.1	28.8
2010	Transfer		0	0.8	52.9	28.0
2011	Transfer		0	1.0	53.9	27.0

Funding Process

Projects may be submitted to the NDDH each year for consideration and inclusion into an IUP. A new IUP is developed for public review and comment in the fall of each year. New and eligible projects for which ranking questionnaires are submitted are evaluated, ranked (if possible), and included on the comprehensive project priority list. Requests for reranking of already-listed and ranked projects are evaluated on a case-by case basis, and may require the completion of an updated ranking questionnaire.

Loan approvals are based on project ranking, readiness to proceed, and availability of funds based on cash flow considerations including projected disbursements under already approved and potential new loans. The NDDH is prepared to issue leveraged bonds if the loan demand exceeds the amount of available DWSRF allotments and state match or if it is in the best interest of the program.

Loan Assistance Terms

The maximum repayment period for DWSRF loans under the SDWA is 20 years following project completion. The NDDH may utilize shorter repayment periods on a project-by-project basis. Candidate projects include low-cost projects for which minimal water rate increases will be required to retire the loan debt. The present loan interest rate is 2.5 percent for PWSs that qualify for tax-exempt financing, and 4 percent for those that do not qualify for tax-exempt financing, with the exception of projects that use leveraged bond proceeds. Leveraged bonds will be discussed later in this section. As discussed under Section D, an annual loan fee of 0.5 percent is assessed on all loans to support DWSRF administration.

The SDWA requires that the interest rate for a loan be less than or equal to the market interest rate. The NDDH will monitor compliance with this requirement by establishing as the market interest rate the average interest rate received by the North Dakota political subdivisions on bond issues with twenty-year maturity sold on a competitive or negotiated basis during the prior quarter. This rate will be calculated and updated quarterly based upon the prior quarter bond sales. If there are no qualified bond sales, the market rate for that quarter will be calculated using comparable regional bond issues. Based upon fourth quarter 2010 North Dakota twenty-year competitive bond sales, the current market interest rate is 4.95 percent

Leveraging the fund is appropriate where financing needs significantly exceed available funds; however, it impacts the DWSRF by reducing the interest rate subsidy provided or reducing future loan capacity. By continuing to leverage, the program will be able to assist more communities currently on the priority list and help those communities achieve or remain in compliance with the SDWA. Loans necessitating leveraging will be subject to a loan interest rate (including the 0.5 percent administration fee) of 75 percent of the current market interest rate. The interest rate on these loans will be more than regular DWSRF interest rate, which currently is 3.0 percent (which includes the 0.5 percent administration fee).

Sources and Uses of Funds

The sources and intended uses of DWSRF funds for FY 1997 through FY 2011 are discussed below (see Section D for a detailed discussion on the use of set-asides).

Sources of Funds (1)

Federal Capitalization Grants	
FY 1997 through FY 2009	129,405,100
FY 2010	13,573,000
Transfer from CWSRF (FY 1997 through FY2009)	22,577,672
Transfer from CWSRF (FY 2010, as needed)	1,000,000
Bond Proceeds Available for Loans	
State Match Bonds	
FY 1997 through FY 2005	14,949,323
FY 2006 through 2009	6,800,000
FY 2010 through 2013	9,200,000
Leveraged Bonds (2)	
FY 1997	10,719,610
FY 2003	15,000,000
FY 2005	15,000,000
FY 2008	18,500,000
FY 2011	14,000,000
Interest Earnings (1997 to 2008)	21,377,517
Interest Payments (1997 to 2010)	19,068,698
Principal Payments (1997 to 2008)	50,948,316
Total Sources of Funds	**$362,119,236**

Uses of Funds (1)

Set-Asides	
Administration (FY 1997 through FY 2009 Grants)	5,103,404
Administration (4% of FY 2010 Grant)	542,920
Small System Technical Assistance (FY 1997 through FY 2009 Grant)	1,845,512
Small System Technical Assistance (2% of FY 2010 Grant)	271,460
Source Water Protection Activities	435,268
PWSS Activities (FY 2007 and 2010)	610,000
Transfer to CWSRF	10,000,000
Bond Principal Payments (1997 to 2010)	18,273,676
Bond Interest Payments (1997 to 2010)	21,906,436
Approved Loans (through December 31, 2010)	284,492,359
Loans for FY 2011	18,638,201
Total Uses of Funds	**$362,119,236**
Available Funds	**$0**

(1) The Sources and Uses of Funds reflect full use of the specified set-asides for set-aside activities, but do not reflect loan administration fees. Loan repayment (principal and interest) funds and investments earnings in excess of that necessary to satisfy debt service, coverage, and reserve requirements for the state match and leveraged bonds and federal rebate-arbitrage requirements are credited to the loan fund. To enable continued management of the DWSRF once it is no longer annually capitalized through federal grants, loan administration fees will be held and used for loan-bond servicing and DWSRF Program administration as allowed under the SDWA.

(2) Leveraged bonds will be issued if the near-term loan demand exceeds available funds or if deemed in the best interest of the program. It is the intent of the NDDH to issue $14 million worth of leveraged bonds in FY 2011 for loans.

State and Tribal Assistance Grants

State and Tribal Assistance Grants (STAG grants) are grants that pass through EPA and go straight to drinking water systems. These grants are for 55 percent of the project. The system must provide the remaining 45 percent of the project as a local match. To avoid the higher cost of issuing municipal bonds, most systems wish to utilize DWSRF loan funds to satisfy the match requirement for these grants. By EPA policy, only non-federal DWSRF funds may be used toward the match. Non-federal funds are limited to loan repayments, earnings, bond proceeds in excess of the capitalization grants, and other state contributions in excess of the required 20 percent state match. Initially the North Dakota DWSRF had insufficient non-federal funds to satisfy match requirements for these grants. Consequently, the NDDH in the past has transferred $14.0 million from the CWSRF to the DWSRF to acquire sufficient non-federal funds to assist systems in this matter. The DWSRF has transferred back $10 million in federal funds to the CWSRF.

Grafton, Devils Lake, South East Water Users District, Washburn, BDW, Valley City, Stutsman Rural Water District and North Central Rural Water Consortium have received or are anticipated to receive STAG grants and must also provide the 45 percent local match. Systems in North Dakota have received a combined $28.7 million in STAG grants since 1999 and must provide a combined $20.6 million in matching funds. The NDDH will fund loans to these and other systems that are awarded STAG grants as long as the program has non-federal funds available. Should the program not have non-federal funds to make loans, loans will be made in future years as these funds become available.

F. Short- and Long-Term Goals

Background

The 1996 SDWA Amendments authorize a DWSRF Program to assist PWSs finance the costs of infrastructure needed to achieve or maintain compliance with SDWA requirements and to protect public health. The objectives of the NDDH's DWSRF Program include addressing public problems and priorities, ensuring compliance with the SDWA, assisting systems to ensure affordable drinking water, and maintaining the long-term viability of the fund. To address these objectives, the DWSRF Program will help ensure that North Dakota's public water supplies remain safe and affordable through prioritized financial assistance, enhanced source water protection activities, and increased technical assistance to small systems. The short- and long-term goals set forth below are established to accomplish these objectives.

Short-Term Goals

1. By March 25, 2011, obtain North Dakota State Water Commission approval of this IUP.

2. Continue to implement the DWSRF program for the state of North Dakota by funding projects for systems that are having problems maintaining compliance with the ground water treatment rule, the arsenic rule, the disinfection byproduct rule series and the surface water treatment rule series.

Long-Term Goals

1. Help North Dakota PWSs achieve and maintain compliance with the SDWA. This is accomplished by coordinating with the PWSS Program and targeting those rules that systems in the state are having problems maintaining in compliance. These include ground water treatment rule, arsenic, disinfection byproduct rule series and the surface water treatment rule series.

2. Assist the PWSS Program meet their goals. The DWSRF program assistance includes providing technical support on infrastructure issues, capacity reviews and small system technical assistance. Through the small system technical assistance set-aside the DWSRF Program helps operators become certified, systems return to compliance, ensure wellhead protection plans are updated and systems maintain capacity.

3. Administer the DWSRF Program in a manner that will maximize the long-term availability of funds for eligible and needed drinking water infrastructure improvements.

4. Assist North Dakota PWSs in improving drinking water quality, quantity, and dependability by providing reduced interest rate, long-term financial assistance for eligible and needed drinking water infrastructure improvements. This infrastructure

assistance helps with compliance of drinking water rules, regionalization/consolidation and replacement of aging infrastructure.

5. Continue to integrate to the maximum extent possible DWSRF funding with other available funding to maximize the benefits to public water systems and needed drinking water projects statewide. The cooperating agencies include the United States Department of Agriculture, Community Development Block Grant Program, and the North Dakota State Water Commission.

Environmental Results

3. Loan Fund
   a. Through 2010, the fund utilization rate, as measured by the ratio of executed loans to funds available, was 105 percent, which is above the national average of 90 percent. For 2011, the goal of the DWSRF program is to maintain the fund utilization rate at 95 percent or above.
   b. Through 2010, the rate at which projects progressed as measured by disbursements as a percentage of assistance provided was 73 percent. This is below the national average of 80 percent. The FY 2011 goal is to return to this construction pace.
   c. The DWSRF program funded 11 projects, including 4 loan increases, in 2010 totaling $18.1 million and serving a population of 46,504. Nine of these loans went to systems that serve less than 3,300 people. For 2011, the goal of the DWSRF program is to fund 10 loans, totaling $19 million and serving a population of 150,000.

4. Set asides, Small System Technical Assistance
   a. In 2010, 115 systems received training. For 2011, the goal is 120.
   b. In 2010, 115 systems received on-site technical assistance. The goal for 2011 is 120.

G. Public Participation

Background

States are required to make their annual IUP available to the public for review and comment prior to submitting it to the EPA as part of its capitalization grant application. States are also required to describe the public review process used and how it responded to major comments and concerns that were received.

Process

The public was invited to comment on the draft 2011 IUP at a public hearing held in Bismarck on February 14, 2011 and comments were received until February 28, 2011. No comments were received.

ATTACHMENT 1

ELIGIBLE AND INELIGIBLE PROJECTS AND PROJECT-RELATED COSTS UNDER THE DRINKING WATER STATE REVOLVING LOAN FUND (DWSRF) PROGRAM

EXAMPLES OF ELIGIBLE PROJECTS AND PROJECT-RELATED COSTS

- Projects that address present Safe Drinking Water Act (SDWA) exceedances
- Projects that prevent future SDWA exceedances (applies only to regulations in effect)
- Projects to replace aging infrastructure
  -rehabilitate or develop drinking water sources (excluding reservoirs, dams, dam rehabilitation and water rights) to replace contaminated sources
  -install or upgrade drinking water treatment facilities if the project would improve the quality of drinking water to comply with primary or secondary SDWA standards
  -install or upgrade storage facilities, including finished water reservoirs, to prevent microbiological contaminants from entering the water system
  -install or replace transmission and distribution piping to prevent contamination caused by leaks or breaks, or to improve water pressure to safe levels
- Projects to restructure and consolidate water supplies to rectify a contamination problem, or to assist systems unable to maintain SDWA compliance for financial or managerial reasons (assistance must ensure compliance)
- Projects that purchase a portion of another system's capacity, if such purchase will cost-effectively rectify a SDWA compliance problem
- Land acquisition
  -land must be integral to the project (i.e., needed to meet or maintain compliance and further public health protection such as land needed to locate eligible treatment or distribution facilities)
  -acquisition must be from a willing seller
  Note: The cost of complying with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (the Uniform Act) is an eligible cost.
- Planning (including required environmental assessment reports) , design, and construction inspection costs associated with eligible projects

EXAMPLES OF INELIGIBLE PROJECTS AND PROJECT-RELATED COSTS

- Dams, or rehabilitation of dams
- Water rights, except if the water rights are owned by a system that is being purchased through consolidation as part of a capacity development strategy
- Reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located
- Drinking water monitoring costs
- Operation and maintenance costs
- Projects needed mainly for fire protection
- Projects for systems that lack adequate technical, managerial and financial capability, unless assistance will ensure compliance Projects for systems in significant noncompliance under the SDWA, unless funding will ensure compliance
- Projects primarily intended to serve future growth

Attachment 2
State of North Dakota
Drinking Water State Revolving Loan Fund Program
Comprehensive Project Priority List and Fundable List for FY 2011

Shaded projects are on the fundable List

Priority Ranking	Priority Points	Project No.	*System Name*	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project		Eng
							Project	Cumulative	Type	Cost($1000)	
1	44	0300659-01*	*Minnewauken*	318	Emergency infrastructure relocation	2011	3,010	3,010			KLJ
2	42	3100838-01	*Ross*	250	Connect to R&TWSA, water tower replacement, watermain replacement	2012	2,532	5,542			KLJ
3	39	5300809-03*	*Ray*	750	New water tower and watermain replacement	2011	5,090	10,632	B/C, wtr effcy	4,136	Interstate
4	35	0700114-01**	*Bowbells*	420	Water tower, watermain and water meter replacement	2011	3,108	13,740	B/C and Cat, wtr effcy	1,321	KLJ
5	32	0901530-01	*Leonard*	255	Consolidation of existing uses to regional water system	2012	3,300	17,040			Moore
6	31	3901068-10	*SEWUD*	2,188	Pump station upgrades, new water reservoir, and system interconnections	2011	375	17,415			AE2S
7	25	0501001-01	*Westhope*	533	Water tower replacement	2011	850	18,265			Estvold
8	23	2600556-01	*Lehr*	114	Well and watermain replacement	2011	300	18,565	B/C, wtr effcy	230	Moore
9	22	1000543-04	*Langdon*	2,101	Intake structure and raw water transmission line improvements	2012	2,964	21,529			AE2S
10	21	4100428-01	*Gwinner*	717	FE/MN removal equipment, membrane treatment and WTP renovation	2013	1,100	22,629			Interstate
11	21	3201072-01	*TCWD*	2,475	WTP rehabilitation and expansion	2011	1,040	23,669			B & W
12	21	4701303-04	*SRWD*	3,048	Reservoir, booster station, watermain and WTP expansion	2011	18,322	41,991			B & W
13	20	1900162-01	*Carson*	320	Watermain replacement	2012	3,182	45,173			Interstate
14	20	2500956-01	*Upham*	155	Water tower rehabilitation	2011	101	45,274			KLJ
15	19	0900217-01	*Davenport*	261	New transmission main, increased storage and control replacement	2012	383	45,657			Interstate
16	19	4900482-04	*Hillsboro*	1,563	New water source, WTP, storage, transmission main and rural water connection	2011	12,124	57,781			AE2S
17	19	4800152-01	*Cando*	1,342	Replacement well and interconnection to raw water transmission; WTP modifications-air stripping	2012	414	58,195			Interstate
18	19	2300535-02	*Kulm*	422	Water storage replacement	2011	650	58,845			Moore
19	19	3700876-01	*Sheldon*	120	Pump and control replacement	2011	152	58,997			Moore
20	18	5201309-02	*CPWD*	2,397	Booster station improvements and back up generation	2011	1,270	60,267			Interstate
22	18	5101189-02	*NPRWD*	2,327	Water storage rehabilitation	2012	1,600	61,867			Interstate
23	18	3200536-02	*Lakota*	781	WTP renovation and new water tower	2012	2,035	63,902			B & W

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project		Eng
							Project	Cumulative	Type	Cost($1000)	
24	17	2500415-01	*Granville*	286	Water tower rehabilitation	2011	200	64,102			Estvold
25	17	2800619-02	*Max*	278	Water tower rehabilitation, water meter replacement and misc appurtenance	2012	429	64,531			Estvold
26	17	1500571-03	*Linton*	1,321	Watermain replacement	2011	2,500	67,031			Interstate
27	17	3100898-01	*Stanley*	1,796	Reservoir, transmission main and watermain	2011	2,300	69,331			ATEC
28	17	5000773-04	*Park River*	1,535	Water tower replacement	2012	1,221	70,552			AE2S
29	16	2900074-01	*Beulah*	3,152	WTP improvements and water storage	2011	1,096	71,648			Interstate
30	16	0900999-02	*West Fargo*	14,940	New SW/GW WTP	2013	46,500	118,148			Moore
31	16	0201058-03	*BRWD*	3,417	WTP rehabilitation and expansion	2012	4,000	122,148			Interstate
32	16	3900703-01	*Mooreton*	204	Replace gate valves and add bladder tank	2012	128	122,276			Interstate
33	16	1801062-03	*GF-Traill WD*	2,361	Water system expansion	2011	5,658	127,934			AE2S
34	16	0900387-01	*Gardner*	80	Watermain replacement and looping	2011	300	128,234			Moore
35	15	0900134-02	*Buffalo*	220	Replace existing watermains, gate valves and hydrants	2011	1,082	129,316			Moore
36	14	3900183-02	*Christine*	153	Watermain replacement and looping	2011	500	129,816			Moore
37	14	0900524-01	*Kindred*	614	Water tower and watermain replacement	2011	975	130,791			Moore
38	14	2700990-01	*Watford City*	1,705	Pump station and watermain looping	2011	400	131,191			AE2S
39	14	1001380-01	*Langdon RWD*	2,007	Pumping facility and transmission main improvements	2011	1,100	132,291			AE2S
40	14	2500964-03	*Velva*	1,049	Transmission line and watermain replacement	2011	1,142	133,433			Estvold
41	14	0200763-01	*Oriska*	128	Pump house and reservoir replacement	2011	500	133,933			Moore
42	14	2901054-01	*Zap*	231	Water storage rehabilitation	2011	117	134,050			Interstate
43	14	2900402-01	*Golden Valley*	183	Water storage rehabilitation	2011	97	134,147			Interstate
44	14	3900567-02	*Lidgerwood*	738	Transmission main replacement	2012	490	134,637			Moore
45	14	0201032-02	*Wimbledon*	237	Water tower replacement	2011	700	135,337			Interstate
46	14	2601055-01	*Zeeland*	141	Watermain replacement	2011	1,200	136,537			Toman
47	14	1500571-02	*Linton*	1,321	Water meter replacement	2011	388	136,925			Interstate
48	14	0900769-03	*Page*	225	Water tower rehabilitation	2011	400	137,325			Moore
49	13	5000408-03	*Grafton*	4,516	Filtration, backwash recycle, and misc WTP improvements	2012	5,863	143,188			AE2S
50	13	5000408-05	*Grafton*	4,516	Pretreatment and advanced oxidation WTP improvements	2016	7,750	150,938			AE2S
51	13	3700574-08	*Lisbon*	2,292	Upgrade to well #1	2011	125	151,063			Moore
52	13	1600159-02	*Carrington*	2,268	Watermain replacement	2013	3,016	154,079			Interstate
53	13	2000446-02	*Hannaford*	181	Water tower replacement	2011	600	154,679			Moore
54	13	5100515-02	*Kenmare*	1,081	New water tower	2011	1,500	156,179			Estvold
55	13	1100758-03	*Oakes*	1,979	Watermain replacement	2011	3,000	159,179			Moore
56	13	1100758-04	*Oakes*	1,979	Water tower replacement	2011	900	160,079			Moore
57	13	1100758-05	*Oakes*	1,979	WTP expansion	2011	1,250	161,329			Moore
58	13	3900567-01	*Lidgerwood*	738	Water meter replacement	2011	115	161,444			Moore
59	13	3700314-06	*Enderlin*	947	New lime softening WTP & storage	2011	7,400	168,844			Moore
60	12	3900333-03	*Fairmount*	406	Water tower replacement	2012	750	169,594			Moore
61	12	5300936-03	*Tioga*	1,300	Reservoir, transmission main and watermain	2011	7,500	177,094			ATEC
62	12	0900999-01	*West Fargo*	14,940	Transmission main from new WTP	2013	25,000	202,094			Moore

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project		Eng
							Project	Cumulative	Type	Cost($1000)	
63	12	0200510-01	*Kathryn*	63	Water meter replacement	2011	150	202,244			
64	12	3401128-04	*NVWD*	7,837	Transmission main capacity improvements and meter replacement	2012	2,119	204,363			AE2S
65	12	2801400-02	*McLean-SRWD*	1,199	Water system expansion	2012	1,800	206,163			
66	12	1100758-06	*Oakes*	1,979	Well and well house replacement	2011	230	206,393			Moore
67	12	4600487-02	*Hope*	304	Service to west side of railroad tracks	2013	150	206,543			Moore
68	12	2300537-01	*LaMoure*	944	Water tower rehabilitation	2011	130	206,673			Moore
69	11	0800080-02	*Bismarck*	55,532	West End Reservoir expansion for SWTR and DBP rule compliance	2014	10,875	217,548			AE2S
70	11	1300520-02	*Killdeer*	713	Water tower replacement	2011	1,400	218,948			AE2S
71	11	0900030-01	*Argusville*	300	Watermain replacement and looping	2014	830	219,778			Moore
72	11	3900196-01	*Colfax*	91	Watermain replacement, looping, and new watermain	2011	350	220,128			Moore
73	11	3900976-02	*Walcott*	189	Watermain replacement and looping	2011	555	220,683			Moore
74	11	3900973-05	*Wahpeton*	8,586	Well upgrades, new well, raw water transmission main	2013	1,025	221,708			Interstate
75	11	5001075-03	*Walsh RWD*	2,800	Reservoir expansion	2011	1,200	222,908			AE2S
76	11	2000203-03	*Cooperstown*	1,053	Watermain replacement	2011	705	223,613			Moore
77	11	3900443-03	*Hankinson*	1,058	Watermain looping	2012	360	223,973			Moore
78	11	4900465-01	*Hatton*	647	Water tower replacement	2011	650	224,623			Moore
79	11	4900803-01	*Portland*	550	Water tower replacement	2011	650	225,273			Moore
80	11	5101189-03	*NPRWD*	2,327	Distribution, storage & pumping improvements	2012	1,820	227,093			Interstate
81	11	1100758-07	*Oakes*	1,979	Water tower rehabilitation 0.25MG	2011	100	227,193			Moore
82	11	3800877-01	*Sherwood*	255	Install operating controls for NAWS	2011	50	227,243			Estvold
83	11	3601424-01	*GRWD*	3,508	Water system expansion	2012	4,000	231,243			B & W
84	11	2801487-01	*NCRWC*	2,286	Water system expansion to Carpio	2011	600	231,843			Interstate
85	11	0501057-03	*ASWUD*	754	Water system expansion	2013	25,844	257,687			B & W
86	11	3900567-03	*Lidgerwood*	738	Water reservoir demolition	2012	58	257,745			Moore
87	10	3400269-02	*Drayton*	913	Replace clearwell, replace chemical feed and	2012	1,610	259,355			AE2S
88	10	3000596-06	*Mandan*	16,718	Mandan water transmission line replacement	2011	4,500	263,855			AE2S
89	10	2900789-03	*Pick City*	166	Replace undersized watermains, eliminate dead ends, and install additional hydrants	2011	90	263,945			
90	10	4700498-06	*Jamestown*	15,527	Phase 3 - Transmission line	2014	2,973	266,918			Interstate
91	10	0900035-01	*Arthur*	402	Water tower replacement	2011	650	267,568			Moore
92	10	5100868-02	*Sawyer*	377	Watermain looping	2011	374	267,942			Estvold
93	10	5101447-01	*West River WD*	400	Service line replacement (from water main to curb stop)	2011	399	268,341			Estvold
94	10	0900613-03	*Mapleton*	606	Watermain replacement	2013	1,300	269,641			Moore
95	10	0801031-01	*Wilton*	807	Watermain replacement	2012	3,359	273,000			Interstate
96	10	1000543-02	*Langdon*	2,101	Water main replacement	2011	608	273,608			AE2S
97	10	1000543-03	*Langdon*	2,101	Rehabilitation of existing 0.25MG water towers	2012	370	273,978			AE2S
98	9	0900336-08	*Fargo*	98,000	Raw water intake and pump station	2015	12,500	286,478			AE2S
99	9	0900336-09	*Fargo*	98,000	Ground storage reservoir #2 and pump station	2016	9,555	296,033			AE2S
100	9	0900336-05	*Fargo*	98,000	Distribution Flow Control Improvements	2012	550	296,583			AE2S

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project		Eng
							Project	Cumulative	Type	Cost($1000)	
101	9	1300520-01	*Killdeer*	713	WTP optimization	2011	1,100	297,683			AE2S
102	9	3900973-04	*Wahpeton*	8,586	Watermain replacement and looping	2012	368	298,051			Interstate
103	9	0900336-06	*Fargo*	98,000	WTP improvements (sulfate)	2013	35,000	333,051			AE2S
104	9	3700314-05	*Enderlin*	947	Watermain replacement-First loan in 2002	2011	700	333,751			Moore
105	9	3700314-07	*Enderlin*	947	Water tower replacement	2012	1,800	335,551			Moore
106	9	3700574-09	*Lisbon*	2,292	New well field (wells) and raw water transmission main	2012	500	336,051			Moore
107	9	3800695-01	*Mohall*	812	Watermain replacement	2011	305	336,356			Estvold
108	9	4500891-01	*South Heart*	320	Water meter replacement	2011	100	336,456			KLJ
109	9	2700990-02	*Watford City*	1,435	Watermain replacement	2011	465	336,921			AE2S
110	9	3700574-10	*Lisbon*	2,292	Watermain replacement	2012	2,200	339,121			Moore
111	9	0900945-01	*Tower City*	252	Water tower rehabilitation	2013	130	339,251			Moore
112	9	1100758-08	*Oakes*	1,979	New reservoir, pump station and transmission main	2011	500	339,751			Moore
113	8	0901060-04	*CRW*	4,703	System elevated tower	2012	3,584	343,335			B & W
114	8	3900333-02	*Fairmount*	406	Watermain replacement and looping	2011	600	343,935			Moore
115	8	0900999-04	*West Fargo*	14,940	Underground storage reservoir	2013	2,200	346,135			Moore
116	8	3901043-01	*Wyndmere*	533	Watermain looping	2012	350	346,485			Moore
117	8	5000408-04	*Grafton*	4,516	Park River water intake improvements	2014	750	347,235			AE2S
118	8	3401128-03	*NVWD*	7,837	SCADA improvements	2011	662	347,897			AE2S
119	8	3900973-03	*Wahpeton*	8,586	Lime storage and slaker additions	2011	1,080	348,977			Interstate
120	8	4700498-04	*Jamestown*	16,000	New water tower and transmission main	2012	3,365	352,342			Interstate
121	8	0900166-02	*Casselton*	1,855	Water tower replacement	2013	1,000	353,342			Moore
122	8	4100357-01	*Forman*	506	Water tower replacement	2011	700	354,042			Moore
123	8	0900492-01	*Hunter*	326	Watermain replacement	2011	400	354,442			Moore
124	8	3400170-01	*Cavalier*	1,537	Water tower rehabilitation	2011	271	354,713			AE2S
125	8	5100868-03	*Sawyer*	377	Transmission line replacement	2011	557	355,270			Estvold
126	7	0901060-01	*CRW*	4,703	Reservoir expansion, watermain upgrade and expansion (refinance)	2012	1,981	357,251			B & W
127	7	0900336-07	*Fargo*	90,599	Water tower level controls	2013	360	357,611			AE2S
128	7	4500252-01	*Dickinson*	16,010	Watermain replacement project	2011	1,240	358,851			
129	7	4600341-02	*Finley*	413	Water tower replacement	2011	650	359,501			Moore
130	7	1800410-05	*Grand Forks*	49,321	WTP facility plan and design	2012	8,563	368,064			AE2S
131	7	5000691-01	*Minto*	657	Water tower rehabilitation	2011	100	368,164			AE2S
132	7	2801430-01	*Garrison RWD*	1,227	Water system expansion (SW)	2011	1,841	370,005			Estvold
133	7	2801430-02	*Garrison RWD*	1,228	Water system expansion (NW) and watermain looping	2011	961	370,966			Estvold
134	7	5200458-04	*Harvey*	1,619	Water treatment plant expansion	2011	1,250	372,216			Moore
135	6	0900999-03	*West Fargo*	14,940	Intake structure for SW	2013	3,440	375,656			Moore
136	6	4700498-05	*Jamestown*	15,527	Water meter replacement	2013	1,241	376,897			Interstate
137	6	3700314-04	*Enderlin*	947	New wells & transmission line	2011	1,500	378,397			Moore
138	6	2801430-03	*Garrison RWD*	1,229	New reservoir and pump station	2011	1,841	380,238			Estvold
139	5	0600119-01	*Bowman*	1,600	Watermain replacement	2011	530	380,768			

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project		Eng
							Project	Cumulative	Type	Cost($1000)	
140	5	1800410-04	*Grand Forks*	49,321	Water distribution improvements-24th Ave. S. (S. 12th St. to Cherry St.)	2011	990	381,758			AE2S
141	5	0901060-05	*CRW*	4,703	Increased capacity to Casselton Area - wellfield, WTP, reservoir, and transmission main improvements	2013	6,220	387,978			B & W
142	5	0900336-03	*Fargo*	90,599	Radio read water metering improvements	2011	5,000	392,978			AE2S
143	5	0900336-04	*Fargo*	90,599	Water tower rehabilitation	2012	1,625	394,603			AE2S
144	5	3000596-05	*Mandan*	16,718	Mandan water meter/MXU replacement	2011	1,800	396,403			AE2S
145	5	2800953-01	*Underwood*	812	Water tower rehabilitation	2011	813	397,216			Toman
146	3	0400638-01	*Medora*	100	Watermain replacement	2011	41	397,257			
147	3	3900333-01	*Fairmount*	406	Replace water tower controls	2011	110	397,367			Moore
148	3	1800410-03	*Grand Forks*	55,158	Lime residuals storage	2011	6,977	404,344			AE2S
149	3	5301079-02	*WRWD*	2,836	Transmission capacity increase	2011	750	405,094			
150	3	0900336-10	*Fargo*	98,000	Solar power system (GSR#1)	2011	305	405,399			AE2S
151	3	0900999-05	*West Fargo*	24,000	North side water tower	2015	2,000	407,399			Moore
152	3	0900999-06	*West Fargo*	24,000	South side water tower	2015	2,000	409,399			Moore
153	1	2701461-01	*MCWRD*		Transmission, 1MG reservoir, pump station	2011	3,500	412,899			AE2S

* These projects are eligible for 60% loan forgiveness with a cap of $1,500,000 of loan forgiveness

** This project is eligible for 60% loan forgiveness with a cap of $1,071,900 loan forgiveness. If additional funds become available this project will be capped at $1,500,000 of loan forgiveness

Abbreviations

B/C = Business Case for Green Project Reserve Required
Cat = Categorically Approved Green Project Reserve Project
DBP = Disinfectants/Disinfection Byproducts Rule
GSR = Ground Storage Reservoir
GW = Groundwater
RWD = Rural Water District
SW = Surface Water
SWTR = Surface Water Treatment Rule
WTP = Water Treatment Plant
MG = Million Gallons

ASWUD = All Seasons Water User District
BDW = Burke, Divide, Williams
BRWD = Barnes Rural Water District
CPWD = Central Plains Water District
CRW = Cass Rural Water
GRWD = Greater Ramsey Water District
MCRWD = McKenzie County Water Resource District
NCRWC = North Central Regional Water Consortium
NPRWD = North Prairie Rural Water District
NVWD = North Valley Water District
R&TWSA = Ray & Tioga Water System Association
SCRWD = South Central Regional Water District
SEWUD = Southeast Water Users District
SRWD = Stutsman Rural Water District
TCWD = Tri-County Water District
TRWD = Traill Rural Water District
WRWD = Williams Rural Water District

Attachment 3

STATE OF NORTH DAKOTA

PRIORITY RANKING SYSTEM FOR FINANCIAL ASSISTANCE THROUGH THE DRINKING WATER STATE REVOLVING LOAN FUND (DWSRF) PROGRAM

DWSRF PROGRAM
DIVISION OF MUNICIPAL FACILITIES
ENVIRONMENTAL HEALTH SECTION
NORTH DAKOTA DEPARTMENT OF HEALTH

AUGUST, 2004

The following criteria and point system is utilized by the DWSRF Program to rank eligible projects for potential financial assistance through the DWSRF Program:

1. Water Quality (Maximum Points Limited to 35)
2. Water Quantity (Maximum Points = 20)
3. Affordability (Maximum Points = 15)
4. Infrastructure Adequacy (Maximum Points Limited to 15)
5. Consolidation or Regionalization of Water Supplies (Maximum Points = 10)
6. Operator Safety (Maximum Points = 5)

Maximum Total Points = 100

DWSRF funds may be used to buy or refinance existing local debt obligations (publicly-owned systems only) where the initial debt was incurred and the construction started after July 1, 1993. DWSRF assistance requests of this type, if eligible, will be ranked based on the original purpose and success of the constructed improvements.

Creation of New Systems - Eligible projects are those that, upon completion, will create a community water system (CWS) to address existing public health problems with serious risks caused by unsafe drinking water provided by individual wells or surface water sources. Eligible projects are also those that create a new regional CWS by consolidating existing systems that have technical, financial, or managerial difficulties. Projects to address existing public health problems associated with individual wells or surface water sources must be limited in scope to the specific geographic area affected by contamination. Projects that create new regional CWSs by consolidation existing systems must be limited in scope to the service area of the systems being consolidated. A project must be a cost-effective solution to addressing the problem. Applicants must ensure that sufficient public notice has been given to potentially affected parties and consider alternative solutions to addressing the problem. Capacity to serve future population growth cannot be a substantial portion of the project.

	CATEGORY	POINTS
1.	Water Quality - Select All That Apply (Maximum Points Limited to 35)[1,3]	
	A. Documented waterborne disease outbreak(s) within last 2 years	20
	B. Unresolved nitrate or nitrite maximum contaminant level (MCL) exceedance(s), OR acute microbiological MCL exceedance(s) within last 12 months	15
	C. Exceedance(s) of EPA-established unreasonable risk to health (URTH) level(s) within last 4 years for regulated chemicals or radionuclides (excludes nitrate and nitrite)	10
	D. Disinfection treatment inadequate to satisfy the Surface Water Treatment Rule (SWTR), the enhanced SWTR or ESWTR, or the groundwater disinfection rule (GWDR) once finalized, OR groundwater source(s) deemed by the DWP to be under the direct influence of surface water, OR multiple turbidity treatment technique requirement (TTR) violations within last 2 years (includes at least one event where the maximum allowed turbidity was exceeded)	8
	E. Multiple turbidity TTR violations within last 2 years (no events where the maximum allowed turbidity was exceeded), OR 3 or more non-acute microbiological MCL violations within last 12 months	7
	F. MCL or TTR exceedance(s) (no URTH level exceedances) within last 4 years (excludes microbiological contaminants, nitrate, nitrite, and turbidity)	6
	G. Potential MCL or TTR compliance problems based on most recent 4 year period (excludes microbiological contaminants and turbidity)	
	• 75% to 100% of MCL or TTR	5
	• 50% to 74% of MCL or TTR	4
	H. General water quality problem (see page 7)	
	• significant general water quality problem	4
	• moderate general water quality problem	3
	• minor general water quality problem	2
2.	Water Quantity - Select One If Applicable (Maximum Points = 20)[2,3]	
	A. Correction of a critical water supply problem involving the loss or imminent loss of a water supply in the near future	20

B. Correction of an extreme water supply problem — 10
Maximum water available <150 gallons per capita per day (gpcd) (community water systems only), OR continuous water shortages during all periods of operation (nonprofit noncommunity water systems only)

C. Correction of a serious water supply problem — 7
Maximum water available <200 gpcd (community water systems only), OR daily water shortages, or inability to meet peak daily water demand, at a frequency of at least once per week during all periods of operation (nonprofit noncommunity water systems only)

D. Correction of a moderate water supply problem — 4
Maximum water available <250 gpcd (community water systems only), OR occasional daily water shortages, or occasional inability to meet peak daily water demands, on a seasonal basis (nonprofit noncommunity water systems only)

E. Correction of a minor water supply problem — 2
Maximum water available <300 gpcd (community water systems only), OR sporadic water shortages or occasional inability to meet peak water demands (nonprofit noncommunity water systems only)

3. Affordability - For the Applicable Sub-Category, Select One For Each Item (Maximum Points = 15)

A. Community Water Systems

1. Relative income index - ratio of local or service area annual median household income (AMHI) to the state nonmetropolitan AMHI (based on 2000 census data)

- < 60% — 8
- 61% to 70% — 7
- 71% to 80% — 5
- 81% to 90% — 3
- 91% to 100% — 1

2. Relative future water cost index - ratio of expected average annual residential user charge for water service resulting from the project, including costs recovered through special assessments, to the local AMHI (based on 2000 census data)

- >2.5% — 7
- 2.0% to 2.5% — 6
- 1.5% to 1.9% — 5
- 1.0% to 1.4% — 3

- 0.5% to 0.9% — 1

B. Nonprofit Noncommunity Water Systems
   1. Relative income index - ratio of local or service area AMHI to the state nonmetropolitan AMHI (based on 2000 census data)
      - ≤ 60% — 8
      - 61% to 70% — 7
      - 71% to 80% — 5
      - 81% to 90% — 3
      - 91% to 100% — 1
   2. Relative future water cost index - ratio of expected annual water service expenditures resulting from the project to total annual operating expenses
      - >20% — 7
      - 15% to 20% — 6
      - 10% to 14% — 5
      - 5% to 9% — 3
      - 2% to 4% — 1

4. Infrastructure Adequacy - Select All That Apply (Maximum Points Limited to 15)

   A. Correction of general disinfection treatment deficiencies - excludes improvements necessary to directly comply with the SWTR, the ESWTR, or the GWDR (once finalized) — 3

   B. Correction of well construction or operating deficiencies — 3

   C. Correction of distribution system pressure problems (dynamic pressure <20 psi) — 3

   D. Replacement of deteriorated water mains — 3

   E. Replacement of deteriorated finished water storage structures — 3

   F. Replacement of distribution system piping/materials shown via DWP-approved testing to contribute unacceptable levels of lead or asbestos — 3

   G. Water treatment plant operating at or above design capacity — 3

   H. Water treatment plant operating at or beyond useful or design life — 3

I. Correction of specific design or operating deficiencies associated with water treatment plant unit processes (excludes disinfection treatment) 2

J. Correction of specific design or operating deficiencies associated with surface water intake facilities 2

K. Correction of specific or design or operating deficiencies associated with finished water storage facilities 2

L. Correction of specific design or operating deficiencies associated with raw or finished water pumping facilities 2

M. Correction of specific design or operating deficiencies associated with raw or finished water distribution system piping 2

N. Correction of specific design or operating deficiencies associated with chemical feed installations (excludes disinfection) 2

O. For systems relying solely on their own groundwater supply, provision of a second well where only one functional well exists 2

P. Replacement of inoperative, obsolete, or inadequate instrumentation or controls 2

5. Consolidation or Regionalization of Water Supplies - Select All That Apply (Maximum Points = 10)

A. Correction of Safe Drinking Water Act (SDWA) compliance problem(s), or extreme to critical water supply problem(s), for 1 or more PWS through consolidation with or regionalized service by another PWS 4

B. Correction of contamination problems (regulated contaminants), or extreme water quantity problems (no water, imminent loss of water supply, or continuous/ frequent daily water shortages), for individual residences or businesses through consolidation with or regionalized service by a PWS 3

C. Correction of potential MCL or TTR compliance problems, general water quality problems, or moderate to serious water quantity problems for 1 or more PWSs through consolidation with or regionalized service by another PWS 2

D. Correction of general water quality problems, or moderate water quantity problems (occasional daily or seasonal water shortages), for individual residences or businesses through consolidation with or regionalized service by a PWS 1

6. Operator Safety - Select One If Applicable (Maximum Points = 5)[2]

A. Correction of a problem that poses a critical and chronic safety hazard for operators	5
B. Correction of a problem that poses an intermittent safety hazard for operators	3
C. Correction of a potential significant safety hazard for operators	1

[1] Applies to community and nonprofit noncommunity public water systems only. Water quality problems must be ongoing and unresolved under the present system configuration. Analysis applies to finished water after all treatment (raw water if no treatment is provided).

[2] Applies to community and nonprofit noncommunity public water systems only. Projects intended mainly to increase water availability for or to improve fire protection are not eligible for DWSRF assistance. Fire protection features, in order to be eligible, must represent an ancillary project benefit or secondary project purpose.

[3] Projects intended to address multiple community and/or nonprofit noncommunity public water system water quality and/or quantity problems will be ranked based on the highest level problem to be solved.

GENERAL WATER QUALITY

DEFINITIONS

Significant General Water Quality Problem (4 points) = Score of 6 or greater
Moderate General Water Quality Problem (3 points) = Score of 4 or 5
Minor General Water Quality Problem (2 points) = Score of 3 or less
All values expressed in milligrams per liter

Total Dissolved Solids (TDS)

500 - 999	Score of 1
1,000 - 1,499	Score of 2
≥1,500	Score of 3

Total Hardness as Calcium Carbonate (TH)

200 - 424	Score of 1
425 - 649	Score of 2
≥650	Score of 3

Iron (FE)

0.3 - 0.89	Score of 1
0.9 - 2.0	Score of 2
>2.0	Score of 3

Manganese (MN)

0.05 - 0.25	Score of 1
0.26 - 1.00	Score of 2
>1.00	Score of 3

Sodium (NA)

200 - 424	Score of 1
425 - 649	Score of 2
≥650	Score of 3

Sulfate (SO_4)

250 - 499	Score of 1
500 - 750	Score of 2
>750	Score of 3

Attachment 4
Nonproject Set-Aside and Fee Activity (1)
North Dakota Drinking Water State Revolving Loan Fund Program

Set-Aside	Set Aside Through 2010	Transferred To Loan Fund	Expended Through 2010	Balance Available	Planned Set-Asides For 2011	Total Set-Aside Funds Available 2011	Reserved Through 2010	Reserved From 2011 Allotment	Total Reserved Through 2011
4% Administration	5,646,324	0	4,502,900	1,143,424	0	1,143,424	0	0	0
10% State Program Assistance									
PWSS Supervision	610,000	0	313,098	296,902	0	296,902			
Source Water Protection									
Capacity Development									
Operator Certification									
2% Small System Technical Assistance	2,116,972	0	1,845,512	271,460	0	271,460	0	0	0
15% Local Assistance (2)									
Land Acquisition									
Capacity Development									
Wellhead Protection									
Source Water Petition Programs									
Source Water Protection (3)	1,255,880	820,612	435,268	0	NA	0	0	NA	0
Totals	9,629,176	820,612	7,096,778	1,711,786	0	1,711,786	0	0	0

Fee Type	Collected Through 12/31/10	Transferred to Loan Fund	Expended Through 12/31/10	Balance Available 12/31/10	Projected Funds 01/01/11 - 12/31/11	Total Funds Available Through 12/31/11	Total Funds Held Through 12/31/11
Loan Fee	3,754,283	0	124,044	3,630,239	823,564	4,577,847	4,453,803

(1) The set-aside amounts are based on percentages (4%, 2%, or 10%) of the respective federal DWSRF allotments. The FY 1997 through 2010 allotments have been awarded. The anticipated allotment for FY 2010 is $13,573,000. The FY 2010 allotment will be applied for by July 1, 2011. The funds expended and the balance available are as of December 31, 2010. The loan fee amounts reflect loans approved up to September 31, 2010. The amounts may increase based upon repayments due (if any) under loans approved after this date. (2) No more than 10% may be used for any one activity with a maximum of 15% for all activities combined. (3) Only the FY 1997 allotment may be used by states to complete the mandatory source water assessments. All funds not used by April 25, 2003, from this set aside were transferred to the Loan Fund.

CITY OF Fargo

APPENDIX "D"
March 28, 2011

Mayor Dennis R. Walaker
200 3rd Street North
Fargo, North Dakota 58102
Phone (701) 241-1310
Fax (701) 476-4136

March 17, 2011

Members of the House Appropriations Committee:

As Mayor of Fargo, I wish to add my name in support of SB 2020. Addressed below are reasons for the City's support. Mr. Darrell Vanyo, Cass County Commissioner, will be making the formal presentation on behalf of Cass County and the City. Your support of funding for permanent flood protection in Cass County is appreciated.

Attached to this document is a series of charts and maps indicating the flooding issues Fargo and Cass County have had to deal with since 1997. We have also presented to you a proposed diversion plan to address long term flood protection for the Fargo metro area and surrounding properties. The final plan is not yet solidified. Downstream concerns have been analyzed, upstream concerns are now being studied, and the final diversion route is being discussed.

As you know, the largest metropolitan area on the Red River not to have permanent flood protection is the Fargo-Moorhead and Cass-Clay County metro. After the 1997 flood that had devastating impacts to Grand Forks and Wahpeton, Governor Ed Shafer approached then Mayor Bruce Furness and requested that Fargo delay requesting State support for permanent flood protection until those two communities recovered from their flood impacts. That request was honored and little did we know at that time that the Red River Valley would experience even higher water in the spring of 2009.

Since 1993, the City of Fargo has directed over $114 million in flood protection within the community. We have purchased and removed homes along the Red River (over 210 homes have been purchased); we have elevated our flood protection along the Red River so that our flood fight now begins in earnest at about 38' above flood stage (flood stage in Fargo is when the Red River leaves its bank at 18'). In 1997, the City's flood fight effort had to begin protecting homes when the flood stage reached 30', so we've come a long way in terms of emergency flood fighting to protect Fargo's citizens' homes.

Because of our southerly growth and our experience with overland flooding, we have also had to extend legal drains, elevate roadways and develop detention ponds that hold water back away from new housing subdivisions. This allows for the staging of water coming into the City from breakout water from the Wild Rice and Sheyenne Rivers.

The cost of permanent flood protection is estimated to be $1.5 billion at this time. A federally sponsored project, planned and designed by the Corp of Engineers, is in the latter stages of approval. An Environmental Impact Statement (EIS) has been drafted and currently is being reviewed internally by the Corps personnel in preparation for review by

other federal agencies. The Corps goal is to have a final EIS approval in the summer of 2011. Once accepted, the EIS record of decision (ROD) will be forwarded on for approval and then Congressional authorization. If all goes according to the current schedule, design of a diversion plan could begin early winter of 2012.

At this time the Corps of Engineers funding plan calls for the federal government participating at 65% of a National Economic Development (NED) planned diversion in Minnesota - which is the Corps preferred option. A locally preferred option calls for a diversion in North Dakota. Intercepting water from the Red River south of Fargo, the proposed diversion would extend west of West Fargo intersecting with the Wild Rice, Sheyenne, lower and upper Rush and Maple Rivers, re-entering the Red River north of Harwood, North Dakota. This diversion would be approximately 36 miles in length, would have a capacity of about 35,000 cubic feet per second (by comparison the West Fargo diversion has a capacity of about 6,000 cubic feet per second), and would protect Fargo, West Fargo, and Moorhead, Minnesota to a 500 year event.

The $1.5 billion cost estimate for the project anticipates federal cost participation to be about $800,000,000 and the State of Minnesota at about $100,000,000, with the balance of the $600 million funding to be split evenly between the State of North Dakota and local funding.

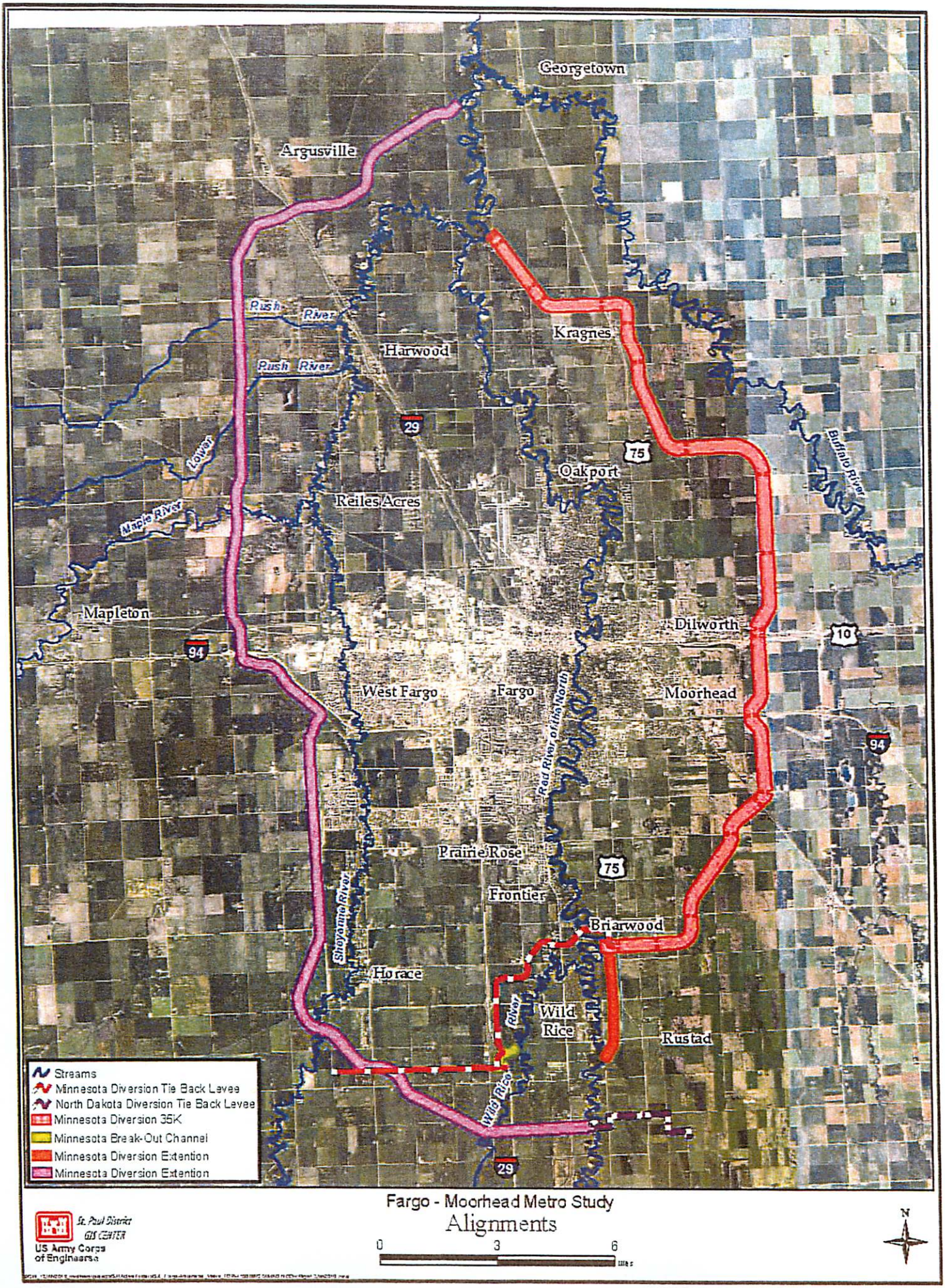
Sales tax votes have been passed in both Fargo and Cass County (1/2 cent in Fargo and 1/2 cent in Cass County). The 1 cent taxes should generate about $21 million a year and each have been put in place for 20 years.

To date, Governors Hoeven and Dalyrmple and previous legislative bodies have been generous in recognizing the need for permanent flood protection and have authorized $75 million. The 2009 legislature appropriated $45 million and today I am here requesting that the balance of the authorization ($30 million) be appropriated in this legislative session. I believe Governor Dalrymple's budget has the $30 million in it for flood protection in Fargo/Cass County and we encourage you to support that funding level. Moreover, we know current legislatures cannot commit future legislatures; however, we respectfully request some language be put in place recognizing the need for additional funding in future legislative sessions for this project.

I thank you for giving me the opportunity to present this information to you.

Sincerely,

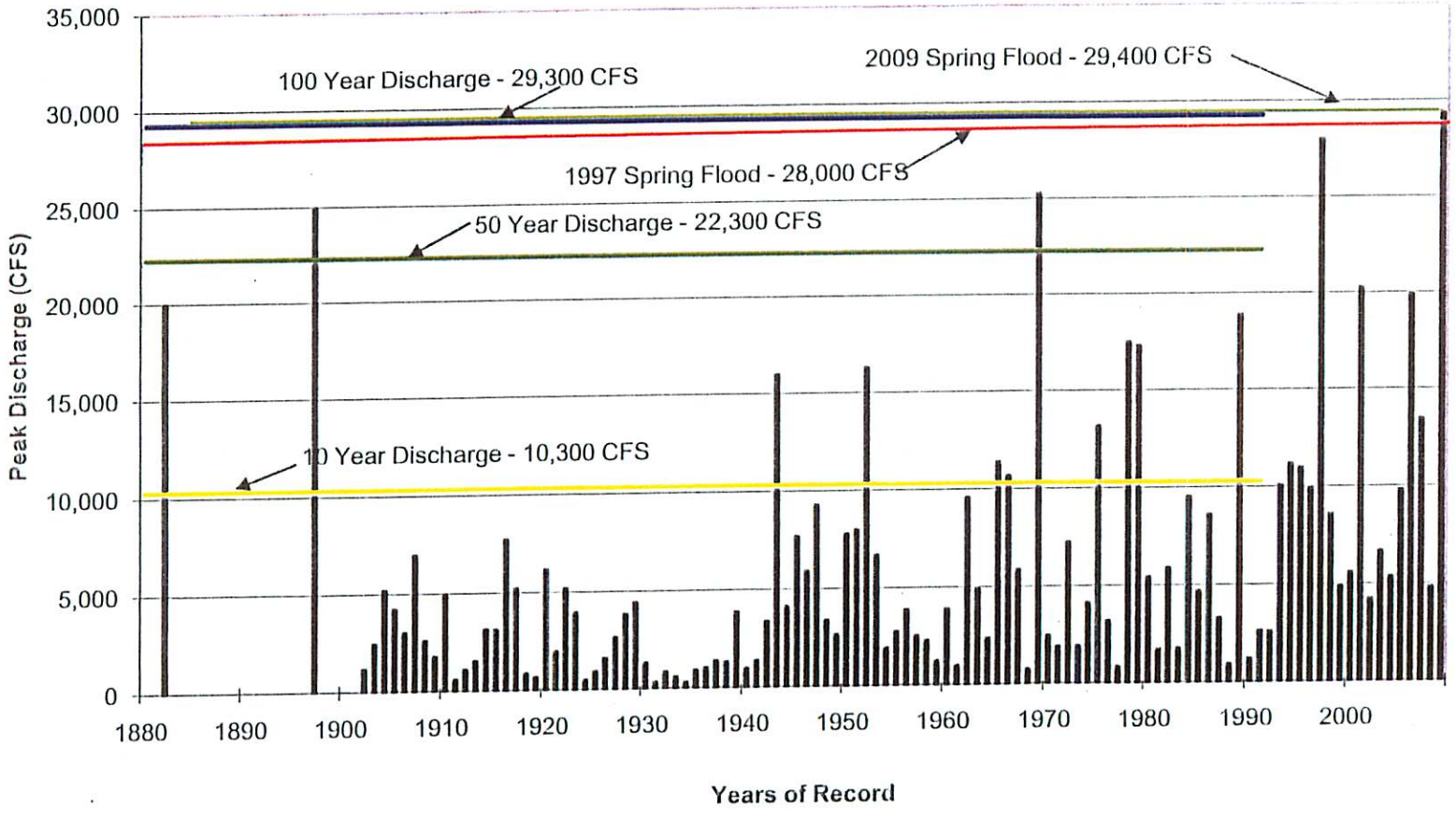
Dennis R. Walaker
Mayor


Georgetown
Argusville
Rush River
Rush River
Harwood
Kragnes
29
75
Oakport
Buffalo River
Lower
Maple River
Reiles Acres
Mapleton
94
Dilworth
10
West Fargo
Fargo
Moorhead
Red River of the North
94
Prairie Rose
75
Frontier
Briarwood
Shoyanne River
Horace
Wild Rice River
Wild Rice
Rustad
29
Streams
Minnesota Diversion Tie Back Levee
North Dakota Diversion Tie Back Levee
Minnesota Diversion 35K
Minnesota Break-Out Channel
Minnesota Diversion Extention
Minnesota Diversion Extention
St. Paul District
GIS CENTER
US Army Corps
of Engineers
Fargo - Moorhead Metro Study
Alignments
0
3
6
N

CITY OF Fargo

CITY OF MOORHEAD MINNESOTA

RED RIVER AT FARGO - USGS GAGING STATION
HISTORICAL FLOOD DATA



FLOOD GRAPH

1. 40.84 feet, March 28, 2009
2. 40.10 feet, April 7, 1897
3. 39.57 feet, April 17, 1997
4. 37.80 feet, April 11, 1882
5. 37.34 feet, April 15, 1969
6. 37.13 feet, April 5, 2006
7. 36.99 feet, March 21, 2010
8. 36.69 feet, April 14, 2001
9. 35.39 feet, April 9, 1989
10. 34.93 feet, April 19, 1979

Source: National Weather Service

BASED ON 1969 FLOOD (April 8 to May 12)

BASED ON 1975 FLOOD (June 20 to July 18)

BASED ON 1979 FLOOD (April 13 to May 4)

BASED ON 1989 FLOOD (April 3 to April 17)

BASED ON 1993 FLOOD (March 26 to April 12)

BASED ON 1993 FLOOD (July 14 to Aug. 18)

BASED ON 1994 FLOOD (March 21 to April 15)

BASED ON 1997 FLOOD (April 2 to May 30)

BASED ON 1999 FLOOD (March 17 to April 9)

BASED ON 2001 FLOOD (April 4 to June 4+)

BASED ON 2005 FLOOD (June 8 to July 22+)

BASED ON 2006 FLOOD (March 30 to April 20+)

BASED ON 2007 FLOOD (March 20 to July 10)

BASED ON 2009 FLOOD (March 20 to May 20)

BASED ON 2010 FLOOD (March 13 to April 23)

17' Gauge = 881.33 Elev. (City of Fargo)
17' Gauge = 878.80 Elev. (U.S.G.S.)

APPROX. AVG. RISE	
1969	3.22 ft./Day
1975	1.07 ft./Day
1979	2.39 ft./Day
1989	2.47 ft./Day
1997	1.45 ft./Day
2001	1.87 ft./Day
2006	3.20 ft./Day
2007	1.84 ft./Day
2009	3.26 ft./Day
2010	2.37 ft./Day

Approx. Max. Rise/Day	
1969	5.10 ft./Day
1975	4.55 ft./Day
1979	3.42 ft./Day
1989	3.94 ft./Day
1997	4.02 ft./Day
2001	3.85 ft./Day
2006	5.03 ft./Day
2007	3.26 ft./Day
2009	4.92 ft./Day
2010	3.26 ft./Day

APPROX. AVG. DECLINE	
1969	0.77 ft./Day
1975	1.15 ft./Day
1979	1.05 ft./Day
1989	1.44 ft./Day
1997	0.75 ft./Day
2001	0.62 ft./Day
2006	1.28 ft./Day
2007	0.56 ft./Day
2009	0.43 ft./Day
2010	0.58 ft./Day

40.82'/2009

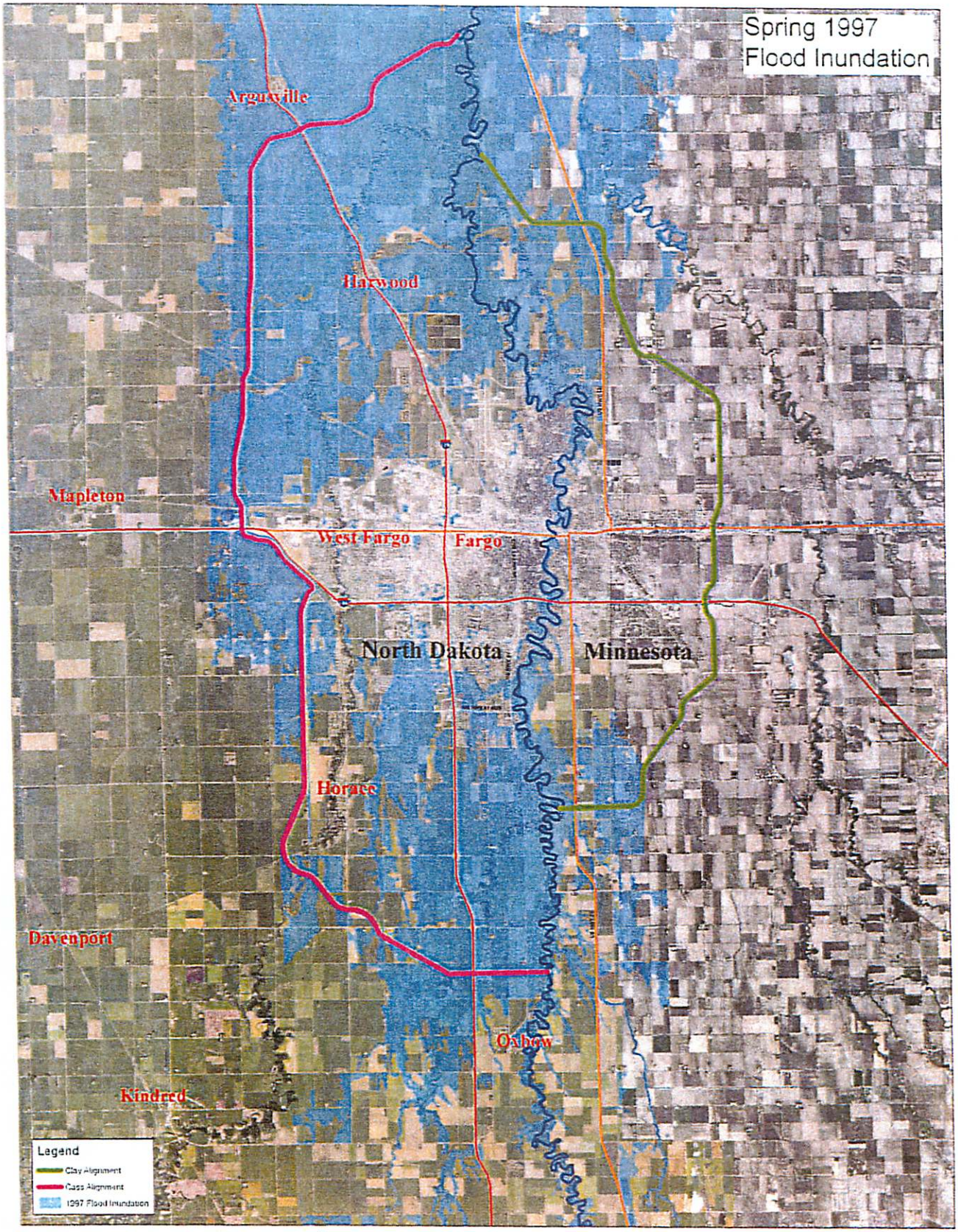
Friday (1:00 A.M.)-April 18, 1997 (39.72)

1969 (37.32)
2006 (37.18)
2010 (36.99)
2001 (36.70)
1989 (35.26)
1979 (34.75)
1975 (31.85) cfs adjusted
1993 (28.18)
2005 (28.20)
1994 (26.69)
1993 (26.21)
1999 (20.84)

Major 30
Moderate 25
Flood Stage 18
17' Action Stage

River Stage

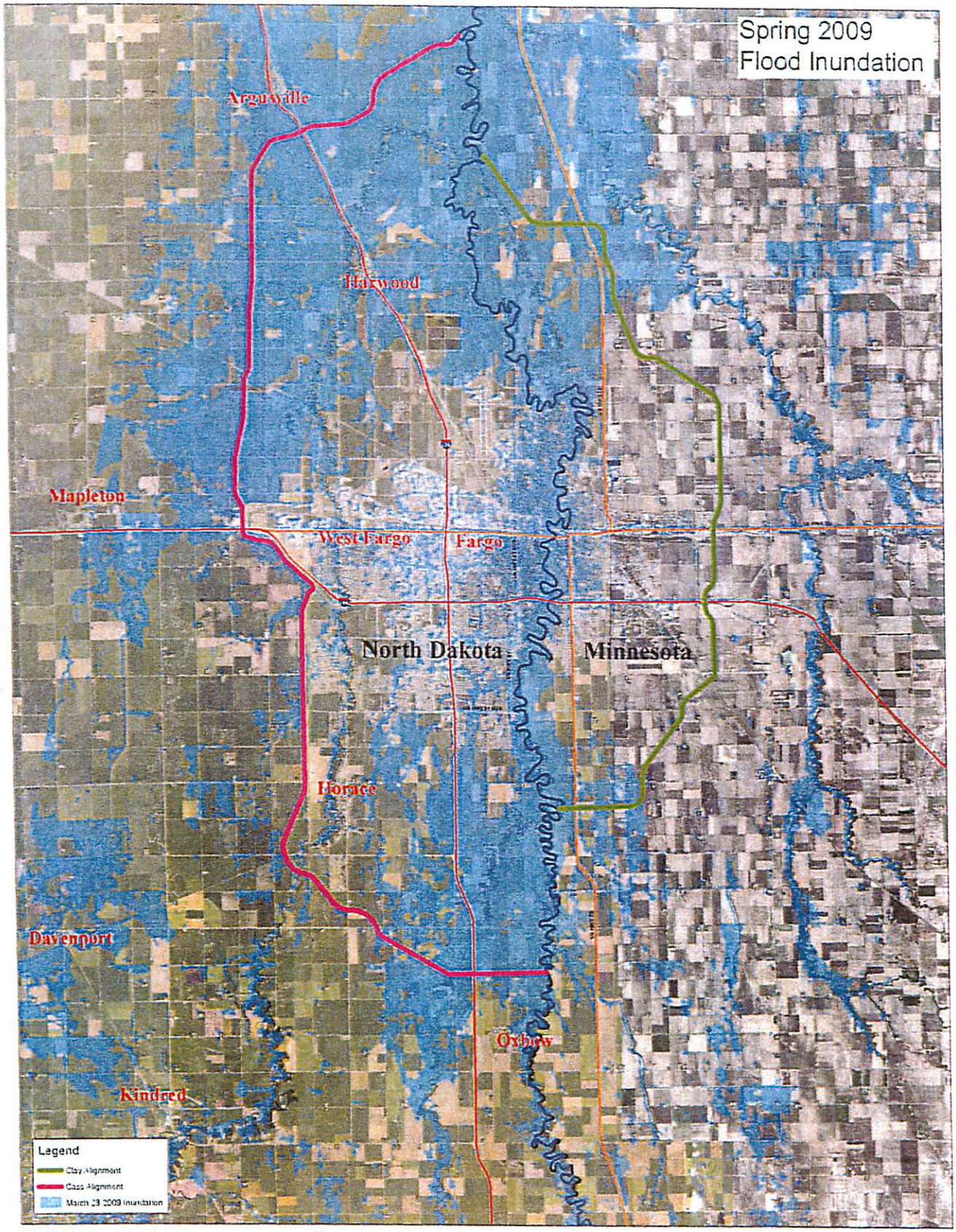
Days



Spring 1997 Cass County Inundation

N

moore engineering, inc.



Spring 2009 Cass County Inundation
Derived from Advanced Land Imager IR
Imagery Date: March 28, 2009

N

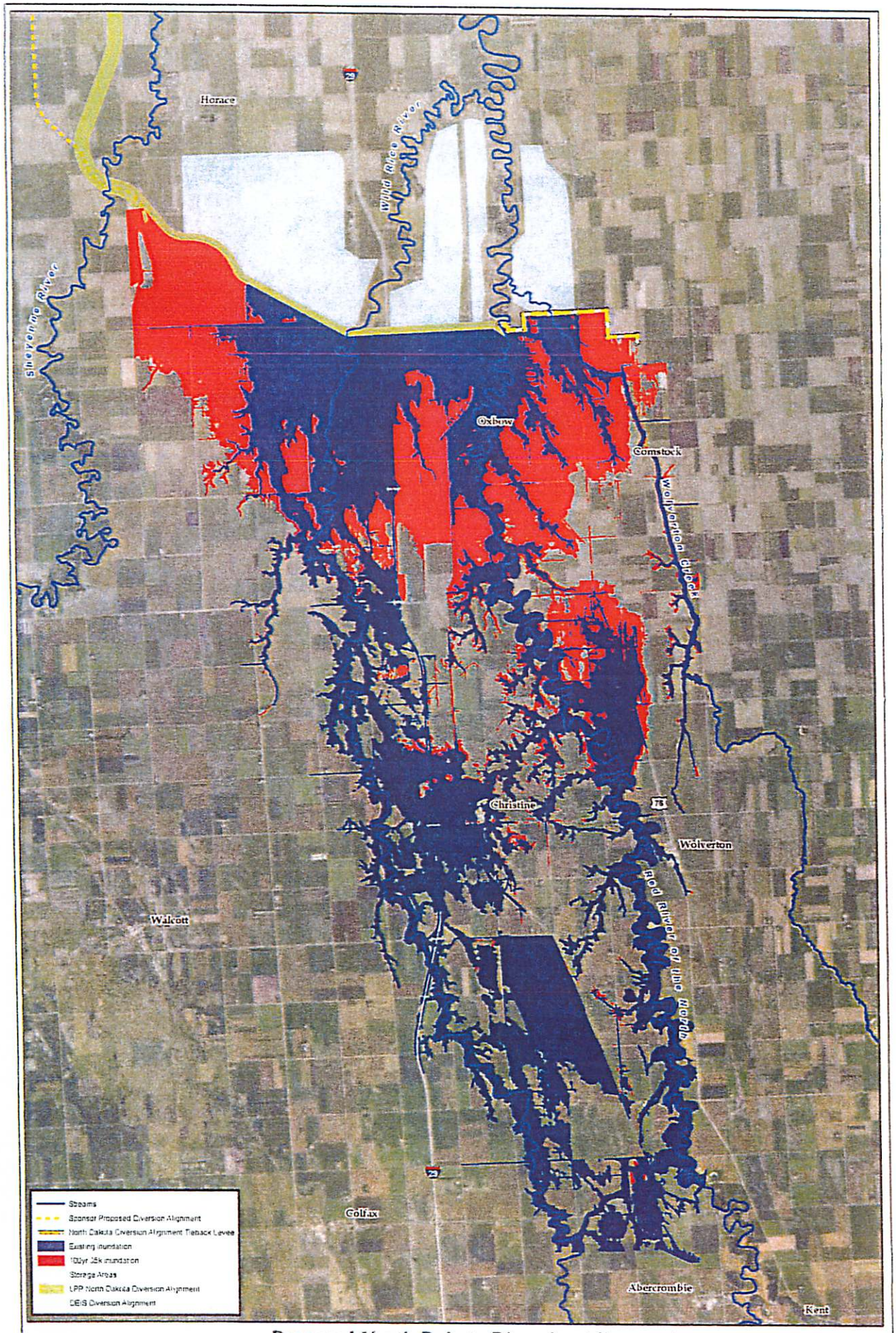
moore engineering, inc.

Effectiveness of Diversions:

	Stage at Fargo Gage (ft)	
	1% Chance (100- year)	0.2% Chance (500- year)
Existing Condition (Stage)	42.4	46.7
Existing Condition (CFS)	34,700	61,700
Work Group Goal	30	36
20K MN Diversion Channel	36.9	43.7
25K MN Diversion Channel	34.8	42.4
30K MN Diversion Channel	33.6	41.9
35K ND Diversion Channel	30.6	40
35K MN Diversion Channel	31.9	39.6
40K MN Diversion Channel	31.9	37.6
45K MN Diversion Channel	31.9	35.3

Fargo, N.D., March 26, 2009

Stage	Impacts
27	Fargo Elm Street closed
30	Fargo 2nd Street Dike installed
31	Moorhead 1st Ave. North closed
32	First homes in Moorhead threatened
35	First homes in Fargo threatened
40.8	2009 Flood Record Stage



St. Paul District
GIS CENTER
US Army Corps
of Engineers

Proposed North Dakota Diversion Alignments

Fargo - Moorhead Metro Study

0 0.5 1 2 3 4 Miles

N

Plate 3

F-M Metro Study Timeline:

✓	26 Nov 10	Unsteady model updated
✓	10 Jan 11	Refinement of LPP
✓	Feb/Mar 11	Meetings in impacted areas (up or downstream)
✓	27 Apr 11	Supplemental Draft EIS to EPA for publication
✓	May 11	Public Meeting(s)
✓	20 Jun 11	Complete 45-day NEPA public comment period
✓	1 Aug 11	Division Engineer's Transmittal
✓	7 Sept 11	Submit Draft Chief's Report and Final EIS to EPA for publication
✓	1 Dec 11	Sign Chief's Report

APPENDIX "E"
March 28, 2011

North Dakota State Water Commission

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

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, PE, Chief Engineer/Secretary
SUBJECT: 2011 Flooding Outlook
DATE: March 14, 2011

MOISTURE CONDITIONS

The fall of 2010 was very wet throughout most of the state, resulting in high soil moisture and limited soil and surface storage potential in most areas. Many streams exhibited abnormally high base flows into and through the winter. This was augmented in some cases by efforts to draw down reservoirs to provide flood storage.

Early winter brought heavy snowfalls and cold temperatures preserved the snowpack. Even the mild weather in February merely consolidated the snow with little loss of the overall water supply. Consequently most of the flood prone areas of the state face some level of threat.

It appears that ice will not be as serious a problem as it was in 2009. The early and enduring snowpack, in covering and insulating the ice, combined with previously mentioned base flows have limited the development of thick ice cover. However, adverse weather conditions could change this.

Current (as of March 11) snowpack conditions are illustrated on Attachment 1.

FLOODING POTENTIAL

The following status summaries are based on conditions and forecasts of March 11, and will likely change as the season progresses. Major flooding refers to the criteria used by the National Weather Service in their forecasts. It should be noted that these criteria do not necessarily imply that damages occur at these stages. Other concerns often are involved, such as indicating the hazard in surrounding areas, which are affected by stages at the forecast points.

1. SOUTHWEST

   a. The Little Missouri watershed has a heavy snowpack, however the forecasts do not indicate high probabilities of major flooding.

   b. The Cannonball also has substantial snowpack, but major flooding is not expected. Mott is not a forecast point, and has historically had flooding problems, so attention will need to be paid there.

   c. Similarly, the communities on the Heart River are not forecast to have significant threats of major flooding.

   d. On the Knife River (and Spring Creek, its tributary) there is about a 20% chance of major flooding at Zap, and about 65% at Beulah.

2. SOUTH CENTRAL

a. There is approximately a 15% chance of major flooding at Linton. Apple Creek could pose problems as it has before, however this is not included in the NWS forecasts.

b. The Missouri at Bismarck should not pose flooding problems this spring.

c. Substantial storage has been made available in Jamestown and Pipestem Dams, so the Corps feels confident that these structures can again maintain control of the floods on the upper James.

d. LaMoure has about a 6% chance of major flooding.

e. Repairs to the emergency spillway of Cottonwood Creek Dam are complete, and should prevent the erosion damage, which has been a problem there in the past 2 years.

3. EAST

a. Claussen Springs Dam repairs are not complete, however the features that are in place, should help to reduce erosion damage to the spillway if flows occur there.

b. Valley City and Lisbon both face a 50% chance of major flooding, while West Fargo and the other communities on the Sheyenne face a virtual certainty of seeing major flood stage.

c. On the Maple River, chances of major flooding are approximately 18% and 12% at Enderlin and Mapleton, respectively.

e. On the Red River mainstem, Wahpeton, Abercrombie, Fargo, Grand Forks, Drayton, and Pembina also face near certainty of major flood conditions.

f. On Red River tributaries in the northeast, Hilllsboro has a 15% chance of major flooding, Minto is not expected to see major flooding, Grafton has approximately a 60% chance, and Neche is nearly certain to face major flood stage.

4. NORTHWEST

a. Williston faces about a 10% chance of major flooding from Little Muddy Creek.

b. The Mouse (Souris) and Des Lacs Rivers contain heavy snow packs, which, on the Mouse, extend up and beyond Rafferty and Alameda dams. Releases from these structures have been under way for some time to gain flood storage, but the runoff below them will be uncontrolled. Lake Darling has also been discharging. On the Des Lacs, Foxholm faces approximately a 20% chance of major flooding. Donnybrook, Carpio, and Burlington, which are not forecast points, probably face similar threats. The probability at Minot is about 10%. The forecast points at Towner, Bantry, and Westhope are currently in or near major flood stage.

5. NORTH CENTRAL

a. The City of Belcourt has already experienced a flood fight. Belcourt Dam, on Ox Creek, produced high discharges over its weir on February 25. The hospital and Dialysis Center were sandbagged, and the Dialysis Center was closed for a time. The reasons for this discharge are not completely known at this time, but Ox Creek through the city has been at least partially cleared and the city is prepared for response when the melt begins in earnest.

b. The Devils Lake Basin again contains above average snowpack, and with the lake currently at elevation 1451.75 further rises are inevitable. The National Weather Service current forecast indicates a 50% chance of the lake rising to 1454.7

Attached is a map showing the water content of the existing snowpack and table summarizing expected conditions at the NWS forecast points.

TS:TF:BE:mmb/1431-12

Probabilistic Hydrologic Outlook

Taken from the NWS Hydrologic Outlook

Red River, Main Stem - Dated: March 25, 2011; Valid 3/31/11-6/29/11

Forecast Sites	Probability of Exceedance			Departure from Normal	Minor Flooding		Moderate Flooding		Major Flooding		Flood Stage of Record (ft)	Flood of Record Flow (cfs)	Year	Chance of Exceedance					
	Minor Flooding	Moderate Flooding	Major Flooding		Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)				90% Stage (Ft)	90% Flow (cfs)	50% Stage (Ft)	50% Flow (cfs)	10% Stage (Ft)	10% Flow (cfs)
Wahpeton	>98%	>98%	>98%	+60%	10	3,240	12	4,810	14	6,600	19.42	12,800	1997	16.5	9,230	17.4	10,300	18.8	12,000
Fargo	>98%	>98%	>98%	+35%	18	4,060	25	8,860	30	12,100	40.65	29,800	2009	37.2	22,400	40.5	29,500	44.4	#N/A
Halstad	>98%	>98%	>98%	+76%	26	19,300	32	27,000	40	59,900	40.74	#N/A	1997	39.1	41,300	40.1	61,400	41.5	#N/A
Grand Forks	>98%	>98%	>98%	+44%	28	20,100	40	36,300	46	58,500	54.35	117,000	1997	49.5	79,900	51.9	97,300	55.4	127,000
Oslo**	>98%	>98%	>98%	+38%	26	18,450	30	22,700	36	58,982	38.17	93,483	2009	37.5	81,360	38.4	97,986	39.7	#N/A
Drayton	>98%	>98%	>98%	+60%	32	28,500	38	36,500	42	55,500	45.55	107,000	1997	43.1	68,600	44.2	84,200	45.7	110,000
Pembina**	>98%	>98%	>98%	+56%	42	31,650	47	39,817	52	89,133	54.94	138,424	1997	53.2	107,022	54	######	55	139,636

Red River Tributaries, North Dakota - Dated: March 25, 2011; Valid 3/31/11-6/29/11

River	Forecast Sites	Probability of Exceedance			Departure from Normal	Minor Flooding		Moderate Flooding		Major Flooding		Flood Stage of Record (ft)	Flood of Record Flow (cfs)	Year	Chance of Exceedance					
		Minor Flooding	Moderate Flooding	Major Flooding		Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)				90% Stage (ft)	90% Flow (cfs)	50% Stage (ft)	50% Flow (cfs)	10% Stage (ft)	10% Flow (cfs)
Sheyenne River	Valley City**	96%	93%	87%	+90%	15	3,666	16	4,041	17	4,421	20.52	5,955	2009	16.8	4,345	19.1	5,249	20.9	6,149
	Lisbon	>98%	96%	72%	+93%	15	3,890	17	4,910	19	6,230	22.79	9,190	2009	17.6	5,290	20.4	#N/A	24.6	#N/A
	Kindred	>98%	>98%	<1%	+85%	16	3,070	20	4,300	22	#N/A	22.33	#N/A	1997	21.2	5,970	21.2	5,970	21.2	5,970
	West Fargo Diversion	>98%	>98%	>98%	+80%	18	3,240	20	3,900	21	4,240	28.77	#N/A	1996	23.5	5,080	23.5	5,080	23.5	5,080
	Harwood**	>98%	>98%	>98%	+81%	84	5,350	86	6,000	91	9,300	92.02	#N/A	1997	92.1	#N/A	92.2	#N/A	92.4	#N/A
Wild Rice River	Abercrombie	>98%	>98%	>98%	+60%	10	1,930	12	2,370	18	4,460	27.69	13,900	2009	25.2	9,570	27	#N/A	29.2	#N/A
Maple River	Enderlin	>98%	>98%	56%	+80%	9.5	1,440	12	3,500	14	5,640	15.41	7,540	1975	12.9	4,380	14.2	5,890	15.1	7,090
	Mapleton - Datum 886.43	>98%	>98%	32%	+71%	905	#N/A	908	#N/A	910	#N/A	909.86	#N/A	2006	909.3	#N/A	909.8	#N/A	910.7	#N/A
Goose River	Hillsboro	>98%	93%	21%	+86%	10	4,330	15.4	10,600	16	12,300	16.76	14,700	1979	13.6	6,530	15	9,570	16.7	14,500
Forest River	Minto	95%	66%	<1%	+66%	6	2,170	7.8	4,500	11	13,700	11.8	#N/A	1948	7	3,170	8.4	5,740	10	10,100
Park River	Grafton	90%	58%	41%	+75%	12	2,585	16.2	4,116	14.5	3,482	20.13	5,758	1950	12.1	2,620	14.1	3,335	16.6	4,268
Pembina River	Walhalla	>98%	35%	<1%	+80%	11	5,170	14.8	12,400	18	#N/A	19.2	#N/A	1950	15.2	14,600	15.8	18,900	16.5	25,400
	Neche	>98%	>98%	>98%	+80%	18	4,770	21.6	11,800	21.5	11,200	24.51	#N/A	1997	21.6	11,800	21.8	13,200	22.2	16,400

**These sites are National Weather Service forecast sites, these sites are not USGS stream gage sites.*

***These stations are operated as a stage only gage with an annual high flow measurement. These ratings are not as well defined (many measurements over a long period of time) as the 12-month discharge stations like Red River at Grand Forks or the Sheyenne River at Lisbon.*

Probabilistic Hydrologic Outlook

Taken from the NWS Hydrologic Outlook

Mouse (Souris) River - Dated: March 25, 2011; Valid 3/29/11-6/29/11

River	Forecast Sites	Probability of Exceedance			Departure From Normal	Minor Flooding		Moderate Flooding		Major Flooding		Flood Stage of Record (ft)	Flood of Record Flow (cfs)	Year	Chance of Exceedance					
		Minor Flooding	Moderate Flooding	Major Flooding		Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)				90%		50%		10%	
															Stage (ft)	Flow (cfs)	Stage (ft)	Flow (cfs)	Stage (ft)	Flow (cfs)
Des Lacs River	Foxholm	90%	77%	67%	+86%	16	1,710	18	2,260	19	2,550	21.23	4,260	1979	16.2	1,770	20.1	3,210	21.8	#N/A
Mouse River	Sherwood	>98%	>98%	4%	+67%	18	2,110	20	2,550	25	7,660	25.15	8,230	1976	23	3,750	23.7	4,390	24.4	5,730
	Foxholm	>98%	>98%	88%	+52%	10	910	13	1,650	15	3,660	17.17	7,980	1976	15	3,660	16.2	5,730	17.3	#N/A
	Minot	>98%	93%	19%	+84%	14	2,310	17	3,530	22	7,040	21.9	6,870	1904	17.5	3,750	20.8	5,570	23.7	#N/A
	Minot Broadway Bridge*	82%	62%	13%	+78%	1549		1551		1555		1558		1881	1547.9		1551.7		1557.2	
	Logan*	>98%	>98%	6%	+72%	34		36		38		38.28		1976	37		37.6		37.9	
	Sawyer*	>98%	>98%	41%	+81%	22		24		26		26.17		1976	25.2		25.8		26.3	
	Velva*	>98%	14%	-	+78%	1505		1510		1515		1509.9		1976	1508.5		1509.3		1510.3	
	Towner*	>98%	>98%	>98%	+35%	52		54		56		56.7		1976	56.5		56.6		56.8	
	Bantry	>98%	>98%	96%	+40%	11	1,090	12	1,690	14	6,520	14.59	9,340	1976	14.6	9,400	14.9	11,200	15.4	14,800
	Westhope	>98%	>98%	>98%	+59%	10	1,950	14	5,050	16	7,040	19.16	10,800	1976	18.5	9,920	19	10,600	20.3	12,300
Willow Creek	Willow City	>98%	>98%	96%	+61%	10	351	14	1,760	16	4,020	16.76	#N/A	1969	16.5	4,840	17.1	#N/A	18.2	#N/A
Wintering River	Karlsruhe	>98%	95%	-	+91%	7	515	9	1,740	10	3,630	13.37	#N/A	1995	9.2	2,030	9.4	2,360	9.6	2,730

**These sites are National Weather Service forecast sites, these sites are not USGS stream gage sites.*

***These stations are operated as a stage only gage with an annual high flow measurement. These ratings are not as well defined (many measurements over a long period of time) as the 12-month discharge stations like Red River at Grand Forks or the Sheyenne River at Lisbon.*

Probabilistic Hydrologic Outlook

Taken from the NWS Hydrologic Outlook

Missouri River - Dated: March 25, 2011; Valid 3/28/11-6/29/11

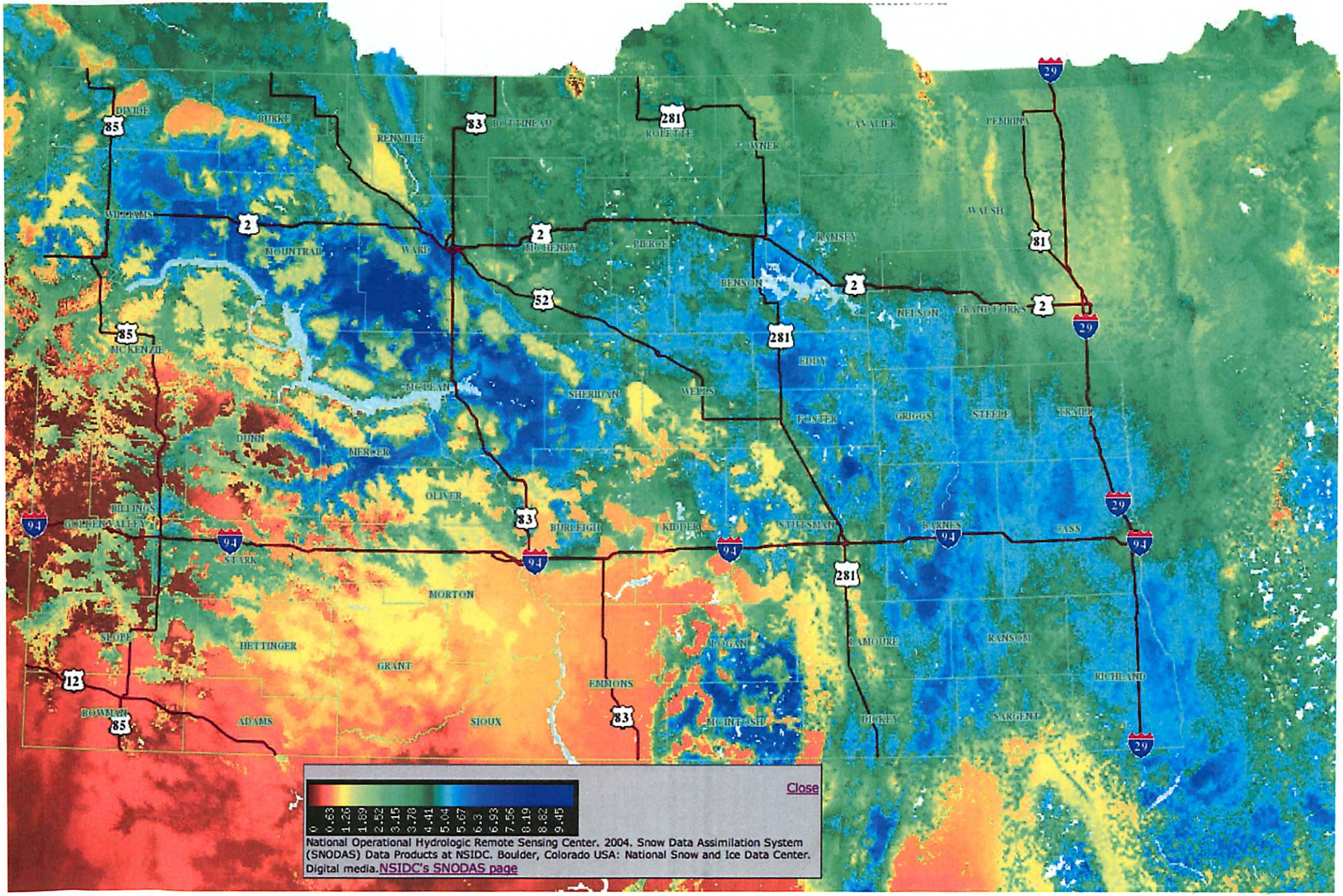
River	Forecast Sites	Probability of Exceedance			Departure From Normal	Minor Flooding		Moderate Flooding		Major Flooding		Flood Stage of Record (ft)	Flood of Record Flow (cfs)	Year	Chance of Exceedance					
		Minor Flooding	Moderate Flooding	Major Flooding		Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)	Stage Height (ft)	Flow (cfs)				90% Stage (ft)	90% Flow (cfs)	50% Stage (ft)	50% Flow (cfs)	10% Stage (ft)	10% Flow (cfs)
Little Muddy River	Williston	>98%	93%	18%	NA	10	2,180	12	5,600	14	#N/A	13.57	#N/A	1960	12.1	5,970	13	#N/A	14.5	#N/A
Little Missouri River	Marmarth	18%	-	-	+15%	18.0	29,300	23.0	#N/A	30	#N/A	23.4	#N/A	1952	6.5	2,510	11.1	8,450	19.3	34,900
	Medora	40%	19%	3%	+29%	15.0	16,400	18.0	#N/A	20	#N/A	20.5	#N/A	1947	10.1	5,800	13.6	12,700	19.2	#N/A
	Watford City	3%	-	-	NA	20.0	#N/A	24.0	#N/A	30	#N/A	24	#N/A	1947	9.5	9,980	11.8	15,500	18.4	#N/A
Spring Creek	Zap	86%	55%	32%	+61%	14.0	2,490	18.0	4,400	20	5,540	20.7	5,970	1972	13.5	2,280	18.3	4,560	22.4	#N/A
Knife River	Manning	76%	5%	-	+63%	15.0	1,670	17.0	6,120	20	#N/A	17.63	9,410	2003	13.8	1,200	15.6	2,220	16.7	4,940
	Hazen 1S	95%	85%	43%	+68%	21.0	7,030	24.0	10,600	25	16,000	27.01	34,300	1966	23.4	9,080	24.9	15,400	26.1	25,000
Heart River	Mandan 3W	26%	4%	3%	+20%	17.0	14,500	23.0	27,500	28	#N/A	25.75	35,500	1952	13	8,820	15.1	11,400	20.2	20,800
Apple Creek	Menoken 6W	96%	92%	32%	+39%	15.0	1,340	16.0	2,190	17	6,000	17.46	#N/A	1979	16	2,190	16.6	3,970	18.1	#N/A
James River	Grace City 3W	97%	94%	81%	+90%	12.0	3,370	14.0	5,360	15	6,240	17.45	8,630	2009	14.4	5,710	17.6	8,780	19.9	#N/A
	Lamoure	90%	38%	6%	+80%	14.0	3,880	16.0	7,530	18	#N/A	17.38	11,500	2009	13.9	3,800	15.3	5,920	17.2	10,900
	Ludden 5SW	>98%	>98%	21%	NA	12.0		14.0		17		17.86		1997	15.9		16.5		17.4	
Pipestem Creek	Pingree 3W	>98%	78%	3%	NA	9.0	700	11.0	2,720	13	8,540	11.86	4,620	2009	10.5	1,930	11.6	3,960	12	5,000
Cannonball River	Regent	-	-	-	NA	22.0	#N/A	24.0	#N/A	26	#N/A	26.1	#N/A	1950	13.5	3,730	14	4,060	16.2	5,680
	Breien	>98%	4%	-	NA	10.0	4,860	20.0	27,000	23	53,900	22.3	44,800	1950	15.1	13,600	15.6	14,700	18.3	21,400
Cedar Creek	Raleigh 19S	13%	4%	-	+10%	12.0	7,730	14.0	11,300	16	15,600	18	20,600	1950	9.8	4,620	10.2	5,120	12.4	8,390
Beaver Creek	Linton	>98%	88%	41%	NA	9.0	1,300	11.0	2,410	13	3,870	17.28	#N/A	2009	10.8	2,290	12.5	3,450	16.4	8,570

Devils Lake - Dated: March 25, 2011; Valid 3/24/11-9/29/11

Forecast Site	90% Stage Height (ft)	90% Capacity (Ac-Ft)	50% Stage Height (ft)	50% Capacity (Ac-Ft)	10% Stage Height (ft)	10% Capacity (Ac-Ft)	Flood Stage of Record (ft)	Capacity (Ac-Ft)	Year
Creel Bay	1454.2	3,535,326	1454.8	3,612,138	1455.9	3,854,604	1452.1	3,162,111	2010
Stump Lake	1454.2	3,535,326	1454.8	3,612,138	1455.9	3,854,604	1452.1	3,162,111	2010

**These sites are National Weather Service forecast sites, these sites are not USGS stream gage sites.*

***These stations are operated as a stage only gage with an annual high flow measurement. These ratings are not as well defined (many measurements over a long period of time) as the 12-month discharge stations like Red River at Grand Forks or the Sheyenne River at Lisbon.*


DIVIDE
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BOTTINEAU
ROLETTE
TOWNER
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PEMBINA
WILLIAMS
MOUNTRAIL
WARD
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RAMSEY
WALSH
BENSON
NELSON
GRAND FORKS
MCKENZIE
MCLEAN
SHERIDAN
WELLS
FOSTER
GRIGGS
STEELE
TRAILL
DUNN
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OLIVER
BILLINGS
GOLDEN VALLEY
STARK
BURLEIGH
KIDDER
STUTSMAN
BARNES
CASS
MORTON
SLOPE
HETTINGER
GRANT
EMMONS
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RANSOM
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9.45
National Operational Hydrologic Remote Sensing Center. 2004. Snow Data Assimilation System (SNODAS) Data Products at NSIDC. Boulder, Colorado USA: National Snow and Ice Data Center. Digital media.NSIDC's SNODAS page

SOUTHWEST PIPELINE PROJECT
WATER SERVICE CONTRACT

Customer Entity: **Missouri West Water System**

I. PARTIES

This contract is between the Southwest Water Authority (the "Authority"), the North Dakota State Water Commission (the "Commission"), and Missouri West Water System (the "Customer").

II. INTRODUCTION

1. The Commission is developing a water pipeline, water supply, and water distribution project known as the Southwest Pipeline Project (the "Project").

2. The Authority, created under North Dakota Century Code § 61-24.5, provides operation, maintenance, and management of the Project.

3. In 1995, the Commission entered into an agreement with the Authority transferring to the Authority the completed portions of the Project for operation, maintenance, and management (the "1995 Agreement").

4. Under North Dakota Century Code § 61-24.5-09 the Authority may enter into water service contracts to deliver and distribute water, and to collect charges for such delivery.

5. The Customer desires to enter into a water service contract, pursuant to the laws of the state of North Dakota, for a water supply from the Project for use by the Customer, for which the Customer will make payment to the Authority as set forth in this contract.

III. DEFINITIONS

The following definitions apply to this contract:

1. "Customer's proportionate share" means the amount of water delivered to the Customer by the Authority during the Year divided by that Year's total annual water sales to all Customers.

2. "Additional water" means water purchased by the Customer at a flow rate greater than the maximum flow rate specified in this contract.

3. "Base consumer price index" means the consumer price index, as defined herein, as of January 1, 1995.

4. "Capital costs" means all the costs incurred by the Commission related to construction of the Project, including the costs of surveys, engineering studies, exploratory work, designs, preparations of construction plans and specifications, acquisitions, acquisitions of lands, easements and rights-of-way, relocation work, and related essential legal, administrative and financial work. "Capital costs" shall not include the Customer distribution system costs.

5. "Consumer price index" hereinafter referred to as "CPI" means the consumer price index for all urban consumers, which is a monthly statistical measure of the average change in prices in a fixed market basket of goods and services. The CPI is based on the prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living.

6. "Customer" means Missouri West Water System.

7. "Customers" means those persons, municipalities, rural water cooperatives, corporations, and other entities which have entered into and executed water service contracts with the Authority for the purchase of water from the Project.

8. "Customer distribution system" means all infrastructure from the point of delivery that extends onto the Customer's property, including any storage, clearwell, pump, service line, distribution line, appurtances and all related items intended for the distribution of water for domestic, business, industrial and public use.

9. "Customer distribution system costs" means all costs for and related to the Customer distribution system.

10. "Domestic use" means the use of water by an individual, or by a family unit or household, for personal needs and for drinking, washing, sanitary, and culinary uses.

11. "Estimated water rate for operation, maintenance, and replacement" means the estimated rate per each one thousand (1,000) gallons of water for operation, maintenance and replacement costs, for establishing and maintaining operating reserves of the Project and for the accumulation and maintenance of a reserve fund for replacement purposes. This rate is determined by dividing total costs the Authority estimates it will incur during a year for operation, maintenance, and replacement by the total number of one thousand (1,000) gallon units of water which the Authority estimates it will sell to its customers during the same year.

12. "Manager" means the person employed by the Authority to be in charge of and supervise the Authority and its powers and duties.

13. "Maximum flow rate" means the maximum number of gallons of water that the Authority may deliver to the Customer during any one minute time period.

14. "Minimum annual water purchase" means the minimum gallons of water which the Customer must purchase and pay for during a year.

15. "Operation, maintenance, and replacement costs" means the cost for operation and maintenance, for establishing and maintaining operating reserves of the Project and for the accumulation and maintenance of a reserve fund for replacement purposes. Operation, maintenance, and replacement costs shall be referred to in this contract as OM&R costs.

16. "Point of delivery" means the location where the Project delivers water to the Customer, from which point the Customer is responsible for conveyance of the water for its intended use.

17. "Potable water" means water fit for human consumption.

18. "Unallocated capacity" means the capacity of the Project which is not allocated and contractually committed to customers by virtue of raw and/or potable water service contracts.

19. "Water rate for capital costs" means the rate per each one thousand (1,000) gallons of water to be paid by the customers for capital costs of the Project.

20. "Year" means the period from January 1 through December 31, both dates inclusive.

IV. TERM OF CONTRACT

1. This contract shall remain in effect for forty (40) years after the date of the first water delivery to the Customer, unless terminated sooner by mutual agreement of the parties.

2. Under terms and conditions mutually agreeable to the parties to this contract, renewals of this contract may be made for successive periods not to exceed forty (40) years from the date of renewal.

V. WATER SERVICE: DELIVERY OF WATER

The Authority will deliver water to the Customer in accordance with the following terms and provisions:

1. All water supplied to the Customer shall be potable treated water that meets water quality standards of the North Dakota Department of Health.

2. The Customer hereby agrees to purchase and make payment for not less than 12 million gallons per year (minimum annual water purchase) in the first year of service, 24 million gallons per year (minimum annual water purchase) in the second year of service, and 40

million gallons (minimum annual water purchase), in the third year of service and each subsequent year of the balance of the term of this contract.

3. The maximum flow rate is 200 gallons per minute total for all connections to the Customer.

4. The Authority will deliver to the Customer any water which the Customer desires to purchase, at a flow rate not to exceed the maximum flow rate specified in this contract. The Authority is not obligated to supply water at a greater flow rate than the maximum flow rate specified in this contract. If there is unallocated capacity in the Project to the Customer's point of delivery, the Authority may allow delivery of additional water at a flow rate greater than the maximum flow rate specified in this contract. If the Customer desires to secure a contractual right to a greater maximum flow rate than specified in this contract, this contract must be amended in writing to provide for such a greater maximum flow rate. At such time the Authority may or may not require an increase in the minimum annual water amount. Unless otherwise specified in the amendment, the term of any amendment is valid through the date specified in Section IV.

5. The flow rate set forth is provided to meet the Customer's needs on a constant flow basis. Should the Customer request or require demand flow service, the Customer may request such service from the Authority. As consideration for receiving this type of service, the Customer agrees to pay, as the water rate for capital costs, an amount equal to two (2) times the water rate for capital costs paid for constant flow service. If the Customer desires to secure a contractual right to demand flow service, this contract must be amended to provide for demand flow service.

6. The Customer is responsible for and shall pay all Customer distribution system costs.

7. No liability shall accrue and the Customer agrees it shall be fully responsible and shall not be entitled to any remedy arising from any water shortages or other interruptions in water deliveries resulting from accident to or failure of the Project. The Customer's duties under this contract shall not be reduced or altered by reason of such shortages or interruptions.

8. The Authority has the right during times of water shortage, from any cause, to interrupt water service to the Customer. Preference will be given to municipal, domestic, and rural water needs during times of water shortage.

9. The Authority may temporarily discontinue or reduce the amount of water supplied to the Customer for the purpose of maintaining, repairing, replacing, investigating or inspecting any of the facilities and works necessary for supplying water. To the extent possible, the Authority will give reasonable advance notice of any temporary discontinuance or reduction. No advance notice is required in case of an emergency. In no event shall any liability accrue against the Authority, the Commission, or any of their officers, agents, or employees for any damage or inconvenience direct or indirect, arising from such temporary discontinuance or reduction for maintenance and repair purposes.

10. The Commission will pay for and install, at the point of delivery, a meter and any other equipment necessary to measure the quantity of water supplied to the Customer ("metering equipment"). Upon installation, the Authority shall operate and maintain the metering equipment. If the Customer believes the measurement of water delivered to be in error, it shall present a written claim to the Authority, either in person or by certified mail. A claim presented after a payment has become delinquent does not prevent the Authority from discontinuing service to the Customer. The Customer shall continue to make payments for water service after a claim has been presented; however, the payment will be under protest and will not prejudice the Customer's claim. After the Customer presents its claim and advances the cost of calibration, the Authority will calibrate the meter. If the meter is found to over-register by more than two percent (2%) of the correct volume, the Authority will refund the Customer's advance for the cost of calibration and the readings for that meter shall be corrected for the twelve (12) months preceding the calibration by the percentage of inaccuracy determined by the calibration. The amount of any overpayment as a result of over-registration shall be applied first to any delinquent payments for water service, and at the option of the Customer, the Authority shall refund or credit the Customer upon future payments for water service. If any meter fails to register for any period, the amount of water delivered during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless the Authority and the Customer agree upon a different amount. The Customer and the Authority shall have access to the meter at all reasonable times for the purpose of verifying its readings.

11. The Customer shall be responsible for the control and use of all water in the Customer distribution system and shall pay all costs related to service, maintenance, and repair of the Customer distribution system. The Customer is responsible for the control, distribution, and use of water delivered under this contract, and the operation, maintenance and replacement of the Customer distribution system.

12. The point of delivery under this contract is two connections served by a combination meter vault/booster pump station located in the SE ¼ Section 4, Township 139 North, Range 85 West. The inlet pressure to the vault will range from 50 to 125 psi. The outlet pressure will vary depending on the settings in the vault, between 118 and 141 psi. The Authority will supply water to the Customer at the point of delivery at the pressure range established by the settings in the vault. If the Customer requests that the Authority supply pressure outside this range, and the Authority determines it can provide the requested pressure, the Customer shall pay the Authority the cost incurred by the Authority in providing the requested pressure. Any connection other than the two connections must be approved in writing, by the Authority and by the Commission and all costs related to any other connection, including all appurtenant piping, valves and controls, shall be paid by the Customer. The Customer is responsible for operation and maintenance of the connection beyond the vault isolation valves. The Project's responsibility for operation and maintenance ends at the vault isolation valves.

VI. WATER SERVICE: WATER RATES AND PAYMENT FOR WATER

The Customer shall pay for water and water service under the following terms:

1. Ninety (90) days prior to completion of the Project to the point of delivery, the Commission shall, via certified mail, notify the Customer of the date when water will be first available to the Customer. The Customer will make payments for water and water service, in accordance with the terms of this contract, beginning at the expiration of the ninety (90) day notice, or beginning at such time when water is available to the Customer, whichever is later in time.

2. The Customer will pay for the minimum annual water purchase in accordance with the rates and terms specified in this contract, even if the Customer does not use the minimum annual water purchase. If, by December 31 of any year, the Customer has not used its minimum annual water purchase, it shall promptly pay the difference between the minimum annual water purchase and the amount used. If, in the first year of service under the terms of this contract, actual use begins later than January 1st, the annual water purchase shall be prorated for service by the Project.

3. The Customer's monthly water service payment is the sum of the following:

    a. The Customer's proportionate share of the OM&R costs, as determined by the Authority; plus

    b. The Customer's payment for capital costs, as determined by the Authority.

4. The Customer's proportionate share of the Project OM&R costs (for calculating the Customer's monthly payment) will be determined as follows:

    a. Prior to February 1 of each year, the Authority shall adopt a budget for OM&R for the Project for the immediate ensuing year. The Authority may include in such budget an amount to be accumulated and maintained in a reserve fund for the purpose of replacing Project works and for extraordinary maintenance of Project works. The amount of the reserve fund shall be contingent upon approval by the Commission. The Authority shall deposit and maintain the reserve fund in a separate account in accordance with the laws of the state of North Dakota.

    b. The Authority will then estimate the total annual water sales for the immediate ensuing year, and calculate the "estimated water rate for operation, maintenance, and replacement" for the Project by dividing the amount of the estimated budget for OM&R for the immediate ensuing year by the estimated total annual water sales for such ensuing year.

    c. The monthly payment to be made by the Customer to the Authority for OM&R shall be determined by multiplying the amount of water actually delivered to the Customer for each month times the estimated water rate for OM&R.

d. At the end of each year, the Authority shall prepare a statement of the year's actual OM&R costs.

e. The Authority will then determine the adjustment to be applied to the Customer's OM&R payment for the previous year. The adjustment will be calculated by dividing the amount of water delivered to the Customer by the Authority during the previous year by that year's total annual water sales to determine the Customer's proportionate share of the OM&R costs. This fraction will then be multiplied by the actual total cost for OM&R for the previous year, which shall be the amount of the Customer's proportionate share of OM&R costs for the previous year. The Authority shall then subtract this amount of the Customer's proportionate share of OM&R costs for the previous year from the total amount actually paid by the Customer for OM&R during the previous year, which is the adjustment to be applied to the Customer's water service payments for the next year. If the Customer's proportionate share of OM&R costs for the previous year is more than the total amount actually paid by the Customer during the previous year for OM&R, the difference shall be owed by the Customer to the Authority. Any such amount due will be added to the Customer's monthly payments for water for the next four (4) months of the immediate ensuing year in equal monthly installments. If the Customer's proportionate share of OM&R costs for the previous year is less than the total amount actually paid by the Customer during the previous year but the Customer has delinquent payments for water service, the remaining sum, if any, shall be used to satisfy the delinquencies, but if there are no delinquencies the sum will be credited against the Customer's monthly payments for water service for the next four (4) months of the immediate ensuing year in equal monthly credits.

5. The Customer's share of the Project's capital costs (for calculating the Customer's monthly payment) will be determined as provided below.

a. The base rate for capital costs for constant flow shall be seventy-two cents ($0.72) per each one thousand (1,000) gallons of water.

b. The Commission shall have the authority to adjust the base water rate for capital costs annually in accordance with the increase or the decrease in the consumer price index CPI. The formula for determining the adjustment to the water rate for capital costs for each year is as follows: The CPI for September 1 of each year shall be divided by the base CPI of January 1, 1995, which is 448.4 (1967=100). The result of this calculation shall be reduced by one (1), and then multiplied by the base water rate for capital costs. The product of this formula is the adjustment to the water rate for capital costs and shall be used to add to the base water rate for capital costs for the next year. Notwithstanding the foregoing basis for adjusting the water rate for capital costs, the Commission shall have the authority to decrease the adjustment to the water rate for capital costs, as it deems

appropriate and necessary, after considering data on changes to the median incomes of Project water customers, substantial increases in operation, maintenance and replacement costs, or other factors.

c. The amount of the Customer's monthly payment to the Authority for capital costs shall be calculated by multiplying the water rate for capital costs times the amount of water actually delivered to the Customer each month.

6. The Authority shall read the metering equipment at the point of delivery and, not later than the first (1st) day of each month, shall send to the Customer, at the address shown on the signature page of this contract, an itemized statement of the payment due from the Customer for water service for the preceding month.

7. The Customer shall pay the Authority for water service under this contract, for OM&R, and for capital costs, by sending payment to the Authority, at the address shown on the signature page, not later than the fifteenth (15th) day of each month. Payments sent after the fifteenth (15th) day of each month shall result in the Customer being in default. If the Customer is in default, the Authority, at its sole discretion, may suspend delivery of water through the Project during the period of default. During any period of default, the Customer remains obligated to make all payments required under this contract. Any action of the Authority shall not limit or waive any remedy provided by this contract or by law for the recovery of money due or which may become due under this contract.

8. Interest of one percent (1%) per month will be imposed upon all payment amounts that are in default.

9. The Customer's failure or refusal to accept delivery of water from the Authority does not relieve the Customer from its obligation to make payments in accordance with this contract.

VII. GENERAL PROVISIONS

1. The Authority, contingent upon the approval of the Commission, may adopt such rules and regulations as it deems appropriate to carry out and to govern the administration of this contract. Such rules and regulations shall not be inconsistent with this contract. The Customer shall comply with such rules and regulations.

2. All notices or other communications required under this contract must be given either in person or by certified mail at the address shown on the signature page of this contract. Notice provided under this provision does not meet the notice requirements for monetary claims against the Commission found at N.D.C.C § 32-12.2-04.

3. Customer shall promptly notify the Authority and the Commission of all potential claims that arise or result from this contact. Customer shall also take all reasonable steps to preserve all physical evidence and information that may be relevant to the circumstances

surrounding a potential claim, while maintaining public safety, and grants the Commission the opportunity to review and inspect the evidence, including the scene of an accident.

4. The use of any remedy specified herein to enforce this contract is not exclusive and does not prohibit the use of, or limit the application of, any other remedy available by law.

5. In the event a lawsuit is initiated by the Commission to obtain performance due under this contract and the Commission is the prevailing party, Customer shall pay the Commission's reasonable attorney fees and costs in connection with the lawsuit.

6. This contract may be amended any time by mutual agreement of the parties in writing, except insofar as any proposed amendments are in any way contrary to applicable law.

7. Any waiver by any party of its rights with respect to a default or any other matter arising in connection with this contract does not waive any other default or matter.

8. If any term of this contract is declared by a court having jurisdiction to be illegal or unenforceable, the validity of the remaining terms is unaffected, and if possible, the rights and obligations of the parties are to be construed and enforced as if the contract did not contain that term.

9. The Customer may not assign or otherwise transfer or delegate any right or duty without the express written consent of both the Commission and the Authority.

10. The Customer understands and agrees that the Authority and the Commission will give preference to potable water for municipal, domestic, and rural water needs before executing water service contracts or allowing additional water purchases.

11. This contract is governed by and construed in accordance with the laws of the state of North Dakota. Any action to enforce this contract must be brought in the District Court of Burleigh County, North Dakota, and the Customer consents to jurisdiction of state courts.

12. Customer understands that, except for disclosure prohibited in this contract, the Commission must disclose to the public upon request any records it receives from Customer. Customer further understands that any records that are obtained or generated by Customer under this contract, except for records that are confidential under this contract, may, under certain circumstances, be open to public upon request under the North Dakota open records law. Customer agrees to contact the Commission immediately upon receiving a request for information under the open records law and to comply with the Commission's instructions on how to respond to the request.

VIII. TERMINATION

The Authority and the Commission may terminate this contract if the Customer fails to use water delivered in a manner consistent with the terms of this contract. Upon such termination, the Authority and the Commission are relieved of all obligations under this contract, and the Customer must immediately disconnect the Customer distribution system from the Point of delivery.

IX. MERGER

This contract constitutes the entire contract between the parties. There are no understandings, agreements, or representations, oral or written, not specified within this contract. This contract may not be modified, supplemented or amended, in any manner, except by written agreement signed by each party to this contract.

STATE WATER COMMISSION
900 East Boulevard Avenue
Bismarck, ND 58505
By: Todd Sando

Todd Sando, Chief Engineer and Secretary

Date 4/6/2011

SOUTHWEST WATER AUTHORITY
4665 2nd Street SW
Dickinson, ND 58601-7231
By: Larry Bares

Larry Bares, Chairman

Date 4-4-2011

MISSOURI WEST WATER SYSTEM
PO BOX 176
MANDAN, ND 58554-0176

By: [signature]

Title: Chair

Date 3-30-2011

MISSOURI WEST WATER SYSTEM

By: Brenda Winckler Sec-Treas

Date 3-30-11

APPENDIX "G"
March 28, 2011

AMENDMENT NUMBER FOUR (4) TO THE CONTRACT (NUMBER SWC-1736-5) FOR WATER SERVICE FROM THE SOUTHWEST PIPELINE PROJECT, NORTH DAKOTA

The above titled contract, entered into by and between the State of North Dakota, acting through the State Water Commission, referred to herein as the Commission, the Southwest Water Authority, a political subdivision created pursuant to North Dakota Century Code (NDCC) 61-24.5, referred to herein as the Authority, and the City of Beach, referred to herein as the City, approved and entered into by resolution of the State Water Commission on the 6th day of December, 1982, is amended by the parties as follows:

Section VI.B.2. is hereby amended and agreed to as follows:
The sentence "The maximum flow rate to be provided by the Commission to the City shall not exceed 31.0 gallons per minute." is changed to "The maximum flow rate to be provided by the Commission to the City shall not exceed 200.0 gallons per minute."

IN WITNESS WHEREOF, the State of North Dakota, acting through the State Water Commission, has caused this Amendment to be signed by the State Engineer, the Southwest Water Authority, acting through its chairperson of its Board of Directors, and the City, has caused this Amendment to be signed and executed on its behalf.

STATE WATER COMMISSION
900 East Boulevard Avenue
Bismarck, ND 58505

By: Todd Sando
Todd Sando, Chief Engineer and Secretary

Date 4/6/2011

SOUTHWEST WATER AUTHORITY
4665 2nd St SW
Dickinson, ND 58601-7231

By: Larry Bares
Larry Bares, Chairman

Date 3-7-2011

CITY OF BEACH
BOX 278
BEACH, ND 58621

By: Walter Lozenski
Title: Mayor

Date 02/22/11

CITY OF BEACH

By: Lynnelle Ludwig
City Auditor

Date 02/22/11

North Dakota State Water Commission
900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
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MEMORANDUM

TO: Governor Jack Dalrymple
North Dakota Water Commission Members

FROM: Todd Sando P.E.
Chief Engineer-Secretary

SUBJECT: Legislative Updates

DATE: March 16, 2011

House Bill 1107 – Water Permit Adjudicative Proceedings – This is an agency bill that provides a more efficient procedure for public hearings by allowing two types of hearings, informational and adjudicative. This bill passed both chambers and has been signed by the Governor.

House Bill 1206 – Creates the Western Area Water Supply Authority and authorizes the Western Area Water Supply Project – This bill in its present form authorizes the Western Area Water Supply Authority to build the project using bond proceeds guaranteed by the State of North Dakota. The WAWS authority is required to report to the Water Commission and provide updates on the bidding, planning, construction, operation, and financial status of the project. They are also required to present the overall plan and contract plans and specifications to the Commission for concurrence. If the project defaults on their bond payments the Commission becomes the governing board and takes ownership of the project. The bill also requires the WAWS authority to repay the Commission up to $30 million of grant funding after retiring the bond debt. This bill has passed the House and has had hearings in the Senate Industry, Business and Labor Committee.

House Bill 1318 – Allows the Garrison Diversion Conservancy District to create special assessment districts for irrigation projects. This bill has passed the House and has been heard in the Senate Natural Resources Committee.

House Bill 1413 – Relates to removal of dangers in or on the bed of navigable waters. This bill changes the sentence reading, "the State Engineer shall issue an order to the person responsible for the object" to "the State Engineer may issue an order to the person responsible for the object." This bill has passed the House and been heard in the Senate Natural Resources Committee.

House Bill 1459 and Senate Bill 2280 – These bills both relate to the installation and permitting or subsurface drainage systems. These bills make the local water resource district responsible for the permitting unless they determine that the drainage is of statewide significance at which

time the State Engineer is responsible for granting approval. House Bill 1459 has passed the House and is scheduled to be heard in the Senate Agriculture Committee. Senate Bill 2280 has passed the Senate and has a do pass recommendation from the House Agriculture Committee.

House Concurrent Resolution 3019 – This resolution urges the US Army Corps of Engineers to immediately cease wrongful denial of access and requirement of payment for the natural flows of the Missouri River. This resolution has passed the House and been heard in the Senate Natural Resources Committee.

Senate Bill 2020 – This is the agency's appropriation bill. The Senate changes include changing the funding for the new Director position from General Funds to Resources Trust Fund; eliminating future repayments from the City of Grand Forks for their flood control project; earmarking $250,000 for a grant to wildlife services for animal control; earmarking $250,000 for Nelson County flood related water projects; and restricting the Commissions allocation of funding to the Garrison Diversion Conservancy District to $1 million. This bill has passed the Senate and has been heard in the House Appropriations Committee.

Senate Bill 2068 – This is an agency bill that statutorily authorizes the State Engineer to execute contracts on behalf of the Commission. This bill has passed the Senate, but was amended in the House to include the State Engineer or designee, and then passed. The Senate must concur in the change.

Senate Bill 2101 – This bill increases the fees to obtain and renew a water well contractor certificate. Senate Bill 2101 has passed the Senate and has a do pass recommendation from the House Energy and Natural Resources Committee.

Senate Bill 2282 – This ties the compensation rate of the Commission members and Atmospheric Resources Board members to the rate of pay received by legislative members. This bill has passed both the Senate and the House.

APPENDIX "I"
March 28, 2011

INDEPENANT WATER PROVIDERS

To Governor Dalrymple, Mr. Todd Sando, and the State Water Commissioners:

I would like to thank the Water Commission to allow us to voice our concerns on HB1206. The project brings treated water to areas of northwest North Dakota, but what it really does is build a water line for the oil industry at a cost of $200,000,000. To bring treated water to these areas we could to it for $60,000,000, a $140,000,000 savings. Their business plan assumes: 80% of revenue will come from the oil industry; they must have 50% of water sales; must receive $20 per 1,000 gallons to cash flow (current private sales are at $11.90 per 1,000). They plan to build 13 or more water depots next to private depots that have made the investment and are currently serving the industry. Last year the private sector provided 80% of the oil industries water needs with no negative effect to groundwater. The plan is to side step the State Water Commission asking for "concurrence" only, and creating an authority that would own this project. The real kicker is, the local communities are guaranteed a revenue stream in the plan, the taxpayers are being asked to guarantee the plan, and after it is paid for the authority gets to retain all revenue thereafter----a complete departure from long-standing North Dakota water policy. In addition, there is no commitment from the oil industry, nor a local commitment, like we have in NAWS, or Southwest Pipeline Authority. I have yet to hear a satisfactory answer to the question, "why shouldn't the SWC build this project".

This project directly competes with private enterprise with the authority building depots with state guaranteed money. Where will it stop, will we bond and guarantee a project that will drill for oil, will we see a need to run a state refinery? If the state is going to guarantee a project that competes with private industry then the state should build it so issues that come up can be resolved with people that know the water industry and how it affects the area it is built in. They say this is an "emergency" we are not out of water. We have plenty of water to supply the needs with more private sources applying for permits for ground water, but more importantly at the Missouri River. I urge the state water commission to pass a resolution: 1.) opposing HB 1206 in its present form 2.) that the project be built by the water commission until possession is given to the local authority, and 3.) that funds be restored to the Resources Trust fund after the project is paid for. These steps will help to make this a project for all the people of North Dakota.

Thank you, Independent Water Providers

Steven Norton

March 28, 2011

Dear State Water Commission:

We have tried to explain our situation concerning HB 1206.

We support a WAWS water infrastructure, and we understand the benefits of Missouri River water. However, like all private enterprise, we have invested tens and hundreds of thousands of dollars, responding to the need created by oil exploration, and simply can't have our state and local government threaten our livelihood, expose us to serious financial loss and possibly even bankruptcy. If each of you had invested a large sum, only to have your government threaten to substantially increase your risk, without any accomodation, you would feel our concern.

While water starts out as a public resource, the state allocates that water on a prior appropriation system, to individuals, companies, and other businesses, which then provide economic development with that water right. Examples include refineries, coal generation plants, gasification plants, ethanol plants, irrigation, agriculture processing plants, construction companies, and others.

The reason we have pushed so hard to have the State Water Commission build this infrastructure is because it provides an objective entity to balance the interest of WAWS sponsors and private water providers. We have been simply run over, disregarded, and completely ignored by the WAWS sponsors, and it is clear to us that if the project is turned over to the WAWS sponsors, we will have no choice but to litigate our interests, seeking just compensation and other remedies. Again, if you had invested tens or hundreds of thousands of dollars as a private enterprise, and government proposed to destroy that investment without any effort to accommodate, replace, or collaborate, you would be equally concerned.

Because we are in the business of providing water, we also believe the WAWS sponsors have grossly over-stated the potential, and are putting at risk funding for all water projects across the state. With the promise of oil money, you are on the verge of setting aside conservative fiscal principles and disregarding water policy that has enabled us to build significant water infrastructure in North Dakota. We urge you to follow fiscal principles and water policy so much needed water infrastructure across North Dakota, including WAWS infrastructure, can continue to be built. Thank you.

Sincerely,

Bill Sheldon

APPENDIX "J"
March 28, 2011

North Dakota State Water Commission

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RESOLUTION NO. 2011-03-525

2011 House Bill 1206
Western Area Water Supply
Resolution on Construction

WHEREAS, Western Area Water Supply (WAWS) infrastructure in northwestern North Dakota is necessary; and

WHEREAS, the North Dakota State Water Commission has constructed extensive water supply infrastructure, and has experience, ability, resources, and management to construct the WAWS infrastructure with significant savings; and

WHEREAS, the State Water Commission is responsible for balancing water infrastructure funding across North Dakota; and

WHEREAS, the State Water Commission is also responsible for balancing competing water interests and water allocation, such as with WAWS sponsors and private water providers; and

WHEREAS, the local WAWS authority has not been created.

NOW, THEREFORE, BE IT RESOLVED that the North Dakota State Water Commission assembled this 28th day of March, 2011, in Bismarck, North Dakota, expressed support that the State Water Commission construct the WAWS infrastructure; an agreement be negotiated with WAWS sponsors to transfer the ownership, operation, and management of the WAWS infrastructure to local entities; and that the water rates, existing facilities, water service contracts, and other local matters be deferred to the WAWS sponsors.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:

NORTH DAKOTA STATE WATER COMMISSION
MANAGING WATER RESOURCES OF THE STATE
FOR THE BENEFIT OF ITS PEOPLE
1937

Jack Dalrymple
Governor-Chairman

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

North Dakota State Water Commission

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RESOLUTION NO. 2011-03-526

2011 House Bill 1206
Western Area Water Supply
Resolution on Resources Trust Fund

WHEREAS, Western Area Water Supply (WAWS) project sponsors are seeking 100 percent upfront state funding, or a guarantee of WAWS infrastructure, in the form of grants and bond guarantees; and

WHEREAS, WAWS sponsors are seeking 100 percent state funding or guarantee without any local sales tax, or a 25 percent cost share; and

WHEREAS, if WAWS infrastructure and proposed bond repayment does not meet projections, bond guarantees/payments will come from the Resources Trust Fund, having an impact on funding for all other water infrastructure projects in North Dakota; and

WHEREAS, upon completion of obligations, WAWS sponsors are proposing to retain all revenues, rather than depositing such revenues in the Resources Trust Fund, to help other needed water infrastructure projects in North Dakota; and

WHEREAS, North Dakota has significant future water infrastructure needs including Fargo flood control, Red River Valley Water Supply, Northwest Area Water Supply treatment plant and pipeline completion, municipal, rural and industrial (MR&I) projects across North Dakota, Grand Forks water treatment plant, completion of the Southwest Pipeline Project, and other projects.

NOW, THEREFORE, BE IT RESOLVED that the North Dakota State Water Commission assembled this 28th day of March, 2011, in Bismarck, North Dakota, recommends that since the state is paying, or providing guarantees for 100 percent of WAWS infrastructure project costs, revenues exceeding operation and maintenance and any bonds on loans be paid to the Resources Trust Fund, and that such revenues be made available for other critical North Dakota water infrastructure projects.

FOR THE NORTH DAKOTA STATE WATER COMMISSION:

NORTH DAKOTA STATE WATER COMMISSION
MANAGING WATER RESOURCES OF THE STATE
for the BENEFIT of its PEOPLE
1937

Jack Dalrymple
Governor-Chairman

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

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, Chief Engineer/Secretary
SUBJECT: Missouri River Update
DATE: March 15, 2011

On March 9, system storage in the six-mainstem reservoirs was 57.7 million acre-feet (MAF), 5.0 MAF above the average system storage for the end of February, and 2.9 MAF more than last year. The operation of the system is based on achieving a system volume of 56.8 MAF by March 1. This year the system had 57.6 MAF on March 1, 0.8 MAF more than the Corps annual target for system. The record minimum system storage for the end of February was 34.3 MAF in 2007, and the maximum system storage for the end of February was 61.4 MAF in 1976. The Corps predicts runoff above Sioux City for 2011 to be 29.8 MAF, 120% of normal. This results in a forecast that the system will have 57.2 MAF at the end of the year. The record low end of year system storage was 34.4 MAF in 2005, and the maximum end of year storage was 60.95 MAF in 1975.

On March 9, Lake Sakakawea was at an elevation of 1838.1 feet msl, about 0.6 feet into the Flood Pool; this is 0.9 feet higher than a year ago and 7.5 feet above its average end of month February elevation. The annual March 1 targeted elevation for Lake Sakakawea is 1837.5, this year the elevation was 1.0 feet higher than the March 1 target elevation. The record minimum end of month February elevation was 1806.9 feet msl in 2007, and the maximum end of month February was 1842.8 in 1973. Garrison Releases averaged 25,800 cfs in February, and will average 22,800 cfs in March. The forecast shows Sakakawea peaking at 1845.1feet msl by the end the end of July.

The elevation of Lake Oahe was 1608.4 feet msl on March 9; this is 0.1 feet lower than last year and 8.2 feet higher than its average end of month February elevation. The annual March 1 targeted elevation for Lake Oahe is 1607.5, this year the elevation was 0.2 feet higher than the March 1 target elevation. The record minimum end of month February elevation for Lake Oahe was 1572.3 feet msl in 2007, and maximum end of month February elevation was 1611.1 in 1996. The forecast shows Oahe peaking at 1613.7 feet msl by the end of June.

The elevation of Fort Peck Lake was 2235.8 feet msl on March 9; this is 12.9 feet higher than a year ago and 9.4 feet above its average end of month February elevation. The annual March 1 targeted elevation for Fort Peck is 2,234, this year the elevation was 1.8 feet higher than the March 1 target elevation. The forecast shows for Fort Peck peaking at 1845.1 feet msl by the end of July.

The Corps of Engineers' basic forecast, 29.8 MAF of runoff, shows full service flows for navigation, and an extended navigation season. The navigation season has been extended 10 days and will close in Sioux City, Iowa on December 2.

Mountain snowpack is 108 percent of normal for this time of year, 110 percent above Fort Peck and 107 percent in the reach between Fort Peck and Garrison. Traditionally, 79 percent of the peak accumulation has occurred by March 1.

Both the March and May spring pulse are planned for this spring. However, the March pulse may be canceled due to flows above flow limits at Omaha and Nebraska City. The decision on whether to implement the March pulse will be based on actual conditions later this month. The May pulse is scheduled, conditions permitting, between May 1 and May 19. The timing of the May pulse will be determined by downstream river levels, water temperature below Gavins Point, and nesting activity by the least terns and piping plovers.

The Missouri River Annual Operating Plan (AOP) meetings will take place in April to review the 2010-2011 Annual Operating Plan for the Missouri River main stem reservoir system. An AOP meeting will be held in Bismarck on April 13, 1:00 pm at the Radisson Hotel.

The Corps released the Missouri River Authorized Purposes Study (MRAPS) Draft Scoping Summary Report on March 4, 2011. A public meeting will be held in Bismarck on March 29 from 5-7 pm at the Best Western Doublewood Inn. The report can be found at www.mraps.org.

On February 19, the U.S. House of Representative passed HR1, the Continuing Resolution to fund the government through fiscal year 2011. One of the amendments to HR1 eliminates funding for MRAPS and effectively ends the study. The U.S. Senate will soon decide how to approach the Continuing Resolution. As a result, the future of MRAPS may be decided soon. Governor Dalrymple and the Missouri River Association of States and Tribes (MoRAST) have both sent letters supporting continued funding to the Senate and House Appropriations Committees.

On January 6, the Corps of Engineers held a public meeting to gather comments for the Garrison Dam/Lake Sakakawea Surplus Water Report. The Surplus Water Report allocates 100,000 acre- feet of yielded storage in Lake Sakakawea to Surplus Water. The allocated storage can be used for municipal and industrial purposes. In order to obtain a real estate easement, users of the storage will have to sign a water storage agreement, which will charge $20.91 per acre-foot of storage yield. Attendance at the meeting was well over 150 concerned citizens. The Governor, Attorney General, and State Engineer spoke out in opposition of the Surplus Water Report.

House Concurrent Resolution No. 3019 voices the State's outrage with the Corps of Engineers, and their attempts to charge water users of North Dakota for storage that is not needed. House Concurrent Resolution No. 3019 passed the N.D. House of Representatives on February 18, and is now being decided on by the N.D. Senate. The hearing for the Senate Natural Resources Committee was on March 11.

BE:KC:mmb/1392

March 1, 2011

GARRISON DIVERSION CONSERVANCY DISTRICT
STATUS REPORT ON THE RED RIVER VALLEY WATER SUPPLY PROJECT

Garrison Diversion is the co-lead representing the State of North Dakota on the Red River Valley Water Supply Project Environmental Impact Statement (EIS). This update is provided on a regular basis to all state agencies. If you would like additional information, please contact us at gdcd@daktel.com, 800-532-0074 or go to www.garrisondiversion.org.

Environmental Impact Statement

- The Secretary of Interior signed a memorandum on January 15, 2009, disclosing the following:
  - The project selected to meet the needs of the Red River Valley is the Preferred Alternative, a pipeline from the McClusky Canal to Lake Ashtabula; and,
  - The identified treatment processes are adequate to meet the requirements of the Boundary Waters Treaty.
- The Final EIS was available to the public on December 28, 2007.

Lake Agassiz Water Authority

- The LAWA board met on September 14. The preliminary findings of the value engineering process were presented. The board also discussed the potential funding needs in the upcoming North Dakota legislative session. The next meeting of the LAWA board is scheduled for December 8 in Bismarck.

Pre-final Design Effort

- The following is a summary of the ongoing efforts on the task orders:

Right-of-Way: Garrison Diversion has wrapped up the effort to obtain options for right-of-way. The next steps to acquire the right-of-way will occur when the decision is made to exercise the options. Access to all of the right-of-way has been secured to complete the studies. Out of 173 landowners, 132 or 76% have signed option agreements for easements.

Permitting and Environmental Services: Notice on the determination of wetlands under the jurisdiction of the Corps of Engineers has been provided to Garrison Diversion. These wetlands, along with the other isolated wetlands, have been field verified. The wetlands under easement by the US Fish and Wildlife Service have been field verified and surveyed to develop contour maps, and the permit application to cross wetland easements has been submitted. The application was returned on January 11, 2011, stating that it could not be processed until the NEPA process has been completed.

The class 3 cultural and historic properties field review has been completed for the entire right-of-way, and there were no significant findings. These results have been submitted to Reclamation, and consultation with the North Dakota Historic Properties Office was requested.

The Wetland Delineation Report has been completed, and the field verified jurisdictional wetlands have been submitted to the Corps of Engineers with a request to amend the jurisdictional determination to account for the adjustments in alignment.

The remaining effort in this task order is to complete the other miscellaneous permit applications so that they are ready when the decision is made to move forward.

Operational Plan: The technical memorandums supporting the operational plan have been completed. The operational plan and the supporting technical memorandums were sent to the

work group for written comments. This will end the development of the operational plan at this stage of the project. It will remain in draft form until the project moves closer to construction.

Preliminary Design: Work on engineering evaluations regarding the preliminary design is 100% complete. Final deliverables have been delivered.

Utility potholing, soil boring and supplemental surveying has been completed.

Value Engineering Review

- The firm of Robinson, Stafford& Rude, Inc. facilitated the value engineering review. A team of engineers, contractors, environmental specialists, maintenance specialists and federal and state agencies completed a week-long review of the project. The results were delivered to the design team, and a meeting was conducted on September 7 to discuss the design team's response. The recommendations are currently under review.

Schedule

- The next steps are to obtain a Record of Decision from the lead federal agency and to get authorization for the use of Missouri River water from Congress. Garrison Diversion, the State Water Commission and the Governor's office are working with the Congressional Delegation to move these efforts forward.

Dave Koland

Dave Koland, General Manager

North Dakota State Water Commission

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701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: http://swc.nd.gov

Agenda #1 (1+2)

MEMORANDUM

TO: Governor Jack Dalrymple
North Dakota Water Commission Members

FROM: Todd Sando P.E.
Chief Engineer-Secretary

SUBJECT: Financial Updates

DATE: June 13, 2011

1. Agency Program Budget Expenditures

Attached is an expenditure spreadsheet for the biennium through April 30, 2011. With only two special line items, Administrative and Support Services and Water and Atmospheric Resources Expenditures our legislatively approved budget does not contain specific amounts for Salaries, Operations, and Grants and Contracts. In order to manage the Division's budgets we have allocated dollar amounts to each of these categories similarly to previous biennium, however, division managers have the ability to shift dollars from one category to another (see page 2.)

The Contract Fund spreadsheet summarizes information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund (see page 3.) A detailed breakdown of the individual projects follows on pages 4 through 9.The current Contract Fund spreadsheet shows approved projects totaling $203,317,921 leaving a balance of $696,278 available to commit to projects in the 2009-2011 biennium.

2. 2009-11 Resources Trust Fund and Water Development Trust Fund Revenues

Oil extraction tax deposits into the Resources Trust Fund total $127,998,849 through May and are currently $40,963,465 or 47.1 percent above budgeted revenues.

Deposits into the Water Development Trust Fund (tobacco settlement) total $18,248,834 and are currently $1,497,702 or 7.6 percent below budgeted revenues.

STATE WATER COMMISSION
ALLOCATED PROGRAM EXPENDITURES
FOR THE PERIOD ENDED APRIL 30, 2011
BIENNIUM COMPLETE: 92%

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	10-Jun-11 PROGRAM TOTALS
ADMINISTRATION				
Allocated	1,812,056	1,212,732		3,024,788
Expended	1,638,787	792,198		2,430,985
Percent	90%	65%		80%
			Funding Source:	
			General Fund:	2,308,143
			Federal Fund:	122,842
			Special Fund:	0
PLANNING AND EDUCATION				
Allocated	1,192,175	208,511	99,000	1,499,686
Expended	1,070,949	128,701	85,442	1,285,092
Percent	90%	62%	86%	86%
			Funding Source:	
			General Fund:	1,030,078
			Federal Fund:	162,723
			Special Fund:	92,291
WATER APPROPRIATION				
Allocated	3,633,879	483,162	1,078,935	5,195,976
Expended	3,229,588	360,440	781,145	4,371,173
Percent	89%	75%	72%	84%
			Funding Source:	
			General Fund:	3,604,321
			Federal Fund:	0
			Special Fund:	766,853
WATER DEVELOPMENT				
Allocated	5,041,486	4,837,457	225,000	10,103,943
Expended	4,375,057	5,156,159	338,397	9,869,613
Percent	87%	107%	150%	98%
			Funding Source:	
			General Fund:	4,051,389
			Federal Fund:	2,534,834
			Special Fund:	3,283,390
STATEWIDE WATER PROJECTS				
Allocated			203,185,070	203,185,070
Expended			71,654,303	71,654,303
Percent			35%	35%
			Funding Source:	
			General Fund:	0
			Federal Fund:	86,912
			Special Fund:	71,567,391
ATMOSPHERIC RESOURCE				
Allocated	854,950	712,830	4,694,692	6,262,472
Expended	751,508	424,547	1,255,787	2,431,842
Percent	88%	60%	27%	39%
			Funding Source:	
			General Fund:	788,362
			Federal Fund:	0
			Special Fund:	1,643,479
SOUTHWEST PIPELINE				
Allocated	400,498	1,665,314	37,556,958	39,622,770
Expended	376,978	2,417,971	8,470,741	11,265,690
Percent	94%	145%	23%	28%
			Funding Source:	
			General Fund:	0
			Federal Fund:	6,370,496
			Special Fund:	4,895,194
NORTHWEST AREA WATER SUPPLY				
Allocated	530,958	6,229,700	50,289,114	57,049,772
Expended	433,147	3,910,799	16,257,433	20,601,379
Percent	82%	63%	32%	36%
			Funding Source:	
			General Fund:	0
			Federal Fund:	9,604,384
			Special Fund:	10,996,996
PROGRAM TOTALS				
Allocated	13,466,002	15,349,706	297,128,769	325,944,477
Expended	11,876,013	13,190,816	98,843,248	123,910,077
Percent	88%	86%	33%	38%

FUNDING SOURCE:	ALLOCATION	EXPENDITURES	REVENUE	
GENERAL FUND	14,124,223	11,782,294	GENERAL FUND:	154,469
FEDERAL FUND	67,070,358	18,882,190	FEDERAL FUND:	18,544,126
SPECIAL FUND	244,749,896	93,245,592	SPECIAL FUND:	109,430,358
TOTAL	325,944,477	123,910,077	TOTAL:	128,128,952

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 BIENNIUM

Apr-11

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
CITY FLOOD CONTROL					
FARGO/RIDGEWOOD	2,084,750	2,084,750	2,033,809	0	50,941
FARGO	45,000,000	45,000,000	0	0	45,000,000
GRAFTON	7,175,000	7,175,000	0	0	7,175,000
WATER SUPPLY	44,304,887	44,304,887	13,794,239	0	30,510,648
PERMANENT OIL TRUST FUND	2,442,000	2,442,000	1,866,169	0	575,831
IRRIGATION DEVELOPMENT	1,605,370	1,605,370	1,052,017	0	553,353
GENERAL WATER MANAGEMENT					
OBLIGATED	22,730,636	22,730,636	8,486,956	0	14,243,680
UNOBLIGATED	696,278			696,278	0
MISSOURI RIVER MANAGEMENT	342,000	342,000	70,509	0	271,491
FLOOD CONTROL					
RENWICK DAM	1,478,190	1,478,190	231,619	0	1,246,571
RED RIVER WATER SUPPLY	3,200,000	3,200,000	3,135,589	0	64,411
DEVILS LAKE					
BASIN DVELOPMENT	91,152	91,152	28,478	0	62,674
DIKE	25,350,000	25,350,000	13,160,105	0	12,189,895
OUTLET	15,961,325	15,961,325	13,374,836	0	2,586,489
OUTLET OPERATIONS	4,900,000	4,900,000	3,253,413	0	1,646,587
DL TOLNA COULEE DIVIDE	500,000	500,000	27	0	499,973
DL EAST END OUTLET	2,200,000	2,200,000	191,286	0	2,008,714
NELSON COUNTY	112,219	112,219	0	0	112,219
WEATHER MODIFICATIONS	225,000	225,000	0	0	225,000
SOUTHWEST PIPELINE PROJECT	12,782,474	12,782,474	4,825,221	0	7,957,253
NORTHWEST AREA WATER SUPPLY	10,832,918	10,832,918	2,785,003	0	8,047,915
TOTALS	204,014,199	203,317,921	68,289,277	696,278	135,028,644

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium

PROGRAM OBLIGATION

Approve By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Apr-11* Balance
			City Flood Control:				
SWC	1927	5000	Fargo/Ridgewood Flood Control Project	6/22/2005	2,084,750	2,033,809	50,941
SWC	1928	5000	Fargo Flood Control Project	6/23/2009	45,000,000	0	45,000,000
SWC	1771	5000	Grafton Flood Control Project	3/11/2010	7,175,000	0	7,175,000
			Subtotal City Flood Control		***54,259,750***	***2,033,809***	***52,225,941***
SWC			***Water Supply Advances:***				
	2373-04	5000	Lakota WS (Tri-Co WD)	7/17/2007	212,065	212,044	21
	2373-09	5000	South Central RWD (Phase II)	6/23/2008	2,350,000	947,234	1,402,766
	2373-15	5000	North Central Rural Water Consortium (S. Benson Cou	12/7/2007	916,000	893,064	22,936
	2373-31	5000	North Central Rural Water Consortium (Anamoose/Ber	6/23/2008	3,295,000	0	3,295,000
	2373-27	5000	Traill Regional Rural Water (Phase I)	1/25/2008	3,199,000	3,164,726	34,274
	2373-16	5000	Traill Regional Rural Water (Phase II)	6/23/2008	2,305,748	2,224,346	81,402
	2373-24	5000	Traill Regional Rural Water (Phase III)	8/18/2009	2,750,000	316,034	2,433,966
			Water Supply Grants:				
	2373-19	5000	City of Washburn Water Supply	4/28/2009	1,500,000	1,347,615	152,385
	2373-17	5000	City of Parshall	6/23/2008	1,920,274	1,413,495	506,779
	2373-18	5000	Ray & Tioga Water Supply Association	12/17/2008	4,200,000	1,350,023	2,849,977
	2373-25	5000	McKenzie Phase II	6/23/2009	1,500,000	631,673	868,327
	2373-28	5000	McKenzie Phase IV	3/11/2010	3,500,000	220,077	3,279,923
	2373-26	5000	Valley City Water Treatment Plant	8/18/2009	15,386,800	0	15,386,800
	2373-29	5000	City of Wilrose - Crosby Water Supply	7/28/2010	1,270,000	1,073,907	196,093
			Subtotal Water Supply		***44,304,887***	***13,794,239***	***30,510,648***
			HB No. 1305 Permanent Oil Trust Fund				
	2373-21	5000	Burke, Divide, Williams Water District	6/23/2009	985,000	771,283	213,717
	2373-22	5000	Ray & Tioga Water Supply Association	6/23/2009	864,000	541,225	322,775
	2373-23	5000	City of Wildrose	6/23/2009	593,000	553,661	39,339
			Subtotal Permanent Oil Trust Fund		***2,442,000***	***1,866,169***	***575,831***
			Irrigation Development:				
SWC	1389	5000	BND AgPace Program	10/23/2001	194,439	75,532	118,907
SWC	AOC/IRA	5000	ND Irrigation Association	7/20/2009	100,000	75,000	25,000
SWC	1968	5000	2009-11 McClusky Canal Mile Marker 7.5 Irrigation Prc	6/1/2010	1,310,931	901,485	409,446
			Subtotal Irrigation Development		***1,605,370***	***1,052,017***	***553,353***
			General Water Management				
			Hydrologic Investigations:		***900,000***		
SWC	1400/12	3000	Houston Engineering Water Permit Application Review	10/10/2010	8,500	0	8,500
	1400/11	3000	Houston Engineering Water Permit Application Review	10/10/2010	8,052	7,733	320
	1400/10	3000	Houston Engineering Water Permit Application Review	1/0/1900	5,870	5,870	1
	1400/7	3000	Houston Engineering Water Permit Application Review	4/2/2009	1,325	800	525
	1400/8	3000	Houston Engineering Water Permit Application Review	6/2/2009	7,500	7,473	27
	1400/9	3000	Houston Engineering Water Permit Application Review	1/1/2010	6,759	6,759	0
	862	3000	Arletta Herman	4/7/2008	2,856	2,856	0
	1690	3000	Mary Lou McDaniel	5/6/2009	4,301	4,301	0
	1703	3000	Neil Flaten	4/7/2008	4,771	4,771	(0)
	1707	3000	Neil Flaten	4/26/2011	3,628	3,628	(0)
	1714	3000	David Robbins	5/7/2009	1,143	1,143	0
	1761	3000	Gloria Roth	5/6/2009	1,208	1,208	0
	1761	3000	Fran Dobits	4/7/2008	2,001	2,001	0
	1395A	3000	US Geological Survey, US Dept. Of Interior Stream Ga	11/12/2009	381,980	381,980	0
	1395D	3000	US Geological Survey, US Dept. Of Interior Eaton Irrig	10/1/2009	15,300	15,300	0
	1393	3000	US Geological Survey, US Dept. Of Interior StreamSta	7/16/2009	39,008	30,345	8,663
	1395	3000	US Geological Survey, US Dept. Of Interior Investigati	10/1/2010	410,907	205,454	205,454
			Hydrologic Investigations Obligations Subtotal		***905,108***	***681,619***	***223,489***
			Remaining Hydrologic Investigations Authority		***(5,108)***		
			Hydrologic Investigations Authority Less Payments				
			General Projects Obligated		***18,258,368***	***4,233,069***	***14,025,299***
			General Projects Completed		***3,572,268***	***3,572,268***	***0***
			Subtotal General Water Management		***22,730,636***	***8,486,956***	***14,243,680***

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium

PROGRAM OBLIGATION

Approve By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Apr-11* Balance
			Missour River Management:				
SWC	1963	5000	Beaver Bay Embankment Feasibilitly Study	8/10/2009	342,000	70,509	271,491
			Subtotal		***342,000***	***70,509***	***271,491***
			Flood Control:				
SWC	849	5000	Renwick Dam Rehabilitation	5/17/2010	1,478,190	231,619	1,246,571
			Subtotal Flood Control		***1,478,190***	***231,619***	***1,246,571***
			Red River Water Supply:				
SWC	1912	5000	2007-09 (GDCD'S) Red River Valley Water Supply Prc	3/17/2008	3,200,000	3,135,589	64,411
			Subtotal		***3,200,000***	***3,135,589***	***64,411***
			Devils Lake Basin Development:				
SWC	416-01	5000	2009-11 Devils Lake Basin Joint Water Resource Man	6/23/2009	60,000	0	60,000
SWC	416-02	5000	City of Devils Lake Levee System Extension & Raise	12/6/2002	25,350,000	13,160,105	12,189,895
SWC	416-05	2000	2009-11 Devils Lake Outlet Awareness Manager	6/23/2009	31,152	28,478	2,674
SWC	416-07	5000	Devils Lake Outlet	2/20/2002	15,961,325	13,374,836	2,586,489
SWC	416-10	4700	Devils Lake Outlet Operations	8/18/2009	4,900,000	3,253,413	1,646,587
SWC	416-13	5000	DL Tolna Coulee Divide	10/26/2010	500,000	27	499,973
SWC	416-15	5000	DL East End Outlet	10/26/2010	2,200,000	191,286	2,008,714
SWC	1932**	5000	Nelson Co. Emergency Pumping Peterson to Dry Run	5/23/2010	112,219	0	112,219
			Devils Lake Subtotal		***49,114,696***	***30,008,145***	***19,106,551***
SWC		***7600***	***Weather Modification***	7/1/2009	***225,000***	***0***	***225,000***
SWC	***1736***	***8000***	***Southwest Pipeline Project***	7/1/2009	***12,782,474***	***4,825,221***	***7,957,253***
SWC	***2374***	***9000***	***Northwest Area Water Supply***	7/1/2009	***10,832,918***	***2,785,003***	***8,047,915***
			TOTAL		***203,317,921***	***68,289,277***	***135,028,644***

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Apr-11* Balance
SE	269	5000	2010 Fordville Dam Emergency Action Plan/GF CO.	3/3/2010	9,600	0	9,600
SWC	281	5000	2009-11 Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	322	5000	2009-11 Long-Term Red River Flood Control Solutions Study	6/23/2009	500,000	348,790	151,210
SWC	322	5000	ND Water: A Century of Challenge	2/22/2010	34,300	0	34,300
SWC	327	5000	2009-11 White Earth Dam EAP	8/18/2009	25,000	0	25,000
SWC	347	5000	2009-11 City of Velva's Flood Control Levee System Certification	3/28/2011	102,000	0	102,000
SE	501	5000	2009-11 Pheasant Lake Dam Emergency Action Plan	4/20/2011	9,600	0	9,600
SWC	528	5000	2009 McGregor Dam Emergency Action Plan	6/23/2009	25,000	0	25,000
SE	568	5000	2008 Sheyenne River Snagging & Clearing Project	4/11/2008	5,000	0	5,000
SWC	568	5000	2009-11 SCWRD Sheyenne River Snagging & Clearing Project	12/10/2010	362,250	0	362,250
SE	571	5000	2009-11 Oak Creek Snagging & Clearing Project	1/28/2011	5,000	0	5,000
SWC	620	5000	2008 Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SE	642	5000	2009-11 Morton Co/Sweetbriar Dam Emergency Action Plan	5/17/2010	15,200	0	15,200
SWC	642-05	5000	2007-09 Sweetbriair Creek Dam Project	3/6/2009	683,400	656,376	27,024
SWC	646	5000	2009-11 Christine Dam Recreation Retrofit Project	10/26/2010	184,950	0	184,950
SWC	646	5000	2009-11 Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	0	44,280
SE	829	5000	2009-11 Rush River Watershed Detention Site Engineering Feasibility Study	8/10/2010	11,990	0	11,990
SE	839	5000	2009-11 Elm River Detention Dam No. 1 EAP	1/10/2011	12,160	0	12,160
SE	839	5000	2009-11 Elm River Detention Dam No. 3 EAP	12/6/2010	12,160	0	12,160
SWC	846	5000	2009-11 Morton Co.Square Butte Dam No. 5 EAP	12/10/2010	24,000	0	24,000
SWC	847	5000	2007-09 Swan Ceek FC Diversion Ditch	6/23/2008	1,640,992	1,585,680	55,312
SE	847	5000	2009-11 Swan-Buffalo Detention Dam No. 12 Emergency Action Plan	10/18/2009	20,000	0	20,000
SWC	847	5000	2009-11 Swan-Buffalo Detention Dam No. 12 Flood Control Dam Safety Projec	7/28/2010	114,783	0	114,783
SE	847	5000	2009-11 Absaraka Dam Safety Analysis	8/31/2009	5,719	0	5,719
SWC	847	5000	2009-11 Swan Creek Diversion Channel Improvement Reconstruction	12/11/2009	76,528	0	76,528
SWC	928/988/1508	5000	2007-09 Southeast Cass WRD Bois, Wild Rice, & Antelope	6/23/2008	60,000	0	60,000
SE	929	5000	200711 Walsch Co. -Soukop Dam EAP	3/2/2011	10,000	0	10,000
SE	929	5000	2009-11 Walsch Co. -Chyle Dam EAP	5/6/2011	10,000	0	10,000
SE	985	5000	2009-11 Kolding Dam Emergency Action Plan	5/29/2009	9,600	0	9,600
SWC	1068	5000	2009-11 Cass County Drain No. 12 Improvement Reconstruction	8/18/2009	500,000	0	500,000
SWC	1069	5000	2009-11 Cass County Drain No. 13 Improvement Reconstruction	8/18/2009	145,472	23,248	122,224
SWC	1070	5000	2009-11 Cass County Drain No. 14 Improvement Recon	8/18/2009	500,000	78,547	421,453
SWC	1088	5000	2009-11 Cass County Drain No. 37 Improvement Recon	8/18/2009	158,535	74,112	84,423
SWC	1093	5000	2007-09 Cass Co. Drain No. 45 Extension Project	3/17/2008	150,800	26,043	124,757
SWC	1161	5000	2007-09 Pembina Co. Drain 55 Improvement Reconstruction	3/28/2011	88,868	0	88,868
SWC	1164	5000	2009-11 Pembina County Drain No. 64 Outlet Area Improvement	12/10/2010	41,480	0	41,480
SWC	1180	5000	2009-11 Richland Co. Drain No. 7 Improvement Reconstruction	3/11/2010	130,681	58,748	71,933
SWC	1232	5000	2009-11 Traill Co. Drain No. 13 Channel Extension Project	8/18/2009	23,575	0	23,575
SWC	1244	5000	2009-11 Traill Co. Drain No. 27 (Moen) Reconstruction & Extension	3/11/2010	500,000	0	500,000
SWC	1245	5000	2009-11 Traill Co. Drain No. 28 Extenstion & Improvement Project	3/28/2011	336,007	0	336,007
SE	1289	5000	2009-11 McKenzie Co. Weed Control on Sovereign Lands	3/4/2011	11,705	0	11,705
SE	1291	5000	2009-11 Mercer County WRD Knife River Snagging & Clearing	11/1/2010	20,000	0	20,000
SWC	1299	5000	2009-11 City of Lisbon's Mapping & Survey for FEMA Buyouts	3/29/2010	30,000	6,522	23,478
SWC	1299	5000	2009-11 City of Fort Ransom Riverbank Stabilization	9/1/2010	60,803	0	60,803
SE	1131	5000	2009-11 Elm River Detention Dam No. 2 Emergency Action Plan	12/6/2010	12,160	0	12,160
SE	1301	5000	2009-11 City of Lidgerwood Engineering & Feasibility Study for Flood Control	2/4/2011	15,850	0	15,850
SWC	1313	5000	2009-11 City of Minot/Ward Co. Aerial Photo & LiDAR	3/11/2010	186,780	0	186,780
SWC	1331	5000	2009-11 Richland Co. Drain No. 14 Improvement Reconstruction	3/11/2010	183,364	66,376	116,988
SWC	1344	5000	2009-11 Southeast Cass Sheyenne River Diversion Low Flow Channel Improve	3/11/2010	2,037,600	0	2,037,600
SWC	1344	5000	2009-11 Southeast Cass Sheyenne Sheyenne Pump Station	3/28/2011	60,750	0	60,750
SWC	1378	5000	2009-11 Clausen Springs Dam Emergency Spillway Repair	10/26/2010	790,975	43,983	746,992
SE	1396	5000	2009-11 Dale Frink Consultant Services Agreement	10/26/2010	20,000	600	19,400
SWC	1401	5000	2009-11 International Boundary Roadway Dike Pembina	9/21/2009	260,238	19,938	240,300
SWC	1403	5000	2009-11 ND Water Resources Research Institute 2011-12 Fellowship Program	12/10/2010	13,850	0	13,850
SWC	1413	5000	2009-11 Traill Co/Buffalo Coulee Snagging & Clearing	9/1/2010	26,000	0	26,000
SWC	1431	5000	2007-09 (S.B. 2020) 2009 Emergency Flood Control	4/28/2009	100,000	46,362	53,638
SWC	1431	5000	2009-11 DES Purchase of Mobile Stream Gages	3/28/2011	9,875	0	9,875
SE	1433	5000	2009-11 Whitman Dam Emergency Action Plan	4/14/2011	10,000	0	10,000
SWC	1438	5000	2007-09 Mulberry Creek Drain Partial Improv Phase III	3/28/2011	226,118	0	226,118
SWC	1444	5000	2009-11 City of Pembina's Flood Control FEMA Levee Certification	3/11/2010	27,156	0	27,156
SWC	1509	5000	2009-11 Sheyenne River Watershed Flood Water Detention Study	7/20/2009	75,000	63,464	11,536
SE	1577	5000	2009-11 Burleigh Co - Fox Island 2010 Flood Hazard Mitigation Evaluation	8/9/2010	11,175	0	11,175
SWC	1577	5000	2009-11 Hazen Flood Control Levee (1517) & FEMA Accreditation	3/11/2010	567,700	118,200	449,500
SE	1625	5000	High Water Mark Delineation Methods & Guidelines	10/24/2007	54,048	0	54,048
SE	1625	5000	2009-11 Sovereign Lands Rules - ND Game & Fish	2/23/2010	10,000	3,213	6,788
SE	1625	5000	2009-11 NDDOT Aerial Photography - Missouri River	11/19/2010	5,200	0	5,200
SWC	1638	5000	2009-11 Red River Basin Non-NRCS Rural/Farmstead Ring Dike Program	6/23/2009	800,000	317,801	482,199
SWC	1657	5000	2009-11 City of Enderlin's Flood Control FEMA Levee Certification	3/11/2010	100,578	0	100,578
SWC	1667	5000	2009-11 Traill Co/Goose River Snagging & Clearing	9/1/2010	48,000	0	48,000
SWC	1705	5000	2009-11 Red River Basin Flood Control Coordinator Position	7/24/2009	36,000	0	36,000
SWC	1785	5000	2009-11 Maple River Dam EAP	8/18/2009	25,000	0	25,000
SE	1785	5000	2009-11 Sweetbriar Dam EAP	2/17/2010	15,200	0	15,200
SWC	1792	5000	2009-11 SE Cass Wild Rice River Dam Study Phase II	12/11/2009	130,000	0	130,000
SE	1842	5000	2009-11 SCWRD Wild Rice River Snagging & Clearing	5/28/2009	20,000	15,669	4,331
SWC	1842	5000	2009-11 SCWRD Wild Rice River Snagging & Clearing	12/10/2010	100,625	0	100,625
SWC	1842	5000	2009-11 Richland Co. Wild Rice River Snagging & Clearing	12/10/2010	33,500	0	33,500
SE	1842	5000	2009-11 Richland Co. - Ph 2- Wild Rice River Snagging & Clearing	2/1/2011	15,000	0	15,000
SWC	1842	5000	2009-11 Richland Co. Wild Rice River Snagging & Clearing Project - Reach 2	3/28/2011	47,500	0	47,500

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	*Apr-11* Balance
SWC	1878-02	5000	2009-11 Maple-Steele Upper Maple River Dam PE & PD	12/10/2010	187,710	0	187,710
SWC	1882-01	5000	2009-11 (ESAP) Extended Storeage Acreage Program	8/18/2009	142,250	35,941	106,309
SWC	1882-07	5000	2009-11 NDSU Development of SEBAL	9/1/2010	61,404	0	61,404
SWC	1921	5000	2007-09 Square Butte Dam No. 6/Recreational Facility	3/23/2009	882,030	0	882,030
SWC	1934	5000	2007-09 Elm River Snagging & Clearing Project Trial	12/5/2008	3,266	0	3,266
SWC	1942	5000	2007-09 Walsh County Assessment Drain 10, 10-1, 10-2	9/21/2009	273,056	235,789	37,267
SE	1943	5000	2009-11 Missouri River/Oahe Delta Flood Hazard Mitigation Evaluation Project	8/10/2009	12,000	0	12,000
SWC	1953	5000	2009-11 Walsh County Drain No. 73 Construction Project	8/18/2009	96,990	0	96,990
SWC	1960	5000	2009-11 Puppy Dog Flood Control Drain Construction	8/18/2009	796,976	0	796,976
SE	1961	5000	2009-11 Pembina County Drain No. 69 Extenstion Construction Project	8/10/2009	7,793	0	7,793
SWC	1964	5000	2009-11 Hydraulic Effects of Rock Wedges Study- UND	11/12/2009	50,000	33,317	16,683
SWC	1965	5000	2009-11 ND Silver Jackets Team Charter & Action Plan	11/12/2009	75,000	38,311	36,689
SWC	1966	5000	2009-11 City of Oxbow Emergency Flood Fighting Barrier System	6/1/2010	188,400	0	188,400
SE	1967	5000	2009-11 Grand Forks County Legal Drain No. 55 2010 Contruction	11/30/2010	9,652	0	9,652
SWC	1969	5000	2009-11 Construction of Walsh Co. Legal Assessment Drain #71	3/28/2011	304,141	0	304,141
SWC	1970	5000	2009-11 Construction of Walsh Co. Legal Assessment Drain #72	3/28/2011	144,807	0	144,807
SWC	1932	5000	2009-11 Peterson Slough into Dry Run Emergency	5/28/2010	112,219	80,069	32,150
SWC	1932**	5000	Michigan Spillway Rural Flood Assessment	8/30/2005	1,012,219	0	1,012,219
SWC	1932**	5000	Michigan Spillway Rural Flood Assessment Drain	8/30/2005	500,000	0	500,000
SE	PBS	5000	2009-11 PBS Documentary on Soil Salinity/Lake Agassiz RC & D	1/29/2010	1,000	0	1,000
SE	AOC/ARB/ND:	5000	2009-11 NDSU Dept of Soil Science - NDAWN Center	3/8/2010	6,000	3,000	3,000
SE	AOC/RRBC	5000	2009-11 Red River Basin "A River Runs North"	6/30/2010	5,000	0	5,000
SWC	AOC/RRBC	5000	2009-11 Red River Basin Commission Contractor	7/1/2009	200,000	150,000	50,000
SWC	AOC/WEF	5000	2009-11 North Dakota Water Magazine	7/20/2009	36,000	27,000	9,000
SE	AOC/WRD	5000	2009-11 Water Managers Handbook	3/22/2010	16,500	16,100	400
SWC	CON/WILL-CA	5000	2009-11 Will & Carlson Consulting Contract	8/24/2009	70,000	38,340	31,660
SWC	PS/IRR/NES	5000	2009-11 NDSU Williston Research Extension Center - purchase of irrigation eq	3/28/2011	60,050	0	60,050
SE	PS/WRD/MRJ	5000	Missouri River Joint Water Board, Start up	12/5/2008	14,829	0	14,829
SE	PS/WRD/MRJ	5000	Missouri River Joint Water Board (MRRIC) T. FLECK	6/30/2009	27,500	21,030	6,470
SE	PS/WRD/USR	5000	2009-11 Upper Sheyenne River WRB Administration	7/10/2009	12,000	500	11,500
			TOTAL		18,258,368	4,233,069	14,025,299

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approvec By	SWC No	Dept	Initial Approved Date	Total Approved	Total Payments	*Apr-11* Balance
SWC	249	5000 2009 Mott Dam Emergency Action Plan	6/23/2009	25,000	12,757	12,243
SWC	281	5000 2007-09 Three Affiliated Tribes/Fort Berthold Irrigation Study	3/23/2009	80,000	80,000	0
SWC	300	5000 Baldhill Dam Flood Pool Raise	4/30/1998	92,832	6,138	86,694
SWC	322	5000 2009-11 Red River Basin Mapping Initiative/Tri-College LiDAR	6/23/2009	300,000	300,000	0
SE	353	5000 2009-11 Cedar Lake Dam, Emergengy Action Plan	7/15/2009	9,600	9,600	0
SE	420	5000 2009 Mirror Lake Dam Safety Repair	10/14/2009	12,220	11,887	333
SE	420	5000 Mirror Lake One-Foot Pool Raise	9/17/2009	18,281	18,281	0
SE	450	5000 2007-09 Sykeston Dam 2008 Emergency Action Plan	11/25/2008	7,839	7,839	0
SE	560	5000 2009 Blacktail Dam Emergency Action Plan	5/28/2009	9,600	6,733	2,867
SWC	568	5000 2009 Sheyenne River Snagging & Clearing Project	12/5/2008	135,000	75,085	59,915
SWC	568	5000 2009-11 Richland Co. Sheyenne River Snagging & Clearing Project	12/11/2009	47,500	35,449	12,051
SWC	568	5000 2009-11 Richland Co. Sheyenne River Snagging & Clearing Project	3/11/2010	47,500	47,409	91
SWC	568	5000 2009 Richland Co. Sheyenne River & Wild Rice River Snagging & Clearing #18	12/11/2009	39,500	28,488	11,012
SWC	568	5000 2009-11 SE Cass Sheyenne River Snaggin & Clearing	3/11/2010	175,473	173,350	2,123
SWC	568	5000 2009-11 Southeast Cass WRD Sheyenne River Snagging & Clearing Project	12/11/2009	165,000	137,888	27,112
SWC	571	5000 2009-11 Oak Creek Bank Stabilization Project	8/18/2009	33,250	25,365	7,885
SWC	576	5000 2009-11 City of Mandan - Missouri River Emergency Bank Stabilization	12/11/2009	33,429	33,370	59
SE	576	5000 2009-11 Mandan City Flood Controls Works	6/18/2010	2,000	2,000	0
SWC	583	5000 Fargo/Moorhead Study	3/29/2010	300,000	300,000	0
SE	586	5000 2009 Short Creek Dam Emergency Action Plan	5/28/2009	9,600	9,600	0
SWC	620	5000 2009-11 City of Manan - Lower Heart River Bank Stabilization	12/11/2009	63,808	63,808	0
SE	662	5000 2009 WCWRD'S Park River Snagging & Clearing Project	6/30/2009	1,948	0	1,948
SE	671	5000 2007-09 Harvey Dam 2008 Emergency Action Plan	11/25/2008	7,840	7,837	3
SWC	847	5000 Maple River - Retention Study Rush River Joint WRD	8/15/2002	25,000	24,927	73
SE	847	5000 2009-11 Swan Buffalo Detention Dam No. 5 Emergency Action Plan	7/20/2009	20,000	11,397	8,603
SE	847	5000 2009-11 Swan Buffalo Detention Dam No. 8 Emergency Action Plan	8/7/2009	20,000	10,496	9,504
SE	870	5000 2009-11 Crown Butte Dam Emergency Action Plan	7/10/2009	9,600	9,600	0
SWC	988	5000 Southeast Cass WRD Antelope Creek Eng Feas	10/12/2006	40,000	40,000	0
SWC	1080	5000 2007-09 Cass County Drain No. 27 Improvement Recon	10/24/2007	94,197	0	94,197
SWC	1084	5000 2008 Cass Co. Drain No. 32 Partial Improvement Recon	3/17/2008	68,538	13,150	55,388
SWC	1131	5000 Nelson County Channel Maintenance & Misc	9/17/2009	6,413	6,413	0
SWC	1140	5000 Pembina County Drain No 11 Outlet Improvement	9/21/2009	70,846	70,846	0
SWC	1155	5000 2008 Pembina Co. Drain No. 42 Partial Impr.Recon.	3/17/2008	11,386	11,386	0
SWC	1176	5000 2008 Richland Co. Drain No. 2 Partial Improvement Recon.	3/17/2008	5,791	2,964	2,827
SWC	1238	5000 2009-11 Traill County Drain No. 19 Legal/Ext Outlet	8/18/2009	46,187	46,187	0
SWC	1249	5000 2008 Traill Co. Drain No. 34 Partial Improvement Recon	3/17/2008	255,629	192,250	63,379
SWC	1289	5000 2007-09 Noxious Weed McKenzie County -Sovereign	10/24/2007	7,247	0	7,247
SWC	1328	5000 2007-09 Cass Co. Drain No. 23 Area Improvement	7/17/2007	35,980	0	35,980
SWC	1334	5000 Traill County Drain No. 38 Reconstruction	6/30/2009	57,631	0	57,631
SE	1346	5000 2009-11 Mt. Carmel Dam Emergency Action Plan	5/5/2010	9,600	9,600	0
SE	1358	5000 2009-11 Sheep Creek Dam Auxiliary Spillway Restoration	1/10/2011	3,459	3,459	0
SE	1378	5000 2009-11 Clausen Springs Dam Incremental Risk Assessment Report	12/22/2009	9,179	9,179	0
SE	1378	5000 2009-11 Clausen Springs Dam Feasibility Study of Improvement Options	12/10/2009	7,921	7,921	0
SE	1378	5000 2009-11 Clausen Springs Dam Emergency Watershed & Dam Hydraulics Repor	8/31/2009	9,418	9,418	0
SWC	1378	5000 2009-11 Barnes Co. Clausen Springs Dam Construction Repair	12/11/2009	1,300,000	0	1,300,000
SE	1382	5000 2009-11Camel Butte Dam Emergency Action Plan	7/24/2009	9,600	9,600	0
SWC	1401	5000 2009-11 International Boundary Roadway Dike Pembina	9/1/2010	43,000	37,464	5,536
SWC	1403	5000 2009-11 ND Water Resources Research Institute Fellowship Program	12/11/2009	13,850	13,850	0
SWC	1413	5000 2009 TCWRD Buffallo Coulee Snagging & Clearing Project	6/23/2009	49,000	28,874	20,126
SWC	1431	5000 2009-11 US Geological Survey - Supplemental Flood Info	3/11/2010	11,000	11,000	0
SWC	1431	5000 2009-11 US Geologoical Survey, DOI Report Describing Peak Discharge Period	8/5/2009	20,000	20,000	0
SWC	1438	5000 2007-09 Mulberry Creek Drain Partial Improv Phase II	3/17/2008	46,816	24,866	21,950
SWC	1461	5000 2008 Pembina River Area Bank Stabilization Project	12/5/2008	24,307	0	24,307
SWC	1461	5000 2009-11 Pembina River Bank Stabilization Project	3/11/2010	64,383	56,338	8,045
SE	1471	5000 2009-11 Erie Dam Emergency Action Plan	7/24/2009	20,000	7,093	12,907
SE	1515	5000 2009-11 US Geological Survey - monitoring gages Cottonwood Creek Dam	10/18/2009	8,260	8,260	0
SWC	1515	5000 2009-11 Cottonwood Creek Dam	7/28/2010	373,440	188,702	184,738
SWC	1523	5000 2008 Souris River Golf Course Area Bank Stabilization	9/29/2008	31,612	31,612	0
SE	1527	5000 2009-11 Daub Dam Emergency Action Plan	8/16/2010	9,600	7,680	1,920
SE	1535	5000 2009-11 Lake Agassiz Resource Conservation & Development Council - Soil Sa	2/22/2010	1,000	1,000	0
SE	1556	5000 2009 Indian Creek Dam Emergency Action Plan	5/28/2009	9,600	9,600	0
SWC	1572	5000 Burnt Creek Floodway Diversion Channel	4/30/2008	121,091	112,637	8,454
SWC	1591	5000 Revision of Handbook ND Water Managers Proj	4/12/2007	14,750	0	14,750
SE	1625	5000 2009-11 Missouri River Contract - Environmental Service Bartlett & West	9/21/2009	5,900	5,900	0
SWC	1625	5000 OHWM Delineations MT/ND Border Yellowstone & Missouri	10/29/2008	75,000	62,250	12,750
SWC	1667	5000 2009-11 Traill County Goose River Snagging & Clearing Project	12/11/2009	46,500	30,873	15,627

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2009-2011 Biennium
Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approvec By	SWC No	Dept	Initial Approved Date	Total Approved	Total Payments	*Apr-11* Balance
SE	1808	5000 2009-11 Beaver Creek Dam Emergency Action Plan	7/14/2009	20,000	20,000	0
SE	1808	5000 2009-11 U.S. Dept of Interior/Beaver Creek Gaging Stations	9/7/2010	11,710	11,710	0
SWC	1842	5000 2009-10 SCWRD Wild Rice River Snagging & Clearing	12/11/2009	115,000	72,676	42,324
SE	1849	5000 2008 Tongue River Diversion Channel Rock Project	11/25/2008	19,087	17,994	1,093
SWC	1859	5000 2009-11 Section NPS 319 ND Health Dept	8/18/2009	200,000	200,000	0
SWC	1869	5000 2008 McDowell Dam Emergency Action Plan	9/29/2008	25,000	25,000	0
SE	1921	5000 2009 Square Butte Dam No. 6/Emergency Action Plan	3/9/2009	16,000	11,040	4,960
SWC	1934	5000 2007-09 Traill County WRD Elm River Snagging	12/7/2007	290	0	290
SWC	1936	5000 Nash Drain Extension Construction Proj	10/12/2006	19,913	14,399	5,514
SWC	1941	5000 2007-09 Walsh County Assessment Drain 4A Construction	9/21/2009	81,594	81,594	0
SWC	1943	5000 Missouri River Siltation Assessment Study	10/12/2006	30,000	0	30,000
SWC	1947	5000 Cass County Drain No. 62, Maple River WRD	4/30/2008	39,787	3,687	36,100
SWC	1948	5000 2008 Cass Co. Drain No. 67 Construction Project	3/25/2008	334,250	199,888	134,362
SWC	1950	5000 2008 Cypress Creek Drain No. 2 Construction	6/23/2008	22,400	22,400	0
SWC	1951	5000 2007-09 Lynchburg-Buffalo Drain Improvement	8/31/2009	1,000,000	0	1,000,000
SWC	18502	5000 (2008) Drought Disaster Livestock Water Supply	5/14/2008	571,747	157,134	414,613
SWC	1131*	5000 Nelson County Central Hamlin Rural Flood Control	9/17/2009	8,940	8,940	0
SWC	1131*	5000 Nelson County Central-Hamlin Rural Flood	9/17/2009	43,381	43,381	0
SWC	1751-06	5000 2009-11 Southeast Cass WRD/Flood Imagery Project	1/18/2010	30,014	30,014	0
SWC	2373-13	5000 All Seasons Rural Water - (Upham)	7/17/2007	76,734	76,734	0
SWC	2373-30	5000 McKenzie WAWS	10/26/2010	0	0	0
SE	416-11	5000 USGS/US Dept of Interior UnTRIM model on water-quality in Devils Lake	8/13/2010	16,000	16,000	0
SWC	416-14	5000 City of Minnewaukan Flood Risk Reduction Analysis Study	6/3/2010	15,000	15,000	0
SE	AOC/Wt	5000 2010 Summer Water Tours Sponsorship	3/1/2010	2,500	2,500	0
SE	AOC/Wt	5000 2009-11 NDWEF Summer Water Tours	4/20/2011	2,500	2,500	0
		TOTAL		7,431,799	3,572,268	3,859,530

North Dakota State Water Commission

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Agenda #3)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: 2009-2011 Biennium Projects/Grants/Contract Fund Obligations Carryovers to the 2011-2013 Biennium [SWC No. 1753]

DATE: June 1, 2011

During the past several months, the projects administered under the cost-share program have been reviewed to identify those with remaining obligated funds to determine which projects are still active, completed, or were not/will not be undertaken.

On June 23, 2009, the Commission approved inquiring into the progress and future intention of projects with unexpended obligations not spent within three years following the Commission's approval. The obligated funds of those projects identified as not active have been returned to the appropriate account and the project removed or transferred to accounting's non-active/completed listing.

Water projects commonly require more than a year to complete due to regulatory issues, funding needs, contracting, bidding and construction delays, project inspections, weather, auditing requirements, etc. As projects are completed they are moved from the active listing to accounting's non-active/completed listing and remaining approved funds de-obligated and returned to the appropriate account.

At this time, all of the cost-share projects listed on accounting's 2009-2011 workbook "Program Expenditures and Projects/Grants/Contract Fund" with obligated funds are either still active or will start in the foreseeable future. Therefore, those projects listed on accounting's 2009-2011 workbook with corresponding obligation amounts are to carry forward to the 2011-2013 biennium.

I recommend that all of the unexpended obligation amounts carry forward to the 2011-2013 biennium. This approval is subject to the entire contents of the recommendation contained herein and the availability of funds.

North Dakota State Water Commission

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Agenda E

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: NDSWC Cost-Share - Biennium Approval Limitation of $500,000
2011-2013 Appropriated Funds [SWC No. 1753]

DATE: June 1, 2011

On August 13, 1998, the State Water Commission approved several cost-share policy changes including a limitation on the amount of funding that can be provided in a single biennium for a rural flood control project to no more than five percent (5%) of new funding available for general projects. This limitation has been in effect for rural flood control projects since that time, however, the dollar amount of the limitation has varied.

Although the State Water Commission's general water projects budget for the 2011-2013 biennium is estimated to be over $10,000,000, an exception to the limitation being set at 5% of new funding is recommended. Due to the water resource management challenges of the biennium, a limitation set at $500,000 is recommended.

The maximum amount proposed that may be approved for a rural flood control project is $500,000. Although the amount available per project will be limited to $500,000 from the 2011-2013 appropriated funds, the total amount approved per project consists of all biennium cost-share approvals. Thus, the total amount of funding approved for a rural flood control project is not limited, only the amount approved per biennium is capped.

I recommend the State Water Commission approve limiting funds for a rural flood control project from the 2011-2013 appropriations to $500,000. This approval is subject to the entire contents of the recommendation contained herein and the availability of funds.

TS:CM/1753 NDSWC Meeting – June 21, 2011

North Dakota State Water Commission

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Agenda F1)

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: *North Dakota Water* Magazine

DATE: June 10, 2011

The *North Dakota Water* magazine is published 10 times each year by the North Dakota Water Education Foundation to communicate to people about water.

The purpose of the North Dakota Water Education Foundation is to develop and implement water information and water education programs in North Dakota, and to increase awareness, understanding and knowledge among students, teachers, water users, decision-makers, and the general public about water resource issues in North Dakota. The Foundation's four programs, North Dakota WaterCourse, North Dakota Wetlands Institute, Water Education for Teachers (WET), and the *North Dakota Water* magazine assist to achieve that mission.

Since 1994, the State Water Commission has contributed $18,000 each year of the biennium to support the magazine and its own pages, the monthly "Oxbow" and the "Water Primer" sections, and to mail the magazine to addresses provided by the Commission. The North Dakota Water Education Foundation has submitted a request (attached hereto) for the State Water Commission's consideration for an allocation up to $36,000 to continue its participation in the *North Dakota Water* magazine for the 2011-2013 biennium.

I recommend that the State Water Commission approve an allocation up to $36,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium, to the North Dakota Water Education Foundation to support the North Dakota Water magazine from July 1, 2011 through June 30, 2013.

TS:sl/AOC/WEF
Attachment

NORTH DAKOTA
WATER
EDUCATION FOUNDATION

PO Box 2254, Bismarck, ND 58502
701-223-8332 • Fax: 701-223-4645
Email: ndwater@btinet.net

June 6, 2011

Mr. Todd Sando, State Engineer
North Dakota State Water Commission
900 East Boulevard Ave.
Bismarck, ND 58505

Dear Mr. Sando:

We are requesting $36,000 from the North Dakota State Water Commission to continue its participation in the *North Dakota Water* magazine for the 2011-2013 biennium.

Since 1994, the State Water Commission has contributed $18,000 each year to support the magazine and its own pages, the monthly "Oxbow" and "Water Primer" sections.

The purpose of the North Dakota Water Education Foundation is to develop and implement water information and water education programs in North Dakota, and to increase awareness, understanding, and knowledge among students, teachers, water users, decision-makers, and the general public about water resource issues in North Dakota. The Foundation's four programs, North Dakota WaterCourse, North Dakota Wetlands Institute, Water Education for Teachers, and the *North Dakota Water* magazine are helping us achieve that mission.

The magazine's purpose is to communicate to people about water. State Water Commission funding has been used to publish its "Oxbow" and "Water Primer" sections in the magazine and to mail the magazine to addresses provided by the Commission.

The State Water Commission's support is critical. We hope you plan to continue to be a part of this exciting and successful project. Thank you.

Sincerely,

Michael Dwyer

Michael Dwyer
Executive Director

North Dakota State Water Commission

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

Agenda F-2)

MEMORANDUM

TO: Governor Jack Dalrymple
North Dakota State Water Commission Members

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

SUBJECT: Consideration of Request from the North Dakota Irrigation Association for Funding Support

DATE: June 13, 2011

The North Dakota Irrigation Association has requested funding support from the North Dakota State Water Commission in the amount of $100,000 for the 2011-2013 biennium. These funds will be used to pursue initiatives outlined in the Strategic Plan for Irrigation Development in North Dakota.

The Strategic Plan identified six important components necessary for the development of irrigation and diversification of the state's economic base. These components consist of communications and coordination, irrigation project development, marketing, funding and financing, research related to irrigation, and the pursuit of Federal hydropower and affordable energy. Together, these elements provide the basis for substantially increasing the irrigated acreage and economic output in North Dakota.

Attached are three documents prepared by the North Dakota Irrigation Association; 1) Strategic Plan, 2) Summary of major North Dakota Irrigation Association activities for 2010, and 3) 2011 Work Plan. It is proposed that the State Water Commission continue to support the efforts of the North Dakota Irrigation Association to increase irrigated acreage in North Dakota, which in turn, will increase economic activities.

I recommend the State Water Commission allocate $100,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium to the North Dakota Irrigation Association to continue to carryout the activities outlined in its Strategic Plan for increasing irrigated acreage.

TS:RS:sl

Attachments

North Dakota Irrigation Association

P.O. Box 2254
Bismarck, ND 58502
701-223-4615, 701-223-4645 (fax)
e-mail: ndirrigation@btinet.net

Dedicated to strenghtening and expanding irrigation to build and diversify our economy.

June 6, 2011

Mr. Todd Sando, State Engineer
North Dakota State Water Commission
900 East Boulevard
Bismarck, ND 58505

Mr. Robert Shaver, Director of Water Appropriations Division
North Dakota State Water Commission
900 East Boulevard
Bismarck, ND 58505

Dear Gentlemen:

This is to request continued support by the State Water Commission for the upcoming biennium (2011-2013) for the efforts of the North Dakota Irrigation Association (NDIA) to strengthen and expand irrigation in North Dakota.

Also included are Summaries of Major NDIA Activities for 2010. We had ongoing efforts in the area of funding and financing, communication and coordination, irrigation research, marketing, irrigation projects, and hydropower.

Finally, the NDIA 2011 Work Plan-Priority Items is included. It outlines the major elements in our efforts to strengthen and expand irrigation. We believe we have excellent staff resources in the area of management, communication, field representation, engineering and technical oversight.

Continued support of the State Water Commission is critical for these efforts. Thus, it is requested that the State Water Commission continue to support the Irrigation Association by providing $100,000 over the 2011-2013 Biennium for the North Dakota Irrigation Association to continue our mission to strengthen and expand irrigation for economic growth in North Dakota.

The Garrison Diversion Conservancy District provides equal support to the North Dakota Irrigation Association to continue the efforts described above, and your continued support will help accomplish a strong irrigation component of our agriculture economy. We thank you for your commitment to strengthen and expand irrigation for economic growth in North Dakota.

Sincerely,

Robert D. Vivatson

Robert Vivatson
Chairman

Enclosures

Summary of Major North Dakota Irrigation Association Activities for 2010

Marketing

1. Worked with the Green Vision Group in the development of a project to produce ethanol using energy (sugar) beets. Production trials this year at three sites showed excellent yields and a burn test will be conducted soon to determine if the plant stillage can be used as an energy source.

2. Participated in the Ag Open in the Mon-Dak region where current activities and enterprises are show cased for others seeking opportunities in the agricultural sector.

Funding and Financing

1. Participated in the development, monitoring and implementation of the Agricultural Water Enhancement Program (AWEP) administered by the Natural Resources Conservation Service (NRCS). This work was done under an Agreement between NDIA and NRCS signed in 2009. In FY 2010, $743,000 was expended for water and energy conservation programs with producers. Applications exceeded funding by more than $100,000. The authorized funding in FY 2011 is $1.2 million. Monies have not been allotted for this year.

Projects

1. Attended and participated in meetings regarding operations and studies of the Missouri River (MRAPS, MRRIC, MRERP). Wrote and submitted statement to the Corp of Engineers supporting irrigation development for the MRAPS.

2. Worked with Reclamation, Garrison Diversion Conservancy District, the State Water Commission, Turtle Lake Irrigation District and area producers to assist in the development of irrigation in the Turtle Lake area using water from the McClusky Canal.

3. Continued preliminary efforts to outline a plan for developing project type irrigation projects using water from the Missouri River.

4. Worked in conjunction with the Devils Lake and Upper Sheyenne Basin Joint Water Resource Boards in identifying areas for constructing water retention ponds for irrigation water supplies. This would serve the dual purpose of reducing flows into the Sheyenne River.

5. Participated in an on-site visit and discussion of pond irrigation and off-stream storage development for irrigation in northeastern North Dakota.

6. Worked with the Dickey-Sargent Irrigation District as needed regarding the Oakes Test Area water supply, infrastructure, and transfer of facilities.

Research

1. Supported research by the Green Vision Group to assess feasibility of using energy (sugar) beets for the production of ethanol.

2. Attended field days at the Carrington Research Extension Center and the Oakes Field Trials.

3. Participated in the NDSU potato research on-site demonstrations and discussions near Larimore and Forest River.

4. Observed and participated in a demonstration and discussion of drain installation west of Edmore. This site will be signed and monitored to demonstrate the effects of this installation.

5. Continued to support the start of a research and education program through NDSU Extension for identifying means of controlling the salinization of soils by natural processes and the effects of using marginal quality water for irrigation. The proposed program was included in the 2011-2013 Biennial Budget that will be considered in the upcoming legislative session.

Affordable Energy

1. Continued efforts to obtain and implement project pumping power for authorized projects under the Dakota Water Resources Act.

2. Met the Great Plains Regional Director and other Reclamation personnel to discuss options of obtaining project pumping power for authorized projects.

Communication and Coordination

1. Assisted in planning, and participated in irrigation workshops and tours. Irrigation workshops are being held in Bismarck on December 9, 2010, and Williston on December 15, 2010. Some of the tours sponsored by the Water Education Foundation and the Ag Open near Williston were participated in and attended.

2. Participated in monthly telephone conference calls with personnel involved in irrigation in the state including NDIA, NDSU Extension, State Water Commission, and Reclamation.

3. Prepared articles for the Irrigation Frontier section of the *North Dakota Water* magazine.

4. Provided information to irrigators, potential irrigators, and others on request and as appropriate to address issues related to irrigation.

5. Prepared two newsletters and two news notes in 2010 and sent to NDIA membership and others.

6. Attended and presented NDIA activities reports to GDCD's Ag and Natural Resources Committee meetings and provided other information as appropriate.

7. A major revision of a web site for NDIA was made and launched in November. The web address is: <http:ndwater.com/Irrigation.htm> It is case sensitive.

8. Continue efforts to expand the membership of the NDIA.

COMPREHENSIVE STRATEGIC PLAN FOR IRRIGATION IN NORTH DAKOTA

INTRODUCTION

North Dakota's economy, population, and vitality can be greatly enhanced with the development of a viable and expanded irrigation industry. Through the years, efforts have been made to increase irrigation development with some success. Currently there are approximately 255,000 acres developed for irrigation in the state. However, a more united and proactive approach is needed to increase the irrigated acreage. North Dakota lags far behind the 17 western states in irrigation development, all of which lack rainfall to consistently produce high-value and other crops.

Since the 1970s, the largest expansion of irrigated acreage took place when markets were available to make irrigation development profitable. In the mid-1970s the price of conventional crops increased substantially allowing the investment in irrigation to enhance yields and make irrigation economically viable. Beginning in about 1989, the french fry potato industry was expanding and the drought during that period caused a major potato processor to require irrigation for the production of a consistently high-quality product. Because of the crop rotation and soil requirements for potatoes and the potential for high profits, many thousands of acres were developed for irrigation to serve the needs of the plant. Again, in the mid-1990s a new french fry plant was constructed in Jamestown, which required the production from approximately 16,000 acres annually. This, too, resulted in the development of many thousands of new irrigated acres. Markets were the key factor in those major expansions.

North Dakota has the water and land resources and climate to produce many crops under irrigation. Irrigation in many of the other western states is quite mature and in some instances the water once used for irrigation is going to other purposes and irrigated acreage is being retired for urban, municipal and industrial development. Processors and producers alike are looking at new areas where water and suitable land are available to develop irrigation to efficiently grow the crops to meet the food and fiber needs of the U.S. and the world. Recently, that has also included crops from which biofuels are produced.

To develop new irrigation, it is necessary to have long-term markets for the crops produced at a price that can repay the initial investment in irrigation and make a profit. The continued markets for potatoes, irrigated malt barley, the local market for corn through ethanol plants, a fledgling vegetable industry, and the market for identity preserved crops, are either growing or poised for growth. They provide an excellent foundation on which to build. Irrigation development is a priority component of the economic initiative in North Dakota.

Producers, communities, and processors must undertake a comprehensive and united effort to successfully take advantage of the opportunities irrigation offers. Requirements for new and successful irrigation development include favorable financing programs,

irrigation research, strategic planning, water permits, favorable energy rates, good and genuine communication, and dependable markets. Irrigation development will take place more efficiently and timely, with a united voice advocating those interests.
Attention is being given to North Dakota for new opportunities to produce crops under irrigation and add value to them because of the availability of untapped land and water resources. The french fry potato market is experiencing positive returns and that may create an opportunity for a new processing plant. Projects such as the onion/vegetable plant at Dawson are underway on a limited scale and they have the potential for growth, particularly with the transportation advantage North Dakota has over western producers to eastern markets. The preserved identity of certain crops used for human consumption is an expanding opportunity that requires consistent quality and quantity. Irrigated agriculture production will have a role in supporting that market.

Achieving optimum irrigation development in the state will require a comprehensive and united effort by all groups and individuals involved in irrigated agriculture. This Comprehensive Strategic Plan for Irrigation in North Dakota as discussed below will require cooperative and proactive efforts by all partners involved in irrigation, including individual irrigators, potential irrigators, irrigation districts, North Dakota State University, the State Water Commission, Garrison Diversion Conservancy District, North Dakota Irrigation Association, federal and state agencies, economic development groups, dealerships, processors, and others.

This Comprehensive Strategic Plan for Irrigation in North Dakota has six components (see below), which outline the specific areas of need and the actions to accomplish irrigation development within the state and to accomplish its mission which is **"to strengthen and expand irrigation to build and diversify North Dakota's economy."** Putting united efforts into these categories and making the results available to interested parties will enhance the basis for carrying out this mission.

1) Marketing
2) Funding and Financing
3) Projects
4) Research
5) Affordable Energy
6) Communication and Coordination

I. MARKETING

A. Goal: Identify and implement ways to develop feasible and long-term markets for irrigated crops in North Dakota.

One critical objective is to foster the development and sustainability of feasible markets for irrigated and potentially irrigable crops, which generally includes barley, corn, beans, some hay crops, potatoes, onions, carrots, sugar beets and others. These crops can and have been grown successfully, but developing sustainable, feasible, and timely markets has many challenges to overcome, especially for some of the high-

value crops such as onions and carrots. Identifying the areas of need and market development priorities for irrigated crops will continue to be an important work aspect.

Farmers markets are becoming an increasingly popular way to market locally grown produce. Following a national trend, the number of farmers markets has more than doubled over the past decade, and North Dakota has followed suit, adding five new markets in the past two years, bringing the total number of farmers markets to 53. The reason for this increase is because of the major increase in the demand for locally grown products. Some of the benefits of farmers markets include face-to-face interaction between the producer and customer, producers are able to charge a premium for their product because there is no middle man involved, they allow residents of small towns to buy fresh produce, they keep money in and bring growth to local communities, and they provide added income for rural families.

In regard to mass marketing of high-value and traditional crops, the partners will continue to work with Busch Agricultural Resources, Cargill Malt, Red Trail Energy, Blue Flint Ethanol, and other industry representatives to encourage and support irrigation and market development for barley and corn. Higher-quality crops can be more consistently grown with proper irrigation practices. The support of premium prices for irrigated crops along with providing educational and other materials showing the best methods and advantages of irrigating crops in North Dakota will be continued and emphasized.

Other opportunities such as the development of an alfalfa seed industry with Forage Genetics International and a potato processing plant in northwestern North Dakota will be pursued. Preliminary meetings on these potential projects were attended during 2007.

The partners have and will work closely with the Commercial Vegetables Growers and/or other similar groups to support funding for studies and continue to work with individuals and industry representatives to develop vegetable production, processing, and marketing for high-value vegetable crops.

Education is an important aspect of irrigating crops. Consequently, appropriate partners work together in writing and publishing brochures on producing corn and malt barley and other crops and activities, as well as publishing newsletters and magazine articles. In addition, cooperative efforts are used in planning and conducting irrigation workshops for irrigators and potential irrigators in the state.

Cooperative work is ongoing with state agencies, irrigation dealers, individuals and others involved in irrigation to strengthen and expand irrigation and to build and diversify our state's economy.

The following identifies completed items and work that is being actively pursued and implemented to accomplish the irrigation mission in North Dakota.

B. Completed Work

1. Met with a group conducting a feasibility study to locate a potato processing plant in northwestern North Dakota. Information was provided on irrigation opportunities to support a potential plant.

2. Met with representatives of Forage Genetics International, a company that processes and markets alfalfa seed. The company wishes to contract a substantial number of irrigated acres of alfalfa for seed production in western North Dakota, which would be generally west of U. S. Highway 83.

3. Worked with and attended numerous meetings with the Commercial Vegetables Growers to help develop the high-value crop industry, particularly onions and carrots, in North Dakota. Secured a grant from APUC and assisted in the funding for a carrot study in North Dakota. Cooperated with NDSU and the SWC in developing and following a coordinated industry plan for high-value crop development.

4. Met with industry representatives, producers, technical, and other representatives to pursue the development of the onion packing operation in Oakes.

5. Met with governor's representative and Department of Commerce personnel to discuss and determine appropriate actions for high-value crop development, financing, and marketing in North Dakota.

6. Contacted representatives of Busch Agricultural Resources and Cargill Malt to discuss issues related to the production of malt barley under irrigation.

7. Met with representatives of the ethanol industry to support irrigation of corn.

8. Revise and distribute updated "Irrigated Malt Barley Production" grower guide.

C. Ongoing Work (2008)

1. Provide information to growers through workshops, newsletters, and individual contact and correspondence.

2. Meet with processing facility representatives.

3. Develop new and keep existing educational materials up-to-date.

4. Provide assistance to individuals and groups for developing high-value and other irrigated crops in North Dakota.

5. Support increases in the acreage and prices of irrigated malt barley, corn, and other high-value crops.

D. New Work (2009-2013)

1. Follow up with Forage Genetics International, to support efforts to establish the production of alfalfa seed under irrigation in western North Dakota.

2. Work with North Dakota Departments of Agriculture and Commerce to develop markets for irrigated crops.

3. Meet with ethanol, malt barley, vegetable and other crop industry representatives at least annually to support irrigation and price premium for these crops.

4. Determine interest in continuing the onion packing plant at Oakes and support as appropriate.

5. Follow up with group conducting a feasibility study to locate a potato processing plant in northwestern North Dakota.

6. Follow up with efforts to support the development of markets in the high value irrigated crops.

7. Support the development of Farmers Markets in North Dakota.

II. FUNDING AND FINANCING

A. Goal: Identify, support, enhance and develop financing programs to support new irrigation development and for the modification of existing irrigation systems.

Irrigation is one of the initiatives identified by the governor's office for economic development in North Dakota. On average, one acre of irrigation generates income that approximates that produced by approximately five acres of dryland before government payments. Substantially increasing irrigated acres would provide a large increase in the economic activity in rural North Dakota. Irrigation also allows more crop diversification, which can result in new opportunities for value-added processing. In many instances the cost of developing new irrigated acreage is at the limits of economic feasibility based on the returns for the crops to be produced. Having programs that enhance the terms of financing irrigation development provides greater assurance that it will be economically successful.

A brochure published by NDSU and NDIA entitled, "Funding Assistance Programs for Irrigation Development in North Dakota" presents financial incentives and opportunities for private irrigation and irrigation districts.

1. **AgPace Program** – The Bank of North Dakota (BND) AgPace Program is used extensively by persons developing new irrigation. Changes in the program during the past several years have enhanced its application. One of the more recent changes increased its use from one-time-only to once-per-biennium with a limit of three cycles to use the maximum interest buy-down. The maximum interest buy-down is $20,000 per cycle. After the first loan cycle, BND policy requires that the net worth of the borrower must be less than $1 million.

The State Water Commission (SWC) also makes funds available to the Bank of North Dakota for an additional $20,000 of interest buy-down for the first time borrower. This brings the total to $40,000. The State Water Commission funds are used when the loan structuring exceeds the initial $20,000 from the BND. The funds from the SWC are used subject to the standard policies of the BND. To date, this program has also been widely used.

The partners will confer periodically with representatives of the BND and the SWC to determine program effectiveness and the availability of funds. Because of the increased cost of development, consideration should be given to requesting an increase in the interest buy-down limit of $20,000 for the first time borrower. In addition, the SWC should be encouraged to make funds available to participate in the second and third cycle loans for a borrower, subject to BND policies.

2. **State Water Commission Cost Share** – The State Water Commission (SWC) will cost-share with an irrigation district the construction of the primary water supply infrastructure. The SWC may provide up to 40 percent cost share on the total cost of qualified infrastructure items associated with the principal capture and conveyance works, depending on the availability of funds. Intake structures, pumps, power units, pipeline, and power supplies are the primary items. On-farm costs such as pipeline and sprinkler systems are not eligible items.

3. **Natural Resources Conservation Service EQIP Program** – The Environmental Quality Incentives Program (EQIP) program is administered by the Natural Resource Conservation Service (NRCS). A component of the program is the enhancement of the water use efficiency of the irrigation method. In North Dakota, it is used extensively to increase the efficiency of the center pivot system by changing sprinkler nozzles and modifying the irrigation equipment from high pressure to low pressure.

Changing the method of irrigation from gravity or flood to sprinkler is becoming more common. The cost of the conversion is significantly higher than changing an existing sprinkler system to increase water efficiency. An increase in the cost per acre to support this concept was supported by NDIA and NDSU and

implemented. These conversions are occurring in the western part of the state on lands developed for flood irrigation in the 1920s through the 1950s. It has been a successful program that creates the opportunity to better manage the water applied, which increases the opportunity for greater crop diversification. The partners will continue to work closely with the NRCS to increase the allocation of funds for the irrigation portion of the program, along with monitoring relative to the availability and use of the funds, and the effectiveness of the program.

4. **Sales tax** – There is no sales tax on repair parts for qualifying farm equipment; however, on irrigation equipment repair parts, the sales tax is the standard rate of 5 percent. In the century code, irrigation equipment is identified separately from farm equipment. The result is a separation of the repair parts from other farm equipment and thus the different sales tax rate. This causes confusion for the irrigators and the equipment dealers and is unfair and inconsistent. The sales tax rate should be consistent with that for other qualifying farm equipment repair parts.

The partners will support or coordinate an effort to amend the North Dakota Century Code to exempt irrigation equipment repair parts from sales tax consistent with that on repair parts for other farm equipment. The process will be coordinated by the executive director of NDIA in conjunction with directors.

5. **Value-added** – Efforts are underway by a few producers to grow and market certain vegetables. The production of vegetables has a relatively high risk, but it also carries with it a correspondingly high profit potential. A vibrant vegetable industry usually includes processing, which provides employment opportunities. The potato industry is well established and proven in North Dakota. Other vegetables identified as having excellent potential to be grown in the state are carrots, onions and cabbage. All require irrigation to ensure high yields and quality.

The partners will work with interested parties and/or groups as opportunities occur to provide information and facilitate the development of innovative ways to foster the development of vegetable production in North Dakota. Favorable financing programs are an important component for fostering the initial stages of establishing the industry. Information relative to programs of the federal and state government, in conjunction with political subdivisions of the state, would be provided as a part of the effort.

B. Completed Work

1. Met with representatives of the State Water Commission and the Bank of North Dakota to determine the level of use and status of the AgPace Program as it relates to irrigation development. It is a regularly used program by those that qualify.

2. Worked with representatives of the fledgling onion industry to identify alternative financing opportunities for needed infrastructure. Those identified did not fit the needs of the principals.

3. Attended NRCS meeting on EQIP and monitored the activities as they pertain to irrigation. Supported an increase in the EQIP funding, which was granted; it is widely used to make an existing center pivot system more efficient and to convert gravity irrigated acreage to sprinkler. Supported the use of PAM for canal seepage reduction, which resulted in incentives.

C. Ongoing Work (2008)

1. Support or coordinate an effort to make the sales tax on irrigation equipment parts consistent with that on repair parts for other farm equipment.

2. Review the AgPace Program periodically to determine that it is effective and sufficient funds are available to meet the needs of the qualified applicants.

3. Review EQIP and attend meetings to determine that it is effective and that funding is sufficient to implement the qualified applications.

D. New Work (2009-2013)

1. Confer with representatives of the BND to increase the interest buy-down for each loan cycle of the AgPace Program in an effort to stay even with the increased cost of equipment and material. NDIA staff will initiate the discussion.

2. Make a request to the SWC to participate in the second and third loan cycle of the AgPace Program for the individual borrower. Having the program in place before processing opportunities occur would assist in attracting interest in developing new irrigated acres.

3. Continue to work closely with the NRCS (EQIP) to monitor, pursue, and support appropriate changes to enhance irrigation development.

4. Initiate and pursue an effort under the guidance of the NDIA executive director to make the sales tax on irrigation equipment parts consistent with that on repair parts for other farm equipment.

5. Work with interested parties or groups as needed to provide information to identify innovative ways to foster the development of vegetable production, financing and processing in the state.

6. Revise "Funding Assistance Programs for Irrigation Development in North Dakota" and distribute to users.

III. PROJECTS

A. Goal: Identify existing and potential irrigation activities and projects in the state which may enhance irrigation development and initiate needed actions and assist in bringing these projects to fruition.

There are numerous crops, projects and activities in North Dakota, which if implemented, can significantly increase the irrigated acreage and rural economic development. The strategic approach of the partners in developing and assisting irrigation projects is being approached from several fronts which are discussed below.

1. **Project Development** – There are several projects in North Dakota which have high potential for irrigation development. The NDIA, along with NDSU Extension Service, the SWC, Reclamation, NRCS and other involved agencies are working with project managers to assist them in developing irrigation in these areas.

In northeastern North Dakota, there is high interest in developing irrigation. Water supplies for irrigation are being developed by constructing and utilizing off-stream water holding ponds and capturing water during peak flow periods. Pumping from natural stream flows is also being used along with utilizing water from existing reservoirs. In addition, the feasibility of constructing new reservoirs is being evaluated.

As authorized by the Dakota Water Resources Act, water is available from the McClusky Canal to irrigate up to 13,700 acres in the Turtle Lake Irrigation District (TLID) in addition to 10,000 undesignated acres along the canal. Until recently, water has only been available through annual water service contracts. Partners and others have been working with the TLID and individual irrigators to make water available on a more consistent, long-term basis. Recently, Reclamation has made five-year water service contracts available to potential irrigators. Efforts are also being pursued to implement a long-term water contract between Reclamation and the TLID to provide irrigation water from the McClusky Canal on a more secure basis.

Several meetings have been held with the Big Bend Irrigation District board of directors and representatives from the Mercer County Water Resource District to assist in developing irrigation in those areas. Although some individual irrigation is occurring, no specific plans are presently in place for irrigation district development. The district has the advantage of obtaining water from the Missouri River below Garrison Dam. The feasibility study for the Big Bend Irrigation District identified approximately 48,000 acres as potentially irrigable from the Missouri River in Mercer and Oliver counties.

The Missouri River is the primary source of water in North Dakota from which substantial volumes of water are still available. To significantly increase irrigated acreage in the state, the Missouri River must be considered as the water source for a large portion of that acreage. In the 1970s, the Bureau of Reclamation and others conducted a reconnaissance study of the concept of diverting water from the McClusky Canal to irrigate lands in parts of Burleigh, Kidder and Emmons counties. Each county has significant acreage of irrigable land.

Large changes have occurred in the agricultural sector as a result of not only changing state and local conditions, but also changes on the national and international front. It is proposed that a preliminary review be made of the potential of diverting water from the Missouri River to irrigate lands in these counties. The entities that could conduct the review and the resources needed have not been identified. As an initial effort, NDIA personnel should research the records for information developed from previous studies. The next step would be making informal inquiries to the State Water Commission, Reclamation, county water resource districts, and local irrigation districts to discuss and determine interest in the concept.

2. **Native American Irrigation Activities** – Under the authorization of the Dakota Water Resources Act of 2000 the Secretary of the Interior is authorized to develop irrigation in the following project service areas within the boundaries of the Fort Berthold and Standing Rock Indian Reservations: Lucky Mound (7,700 acres) and Upper Six Mile Creek (7,500 acres), or such other lands at Fort Berthold of equal acreage as may be selected by the tribe and approved by the Secretary, and one or more locations within the Standing Rock Indian Reservation. No funds are authorized to be appropriated for construction of these projects until the Secretary has made a finding of irrigability of the land to receive water as required by law.

The Standing Rock Sioux Tribe will complete construction of the remaining 1,568 acres by expanding the existing Fort Yates unit by 180 acres, expanding the existing Eagle Unit (South Dakota) by 200 acres and by constructing the new Kenel Unit (South Dakota) to a level of 1,240 acres. These three undertakings will complete the authorized project.

At the present time, there are no plans to develop lands for irrigation on the Fort Berthold or the Spirit Lake Indian Reservations, although as noted above, a study has been completed to study the irrigation of lands on the Fort Berthold Reservation.

3. **Water Supply Development** – Consistent and adequate water supplies must be made available in areas which are presently being irrigated or have the potential to be feasible irrigation projects. For example, the Oakes Test Area operated by the Dickey-Sargent Irrigation District has a distribution system but does not have an adequate, consistent water supply for irrigation. The NDIA completed a study

that identified potential water sources for about 3,500 acres and will continue to work on this project with the Dickey-Sargent ID as needed. A more efficient distribution system is also needed for these lands.

The drought in the Missouri River basin has caused very low water levels in Lake Sakakawea and Lake Oahe, resulting in water being inaccessible to many adjacent irrigators. NDIA is participating in a study with Reclamation and the State Water Commission and others to identify feasible ways to develop pump stations that will function under high and low water conditions. Funding is needed to complete State Water Commission drilling work on this project. Consolidation of the pumping systems to improve overall efficiency will also be evaluated.

The SWC, NDSU, Bureau of Reclamation, NDIA and other entities will continue to research new and innovative techniques of obtaining, storing, and utilizing water from surface and groundwater sources and determining the feasibility of these methods.

4. **Irrigation Assistance** – Appropriate partners will continue to work with and assist irrigation districts relative to their organization, operation, management and financing needs in conjunction with the SWC. A list of active and inactive irrigation districts is available from the NDIA.

The partners will also continue to work with individual irrigators by providing information on request or on an ongoing basis through workshops, newsletters, magazines and other means. Communicating with suppliers and dealers to keep up-to-date on the latest technology will be done on an ongoing basis; this information will be disseminated to irrigators on request or through normal communication channels.

5. **Partnerships** – The partners will continue to seek partnerships with other entities, such as economic development organizations, which have the potential to foster irrigation development as a part of economic development.

6. **Horizontal Wells** – The construction of horizontal wells could have application for capturing water from selected aquifers for irrigation in North Dakota. As the availability of unappropriated water becomes more scarce, innovative means of capture from shallow aquifers with thin saturated thickness may be practical. Horizontal well construction technology was developed for the purpose of removing contamination in saturated zones beginning about 20 years ago. It has not been widely applied to capturing ground water for beneficial use.

To assess the practicability of using horizontal wells for capturing ground water for irrigation, the literature should be researched to identify its application in other parts of the United States and the world. This would provide information to reveal the types of applications, construction techniques, equipment requirements,

materials used, development processes, and perhaps the success of the well to accomplish its purpose. This would be largely a literature search along with contacts to people who have been involved in horizontal well construction. A report should be developed highlighting the major findings of the research that may be applicable to North Dakota. In addition, a bibliography of the relevant references must be presented in the report. Because the construction of horizontal wells is not wide-spread, it is suggested that engineering firms having experience in the field be sought to conduct the proposed research.

Parallel with or after the literature research, an inventory should be made of the aquifers in North Dakota where the hydrogeologic conditions may be favorable for the utilization of horizontal wells. The information is available from the North Dakota State Water Commission to make such an inventory. The results should report appropriately with supporting general maps.

7. **Water Permit Application Backlog** – The State Water Commission has a significant backlog of water permit applications, some of which have been held in abeyance for several years. The majority of the applications are requests to appropriate ground water for irrigation; however, some applications in backlog are for surface water. The applications are addressed in their order of priority dates for each respective source. In many instances a computer model is required to adequately address the statutory requirements that must be met before a conditional water permit can be issued. Even though substantial data is available for the aquifer, additional data may need to be collected to ensure the model adequately represents the hydrogeologic conditions of the aquifer. These procedures require significant time, often upwards of a year or more.

In 2007, the State Water Commission received 107 water permit applications, 40 of which were for irrigation. Applications requesting water for ethanol plants and water to serve oil field development dominated the remaining applications. Because of the time required to address pending irrigation applications and those for ethanol plants, the pending backlog continued to build.

As a short-term measure, Robert Shaver, director of the Water Appropriation Division of the State Water Commission, has indicated that he hopes to hire consultants to prepare the recommended decisions for selected applications. This would allow staff to work on applications that require more complex analysis.

Longer-term, additional staff is needed to reduce the water permit application backlog and continue to deal with the increasing and complex water appropriation and supply issues of the day. The process for preparing the Executive Budget for 2009 - 2011 will begin in about April or May 2008 and continue until it is submitted to the 2009 legislature in December. During the preparation of the budget, opportunity will likely be given to the agencies to submit optional adjustments for the budget, which may or may not become a part of the budget submitted to the legislature. If given the opportunity, the State Engineer will

submit a request for additional personnel for the Water Appropriation Division. The NDIA will support the budget preparation process and its consideration by the legislature by presenting information on the impact of the delay in addressing water permit applications on new irrigation development.

8. **Federal Legislation** – Legislation was introduced in the U.S. House of Representatives by Congressman James Oberstar of Minnesota to expand the definition of "water of the United States" in the Federal Water Pollution Control Act. The bill deletes the term "navigable" and provides a specific definition that virtually includes all interstate and intrastate waters. This bill, if passed, would give the federal government jurisdiction to review and approve applications for the appropriation of water for beneficial use in North Dakota. All sources of water would be affected, including ground water. This action would require that decisions by the State Engineer be reviewed and approved by the Corps of Engineers and likely the Environmental Protection Agency. The standards for the evaluation and determination would likely be defined by federal rules. This bill would usurp North Dakota's authority in making decisions concerning the proper management of its water resources and create unacceptable delays in the permitting process.

9. **Devils Lake Water Utilization Test Project** – The purpose of this project is to primarily assist in providing flood control in the Devils Lake Basin while also providing economic gain from increased crop production through irrigation. This test project consists of 10 sites each irrigated with a pivot irrigation system. Data will be collected related to water use, salinity, crop rotations, soils, economics, and other data to help determine the potential and benefits for additional development. In 2007, irrigation of these sites took place and data was collected for analysis by NDSU scientists. The partners will continue to monitor this project and assist as appropriate.

B. Completed Work

1. Met numerous times and worked with existing irrigation districts such as Horsehead, Big Bend and Turtle Lake and individuals to assist them in formation, organization, management, financing and irrigation development.

2. Met with existing and/or potential individual irrigators on request and provided assistance related to irrigation development.

3. Completed an assessment of the irrigation districts created for the Garrison Diversion Project to determine their present viability as districts and recommended future status and activities. This information is presented on a paper entitled, "Garrison Diversion Conservancy District (GDCD) Status of Irrigation Districts, October 2006," which was presented to the GDCD board.

4. The partners participated with TLID and others in several meetings to determine the best options to obtain irrigation water from the McClusky Canal on a long-term and efficient basis and followed up on actions that would help bring this to fruition. Reclamation now offers five-year water service contracts instead of annual contracts. Actions are pending to implement longer-term contracts.

5. Worked with Reclamation, SWC, and Horsehead Irrigation District to initiate and conduct a study to identify ways to access water for irrigation under variable water levels in Oahe Reservoir and to provide distribution efficiency in the district. The study is scheduled to be completed in 2008, although additional funding is needed.

6. Worked with and met with irrigators and potential irrigators in Pembina County to determine alternative and innovative methods to provide water supplies for irrigation and provided assistance in meeting the requirements of state and federal agencies.

7. Met with the board of directors of the Big Bend Irrigation District and Mercer County Water Resource District representatives regarding the addition of irrigable lands to the irrigation district.

8. Participated in a meeting of representatives of Mountrail County, Mountrail-Williams Rural Electric Co-op, NDSU Extension, state and federal agencies, North Dakota's Congressional delegation and others to discuss potential irrigation development in the Parshall area and ways to bring about that development.

9. Completed a preliminary water supply study for the Dickey-Sargent Irrigation District.

10. Planning studies by the Bureau of Reclamation for irrigation on the Fort Berthold Indian Reservation.

11. Emergency replacement of the intake for the Cannonball Unit following inundation of the newly constructed, original intake by 11 feet of sediment stemming from drawdown of Lake Oahe by the Corps of Engineers to historic low levels in the fall of 2003

12. Construction of the Cannonball Unit of the Standing Rock Irrigation Project to a level of 760 acres.

13. Construction of the Porcupine unit of the Standing Rock Irrigation Project to a level of 52 acres.

14. Completed a report which summarizes the completion of facilities on 1,568 acres remaining to be built in the 2,380-acre Standing Rock Indian Irrigation Project as authorized by the GDU Reformulation Act of 1986.

C. Ongoing Work (2008)

1. Continue to meet with existing and potential irrigation districts as needed to assist them in their operation, management, financing and efficiency.

2. Work with existing and potential irrigators to develop irrigation.

3. Work with Horsehead Irrigation District on its water supply, distribution and power issues.

4. Work with Pembina County irrigators on water supply development and implementation along with permit processing.

5. Continue to pursue long-term water supply contracts for irrigation from the McClusky Canal.

6. Assist in the development of new or inactive irrigation districts as needed.

7. Seek out partnerships with economic development entities and other organizations to enhance irrigation and economic development.

D. New Work (2009-2013)

1. Pursue options to implement irrigation from the McClusky Canal with long-term contracts. Seek funding sources to develop irrigation plan and construction.

2. NDIA, SWC, Horsehead Irrigation District, and the Bureau of Reclamation should continue to pursue studies to identify options for making irrigation water available from Lake Oahe under low and high water levels, along with the evaluation of the District's pumping and distribution systems. Pursue funding to complete SWC work on this project, including the acquisition/rental/use of a dredge.

3. Support the effort to determine the feasibility of pumping irrigation water through the use of horizontal wells. GDCD has submitted a work order to its engineering firm to perform preliminary work.

4. Work with appropriate SWC personnel to provide additional personnel and/or funding to expedite the preparation of recommended decisions on water permit applications for irrigation.

5. Monitor the status of the "Clean Water Restoration Act of 2007" H. R. 2421 (an expansion of the Federal Water Pollution Control Act) and oppose it as needed in the legislative process.

6. Work with Dickey-Sargent Irrigation District to determine potential water supplies and more efficient and economical water distribution methods for the Oakes Test Area.

7. Support the efforts for irrigation development in Pembina county.

8. Follow up on potential irrigation development in Mountrail County near Parshall.

9. Conduct research and review records to obtain available information on the feasibility and desire to divert water from the Missouri River into Burleigh, Emmons and Kidder counties for irrigation development.

10. Work with irrigation districts, groups, and individuals to promote irrigation as appropriate and requested.

11. Work with appropriate personnel to assist completion of irrigation work on Standing Rock Sioux lands and support and assist with other Native American irrigation work as appropriate.

IV. Research

A. Goal: Identify and assist in implementing research programs which will be most beneficial to irrigation development in North Dakota.

Managing our land and water resources to their fullest potential is the goal of the irrigator and the State of North Dakota for its citizens. The knowledge to manage these resources are best obtained through an effective and well thought out research program. It is critical that research related to irrigated agriculture in North Dakota be given a high priority. Management issues have become important in today's irrigation environment. Crop quality demands by food processors make proper water and chemical applications critical to meet quality guidelines. In addition producers must meet more stringent requirements in managing chemical, fertilizer, and fungicide application runoff throughout the growing year.

Historically high fuel prices and the goal of sustainable agricultural production mandates a research effort on reduced tillage. These systems must show economical viability while protecting our environment. The opportunities and needs related to bio-fuels are becoming a major factor in determining what crops are to be grown and ultimately their composition. There is a limited understanding of the effects of removing organic matter for this crop use will have on the long-term productivity of our land base. Factors such as carbon sequestration, soil quality, nutrient cycling and soil erosion must be addressed before this practice becomes widely adapted.

North Dakota State University has facilities for irrigation research in Carrington, Oakes, and Williston (Nesson). Research related to irrigation should receive a high

priority in areas such as outreach programs, nitrate and water management, energy issues, farm budgets, disease, sustainable agriculture, value added crops, dairies, processing, cropping practices (crop rotations, variety comparison, irrigation systems), and crop storage.

North Dakota producers must be able to compete at the regional, national and international level. The development of new management practices and technologies through vision and innovation are necessary. These practices and technologies must be tested to determine their adaptability and viability to all regions of the state; therefore, it is imperative that appropriate research be conducted on a high priority basis at each of the research sites in North Dakota for irrigated agriculture.

Following are brief summaries of the objectives for irrigation research at NDSU Research Centers located at Carrington, Oakes, Tappen, and Williston (Nesson). More detailed information can be obtained for these and other NDSU Research sites at http://www.ag.ndsu.edu.research.recenthp.htm.

1. Research Sites

a. Carrington Research Extension Center and Oakes Irrigation Research Site

Research at the Carrington site has been ongoing for over 45 years and at the Oakes site for more than 35 years, and has evolved to meet the current needs of irrigated agriculture.

Objectives: (2009-2013)

- Evaluate crop and crop cultivar performance under irrigated conditions.
- Develop, refine, and test cropping systems and agronomic practices for traditional and high value irrigated crops that result in efficient and economical crop production.
- Investigate tillage systems that produce optimum crop performance and are environmentally and economically sustainable.
- Review and refine crop fertility recommendations.
- Develop research projects and collaborations with private and public entities interested in irrigation development and pursue stated objectives.
- Identify and secure appropriate land base and associated infrastructure necessary to empower a sustained research program of ongoing and long-term projects.

b. Williston (Nesson site)

Development of this site began in about 2002 and research activities began in about 2004. The site has four 1260 foot self propelled linear move irrigation systems which have the capability to provide the latest technology in selective irrigation water and fertilizer application. Computerized controls tied to a GPS system with feedback from wireless sensor stations in the field determine the water and fertilizer requirements for site specific areas or plots. The controllers regulate application of water and fertilizer to each plot based on GPS position and soil, water, temperature and other feedback. These systems are particularly useful for research because of their ability to precisely apply water to any area of a field to exactly match the needs of specific crops and conditions.

These research facilities were funded by numerous state, county, city, federal, REC, and other public and industry cooperators.

Objectives (2009-2013)

- Conduct and support research related to irrigated malt barley, sugarbeet expansion, potato production, storage facilities, value-added alfalfa production, expanded dry bean production, expanded irrigated durum production, feedlots, dairies, expanded irrigated agriculture, and expanding new food processing and industrial plants in ND.
- Develop irrigated enterprise budgets and improve evaporation/transpiration crop curves for irrigation scheduling to assist irrigation producers in improvement of their irrigation management of water and nutrients to increase income and profitability on a sustainable basis.
- Compare crop responses and water quality relative to the use of water from Lake Sakakawea and the Hofflund Aquifer.
- Provide information in evaluating the effect of specific crop management programs in transition from dryland to irrigated agriculture.
- Develop a multi-agency, multi-state research and development project.
- Assess the environmental impacts of improved management of water, nutrient, chemical applications, and cultural practices in irrigated cropping systems.
- Examine the interaction between irrigation methods and crop rotations and evaluate the effects of crop rotations and tillage on crop yields and quality, and nutrient and water movement.
- Development of alternative cropping systems and a nutrient and pest management plan for irrigable lands.
- Development of water and cultural management strategies for optimal production and water use efficiency of high value crops production and water quality.

- Improvement of the agronomic, and environmental qualities of irrigated row crop production in coarse-textured, well-drained soils by modifying nitrogen management practices, irrigated management practices, and planting configurations.
- Compile enterprise budgets to assist producers in making production decisions.

c. **Tappen site**

The Northern Plains Potato Growers Association maintains a research station two miles east of Tappen on which irrigated potato production trials are being conducted. Many of the trials are carried out by researchers from NDSU.

1. **Identification of Critical Research Needs and Funding** – Research projects in the state will be identified and prioritized by working with the NDIA, NDSU Extension personnel, irrigators, GDCD Agriculture and Natural Resources Committee, SBARE, producers and others. Funding support for these projects will be supported and pursued by the partners.

A diversity of agronomic and horticulture crops can be grown in North Dakota. A comprehensive research effort is needed to support existing crops and new alternative crop acreage and to provide the information necessary to expand the utilization of crops within the cropping systems of North Dakota. Crop breeding systems have advanced at an almost exponential rate in recent years which increases the urgency of unbiased testing that is specific to different regions of the state. Additionally, recent research has substantiated the belief that performance of crop cultivars is influenced by production systems within specific eco-systems. These production systems may be defined by irrigation versus dryland or the contrasts of tillage systems. Testing the latest germplasm and getting that information into the producers' hands in a timely fashion is a high priority.

2. **High Water Tables/Salinity** – Controlling high water tables and salinity is a significant problem on irrigated land. The need for research on irrigated land has a high priority because of the higher investment, especially for high-value crops. The partners support this research and a proposal has been presented to SBARE in support of research in this area. Additional data should be obtained to further quantify impacts.

3. **Soil and Water Quality Relationships** – Marginal quality water is being used on conditionally irrigable soils by a significant number of irrigators. North Dakota has a significant acreage of conditionally irrigable soils overlying aquifers with marginal quality water. Research is needed to identify the effects of the use of marginal quality of water on the yield of the crops produced, to identify irrigation practices to minimize the effects of the marginal quality water on the crops, and on the soils being irrigated. This should be considered a matter of priority and

presented to SBARE for support.

4. **Distribution of Research Results** – Results from studies will be published in professional journals, popular press, extension releases and annual reports, posted on the NDSU Website, and presented at meetings field days and tours. On-farm research and demonstration projects will continue to held. The outreach effort will stress resource and guidance that personnel of the project provide. Researchers involved with a project will be speakers at subject matter workshops throughout the year and provide counsel to growers via telephone and personal visits.

The partners will assist when possible in the distribution of research results to the irrigators and other users in a timely and useable manner through newsletters, *North Dakota Water* magazine and other means. Follow up to obtain feedback on research results relative to their benefits, use, and application will also be made.

B. Completed Work

1. Attended GDCD Agriculture and Natural Resources Committee meetings which, among other items, relate to discussions and input, including funding, on irrigated agriculture research performed by the NDSU Experiment Stations.

2. Met periodically with representatives of the research stations to discuss and provide input and support for funding for needed research related to irrigated agriculture.

3. Attended an SBARE meeting on November 8, 2007, and made a presentation to solicit support and funding for research related to controlling high water tables and salinity on irrigated lands.

4. Wrote articles in the *North Dakota Water* magazine and newsletters supporting research for irrigated agriculture.

C. Ongoing Work (2008)

1. Attend GDCD Agriculture and Natural Resources Committee meetings and discuss and identify research needs related to irrigated agriculture.

2. Meet or communicate periodically with NDSU Extension personnel to identify research and other irrigated agriculture needs in the state. Specific research will be prioritized and the level of financing estimated along with the implementation procedures.

3. Attend SBARE meetings as needed to support irrigated agriculture research priorities.

4. Publish articles in the *North Dakota Water* magazine and newsletters in support of irrigation research.

5. Support research for irrigation during the state legislative sessions.

D. New Work (2009-2013)

1. Work with research personnel and others to identify and prioritize research work in the state as identified under IV. A. a. and b. above, and support and pursue management support for funding and implementation.

2. Disseminate and/or assure that irrigation research results are disseminated to appropriate personnel and entities in a timely and complete manner.

3. Obtain and provide additional information to SBARE to support the water table/salinity research for irrigation.

4. Develop a proposal for research on the use of marginal chemical quality water on various types of soils to determine effects on the soil and crop yield for presentation to SBARE.

5. Pursue participation of research facility managers in North Dakota (or their representatives) in the NDIA monthly irrigation conference call.

V. Affordable Energy (project pumping power rates)

A. Goal: Implement "project pumping power" for irrigation of about 56,000 acres of land in the Missouri River Basin as authorized under the Dakota Water Resources Act and for other lands in North Dakota as authorized by the Flood Control Act of 1944.

North Dakota gave up 550,000 acres of land as part of the Pick-Sloan Missouri Basin Program (PSMRP), which, among other things, authorized the construction of five major dams on the Missouri River (Fort Pack Dam has previously been constructed). The PSMRP also authorized the irrigation of more than 1 million acres of land in North Dakota which never materialized. The generators in these dams, however, produce large amounts of hydropower which is mostly used in other states.

The PSMRP authorized irrigation of the Garrison Diversion Project along with the use of hydropower for pumping of project water. The Act of 1965, authorized the irrigation of 250,000 acres; however, it was eventually replaced by the Reformulation Act of 1986 and the Dakota Water Resources Act of 2000 which authorized no irrigation construction but authorized the use of **project pumping power rates** for certain projects (about 28,000 acres) and 28,000 undesignated acres in the Missouri River basin, exclusive of the James River basin.

While it is recognized that the long-promised irrigation from the Garrison Diversion project will not be realized in the foreseeable future; favorable power rates/benefits should be provided for irrigation development in the state in the form of project pumping or preference power rates as authorized initially under the Pick-Sloan Act and reauthorized for certain lands under DWRA.

Efforts have been ongoing since about 2000 to obtain project pumping power rates for irrigation as authorized under the DWRA; however, all efforts have been unfruitful to date due to various problems. Since these project pumping power rates could have a significant effect on increasing irrigation development in North Dakota this issue is a high priority and will be pursued along with other related issues.

Access to power and power rates for irrigation is also a problem in many areas. While it is difficult to satisfy all individual needs, efforts should be made to alleviate these problems as much as possible.

1. **Project Pumping Power** – All efforts will be made to implement project pumping power rates as authorized under DWRA by working with state RECs, Reclamation, irrigation districts, Congressional delegation, and others.

2. **Alternative Power Sources** – There are various power sources for running irrigation systems including electric, wind, diesel, and perhaps others, most of which are becoming quite expensive. It would be helpful to the irrigator to be aware of these costs in a timely manner in order to choose the best option(s) for their conditions. This information will be compiled as necessary and distributed to irrigators and potential irrigators.

B. Completed Work

1. Pursued the implementation of project pumping power rates during the past four to five years as authorized in the Dakota Water Resources Act by meeting and working with Reclamation, Horsehead Irrigation District, RECs, GDCD, legislative personnel, and others involved in this long, tedious process. This remains an ongoing goal of NDIA.

2. Worked with representatives of the Upper Missouri Water Association to obtain project pumping power rates for irrigation as authorized by the Flood Control Act of 1944 (Pick-Sloan Act).

3. Met with the REC representatives to discuss and seek support for implementing Project pumping power as authorized under DWRA. Followed up with agreed upon correspondence.

C. Ongoing Work (2008)

1. Pursue project pumping power rate implementation with the Upper Missouri Water Association as authorized by the Dakota Water Resources Act.

2. Work with the RECs in the Missouri River basin to seek their support of project pumping power rates for irrigation.

D. New Work (2009-2013)

1. Work with North Dakota RECs and others to implement the power provisions of the DWRA and in providing reasonable access to power for irrigation.

2. Work on the Upper Missouri Water Association Committee as assigned, which represents Montana, North Dakota, South Dakota, and Wyoming, to obtain project pumping power rates as authorized under the Pick-Sloan (Flood Control Act of 1944). Write paper to discuss issues and impacts and pursue implementation of this power.

3. Develop information on alternative power sources for irrigation and develop a database to provide energy costs to irrigators.

VI. COMMUNICATION AND COORDINATION

A. Goal: Provide information from the first five work elements in this plan to existing and potential irrigators, and other interested persons.

Providing information on questions, issues, and problems related to irrigation is an essential function of the partners. To realize benefits from the first five work elements, the outcome must be conveyed to the irrigation community. The flow and exchange of information is the only way an efficient and effective process can be established and maintained to expand and strengthen irrigation in North Dakota. In many ways the NDIA serves in the role of facilitator to the irrigation industry. This process is accomplished in a variety of ways.

1. **Supporters** – Excellent working relationships have been established with many government agencies, other organizations, and individuals having an interest in irrigation. They include the NDIA, U. S. Bureau of Reclamation, NRCS, NDSU Extension Service, North Dakota Governor's Office, State Water Commission, Garrison Diversion Conservancy District, Missouri Slope Irrigation Development Association, Commercial Vegetable Growers of North Dakota, irrigation districts, irrigation equipment dealers, businesses, financial institutions, and individual irrigators. Communicating periodically with people involved in the organizations as well as the irrigators helps provide a more united effort to better understand the questions and issues faced by those operating the industry.

Each month, a conference call takes place between five NDSU Extension

personnel, and one person each from the State Water Commission, Bureau of Reclamation, NRCS and three people from NDIA. Each reports on their irrigation- related activities for the previous month and answers questions. Through this call, activities are coordinated and everyone is brought up to date on the events of the previous month. A summary of the reports is prepared and provided to each of the participants as well as to anyone who could not participate in the call.

2. **Workshops** – Irrigation workshops are held annually in about three to five locations in the state depending on the important issues of the day and the local interest. These workshops are an effective way of providing information on many topics important to successful irrigation. Typically, the talks at workshops present information on the latest research on certain irrigated crops, irrigation water management, equipment technology, soils, irrigated crop budgets, and water rights issues, to name a few. Each August or September, representatives from NDSU Extension, NDIA and others meet to plan the workshops to be held that fall and early winter to prepare a list of topics on which information should be presented and decide on tentative locations.

The Irrigation Expo is held in conjunction with the annual North Dakota Water convention, which takes place in early December in Bismarck. A day-long irrigation workshop sponsored by NDSU Extension Service is held during the convention. In addition, irrigation equipment suppliers, water agencies, engineering firms, and agricultural suppliers have booths at which representatives are available to provide information. This gives those with irrigation interests an opportunity to obtain information, exchange ideas and coordinate activities.

3. **Publications** – Information must also be disseminated through the print media. A two-page article pertaining to a timely topic on irrigation is published in the "Irrigation Frontier" section of the *North Dakota Water* magazine. One or two newsletters are prepared during the winter months, when the NDSU Extension Service's publication "Water Spouts" is not published. They convey information on activities and events that are of interest to the irrigation community.

Perhaps there are topics that are not being discussed that should be. Therefore, it is suggested that the irrigation community be encouraged to provide information or ideas on topics they believe would be useful to irrigators.

4. **Membership** – In 2007, NDIA had 125 members. There are several hundred irrigators in North Dakota and many businesses who are not members of NDIA. Efforts must be increased to solicit their membership. A plan should be prepared for proceeding with the membership drive that identifies the approach and means of reaching out to prospective members. It is suggested that board members assist in the solicitation of new members in their respective home areas. It is the board's goal to increase membership by 28 percent in 2008.

5. **Website** – The internet also provides a means of making information on irrigation widely accessible through the personal computer. NDIA is a part of the website for the North Dakota Water Users Association. It could be expanded to include more information about the irrigation partners, irrigation in North Dakota, and links to other websites having information of interest to the irrigation community. A plan should be developed for the website to outline the type of information to be presented, the format, links to other websites, and for the maintenance of the site. In addition a budget and a procedure for developing the website must be prepared.

6. **Outreach and education** – Staff of the NDIA and various partners participates in water tours and NDSU research station field days when the program is related to irrigation. The tours associated with the North Dakota Water Education Foundation are often attended because water is the common theme. In addition, some organizations periodically hold tours to view irrigation facilities in North Dakota.

7. **Tours**—Various water tours are conducted by the North Dakota Water Education Foundation which relate to water resources and at times to irrigation. NDIA representatives and other partners participate in these tours as appropriate to assist in education of the public on these issues.

B. **Completed Work**

1. Assisted in planning, attended, and participated in workshops that emphasized high-value and other irrigated crops in Bismarck, Beulah, Sidney, Mont., Williston, Carrington, and Park River. Also attended numerous other workshops, seminars and activities which, dealt with high-value crops development, financing and marketing.

2. Met with representatives and toured facilities of the malt barley, ethanol, alfalfa, onion and other industries to become acquainted with these industries and support price premiums and irrigation for those crops.

3. Participated in monthly conference calls between staff members of NDSU Extension Service, NRCS, Bureau of Reclamation, and the State Water Commission.

4. Sent letters and information to approximately 200 irrigators inviting them to become members of NDIA.

5. Prepared 10 articles for the "Irrigation Frontier" section of the *North Dakota Water* magazine, covering a variety of topics relevant to irrigation in North Dakota and prepared two newsletters to irrigators in January and March 2007.

6. Participated in North Dakota Water Education Foundation tours to discuss irrigation and other water resource issues with tour participants.

7. Prepared and published, in cooperation with NDSU Extension Service, grower guides for enhancing irrigation development in North Dakota. These included grower and irrigation management guides for corn and malt barley and guidelines and benefits for irrigation district development and irrigation financing.

8. Participated in the 2007 Ag Open, which showcases the Mon-Dak region. Included in the two-day event were seminars on relevant issues that affect irrigation and tours of various facilities and irrigation enterprises in the region.

9. NDIA, North Dakota Water Users Association, NDSU Extension Service and Missouri Slope Irrigation Development Association jointly sponsored the North Dakota Irrigation Expo. The two-day event is held in conjunction with the annual North Dakota Water Convention in Bismarck.

C. Ongoing Work (2008)

1. Prepare 10 articles for the "Irrigation Frontier" section of the *North Dakota Water* magazine.

2. Prepare the winter newsletter(s).

3. Participate in the monthly conference calls with representatives of NDSU Extension Service, NRCS, Bureau of Reclamation, and the State Water Commission.

4. Participate in workshops, tours, and meetings relevant to irrigation.

5. Respond to requests for information from irrigators, potential irrigators, and others as needed.

6. Attend meetings of the State Water Commission and Garrison Conservancy District board of directors as needed.

D. New Work (2009-2013)

1. Increase the membership of the NDIA by at least 25 percent by the end of 2009 and at least 5 percent in subsequent years through 2013 to gain more statewide support for irrigation development. Develop a plan to accomplish this in consultation with the board of directors or committee thereof. The plan should identify the methods and approach for soliciting new members.

2. In cooperation with NDSU, GDCD, the State Water Commission and others, develop a coordinated and comprehensive strategic plan to provide direction and

guidance for irrigation development in North Dakota.

3. Assist in planning and participating in three or more irrigation workshops annually along with participating in tours, meetings, and other activities to promote irrigation in North Dakota.

4. Solicit topics for "Irrigation Frontier" articles from the irrigation community and provide information as needed.

5. Develop a website for NDIA as described above.

6. Work with members of the North Dakota Legislature and/or other appropriate personnel in support of legislative issues related to improved irrigation practices and development.

7. Evaluate annually the need for new brochures and/or the revision of existing ones.

8. Attend and participate in Water Education Foundation tours as appropriate and the annual Ag Open which features the Mon-Dak region.

9. Sponsor the North Dakota Irrigation Expo in cooperation with NDWU, NDSU Extension Service and the Missouri Slope Development Association held in conjunction with the annual ND Water Convention in Bismarck.

SUMMARY

North Dakota has the least irrigated acreage of the 17 western contiguous states yet has high potential to develop this important agricultural resource. Research has shown that many high-value crops as well as traditional crops can be irrigated on a feasible basis in the state. On average, one acre of irrigated crop generates income that approximates that produced by about five acres of dryland before government payments. A more united and proactive approach is needed to develop more irrigation in the state.

The purpose of this document is to provide a one-source document to include and promote all irrigation activities and opportunities in North Dakota so that individuals and groups involved in irrigation will be aware of and work towards a common goal of achieving optimum benefits. This will be a "living" document in that it will evolve as conditions, opportunities, technologies and other aspects of irrigation change. As such, changes will be made in this document on a periodic basis as needed.

The partners in this endeavor are individuals who are or would like to become involved in irrigation. They include: individual irrigators, potential irrigators, irrigation districts, North Dakota State University, the State Water Commission, Garrison Diversion Conservancy District, North Dakota Irrigation Association, federal and state agencies, economic development groups, dealerships, processors, and others. The North Dakota

Irrigation Association will facilitate a proactive approach to promoting irrigation and economic development in the state by providing avenues of open communication among these groups, providing general awareness of activities, promoting new technologies, and encouraging cooperation on a united front.

North Dakota Irrigation Association
2011 Work Plan – Priority Items

Marketing

1. Continue to work with the Green Vision Group in developing energy beets as a biofuel. A member of the NDIA staff is on the Energy Beet Project Advisory Council.
Timeline: Ongoing as needed.

2. Assist individuals and groups in developing high-value irrigated crops and related processing.
Timeline: Ongoing as needed

3. Continue to communicate with groups, agencies, individuals, and companies to discuss and identify mutual areas of work and provide information.
Timeline: Ongoing as needed.

4. Continue to support the group working to establish a potato plant in northwestern North Dakota.
Timeline: Ongoing as needed.

5. Develop new and maintain up-to-date educational materials.
Timeline: Ongoing

Funding and Finance

1. Continue to work closely with NRCS on the Agricultural Water Enhancement Program to develop criteria and procedures for innovative projects and work with producers to secure funding. Work with NRCS to extend the agreement, including financing and innovative activities
Timeline: Ongoing

2. Monitor the AgPace program funding level with the Bank of North Dakota and submit a request to the State Water Commission for additional funds when appropriate.
Timeline: Ongoing

Projects

1. Support and work with entities involved in the development of irrigation using water from the McClusky Canal under the authority of the DWRA.
Timeline: Ongoing

2. Support and work with entities in developing new irrigated acreage utilizing water from the Missouri River.
Timeline: Ongoing

3. Continue to work with irrigators and potential irrigators in developing water supplies utilizing off-stream storage and other innovative means.
Timeline: Ongoing

4. Work with the Upper Sheyenne River Joint Board to develop water storage opportunities to relieve flooding and provide water supplies for irrigation.

Timeline: Ongoing

5. Work with the Dickey-Sargent Irrigation Distict regarding the Oakes Test Area water supply, infrastructure needs, and transfer of facilities.
Timeline: Ongoing

6. Monitor legislative issues on the national and state level which affect irrigation and potential for new development.
Timeline: Ongoing

7. Attend and participate in meetings related to Missouri River management and development to address issues affecting irrigation in North Dakota.
Timeline: Ongoing

Research

1. Work with irrigators, irrigation advisors, equipment dealers, research managers, and others to identify needed irrigation research, potential benefits, funding sources, and personnel requirements.
Timeline: Ongoing

2. Support the proposed saline soil management and research initiative by North State University, which is a part of the proposed budget to be considered by the 2011 Legislature.
Timeline: Legislative Session and ongoing.

3. Assist in the dissemination of irrigation research results to the irrigation industry.
Timeline: Ongoing

Energy

1. Work with Reclamation, Upper Missouri Water Associations, irrigation districts, and others to implement the project pumping power provisions of the DWRA.
Timeline: Ongoing

2. Develop and distribute cost data on alternative power sources for irrigation as needed.
Timeline: Ongoing

Communication

1. Continue the effort to increase NDIA membership through direct communication with potential members and describe accomplishments, ongoing work, and resulting benefits to irrigation.
Timeline: Ongoing

2. Continue to improve the NDIA website as additional opportunities are identified.
Timeline: Ongoing

3. Provide irrigation-related information to producers and irrigation entities as needed or requested through workshops, newsletters, Irrigation Frontier in *North Dakota Water*, and individual communication to strengthen existing irrigation and foster new development.
Timeline: Ongoing

4. Attend quarterly and other meetings of the GDCD Agricultural and Natural Resources Committee and board meetings as needed.
Timeline: As scheduled

5. Work with NDSU Extension, GDCD, State Water Commission, and other partners in implementing the NDIA Strategic Plan for Irrigation in North Dakota.
Timeline: Ongoing

6. Continue to participate in workshops, tours, and meetings relevant to irrigation and other water resource related activities in North Dakota.
Timeline: Ongoing

7. Participate in the monthly telephone conference calls with NDSU Extension, State Water Commission, Reclamation, and NDIA to discuss irrigation issues of mutual interest and benefit.
Timeline: Ongoing

North Dakota State Water Commission

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Agenda F 3)

MEMORANDUM

TO: Governor Jack Dalrymple
State Water Commission Members

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

DATE: June 10, 2011

SUBJECT: Red River Basin Commission (RRBC) funding for the 2011-2013 biennium.

The RRBC has requested continued funding assistance in the amount of $200,000 for the 2011-2013 biennium. This will provide base funding support from the State Water Commission with payments provided on a semi-annual basis – contingent upon their progress. The funding will support activities outlined in the attached RRBC May 6, 2011, letter.

The RRBC's 41-member board of directors represents a broad cross section of local and state/provincial governments and other interests. The SWC has helped fund the RRBC and its predecessor, the Red River Basin Board for a number of years. Minnesota, Manitoba, and local governments in the three major jurisdictions have done likewise.

I recommend the Commission approve funding the RRBC's proposal in the amount not to exceed $200,000 from the funds appropriated to the State Water Commission for the 2011-2013 biennium. Funding of this project shall be contingent upon the availability of funds.

TS:lk:pf/AOC/RRBC

Red River Basin Commission

Manitoba • Minnesota • North Dakota • South Dakota

Moorhead Office: 119 5th St. S. • PO Box 66 • Moorhead, MN 56561-0066
Phone 218-291-0422 • FAX 218-291-0438 • staff@redriverbasincommission.org

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Phone 204-982-7250 • FAX 204-982-7255 • staff@redriverbasincommission.org

www.redriverbasincommission.org

May 6, 2011

Todd Sando, State Engineer
ND State Water Commission
900 E. Blvd
Bismarck, ND 58505

Dear Mr. Sando:

The work and activities of the Red River Basin Commission (RRBC) are producing results in helping create a basin vision for the future. The Red River Basin (RRB) Natural Resource Framework Plan's (NRFP) 13 Goals are the cornerstone of this vision.

RRBC is uniquely positioned to promote and is working on key basin-wide activities related to: basin drought initiative, Long Term Flood Solutions, mainstem modeling and flow reduction goals, basin water quality initiative, conservation-land use issues, public support and jurisdictional dialogue.

We are requesting the 2011/2013 (the biennium) base funding support from the State Water Commission (SWC) and that the payments be made on a semi-annual basis as follows: December 31, 2011; June 30, 2012; December 31, 2012; and June 30, 2013. We are also requesting that the base funding be related to the following areas of RRBC activities:

- The first area continues to be related to the NRFP. This effort will be guided by the basin outreach strategy that continues to present the NRFP to the public and leadership on all levels. Buy-in to the NRFP through the "Resolution of Support" continues through the outreach effort.
  - Working Groups (WGs) are now part of the Plan Implementation Committee (PIC) mandate. WG Chairs for each NRFP Goal have been established and these Chairs now comprise PIC. Working Groups for each NRFP Goal area will be established as staff resources allow. WGs will assist in updating the NRFP Objectives and Action Agenda, identification of basin activities that are addressing basin goals, identification of areas that need assistance, and the identification of the role RRBC can best provide or what other entity is best positioned to assist.
  - RRBC will continue to refine the NRFP tracking, review and reporting process that will assist in the identification of gaps, celebration of successes (that will continue as part of future Annual Summit Conferences), and the NRFP update process (State of Basin reports).
  - RRBC will continue connecting the basin NRFP with the SWC biennium plan implementation and the joint Water Resource District (WRD) efforts and the newly formed Red River Retention Authority (RRRA). This effort will include working with key staff at the SWC and at the WRD level.

- The second area is linked to RRBC activities on specific NRFP Goals. One of these is NRFP Goal #10 related to water supply. RRBC is seeking to continue and expand the basin water supply effort by actions related to the Drought Scoping Document recommendations.

- The third area will be related to the LTFS project which is related to NRFP Goal #6. Wrap-up of the current project will be completed by the end of 2011. Continued work on recommendations related to the non-structural section on floodplain management will be further pursued.

- The fourth area will be continued efforts related to the basin mainstem model. There will be further work in Manitoba and on the Pembina and Roseau Rivers. This will generate better flow data at the international boundary and then modeling flow reduction scenarios for tributaries to generate basin-wide discussion to move toward tributary flow reduction goals.

- The fifth area will be related to basin water quality (NRFP Goal #9) where the RRBC documents will refined and linked to the water quality efforts at the international boundary and their relationship to water quality standards that effect ND strategies, such as Devils Lake.

- The sixth area will be related to conservation-land use issues (NRFP Goal # 9) and RRBC will continue to assist in seeking USDA funding for future retention in the next farm bill and under the current farm bill (Agricultural Water Enhancement Program-AWEP).

- The seventh area will be related to providing opportunities for jurisdictional dialogue and efforts as needed and directed by the board. RRBC will continue to promote basin approaches as outlined in the NRFP and continue to work with and support the Devils Lake Executive Committee (DLEC) and Devils Lake Working Group (DLWG).

RRBC is requesting the $200,000 ND State 2011/2013 base funding for RRBC through the biennium. The RRBC activities mentioned above have been discussed with Lee Klapprodt. The work plan summary for the activities that relate to the ND base funding is as follows:

- NRFP presentation related to specific goal areas at the annual summit conferences: January 2012 and 2013.

- Success stories and "State of the Basin" reports as needed for the annual summit conferences: January 2012 and 2013.

- Work on NRFP Goals #6, 9, 10, 11 as funding and staff allow: July 2011 – June 2013.

- Public outreach strategy implementation meetings and consultations: July 2011 – June 2013.

- Buy-in (Resolution of Support) by governments: July 2011 – June 2013.

- Implementing the NRFP where appropriate: July 2011 – June 2013.

- Linkage of the basin NRFP to the ND efforts (SWC, local WRD, Joint WRDs, and RRRA efforts): July 2011 – June 2013.

- Mainstem Model MB modeling linked to Pembina & Roseau Rivers: July 2011 – June 2012.

- Tributary Reduction Modeling: August 2011 – June 2013.

I am available for a future SWC meeting to answer questions regarding this request. Thank you for your continued support and interest in the RRBC and Red River activities.

Sincerely,

Lance Yohe

Lance Yohe
Executive Director

North Dakota State Water Commission

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Agenda F4)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: NDSWC Cost-Share Participation Request [SWC No. 1705]
2011 - 2013 Red River Basin Flood Control Coordinator Position

DATE: June 1, 2011

The Red River Joint Water Resource District (District) has requested state cost-share participation for funding the Red River Basin Flood Control Coordinator position from July 1, 2011 through June 30, 2013. The annual salary of the coordinator is $50,000, plus annual expenses of up to $10,000. The District requested the State Water Commission provide 30% of the cost or up to $15,000 of salary and $3,000 of expenses annually ($18,000) totaling $36,000 for the 2011-2013 biennium.

The Red River Basin is subject to severe and repeated flooding impacting the lives, health, property, and well being of its citizens. According to the Red River Joint Water Resource District (District), success in developing and implementing a comprehensive and workable plan to reduce these impacts requires the various political subdivisions in the Red River Basin and other interested groups to understand the various options that are available toward this effort.

According to the District, the various political subdivisions and other interested groups need to be aware of the steps that have been taken to reduce flooding and its impacts. Furthermore, they need to be able to work together on common strategies to reduce flooding by employing a basin wide flood control coordinator.

The Commission has funded this position (30%) since January 31, 2003 at $15,000 annually in salary and up to $3,000 in expenses annually. It is understood Coordinator will not be employed in this position during the 2013 legislative session.

I recommend the State Water Commission approve $36,000 ($30,000 salary and $6,000 expenses, $18,000 annually) for the Red River Joint Water Resource District's Flood Coordinator position, excluding legislative employment, from the funds appropriated to the State Water Commission in the 2011-2013 biennium. Approval is subject to the availability of funds and the entire contents of the recommendation contained here within.

Red River Joint Water Resource Board

Providing a coordinated and cooperative approach to planning and implementing a comprehensive water management program in the Red River Valley

Traill County Courthouse
Box 10
Hillsboro ND 58045

Office 701-636-5812
Fax 701-636-2308

March 17, 2011

Carolyn Merbach
ND State Water Commission
900 E. Boulevard Avenue
Dept. 770
Bismarck, ND 58505

Subject: Red River Joint Water Resource PR Coordinator

Dear Carolyn,

The Red River Joint Water Resource District's Coordinator position will be continued. We respectfully request cost share for this position for July1, 2011 through June 30, 2013.

Please call me if you have any questions.

Thank you,

Nettie Johnson
Secretary
Red River Joint Water Resource District

MEMBER WATER RESOURCE DISTRICTS

Ransom County	Walsh County	Maple River	Rush River
Richland County	Grand Forks County	North Cass	Nelson County
Sargent County	Traill County	Southeast Cass	Steele County
Pembina County	Barnes County		

North Dakota State Water Commission

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Agenda F5)

MEMORANDUM

TO: Governor Jack Dalrymple
ND State Water Commission Members

FROM: Todd Sando, Chief Engineer and Secretary

SUBJECT: Renewal of Contract for Upper Sheyenne River Joint Water Resource Board

DATE: June 1, 2011

In recent years, the Upper Sheyenne River Joint Water Resource Board (Board), which has the mandate "*To bring the watershed above Bald Hill Dam (Lake Ashtabula) into a partnership in order to review issues and create solutions through local, county, state, and federal cooperation.*" has become increasingly active, growing to include the counties of Barnes, Benson, Eddy, Foster, Griggs, McHenry, Nelson, Pierce, Sheridan, Steele, Stutsman, and Wells.

The Board has played an important role in the restoration of Sheyenne Dam in Eddy County, financially supporting a water quality analysis project of the Sheyenne River, helping to raise awareness and support amongst member counties for the Red River Valley Water Supply Project, and has developed two conceptual water management plans. The Board serves an important role as a valuable resource for directing water project developments and water quality improvements in the Sheyenne River.

The Water Commission has a long history of supporting and encouraging the management of water along watershed lines, through groups such as the Red River, Missouri River, and Devils Lake joint boards, which corresponds to our agency goal of managing water resources for the future welfare and prosperity of the people of North Dakota.

Boards organized along watershed boundaries play an important role in driving water management that reflects the need of our counties. The Board has requested that the Commission approve a two-year contract for an amount not to exceed $6,000 annually, or $12,000 for the term of the contract, that the Board will apply solely to administrative expenses. This contract would begin on July 1, 2011 and end on June 30, 2013. The Commission will pay the Joint Board for 50% of actual administrative expenses, based on quarterly expense reports, as approved by the Commission. If approved, the $12,000 will be used to:

- Fund basic administrative expenses, travel, and transportation to meetings;
- Support the services of the part-time chairman and secretary of the Board;
- Continue the Board's efforts to lead in the efforts encouraging the basin's management along watershed lines;
- Continue efforts to coordinate the restoration and enhancement of existing dams and promote the construction of viable new dams; and
- Work to facilitate data collection and improve water quality in the basin.

If the Commission sees fit to approve this agreement, the Upper Sheyenne Board will provide quarterly written reports to the commission on water management efforts in the basin, and also provide an annual review of board activities at the December Water Commission meeting.

I recommend that the State Water Commission approve cost-share for 50 percent of the USRJWRB's eligible costs, not to exceed $12,000.

TS:LK:MN/dp:322

Upper Sheyenne River Joint Water Resource Board
P.O. Box 446
Lakota, North Dakota 58344-0446

Phone: 701 247-2682
Fax: 701 247-2692
E-mail: ncwrd@polarcomm.com

Providing a coordinated and cooperative approach to planning and implementing a comprehensive water management program in the Upper Sheyenne Watershed

May 31, 2011

Todd Sando, State Engineer
900 East Boulevard
Bismarck, ND 58505

RE: Cost Share Request

Dear Mr. Sando:

The Upper Sheyenne River Joint Water Resource Board wishes to update the agreement for cost share for the 2011-2013 biennium to assist with operational costs to support the Joint Board's efforts to improve management of the Sheyenne River system in North Dakota.

Because the Joint Board has a small tax base the cost share reimbursement helps make funds available for projects. Therefore, we request cost share of 50% up to $6,000 per year or up to $12,000 for the biennium for administration expenses.

Thank you.

Sincerely,

Ben Varnson

Ben Varnson
Chairman

BAV/ckv

North Dakota State Water Commission

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Agenda F 6)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: NDSWC Cost-Share Participation Request [SWC No. 1671]
Dead Colt Creek Dam 2011 Emergency Action Plan

DATE: June 1, 2011

Per their March 2011 correspondence, the Ransom County Water Resource District requested state cost-share participation for the development of an Emergency Action Plan (EAP) for Dead Colt Creek Dam. The dam is located approximately 4.5 miles south and 1.5 miles east of Lisbon. Dead Colt Creek Dam was built in 1984 for flood control and recreation.

The North Dakota Century Code (Section 61-03-21) requires the operator of a reservoir with a storage capacity greater than 1,000 acre-feet to submit an operation plan to the State Engineer each year. One required component of the operation plan, as outlined in the North Dakota Administrative Code (Section 89-08-04-01) is emergency procedures and warning plans.

The EAPs prepared under the cost-share program shall be developed in accordance with the guidelines described in the North Dakota Dam Design Handbook. Dead Colt Creek Dam is a Class IV medium hazard dam requiring a dam break model considering a dam failure under both normal operating conditions and flood conditions. The Commission will provide the hydrology.

KL&J Engineering is developing the EAP and will identify detection and evaluation procedures, responsibilities and expected actions, a directory and notification flow chart, emergency remedial measures, and a list of locally available resources and contractors. The estimated total cost of the EAP is $28,500, of which all is considered to be eligible for state cost-share participation as an Emergency Action Plan at 80% equaling $22,800.

I recommend the State Water Commission approve Ransom County Water Resource District's request for state cost participation in the Dead Colt Creek Dam 2011 Emergency Action Plan, at an amount not to exceed $22,800, from the 2011-2013 appropriated funds. This approval is subject to the entire contents of the recommendation contained herein and the availability of funds.

Ransom County Water Resource District

Post Office Box 388
Lisbon, North Dakota 58054

March 2, 2011

Todd Sando, State Engineer
ND State Water Commission
900 East Boulevard
Bismarck, ND 58504

Cost-Share Request
Emergency Action Plan
Dead Colt Creek Dam – Ransom County, ND

The Ransom County Water Resource District would like to request cost-share assistance for the development of an Emergency Action Plan for Dead Colt Creek Dam in Ransom County. The dam is located approximately 4.5 miles south and 1.5 miles east of Lisbon, ND.

As per correspondence with Jeff Berger in the Dam Safety Section, Dead Colt Creek Dam will require a dam break model and maps for both "sunny day" and "flood conditions" at failure. ***Attached please find the scope of work.***

We appreciate your consideration for cost-share assistance on this project. If you have any questions or require additional information, please call me at 701-680-2006.

Sincerely,

Jim Lyons

Jim Lyons, Chairman
Ransom County Water Resource District

c: Jennie Krause – Kadrmas, Lee & Jackson
File

North Dakota State Water Commission

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Agenda F 7)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: NDSWC Exemption for Conditional Approval- Cost-Share Participation Request
Reconstruction Conditional Approvals (SWC No. 1344)
Sheyenne River Diversion Low-Flow Channel Areas 3 and 4
Horace Diversion Channel Site A

DATE: June 1, 2011

The Southeast Cass Water Resource District requests conditional state cost-share participation for reconstruction improvements to the Sheyenne River Diversion Low-Flow Channel (Sheyenne Diversion). Per cost-share policy, projects are to be permitted (except rural flood control drains pending an assessment vote) before requesting cost-share assistance. The District asks for an exception to policy and to consider this project for conditional approval.

As explained by the District, the earthen Sheyenne Diversion channel and the contributing Horace Diversion channel are susceptible to erosion. Since the completion of the Diversions by the United States Army Corp of Engineers (USACOE) in 1992, the channels have been utilized more than originally intended. The frequency of use and duration of flows has increased the saturation of the diversion channels contributing to erosion. The USACOE no longer plans to reconstruct or fund reconstructions of the Sheyenne Diversion and Horace Diversion.

Adding Site A Into Agreement for Areas 1 and 2

Areas 1 and 2 were let for bid on October 21, 2010. The construction contracts were awarded to Tom's Backhoe Service in the amount of $1,862,300, of which 60% is $1,117,380. The difference between the estimated cost-share approval ($2,037,600) and the actual awarded construction amount of $1,117,380 is $920,220.

The proposed additional maintenance and improvement project (Site A) consists of improving the low-flow portion of the Horace Diversion channel in Section 7 of Stanley Township by flattening the channel gradient, shaping the channel cross-section, and armoring the channel bottom with riprap and filter blanket at that location. The estimated total cost of Site A is $1,200,000, of which all construction work, as in Areas 1 and 2, in the amount of $1,075,000 is considered eligible for 60% cost-share equaling $645,000. The ineligible $125,000 is the engineering services, legal and administrative costs, and other non-construction cost items. Site A Construction Permit No. 2288 has been submitted and is pending.

It is recommended Site A's cost-share request of $645,000 be allocated from the remaining amount of the cost-share for Areas 1 and 2. The agreement for Areas 1 and 2 will be amended to

include Site A, pending the permit and cost-share approval. An amount of $275,220 (the difference of $645,000 and $920,220) will be deobligated. The Areas 1 and 2 projects, including Site A, are slated for completion by end of 2011.

Pending USACOE approval for the improved weir design, the inlet weir in Section 19 of Barnes Township will be submitted for cost-share assistance at a later date.

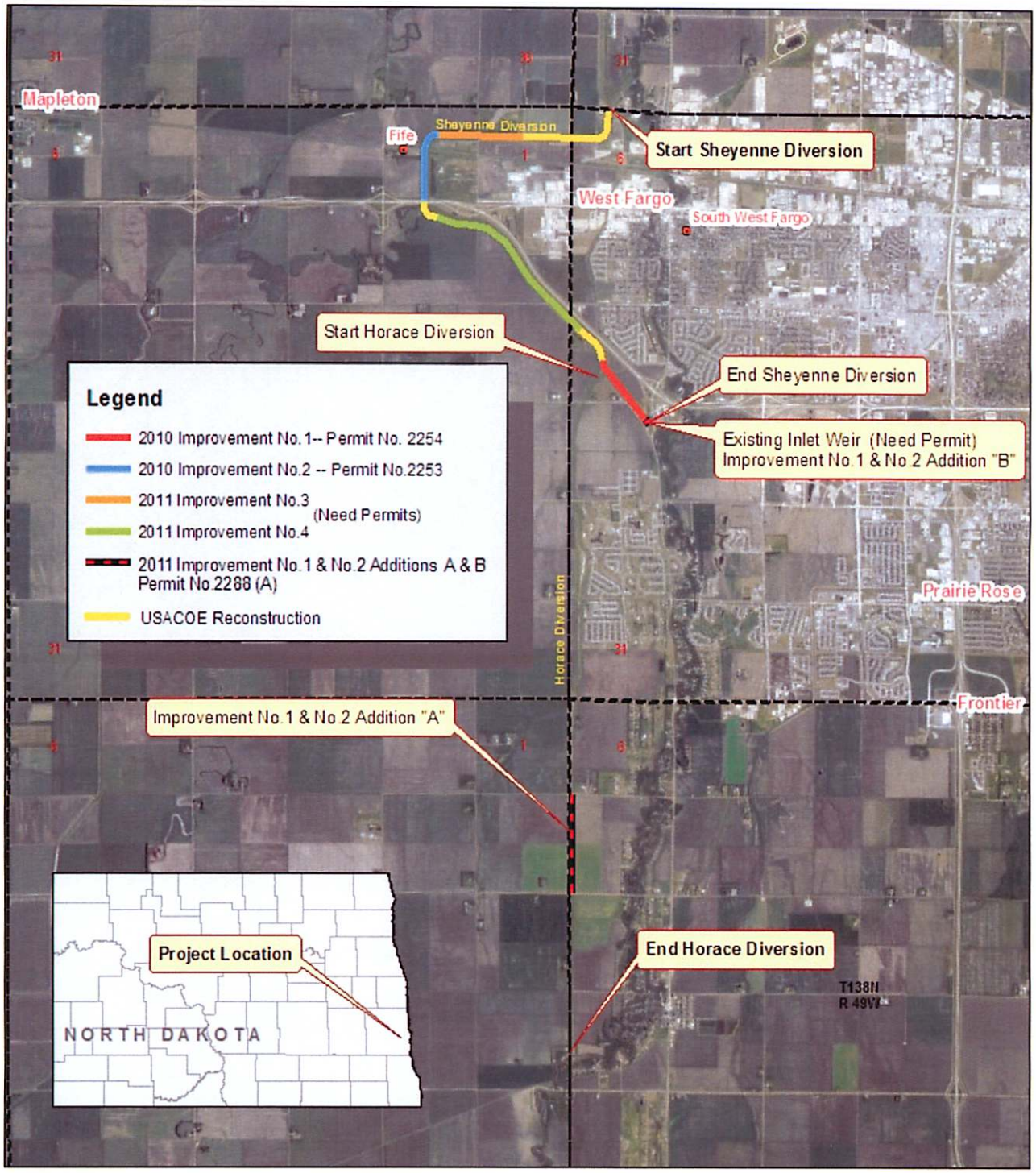
Areas 3 and 4

There are two other unfunded areas along the existing Sheyenne Diversion channel that require maintenance/repairs and improvements. Per the District's recent correspondence, these locations are known as Area 3 (located north of the BNSF railroad) and Area 4 (located south of Interstate 94). The reconstruction and improvements consist of constructing a riprap armored low-flow channel at a new grade line through the existing channel, and shaping the channel cross-section at the described locations. The placement of riprap will minimize future erosion of the low-flow channel. At this time no permits have been issued for Areas 3 or 4.

Using the bid from the Areas 1 and 2 projects, a rough estimate was developed based on the cost per linear foot for the District to request conditional cost-share assistance. Area 3's eligible construction cost is $1,460,000, to include all excavation and embankment, of which 60% is $876,000. Area 4's eligible construction cost is $3,210,000, to include all excavation and embankment, of which 60% is $1,926,000. The total project cost that includes the ineligible cost was not provided. The estimated cost share request for Areas 3 and 4 projects is $2,802,000.

I recommend the State Water Commission conditionally approve the inclusion of Site A $645,000 and deobligate $275,220 from the Area 1 and 2 cost-share. The obligated amount for the Area 1, 2, and Site A agreement will be $1,762,380. Conditional approval is subject to the entire recommendation contained herein, the construction permit, receipt and approval of final engineering plans, and the availability of funds.

I recommend the State Water Commission conditionally approve $2,802,000 for Areas 3 and 4 maintenance/repair and improvement work from the 2011-2013 appropriations. Conditional approval is subject to the entire recommendation contained herein, construction permits, receipt and approval of final engineering plans, and the availability of funds.



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Sheyenne & Horace Diversion
Low-Flow
Channel Improvement

CASS COUNTY GOVERNMENT

March 3, 2011

Southeast Cass Water Resource District

Thomas L. Fischer
Chairman
Fargo, North Dakota

Mark Brodshaug
Manager
Horace, North Dakota

Dan Jacobson
Manager
West Fargo, North Dakota

Carol Harbeke Lewis
Secretary-Treasurer

1201 Main Avenue West
West Fargo, ND 58078-1301

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wrd@casscountynd.gov
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Todd Sando
North Dakota State Engineer
900 East Boulevard Avenue, Dept. 770
Bismarck, ND 58505-0850

Dear Todd:

As you are aware, the Sheyenne Diversion (Diversion) project protects the communities of Horace, Fargo, and West Fargo from Sheyenne River floods. Since the Diversion was completed in 1993, it has repeatedly demonstrated its value in that it has saved these communities from severe flooding numerous times, including the catastrophic spring floods of 1997, 2009, and 2010. As you are also aware, the current wet cycle has caused the Diversion to operate more often and with a greater duration than the original design intended. In additional to the recent wet period, the 2010 releases from Devils Lake compounded the problem; 2010 was the first year in the history of the project that the Diversion operated nearly the entire year after ice out. As a result of the combined effects of the wet climate and Devils Lake releases, the Diversion has suffered from severe erosion in recent years, threatening the integrity of the project and subsequent flood protection benefits. In order to address this situation, the Southeast Cass Water Resource District (WRD) developed a plan for improving the Diversion so that it can continue to provide safe and reliable flood protection, as it has in the past.

The improvement concept consists of a new low flow channel grade line and armoring the low flow channel with rip-rap. This concept has been approved by the North Dakota State Water Commission (ND SWC) for cost share in two reaches already. In addition to the two reaches that have already been cost shared, the WRD has independently completed two segments that were finished in 2008. Also, the United States Army Corps of Engineers (USACE) is independently working on a segment located near the City of West Fargo lagoons. The USACE project is identical to the WRD low flow channel improvement projects. The WRD has made every attempt, has made every argument, and has exhausted every avenue with the USACE for their continued involvement with the improvements. Unfortunately, the USACE simply will not fund any further improvements.

As stated, the WRD initiated a plan for improving the Diversion in reaches, with cost share assistance from the ND SWC. In order to finance this effort, the WRD needs to complete the work in phases over a period of many years. At this time, the WRD is bonded for a period of approximately 3 years to pay for the two reaches that the ND SWC funded in 2010. This means that assessment district funds to pay for any further improvement projects are simply not available in the near future. The two reaches cost shared in 2010 will be constructed the summer and fall of 2011.

It has been learned that the State of North Dakota intends to increase the releases from Devils Lake in 2012. While the WRD supports Devils Lake flood relief, and wants to work with the State to accommodate additional releases, the timing of this release is a problem. The WRD, with the interest of the Diversion and its constituents in mind, cannot support additional releases from Devils Lake until the Diversion improvements are completed. Again, under the current cost share scenario, the WRD cannot begin the improvement of the remaining reaches for a number of years. As a result of these facts, and understanding the needs to the Devils Lake basin, the WRD requests that the remaining segments be improved this year, under a 100% cost share scenario, so that the Diversion is ready for the additional 2012 Devils Lake releases.

Attached is a project map and cost estimate for your consideration. Please feel free to call our office if you have any questions.

Sincerely,

SOUTHEAST CASS WATER RESOURCE DISTRICT

Mark Brodshaug
Vice-Chair

CASS COUNTY GOVERNMENT

March 3, 2011

Southeast Cass Water Resource District

Thomas L. Fischer
Chairman
Fargo, North Dakota

Mark Brodshaug
Manager
Horace, North Dakota

Dan Jacobson
Manager
West Fargo, North Dakota

Carol Harbeke Lewis
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1201 Main Avenue West
West Fargo, ND 58078-1301

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www.casscountynd.gov

Todd Sando
State Engineer
North Dakota State Water Commission
900 East Boulevard Avenue, Dept. 770
Bismarck ND 58505-0850

Dear Todd:

RE: Sheyenne River Diversion Low-Flow Channel Improvements
Barnes, Mapleton, and Stanley Townships, Cass County, ND

In February 2010, the Southeast Cass Water Resource District (WRD) requested cost share dollars from the North Dakota State Water Commission (SWC) for improvements to the Sheyenne River Diversion Low-Flow Channel (the Diversion). The WRD requested cost share for two reaches, which the SWC subsequently approved. At that time, the SWC deemed certain construction items ineligible, claiming the items were maintenance issues rather than actual improvements to the Diversion. With this information, the SWC approved $1,557,600 to the WRD for the improvements in the two areas on March 3, 2010.

After the March SWC meeting, the WRD met to review the cost share that was approved by the SWC. The WRD did not agree with the SWC's determination with regard to the maintenance vs. improvements and requested that their engineer send a letter to the SWC requesting that the SWC conduct a second review of the cost share request. On May 21, 2010, Chad Engels, Moore Engineering, Inc., sent an email to John Paczkowski requesting a second review by the SWC and the reasons why the WRD believed the work was an actual improvement to the Diversion as opposed to maintenance work. The WRD also submitted an *Application to Modify a Water Resource Facility* for improvements at this time following a request from the SWC to do so. Upon the SWC's second review of the preliminary plans and cost share request, the SWC approved an additional $480,000 at their September 1, 2010, meeting. This cost share approval brought the total cost share amount for the two improvement areas to $2,037,600.

After the approval of the cost share from the SWC, the WRD continued developing the final plans and specifications. Phase I and Phase II of the Diversion project were let for bid on October 21, 2010. Tom's Backhoe Service was the lowest responsible bidder on both projects and was awarded construction contracts to complete the work. The construction costs that were submitted for the work were considerably less than what the WRD estimated the costs to be. The total project cost of Phase I and Phase II was $2,260,000, of which $1,862,300 was construction and contingency costs. The projected SWC's share for Phase I and Phase II is $1,117,380.

With these low construction costs, the amount of cost share that was approved by the SWC is over and above what is needed to complete the Phase I and Phase II projects. Therefore, the WRD respectfully requests that the SWC approve a construction permit and to allow the WRD to utilize remaining SWC cost share funds on the additional improvement projects within the Diversion channel. The first additional improvement project includes improving the low-flow portion of the channel bottom in Section 7 of Stanley Township by flattening the channel gradient, shaping the channel cross-section, and armoring the channel bottom with rip-rap and rip-rap filter blanket. The placement of rip-rap will minimize future erosion in the channel and will stabilize the side slopes of the Diversion channel. This work would be identical to the work being done on the Phase I and Phase II construction projects. The second additional improvement project includes improving the existing weir structure in Section 19 of Barnes Township. Due to increased flows from the Devils Lake outlet structures, the Sheyenne River is experiencing a higher base flow, which causes the Diversion to be utilized far more frequently than the original design intended. The facility operated nearly the entire year after ice-out in 2010. The WRD is proposing to construct a weir structure that would direct more base flow water through the Sheyenne River within the City of West Fargo and would allow less water through the Diversion channel during typical summer flows.

The two additional improvement projects stated above are estimated to cost $1,700,000 of which $1,485,000 is construction and contingency costs which are eligible for 60% cost share from the SWC. The projected SWC's share of these two projects would be $891,000. If this cost is added to the total costs of the Phase I and Phase II project, the SWC share is projected to be $2,008,380. This amount is less than the already approved amount of $2,037,600.

Attached, please find the following documents as referenced in this letter:

- a map showing the extents of all the projects discussed;
- an *Engineer's Statement of Cost* for the Phase I and Phase II construction projects;
- an *Engineer's Opinion of Probable Cost* for the additional improvement projects;
- a budget analysis showing the allocation of costs for each project;
- a revised cost share request form;
- an *Application to Modify a Water Resource Facility* for the Section 7 Stanley Township Channel Improvement project; and
- a set of preliminary plans for the Section 7 Stanley Township Channel Improvement project.

If you have any questions, please feel free to contact me or our project engineer, Chad Engels, Moore Engineering, Inc. at 282-4692.

Sincerely,

SOUTHEAST CASS WATER RESOURCE DISTRICT

Carol Harbeke Lewis
Secretary-Treasurer

Enclosures

North Dakota State Water Commission

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

Agenda F 8)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: NDSWC Additional Cost-Share Participation Request [SWC No. 1444]
Pembina's Flood Control System - 2010 Levee Certification for FEMA

DATE: June 1, 2011

On March 11, 2010, the State Water Commission (Commission) approved the City of Pembina's (Pembina) cost-share request in the amount of $27,156 for assistance with their costs in analyzing Pembina's flood control levee system for compliance with the Federal Emergency Management Agency (FEMA) guidelines as outlined in the Code of Federal Regulations (CFR), Title 44 Part 65.10.

The analysis is required by FEMA to accredit the levee system, for flood insurance mapping purposes only, as being operated as designed and/or to the current standards and providing protection from the 100-year flood. A statement from a registered professional engineer whether the system elements are designed in accordance with sound engineering practices to meet the requirements of 44 CFR 65.10 is expected.

According to FEMA's current Flood Insurance Rate Map (FIRM), Pembina is protected from the 1-percent-annual-chance flood (100-year flood). In a letter dated March 26, 2009, Pembina was officially notified of FEMA's intent to require levee certification within two years.

FEMA accreditation will allow Pembina to maintain its status as a community removed and protected from the floodplain. The levee analysis did show the flood control system did not meet the 44 CFR 65.10 requirements and Pembina is currently developing plans to address the deficiencies estimated to cost upward of $1,000,000. Pembina will request cost-share for the rehabilitation when applicable.

Completed in December of 2010 the analysis cost $159,633, of which $73,487 is considered eligible for a 60% cost-share in the amount of $44,092. The ineligible amount of $86,146 is directly attributable to the engineering services of the rehabilitation and were incurred after the analysis completion date. Per HDR Engineering, increased project costs are a result of unforeseen costs estimated in February of 2010 for soils investigation and additional engineering. The additional $16,936 requires Commission approval as well as an amendment to the existing agreement.

I recommend that the State Water Commission approve this request by the City of Pembina for additional state cost-share assistance with Pembina's 2010 Flood Control Levee System Analysis and Certification for FEMA Accreditation project, at an amount not to exceed $16,936 from the funds appropriated to the State Water Commission in the 2011-2013 biennium. This approval is subject to the entire contents of the recommendation contained herein and the availability of funds.

EQUAL HOUSING OPPORTUNITY

City of Pembina
152 W. Rolette St.
Pembina, ND 58271
pcityofc2@invisimax.com
701-825-6819

City of Pembina

May 27, 2011

Mr. Todd Sando, P.E.
North Dakota State Engineer
State Water Commission
900 East Boulevard
Bismarck, ND 58505

Mr. Sando,

Please consider a request for $16,936 in additional cost-share reimbursement, based upon additional unforeseen costs incurred since the February 2010 date of our original cost-share application. The costs include soils analysis and additional engineering due to FEMA and Corps requirements for the levee certification analysis.

Sincerely,

Warren Hillukka
Mayor of Pembina

North Dakota State Water Commission

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

Agenda #9

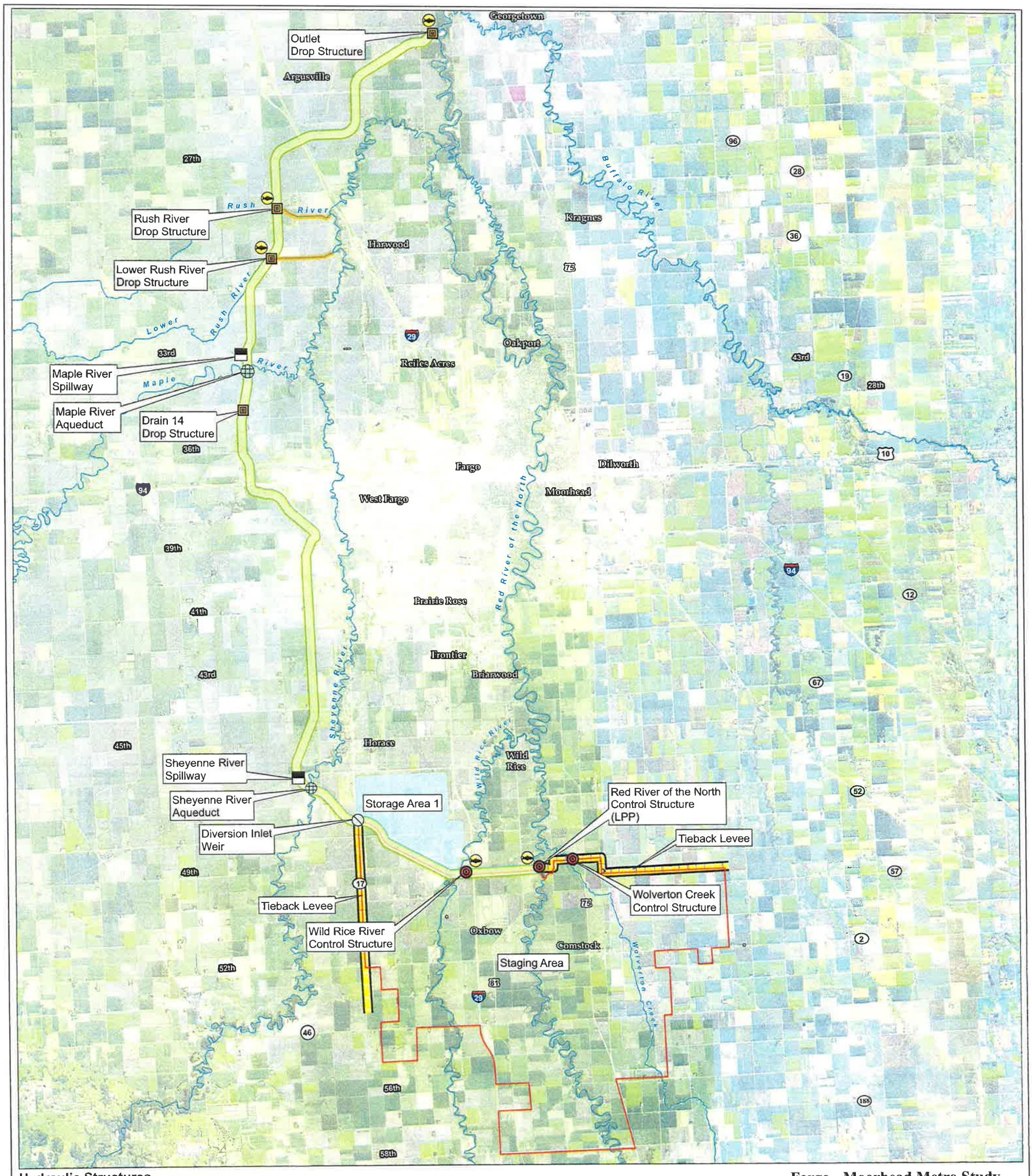
MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer-Secretary
SUBJECT: U.S. Geological Survey Missouri River Topography
DATE: June 15, 2011

With the flooding that is occurring this spring on the Missouri River comes high velocities and more erosion in the channel and along the banks. With this unprecedented flooding, comes a potentially once in a lifetime chance to gather important data that can be used for investigations into impacts of erosion and bank stability. The USGS has the capabilities to gather channel bottom topographic data. They have given an estimate to the State of $110,000 to gather data in an approximately 12-14 miles of river through the Bismarck/Mandan area. The NDDOT has committed to going in half the cost.

I recommend the State Water Commission authorize $55,000 towards gathering channel bottom topographic data.

TF:KC:mmb/1392


Outlet
Drop Structure
Rush River
Drop Structure
Lower Rush River
Drop Structure
Maple River
Spillway
Maple River
Aqueduct
Drain 14
Drop Structure
Sheyenne River
Spillway
Sheyenne River
Aqueduct
Diversion Inlet
Weir
Storage Area 1
Tieback Levee
Wild Rice River
Control Structure
Red River of the North
Control Structure
(LPP)
Tieback Levee
Wolverton Creek
Control Structure
Staging Area
Georgetown
Argusville
Harwood
Kragnes
Oakport
Reiles Acres
Fargo
West Fargo
Moorhead
Dilworth
Prairie Rose
Frontier
Briarwood
Horace
Wild Rice
Oxbow
Comstock
27th
33rd
36th
39th
41st
43rd
45th
49th
52nd
56th
58th
Rush River
Lower Rush River
Maple River
Buffalo River
Sheyenne River
Red River of the North
Wild Rice River
Wolverton Creek
94
29
75
96
28
36
10
12
67
52
57
2
46
81
17
19
Hydraulic Structures
Weir
Aqueduct
Control Structure
Drop Structure
Fish Passage
Spillway
Streams
North Dakota Diversion Tieback Levee
North Dakota Diversion Locally Preffered Plan (LPP)
Channel Reclamation Reaches
Storage Area 1
Staging Area
Fargo - Moorhead Metro Study
Project
Overview
N
0 0.5 1 2 3 4
Miles

Depths with Project
Sructures
Streams
North Dakota Diversion Tieback Levee
Storage Area 1
North Dakota Diversion
Staging Area

Staging Area Only

Depth in Feet	Residential	Non-Residential	Total Structures	Total Acres
0 to 1 feet	95	110	205	5,298
1 to 3 feet	75	149	224	7,361
Greater than 3 Feet	217	165	382	21,271
Total	387	424	811	33,390

Upstream Staging Area - North Dakota Alignment 100 Year

Fargo - Moorhead Metro Study

St. Paul District
GIS CENTER
US Army Corps of Engineers®

0 0.5 1 2 3 4 Miles

N

\\mvp-netapp2\shares\Shares2\projects\SA\SA_Fargo-Moorhead_Metro_FDR-153866\GIS\MXD\1March2011 -110302Upstream100year.mxd 9 March 2011 BGW

With LPP Conditions
20%, 10%, 2%, and 1% Chance Flood Events

N

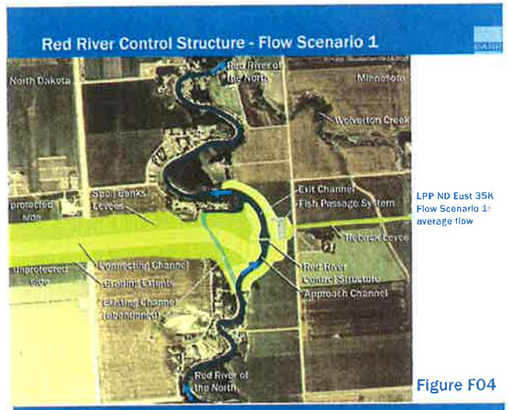
Oxbow
Comstock
Christine
Wolverton
Walcott
Abercrombie
Kent

LPP Diversion
LPP Tieback
South Impacts Mapping Extent
Storage Area 1
LPP 20% (5,652 Acres)
LPP 10% (20,841 Acres)
LPP 2% (38,000 Acres)
LPP 1%(54,721 Acres)

0 2,500 5,000 10,000 15,000 Feet

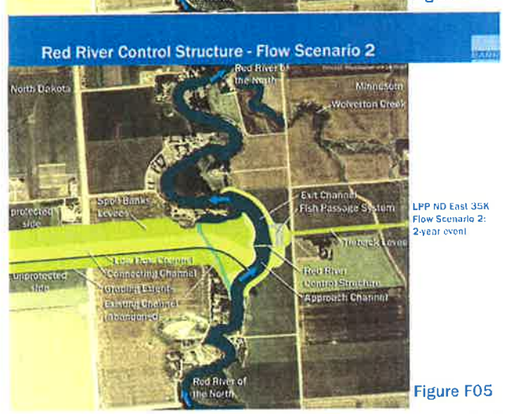
Houston Engineering Inc.

2:\6000\6058\10_6059_025\GIS\South_Impacts\South_Impacts_Final_Mapping_Number2.mxd



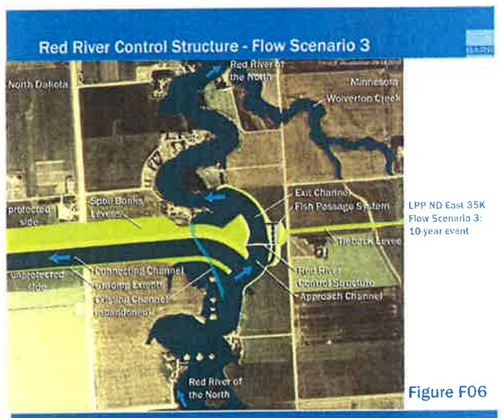
LPP ND East 35K
Flow Scenario 1:
average flow

Figure F04



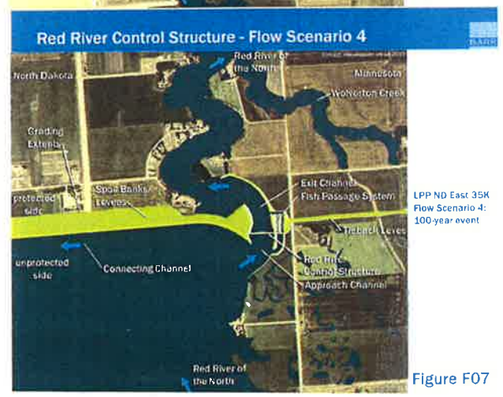
LPP ND East 35K
Flow Scenario 2:
2-year event

Figure F05



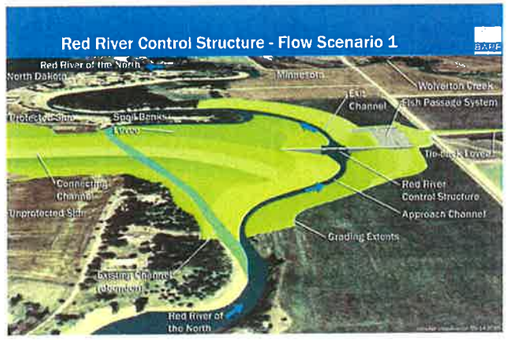
LPP ND East 35K
Flow Scenario 3:
10-year event

Figure F06



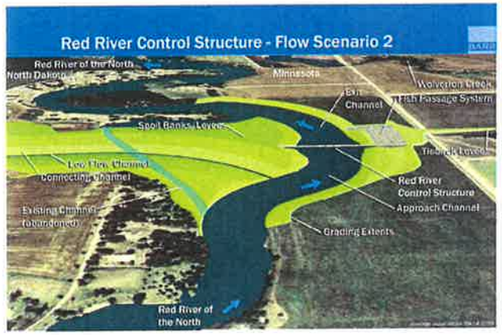
LPP ND East 35K
Flow Scenario 4:
100-year event

Figure F07



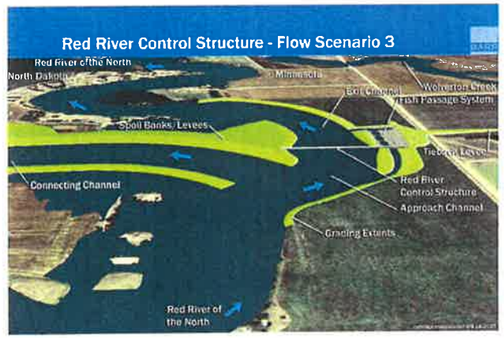
LPP ND East 35K
Flow Scenario 1:
average flow

Figure F08



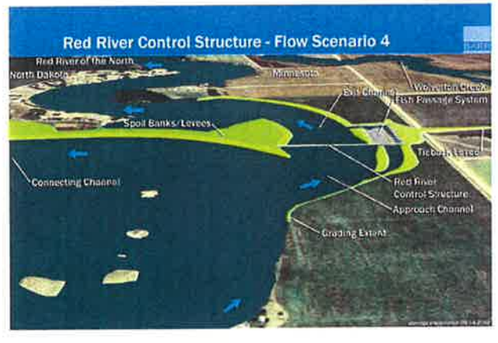
LPP ND East 35K
Flow Scenario 2:
2-year event

Figure F09



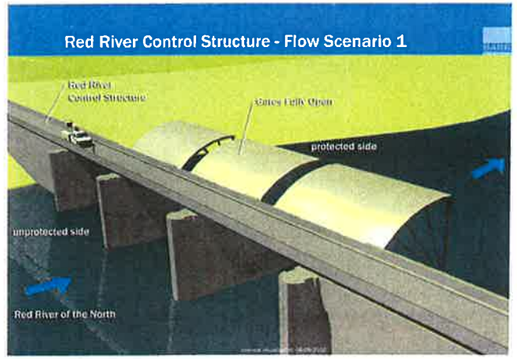
LPP ND East 35K
Flow Scenario 3:
10-year event

Figure F10



LPP ND East 35K
Flow Scenario 4:
100-year event

Figure F11

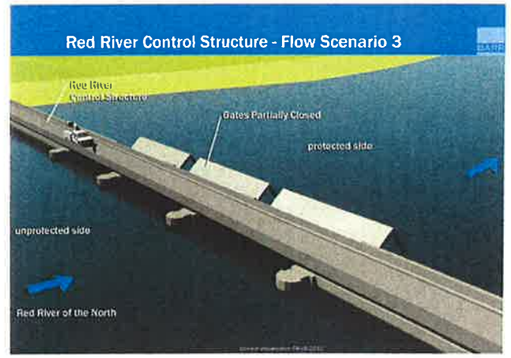


LPP ND East 35K
Flow Scenario 1:
average flow

Figure F19

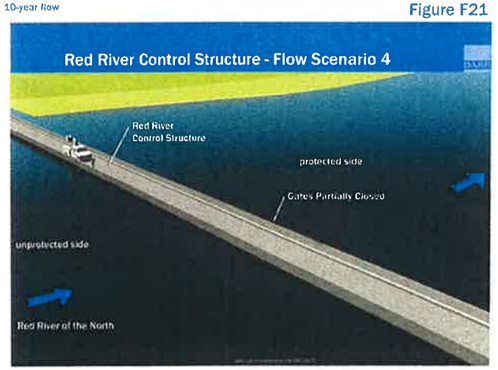
LPP ND East 35K
Flow Scenario 2:
2-year flow

Figure F20



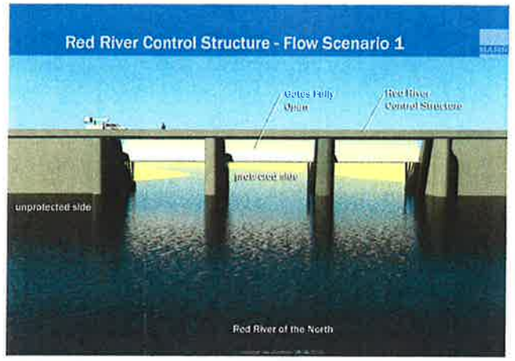
LPP ND East 35K
Flow Scenario 3:
10-year flow

Figure F21



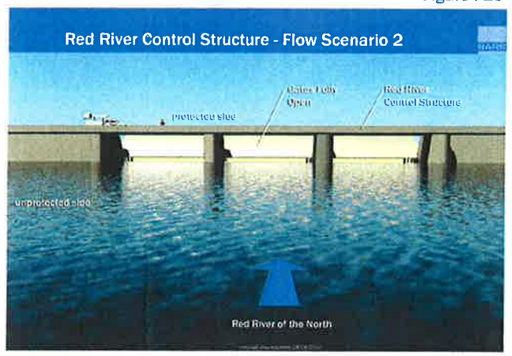
LPP ND East 35K
Flow Scenario 4:
100-year flow

Figure F22



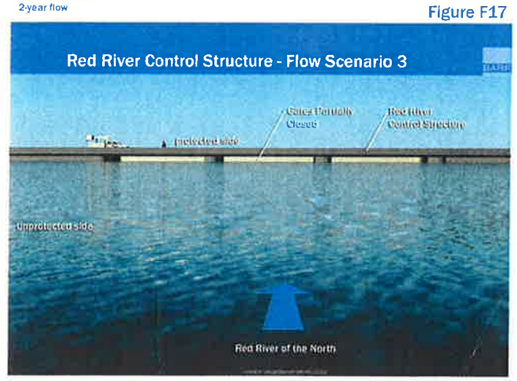
LPP ND East 35K
Flow Scenario 1:
average flow

Figure F16



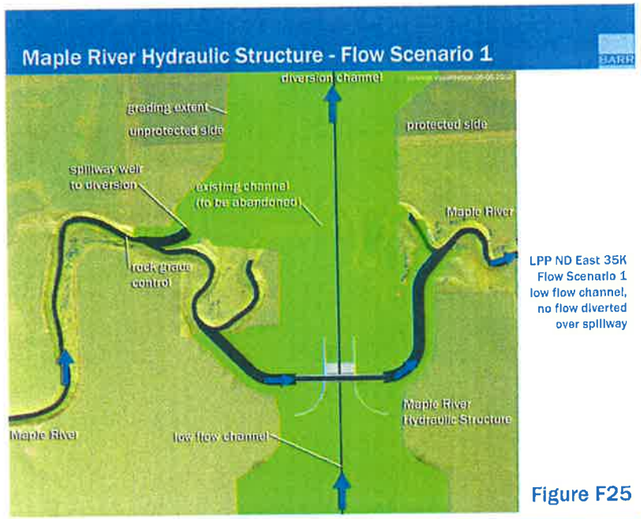
LPP ND East 35K
Flow Scenario 2
2-year flow

Figure F17



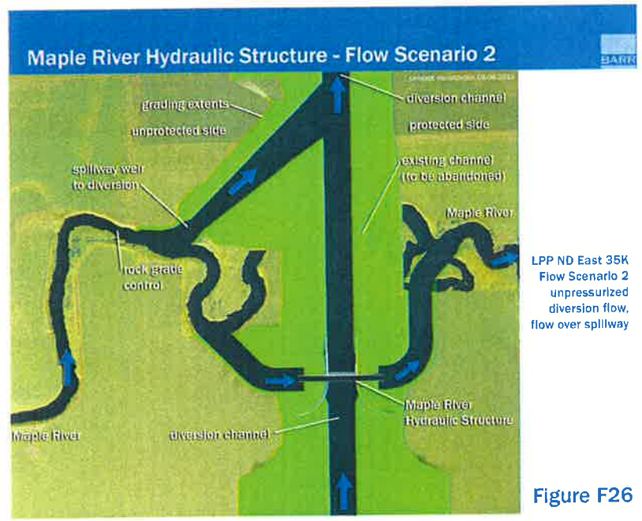
LPP ND East 35K
Flow Scenario 3
10-year flow

Figure F18



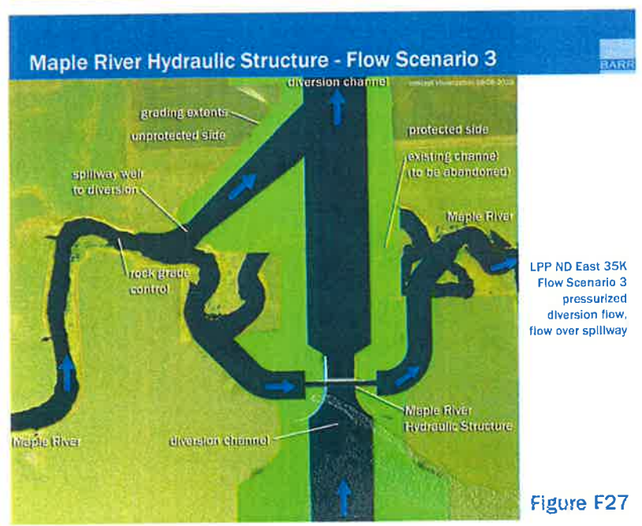
LPP ND East 35K
Flow Scenario 1
low flow channel,
no flow diverted
over spillway

Figure F25



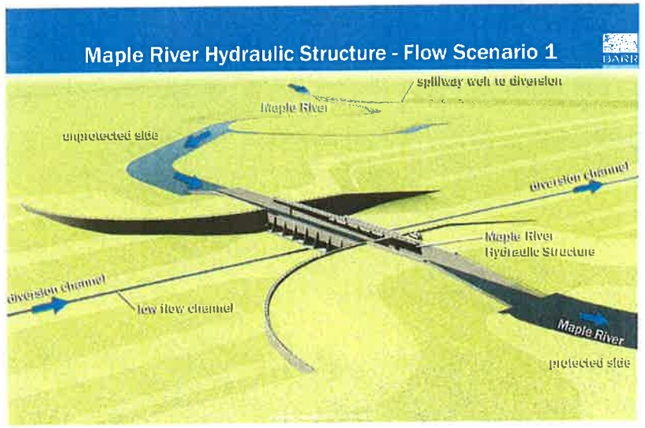
LPP ND East 35K
Flow Scenario 2
unpressurized
diversion flow,
flow over spillway

Figure F26



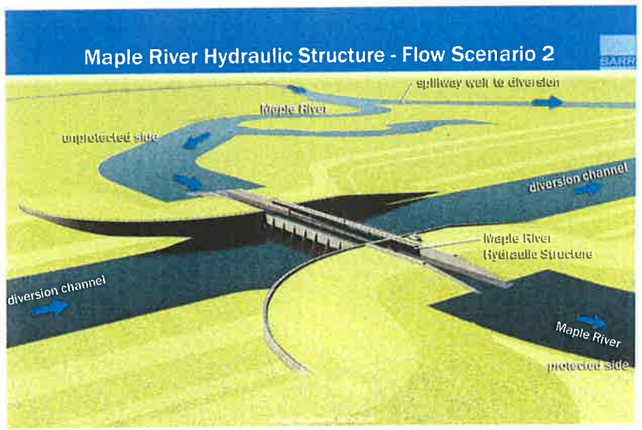
LPP ND East 35K
Flow Scenario 3
pressurized
diversion flow,
flow over spillway

Figure F27



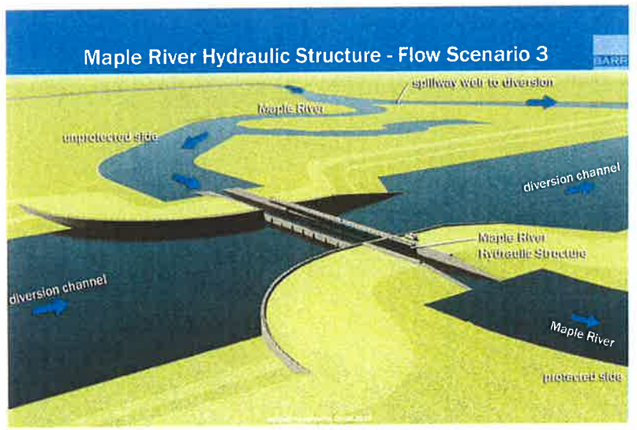
LPP ND East 35K
Flow Scenario 1
low flow channel,
no flow diverted over spillway

Figure F33



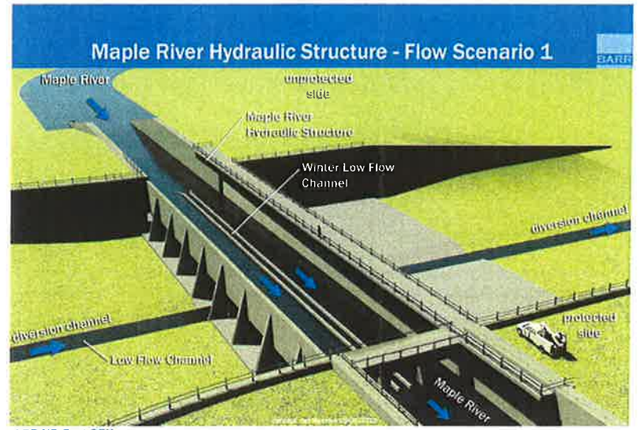
LPP ND East 35K
Flow Scenario 2
unpressurized diversion flow,
flow over spillway

Figure F34



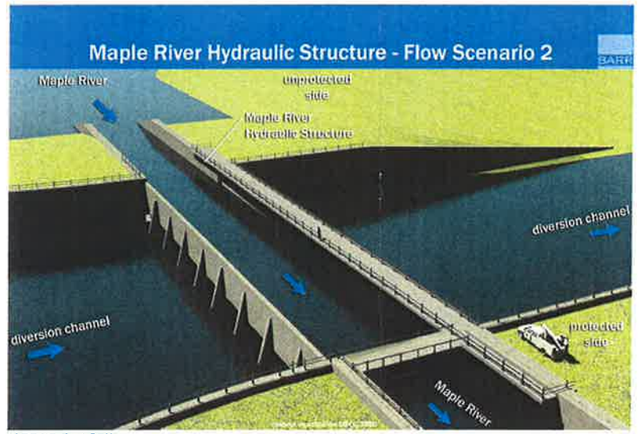
LPP ND East 35K
Flow Scenario 3
pressurized diversion flow,
flow over spillway

Figure F35



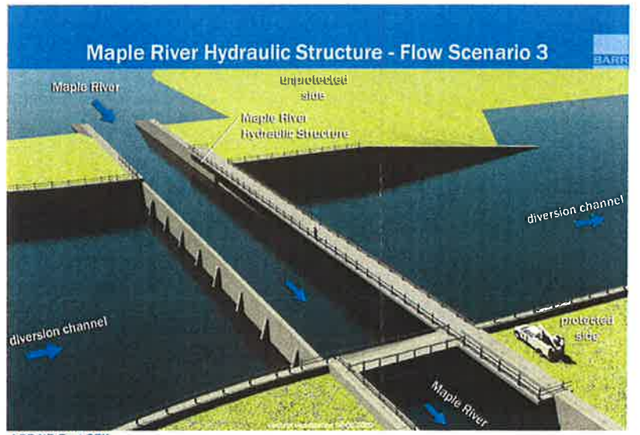
LPP ND East 35K
Flow Scenario 1
low flow channel,
no flow diverted over spillway

Figure F41



LPP ND East 35K
Flow Scenario 2
unpressurized diversion flow,
flow over spillway

Figure F42



LPP ND East 35K
Flow Scenario 3
pressurized diversion flow,
flow over spillway

Figure F43

Agenda 4

CITY OF Fargo

OFFICE OF THE CITY ADMINISTRATOR
Pat Zavoral

June 1, 2011

Mr. Todd Sando
North Dakota State Water Commission
900 East Boulevard Avenue, Dept. 770
Bismarck, ND 58505

Dear Todd,

Enclosed is information for the June 14th State Water Commission meeting for the proposed flood protection project in Fargo and Cass County. Included in this packet is a document the Corps of Engineers staff presented to the public last week relating to the most Frequently Asked Questions (FAQs) for the project as it is currently configured, maps the Corps staff also presented and minutes from the May 12th meeting of the Metro Flood Study Work Group.

This information should give the Commission members a current status report and actions taken locally on the project. We will have representation at the meeting to give a brief overview of the project status and answer any questions members might have.

If you should have any questions, please feel free to contact me.

Sincerely,

Pat

Pat Zavoral
City Administrator

PZ:ka
Enclosures

200 North Third Street • Fargo, ND 58102

Fargo-Moorhead All-America City 2000

Phone (701) 241-1310 • Fax (701) 476-4136

pzavoral@cityoffargo.com

Metro Flood Study Work Group Meeting
May 12, 2011
3:30 p.m.
Fargo City Commission Room

A meeting of the Metro Flood Study Work Group was held at 3:30 p.m. on May 12, 2011 in the Fargo City Commission Room.

Work Group Members present: Fargo City Commissioners Tim Mahoney and Brad Wimmer, Moorhead Council Members Dan Hunt and Nancy Otto, Cass County Commissioner Darrell Vanyo, Clay County Commissioners Kevin Campbell and Grant Weyland, Buffalo-Red River Watershed District Manager Gerald VanAmburg.

Work Group Members absent: Diane Wray-Williams, Scott Wagner and Tom Fischer.

Staff Members present: Fargo City Administrator Pat Zavoral, Fargo City Engineer Mark Bittner, Fargo Senior Engineer April Walker, Moorhead City Manager Mike Redlinger, Moorhead City Engineer Bob Zimmerman, Cass County Administrator Bonnie Johnson, Cass County Engineer Keith Berndt, Clay County Administrator Brian Berg.

Others present: Fargo City Attorney Erik Johnson, West Fargo Mayor Rich Mattern, Dilworth Mayor Chad Olson, Oxbow Mayor Jim Nyhof, Cass County Water Resource District Vice Chairman Rodger Olson.

Approval of the April 1, 2011 Minutes

Dan Hunt moved the minutes from the April 1, 2011 Metro Flood Study Work Group meeting be approved. Brad Wimmer seconded the motion. All Members present voted aye, and the motion was declared carried.

Update from the Corps of Engineers

Aaron Snyder stated the Corps received approval from the Assistant Secretary of the Army for the revised LPP and the Corps released the report to the public the same day. The report was published to the federal registry on May 6th which, he said, begins the 45 day comment period. He said there are a number of public meetings coming up as part of the official public comment period. There are a number of surveys that the Corps has ongoing, he said, and testing that will continue through the summer. He said everything is on schedule and moving forward smoothly. The meetings with FEMA this past week, he said, went very well and both agencies are close to being in a place where they will be able to move forward and implement this project.

Update on Contract Work

In response to a question from Commissioner Mahoney regarding using local contractors to do the work, Mr. Snyder said working with local contractors will definitely be something that the Corps can do; however, the Corps does not want to see contractors managing contractors; therefore, when the Corps moves forward with local

work and administration it would be better if it is local staff that is on hand to do the work.

Technical Committee Update

Bob Zimmerman gave an overview of the completed and ongoing tasks the Technical Committee has been working on. He said there may be some additional costs associated with the ongoing work that the consultants will be doing; however, as far as the Minnesota side is concerned they are still on target with the budget for the year.

Mark Bittner said the next step is the design agreement, which the Corps anticipates will be signed the first part of August and the Work Group needs to determine which elements should be considered; however, the biggest need is for a governance group to be defined. Mr. Bittner presented the Technical Committee's recommended organizational chart to the Work Group. The point is, he said, this Group needs to have a governing body to help make decisions on what to do and what not to do.

Aaron Snyder said the Corps is committed to moving this project forward and the work in kind has worked very well thus far; however, in the design phase of the project the authority level changes making it more difficult to get approval for that work.

Darrell Vanyo moved the Technical Committee be directed to submit a letter to the Corps requesting Section 221 work in kind. Nancy Otto seconded the motion. All Members present voted aye, and the motion was declared carried.

Joint Powers Agreement

Darrell Vanyo stated the Group is at the point where the Joint Powers Agreement (JPA) needs to get started again to show the Corps that the Work Group is an organized group. He said he would suggest directing the legal group to start a limited JPA that would take care of some of the immediate needs and would give us a flavor of how the JPA Board would really work while the Work Group is still in place.

Kevin Campbell said it is clear the Technical Committee feels their hands are tied and need some additional assistance and designating a project manager or executive director is a significant step that the Technical Committee would like the Work Group to take. He said discussion has been to set up a Board of 9 members; 7 from North Dakota and 2 from Minnesota. The primary goal would be to establish this director and determine needs in Washington, DC and any support that would be needed as well. The legal team, he said, could draft something to form a JPA with a limited scope in a short amount of time so the Technical Committee can get moving with the assistance they need.

Nancy Otto said she would like to make sure that the JPA clearly states what decision making power this 9 member board would have.

Kevin Campbell said the only authority the JPA would have is to hire a project manager and potentially hire a lobbyist.

Darrell Vanyo moved to direct the Legal Team to complete the limited JPA for the Work Group's review, including in the document that the JPA Board will consist of 9 members; 7 from North Dakota and 2 from Minnesota, and a 90/10 cost-share during the design phase of the project. Brad Wimmer seconded the motion. All Members present voted aye, and the motion was declared carried.

Next Meeting Date
The Committee agreed to meet on Thursday, May 26 at 3:30 p.m.

The meeting was adjourned at 4:45.

US Army Corps
of Engineers

Fargo-Moorhead Metro Area Feasibility Study FAQs

Q1: Why was a diversion channel rather than levees or water retention recommended?

A1: The study found that a diversion was the only concept that could significantly reduce flood risk in the Fargo, N.D.-Moorhead, Minn. area from flood events larger than the 2009 event. A diversion channel is the safest and most robust flood risk reduction option available because no matter the size of the flood, a diversion channel will provide some benefits. When floods exceed the capacity of levees and dams, the results can be catastrophic. A number of alternatives, including levees and water retention, were analyzed before a diversion channel was tentatively recommended. Due to a lack of high ground in the area, levees could only be built to a height that would reliably contain the 50-year flood, which is similar to the 2009 flood. For greater levels of protection, a ring levee would have to be built around the cities of Fargo and West Fargo, N.D. making this option cost prohibitive. Flood storage was also considered. Water resource managers in the Red River Basin estimated in the Fargo-Moorhead and Upstream Feasibility Study that up to a total of 400,000 acre-feet of flood storage (or 40,000 acres covered with 10 feet of water) could be constructed at various locations upstream of Fargo-Moorhead at a cost of approximately $600 million. Such a system of storage sites would reduce the 100-year flood crest at Fargo by less than two feet. The proposed diversion would reduce the 100-year flood stage in Fargo by 12.4 feet.

Q2: Why is the North Dakota diversion channel the tentatively selected plan, when the Minnesota diversion channel is cheaper?

A2: The local sponsors for the project, the cities of Fargo and Moorhead, as well as representatives from Cass and Clay counties, overwhelmingly supported the North Dakota diversion and selected it as their Locally Preferred Plan because it reduces flood risk for a much larger portion of the metro area. Because the Minnesota diversion is the National Economic Development Plan, the federal government will cap its contribution towards the project at what it would have contributed had the Minnesota plan been selected instead.

Q3: Why was the current alignment selected?

A3: The current alignment was selected for technical and policy reasons. The design intent was to benefit as much existing development as possible, while minimizing overall impacts to the floodplain and the environment while at the same time minimizing costs. The diversion alignment was located to keep flood water out of the Rose Creek watershed by capturing overland flows south of Fargo and to stay south and west of the existing Sheyenne River Diversion control structure at Horace, N.D. The diversion outlet was located downstream of the mouth of the Sheyenne River to maintain natural drainage within the benefitted area. The channel alignment north and west of Harwood, N.D. was adjusted to avoid Drain 13, as requested in a petition from local landowners. In general, to the extent possible, the alignment avoids existing structures and crosses rivers and roads at right angles.

Q4: Why are you proposing to cause upstream impacts now rather than downstream impacts?

A4: Hydraulic modeling showed that the downstream impacts were far greater than first anticipated, extending beyond Drayton, N.D., approximately 211 river miles downstream, and possibly to Canada. However, further study showed that downstream impacts could almost entirely be eliminated by temporarily staging approximately 200,000 acre-feet of water immediately upstream of the diversion. Staging water upstream would affect approximately 1,000 structures as compared to approximately 4,500 structures affected downstream without staging.

Q5: Is this plan final or can the alignment be moved before the diversion channel is built?

A5: As the design proceeds, minor adjustments to the alignment can be expected. Each alignment adjustment will be determined on a case-by-case basis. We can also consider major changes to the alignment, such as moving it west or south, during the design phase; however, we would still have to comply with current laws and policies to include the National Environmental Policy Act, the Clean Water Act and Executive Order 11988. (Executive Order 11988 requires agencies to minimize impacts on the floodplain). Changes may also require Congressional reauthorization.

Q6: Why does the project include recreation features?

A6: Recreation features are generally included in flood risk management projects because they provide additional economic benefits to the local communities at relatively small cost. Flood risk management projects in St. Paul, Minn., Rochester, Minn., Grand Forks, N.D., and East Grand Forks, Minn. included such features. The cost of recreation features are shared 50/50 between the non-federal sponsors and the federal government.

Q7: How will this diversion channel affect the Sheyenne Diversion Channel?

A7: The existing Sheyenne River diversion is really two diversion projects: the Horace to West Fargo diversion and the West Fargo diversion. The Fargo-Moorhead Metro diversion would incorporate and expand the Horace-to-West Fargo channel. From West Fargo north, the Fargo-Moorhead Metro diversion would run alongside the existing West Fargo diversion and be set far enough away so as to not affect the existing diversion. The Fargo-Moorhead Metro diversion would reduce risk in the cities of Horace and West Fargo from Sheyenne River floods more than the current Sheyenne Diversion does, and it will also reduce flood risk from Red River and Wild Rice River flood events.

Q8: Why have costs increased since you released the Draft Environmental Impact Statement?

A8: In the May 2010 Draft EIS, the tentatively selected plan had an estimated first cost of $1.3 billion. In early fall of 2010, we refined the Draft EIS with the new data we collected during the study process. The new data indicated that the diversion channel had to be adjusted to minimize the contact with the Brenna clay formation (a weaker soil). These adjustments to the plan increased the first costs to $1.5 billion. Shortly thereafter, we determined that the downstream impacts from the North Dakota 35K diversion were not acceptable. We modified the plan to include upstream impacts in an effort to minimize the extensive downstream impacts, and the mitigation for the upstream impacts increased the first costs to $1.7 billion.

Q9: How will the diversion channel cross five rivers?

A9: At the Wild Rice River, there will be a gated water control structure similar to the one on the Red River at the upstream end of the project. Where the diversion crosses under the Sheyenne and Maple rivers, aqueduct structures will allow some of the natural river flows to cross over the diversion. Similar structures are more common in Europe and have been constructed in the United States, typically for water supply or canal projects. The Rush and Lower Rush rivers will be completely diverted into the diversion channel via drop structures. The existing Rush and Lower Rush river channels will be abandoned.

Q10: Is it true that the Fargo-Moorhead Metro area will be protected to a 500-year level when other communities in the basin have less protection?

A10: The diversion project will significantly reduce flood damages in the benefitted area by reducing the frequency of high flows in the natural river channels through town. For floods up to a 100-year event, only minimal emergency efforts would be required within the benefitted area. A 500-year flood would cause a stage of approximately 40 feet with the diversion channel in place that would require emergency measures similar to those used during the 2009 flood (stage of 40.8 feet). It is important to remember that the Fargo-Moorhead area is prone to localized flooding from extreme rainfall events, and the diversion project would not reduce that risk.

Q11: Will the 45-day public review period for the Supplemental Draft EIS be extended upon request?

A11: The Corps will consider any request for an extension but at this time does not anticipate extending the review period. The public review period began May 6 when the Supplemental Draft EIS notice of availability was published in the *Federal Register* and ends 45 days later on June 20. The Supplemental Draft EIS will have been available for public review for longer than 45 days, as it was posted on the project website April 28 and mailed out to agencies and libraries April 29. The Corps began releasing the details of the tentatively selected plan several months ago. In addition, several public meetings, including ones specifically for landowners upstream, were held prior to release of the Supplemental Draft EIS and information was made public on the project website. Finally, although the tentatively selected plan identified in the Supplemental Draft EIS is different from that identified in the Draft EIS, the majority of the information conveyed in the Supplement is similar to that conveyed in the Draft and the features of the other alternatives remained largely the same.

The Fargo-Moorhead Metro area has suffered from extensive flooding nearly every year as of late, and it is critical that this project be considered by Congress as soon as possible so a project can be implemented. There is a specific process with specific timelines that must be followed in order to present the project to Congress. Given the extensive information already shared with the public and the desire to attempt to obtain Congressional authorization as soon as possible, the Corps does not anticipate extending the public review period.

North Dakota State Water Commission

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

Agenda H (4-2)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer-Secretary
SUBJECT: WAWSP – Project Update & Funding Request
DATE: June 10, 2011

Authorizing Legislation

House Bill 1206 formed the Western Area Water Supply Authority (WAWSA). There are a few sections in the attached legislation to highlight for the decisions before us today.

On page 1 of the attached legislation, 61-40-01, last sentence: "The western area water supply authority shall consider in the process of locating industrial water depots the location of private water sellers so as to minimize the impact on private water sellers." As the project develops, the Authority will need to show how they have considered minimizing the impact on private water sellers.

One page 2, 61-40-03(1): "[t]he state engineer or designee is a voting member on the authority's board of directors." Michelle Klose is the State Engineer designee on the Authority.

On page 4, 61-40-05(20): The authority may "[a]ccept assignment by member entities of contracts that obligate member entities to provide a water supply, contracts that relate to construction of water system infrastructure, or other member entity contracts that relate to authorities transferred to the authority under this chapter." (Emphasis added.) The WAWSA is proposing to use this legislative language to allow the work for Phase I under the contract between McKenzie County water resource district and their engineering firm to continue through the Authority. The Phase II and Phase III portions of the project will proceed following an engineering selection process.

On page 4, 61-40-06: "The authority shall comply with the policy of the state water commission as the policy relates to bidding, planning, and construction of the project. … The authority shall report to and consult with the state water commission regarding the operation and financial status of the project, as requested by the state water commission. In relation to initial construction of the system and debt repayment, the authority shall present the overall plan and contract plans and specifications for the project to the state water commission for approval." The WAWSA is seeking approval for Phase I of the project, which has an estimated construction cost of $27 million. At this point, we are recommending an overall approval from the State Water Commission on Phase I of the project, including review of depot locations. We are also recommending the State Water Commission delegate the review of specific plans and

specifications to the staff of the State Water Commission. The attached letter from the Authority requesting funding includes a listing of Phase I projects and associated map.

On page 5, Section 2: "The state water commission shall make available from funding appropriated to the commission for the 2011-13 biennium $25,000,000 as a zero interest loan to the western area water supply authority, and the Bank of North Dakota shall manage this loan." We have started discussions with the Bank on North Dakota on how these loans will be set up and how funding will be transferred. The level of oversight by the State Water Commission will need to be addressed in the loan documents.

Authority & Bylaws

The initial board of directors, and positions, has been established as follows:

Denton Zubke, Chairman – representing McKenzie County Water Resource District
Brent Bogar, Vice President – representing City of Williston
Liz Suhr, Treasurer – representing R&T Water Supply Association
Karen Burau, Secretary – representing Williams Rural Water District
Bert Anderson, representing Burke Divide Williams Rural Water
Gary Rust, representing Burke Divide Williams Rural Water
Jerry Ranum, representing R&T Water Supply Association
Mark Owan, representing Williams Rural Water District
Ben Clarys, alternate representative for Williams Rural Water District
Gene Veeder, representing McKenzie County Water Resource District
Ward Koeser, representing City of Williston
Michelle Klose, representing State Engineer

The bylaws and board of directors were conditionally approved by the entities represented, pending the review of the bylaws by the Attorney General. The Attorney General review did require a few changes to the bylaws that will now be reviewed by the boards and Authority. The edited bylaws are enclosed for your information.

Engineering Selection Process

During the last meeting of the Authority on May 31, 2011, the engineering selection process was discussed. We provided recommendations on insurance and indemnification language, and suggested this information be available with the advertisement, along with contract language, so the discussion would be upfront with all potential firms. In addition, the initial proposal for services requested the firm's standard hourly fee scheduled. We suggested changes as for the magnitude on this project, an audited actual cost plus percent profit could be negotiated. A subcommittee of the Authority, including the State Engineer designee, was established to develop the proposal for the selection process.

I recommend the State Water Commission approve the overall Western Area Water Supply Project Phase I, and the $25 million of project funding authorized in House Bill 1206. It is further recommended that the State Water Commission delegate the review of specific plans and specifications to the staff of the State Water Commission.

WESTERN AREA WATER SUPPLY AUTHORITY
Box 1306
22 East Broadway
Williston, North Dakota 58801

June 8, 2011

Governor Jack Dalrymple, Chairman
North Dakota State Water Commission
900 East Boulevard Avenue, Dept 770
Bismarck, ND 58505-0850

Re: $25 Million Funding Request
Western Area Water Supply Project (WAWSP)

Dear Governor Dalrymple:

Thank you for your continued support of the Western Area Water Supply Authority and Project. Since the passage of HB 1206, we have been working diligently to complete the project on the schedule that was presented to the Legislature. At our organizational meeting, we approved a project schedule which includes estimated expenses for the period of June 1, 2011 through March 31, 2012 of approximately $30.6 million. To meet the project schedule, we are requesting approval of the State Water Commission's Resources Trust Fund portion of the WAWSP financing in the amount of $25 million at the State Water Commission meeting on June 21, 2011.

Latest Action Steps Taken

Since the approval of HB 1206, the following action steps have been completed:

- Appointed representation to the WAWSA Board of Directors as directed in HB 1206
- Held an organizational Board of Directors meeting and elected officers
- Approved the draft bylaws by founding member entities and WAWSA Board of Directors which have been forwarded to the ND Attorney General's office for review and approval
- Approved project schedule
- Initiated legal services selection process
- Completed the WAWSP Business Plan Supplement #1 to verify project feasibility based upon the financial package provided in HB 1206
- Initiated communications with the Bank of North Dakota on WAWSP due diligence process for project financing

The WAWSA is currently developing a job description for an Executive Director and a Request for Proposal for engineering services. The engineering services selection process is anticipated to be completed by the end of July and will encompass general services for Phase II and III projects. In April 2011, the Phase I project design contracts were executed with AE2S through the McKenzie County Water Resource District under the Memorandum of Understanding between the founding members. The Phase I contracts with AE2S will be transferred from the McKenzie County Water Resource District to the WAWSA for completion.

Supporting Documents

The following attachments have been enclosed for reference:

- Revised Proposed Construction Schedule, May 2011 (in 2011 dollars)
- Quarterly Project Implementation Schedule April 1, 2012 to December 31, 2013
- WAWSP map identifying the Phase I, II, and III projects

WAWSP Business Plan Supplement #1

The WAWSP Business Plan Supplement #1 has been drafted to provide analysis based on the financial package outlined in HB 1206 and adjustments made to the construction timeline to determine the WAWSP financial viability. The financing package provided by the State of North Dakota will provide sufficient capital to fund Phases I and II as well as the Phase III engineering, legal, and administrative expenses. Further, due to the opportunity to capitalize on industrial water demands, WAWSP should provide sufficient revenue to operate, build adequate reserve funds, and complete debt repayment within a ten-year period following full project implementation.

The WAWSP Business Plan Supplement #1 has been forwarded to the State Engineer and the Bank of North Dakota for review. The WAWSA would be happy to provide a detailed presentation at the June 21 State Water Commission meeting, if requested.

Again, thank you for your support for the Western Area Water Supply Project. We look forward to providing you and the Commission regular updates as we continue the important work to provide quality water to the people of our region. Should further information be required, please contact me at dentonz@dakotawestcu.org or 701-444-3616.

Sincerely,

Denton Zubke
Chairman
Western Area Water Supply Authority

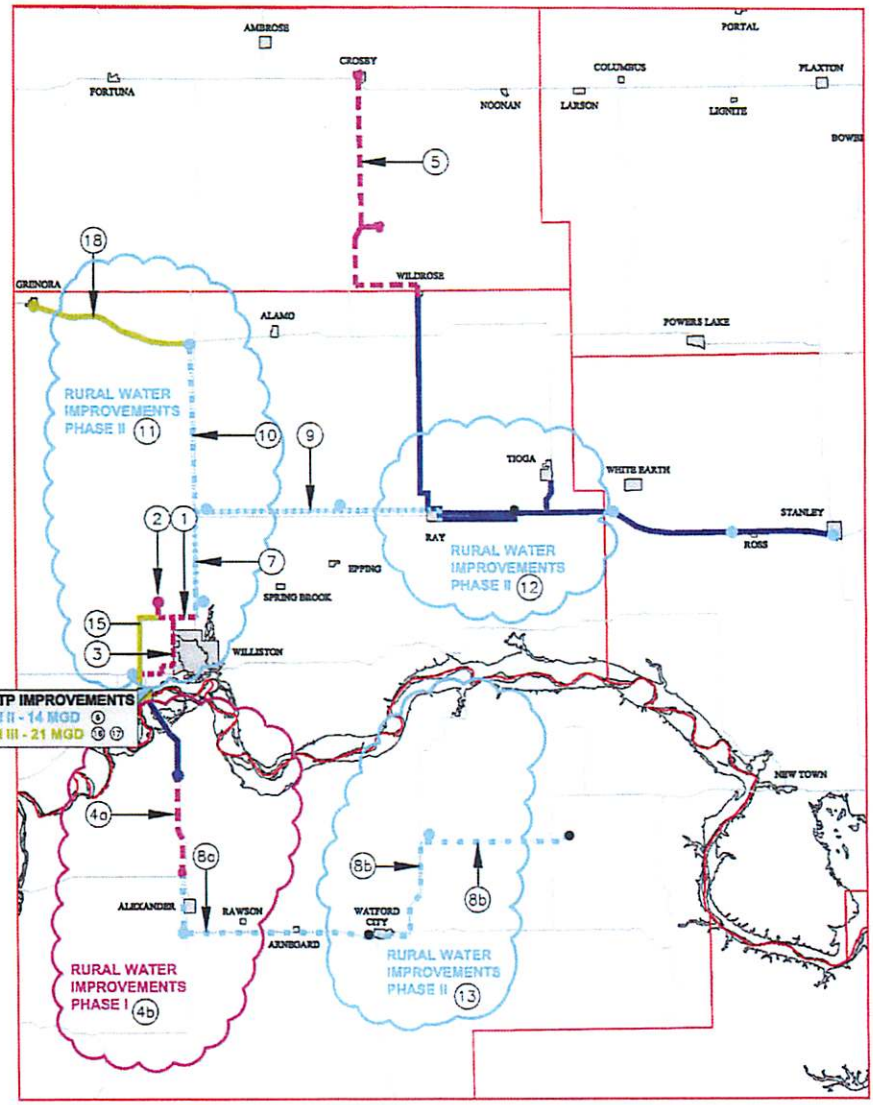
Enclosures: Revised Proposed Construction Schedule, May 2011 (in 2011 dollars)
Quarterly Project Implementation Schedule April 1, 2012 to December 31, 2013
WAWSP map identifying the Phase I, II, and III projects

Cc: Todd Sando, State Engineer, ND State Water Commission
Brad Thompson, Loan Officer, Bank of North Dakota
Karlene Fine, Executive Director, ND Industrial Commission
WAWSA Board of Directors

Project Number	Project	Estimated Start Date	Estimated Completion Date	Estimated Construction
1	Williston By-Pass Transmission Lines and Bulk Fill Stations; Service to WRWD West Service Area	4/1/11	12/31/11	$4,500,000
2	NW Williston Regional Reservoir (5 MG)	4/1/11	6/30/12	$ 5,000,000
3	Regional Water Service to NW Williston – Tie Back to 26th Street Reservoir and NW Annexation Areas	4/1/11	12/31/11	$ 5,725,000
4a	Regional Water Service to Western McKenzie County	4/1/11	9/30/12	$ 4,800,000
4b	MCRWS System IV Improvements	4/1/11	12/31/12	$ 3,700,000
5	Regional Water Service From R&T WSA to the City of Crosby	4/1/11	9/30/12	$ 4,000,000
TOTAL PHASE I				**$ 27,725,000**
6	Williston Regional Water Service – WTP Expansion from 10 MGD to 14 MGD	4/1/11	6/30/13	$ 11,000,000
7	Regional Transmission Line to 13 Mile Corner, Reservoir (2 MG), and Bulk Fill Station	10/1/11	12/31/12	$ 13,700,000
8a	Regional Water Service to Watford City	10/1/11	12/31/12	$ 14,900,000
8b	Supplemental Water Service to MCRWS System II	10/1/11	12/31/12	$ 5,600,000
9	Regional Water Service to R&T Water Supply Association, Expanded Service to Stanley	10/1/11	12/31/12	$ 17,200,000
10	Regional Water Service to Intersection of Highways 85/50	10/1/11	12/31/12	$ 4,600,000
11	WRWD Regional Water Service to West Central Williams County (Black Tail Dam Area) – Estimated	7/1/11	6/30/13	$ 1,350,000
12	WRWD Regional/Rural Water Service to East Central Williams County (Ray and Tioga Area) – Estimated	7/1/11	6/30/13	$ 4,500,000
13	MCRWS System I Expansion	7/1/11	6/30/13	$ 2,250,000
14	Phase III Engineering, Legal, Administration	1/1/12	6/30/13	$5,230,000
TOTAL PHASE II				**$ 80,330,000**
15	Williston Phase II By-Pass Transmission Lines	8/1/12	6/30/14	$ 8,460,000
16	Williston Regional Water Service WTP Intake Expansion – 14 to 21 MGD	1/1/12	12/31/14	$ 11,700,000
17	Williston WTP Expansion – 14 to 21 MGD	1/1/12	12/31/14	$ 21,000,000
18	Service to Grenora (if service is requested)	1/1/12	12/31/13	$ 810,000
TOTAL PHASE III				**$ 41,970,000**
TOTAL PHASE I, II, AND III				**$ 150,025,000**

Revised Proposed Construction Schedule, May 2011 (in 2011 dollars)

WESTERN AREA WATER SUPPLY PROJECT
PHASING PLAN



Sixty-second Legislative Assembly of North Dakota
In Regular Session Commencing Tuesday, January 4, 2011

HOUSE BILL NO. 1206
(Representatives Skarphol, Keiser, Kreun)
(Senators Fischer, Lyson, O'Connell)

AN ACT to create and enact chapter 61-40 of the North Dakota Century Code, relating to a western area water supply authority; to provide appropriations; to provide for loans and loan repayment; and to declare an emergency.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. Chapter 61-40 of the North Dakota Century Code is created and enacted as follows:

61-40-01. Legislative declarations - Authority of western area water supply authority.

The legislative assembly declares that many areas and localities in western North Dakota do not enjoy adequate quantities of high-quality drinking water; that other areas and localities in western North Dakota do not have sufficient quantities of water to ensure a dependable, long-term domestic or industrial water supply; that greater economic security and the protection of health and property benefits the land, natural resources, and water resources of this state; and that the promotion of the prosperity and general welfare of all of the people of this state depend on the effective development and utilization of the land and water resources of this state and necessitates and requires the exercise of the sovereign powers of this state and concern a public purpose. To accomplish this public purpose, it is declared necessary that a water authority to treat, store, and distribute water to western North Dakota be established to provide for the supply and distribution of water to the people of western North Dakota for purposes, including domestic, rural water, municipal, livestock, industrial, oil and gas development, and other uses, and provide for the future economic welfare and prosperity of the people of this state, and particularly the people of western North Dakota, by the creation and development of a western area water supply project for beneficial and public uses. The western area water supply authority may acquire, construct, improve, develop, and own water supply infrastructure and may enter water supply contracts with member cities, water districts, and private users, such as oil and gas producers, for the sale of water for use within or outside the authority boundaries or the state. The western area water supply authority shall consider in the process of locating industrial water depots the location of private water sellers so as to minimize the impact on private water sellers.

61-40-02. Western area water supply authority.

The western area water supply authority consists of participating political subdivisions located within McKenzie, Williams, Burke, Divide, and Mountrail Counties which enter a water supply contract with the authority. Other cities and water systems, within or outside the authority counties' boundaries, including cities or water systems in Montana, may contract with the authority for a bulk water supply. The authority is a political subdivision of the state, a governmental agency, body politic and corporate, with the authority to exercise the powers specified in this chapter, or which may be reasonably implied. Participating member entities may be required to pay dues or water sale income to the authority, as determined by the bylaws and future resolutions of the authority. Participating member entities may not withdraw from the authority or fail or refuse to pay any water sale income to the authority if the twenty-five million dollar zero interest loan from the state water commission has not been repaid.

61-40-03. Western area water supply authority - Board of directors.

1. The initial board of directors of the western area water supply authority consists of two representatives from each of the following entities: Williams rural water district, McKenzie County water resource district, the city of Williston, BDW water system association, and R&T water supply association. The governing body of each member entity shall select two

representatives to the authority board who are water users of the member entity. If a vacancy arises for a member entity, the governing body of the member entity shall select a new representative to act on its behalf on the authority board. In addition, the state engineer or designee is a voting member on the authority's board of directors. Directors have a term of one year and may be reappointed.

2. Additional political subdivisions or water systems may be given membership on the board upon two-thirds majority vote of the existing board. To be eligible for membership on the board, the member entity must first contract with the authority for financial participation in the project.

3. A member entity may designate an alternate representative to attend meetings and to act on the member's behalf. The board may designate associate members who are nonvoting members of the board. Notwithstanding this section, except for the state engineer or designee, initial board members must be removed if they have not entered a contract with the authority, before August 1, 2013, for financial participation in the project.

61-40-04. Board of directors - Officers - Meetings.

1. The board of directors shall adopt such rules and bylaws for the conduct of the business affairs of the authority as it determines necessary, including the time and place of regular meetings of the board, financial participation structure for membership in the authority, and membership appointment and changes. Bylaws need to be approved by member entity boards.

2. The board shall elect from its members a chairman and a vice chairman. The board shall elect a secretary and a treasurer, which offices may be held by the same individual, and either or both offices may be held by an individual who is not a member of the board. Special meetings of the board may be called by the secretary on order of the chairman or upon written request of a majority of the qualified members of the board. Notice of a special meeting must be mailed to each member of the board at least six days before the meeting, provided that a special meeting may be held at any time when all members of the board are present or consent in writing.

3. Board members are entitled to receive as compensation an amount determined by the board not to exceed the amount per day provided members of the legislative management under section 54-35-10 and must be reimbursed for their mileage and expenses in the amount provided for by sections 44-08-04 and 54-06-09.

4. The initial board bylaws must direct board voting protocol. A weighted voting structure for board members is acceptable if the voting is based upon the volume of water purchased, the financial contributions of the stakeholder entities, or any other formula agreed by a majority of the board.

5. Before the bylaws become effective, the bylaws must be reviewed and approved by the attorney general.

61-40-05. Authority of the western area water supply authority.

In addition to authority declared under section 61-40-01, the board of directors of the western area water supply authority may:

1. Sue and be sued in the name of the authority.

2. Exercise the power of eminent domain in the manner provided by title 32 or as described in this chapter for the purpose of acquiring and securing any right, title, interest, estate, or easement necessary or proper to carry out the duties imposed by this chapter, and particularly to acquire the necessary rights in land for the construction of an entire part of any pipeline,

reservoir, connection, valve, pumping installation, or other facility for the storage, transportation, or utilization of water and all other appurtenant facilities used in connection with the authority. However, if the interest sought to be acquired is a right of way for any project authorized in this chapter, the authority, after making a written offer to purchase the right of way and depositing the amount of the offer with the clerk of the district court of the county in which the right of way is located, may take immediate possession of the right of way, as authorized by section 16 of article I of the Constitution of North Dakota. Within thirty days after notice has been given in writing to the landowner by the clerk of the district court that a deposit has been made for the taking of a right of way as authorized in this subsection, the owner of the property taken may appeal to the district court by serving a notice of appeal upon the acquiring agency, and the matter must be tried at the next regular or special term of court with a jury unless a jury be waived, in the manner prescribed for trials under chapter 32-15.

3. Accept funds, property, services, pledges of security, or other assistance, financial or otherwise, from federal, state, and other public or private sources for the purpose of aiding and promoting the construction, maintenance, and operation of the authority. The authority may cooperate and contract with the state or federal government, or any department or agency of state or federal government, or any city, water district, or water system within the authority, in furnishing assurances and meeting local cooperation requirements of any project involving treatment, control, conservation, distribution, and use of water.

4. Cooperate and contract with the agencies or political subdivisions of this state or other states, in research and investigation or other activities promoting the establishment, construction, development, or operation of the authority.

5. Appoint and fix the compensation and reimbursement of expenses of employees as the board determines necessary to conduct the business and affairs of the authority and to procure the services of engineers and other technical experts, and to retain attorneys to assist, advise, and act for the authority in its proceedings.

6. Operate and manage the authority to distribute water to authority members and others within or outside the territorial boundaries of the authority and this state.

7. Hold, own, sell, or exchange any and all property purchased or acquired by the authority. All money received from any sale or exchange of property must be deposited to the credit of the authority and may be used to pay expenses of the authority.

8. Enter contracts to obtain a supply of bulk water through the purchase of infrastructure, bulk water sale or lease, which contracts may provide for payments to fund some or all of the authority's costs of acquiring, constructing, or reconstructing one or more water supply or infrastructure.

9. Acquire, construct, improve, and own water supply infrastructure, office and maintenance space in phases, in any location, and at any time.

10. Enter contracts to provide for a bulk sale, lease, or other supply of water for beneficial use to persons within or outside the authority. The contracts may provide for payments to fund some or all of the authority's costs of acquiring, constructing, or reconstructing one or more water system projects, as well as the authority's costs of operating and maintaining one or more projects, whether the acquisition, construction, or reconstruction of any water supply project actually is completed and whether water actually is delivered pursuant to the contracts. The contracts the cities, water districts, and other entities that are members of the western area water supply authority are authorized to execute are without limitation on the term of years.

11. Borrow money as provided in this chapter.

12. Make all contracts, execute all instruments, and do all things necessary or convenient in the exercise of its powers or in the performance of its covenants or duties or in order to secure the

payment of its obligations, but an encumbrance, mortgage, or other pledge of property of the authority may not be created by any contract or instrument.

13. Accept from any authorized state or federal agency loans or grants for the planning, construction, acquisition, lease, or other provision of a project, and enter agreements with the agency respecting the loans or grants.

14. Contract debts and borrow money, pledge property of the authority for repayment of indebtedness, and provide for payment of debts and expenses of the authority.

15. Operate and manage the authority to distribute water to any out-of-state cities or water systems that contract with the authority.

16. Accept, apply for, and hold water allocation permits.

17. Adopt rules concerning the planning, management, operation, maintenance, sale, and ratesetting regarding water sold by the authority. The authority may adopt a rate structure with elevated rates set for project industrial water supplies in recognition that a large component of the project expense is being incurred to meet the demands of industrial users.

18. Develop water supply systems; store and transport water; and provide, contract for, and furnish water service for domestic, municipal, and rural water purposes; milling, manufacturing, mining, industrial, metallurgical, and any and all other beneficial uses; and fix the terms and rates therefore. The authority may acquire, construct, operate, and maintain dams, reservoirs, ground water storage areas, canals, conduits, pipelines, tunnels, and any and all treatment plants, works, facilities, improvements, and property necessary the same without any required public vote before taking action.

19. Contract to purchase or improve water supply infrastructure or to obtain bulk water supplies without requiring any vote of the public on the projects or contracts. In relation to the initial construction of the system and for the purposes of entering a contract with the authority, municipalities are exempt from the public voting requirements or water contract duration limitations otherwise imposed by section 40-33-16.

20. Accept assignment by member entities of contracts that obligate member entities to provide a water supply, contracts that relate to construction of water system infrastructure, or other member entity contracts that relate to authorities transferred to the authority under this chapter.

61-40-06. Oversight of authority projects.

The authority shall comply with the policy of the state water commission as the policy relates to bidding, planning, and construction of the project. The policy must include provisions for insurance, including general liability insurance, in adequate amounts. The authority shall report to and consult with the state water commission regarding the operation and financial status of the project, as requested by the state water commission. In relation to initial construction of the system and debt repayment, the authority shall present the overall plan and contract plans and specifications for the project to the state water commission for approval. The attorney general shall assist the authority at the request of the state water commission. 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.

61-40-07. Easement granted for pipelines and appurtenant facilities on any public lands.

In connection with the construction and development of the project, there is granted over all the lands belonging to the state, including lands owned or acquired for highway right-of-way purposes, a right of way for pipelines, connections, valves, and all other appurtenant facilities constructed as part of

the project. However, the director of the department of transportation and the state engineer must approve the plans of the authority with respect to the use of right of way of roads before the grant becomes effective.

61-40-08. Proceedings to judicially confirm contracts and other acts.

The authority, before making any contract or taking any special action, may commence a special proceeding in district court by which the proceeding leading up to the making of such contract or leading up to any other special action must be examined, approved, and confirmed. The judicial proceedings must comply substantially with the procedure required in the case of judicial confirmation of proceedings, acts, and contracts of an irrigation district.

61-40-09. Default.

If the authority is in default in the payment of the principal of or interest on any of the obligations of the authority under this chapter and if the budget section determines that the authority is unable to reimburse the state in the time period required by the budget section, the budget section may give written notice to the governing board of the authority that the state has taken possession and ownership of the water system of the authority and the liabilities of the authority. In addition, the state assumes the powers of the authority. If the authority is in default in the payment of the principal of or interest on the obligation to the Bank of North Dakota for a loan for which the Bank of North Dakota is the source of funds for the loan, the state water commission shall request funding from the legislative assembly to repay the principal and interest due. Upon written notice, the members of the governing board of the authority are immediately removed, and the state water commission is the governing board from the date of notice. If the state water commission determines that governance, possession, and ownership of the water system is not necessary for the authority to be able to reimburse the state in the necessary time period, the state water commission may develop a plan to return governance, possession, and ownership to the authority, subject to approval of the plan by the budget section.

SECTION 2. LOANS FROM BANK OF NORTH DAKOTA AND STATE WATER COMMISSION. The Bank of North Dakota shall provide a loan of $50,000,000 to the western area water supply authority for construction of the project. The terms and conditions of the loan must be negotiated by the western area water supply authority and the Bank of North Dakota. However, the term of the loan is a maximum of seven years after June 30, 2014. The state water commission shall make available from funding appropriated to the commission for the 2011-13 biennium $25,000,000 as a zero interest loan to the western area water supply authority, and the Bank of North Dakota shall manage this loan. The maximum term of this loan is five years from the completion of the $10,000,000 loan from the resources trust fund.

SECTION 3. APPROPRIATION. There is appropriated out of any moneys in the general fund in the state treasury, not otherwise appropriated, the sum of $25,000,000 or so much of the sum as may be necessary, to the Bank of North Dakota for the purpose of providing a loan to the western area water supply authority for a maximum term of eight years from the completion of the $50,000,000 loan from the Bank of North Dakota and at five percent interest per year, for the biennium beginning July 1, 2011, and ending June 30, 2013.

SECTION 4. APPROPRIATION. There is appropriated out of any moneys in the resources trust fund in the state treasury, not otherwise appropriated, the sum of $10,000,000, or so much of the sum as may be necessary, to the Bank of North Dakota for the purpose of providing a loan to the western area water supply authority for a maximum term of two years from the completion of the $25,000,000 loan from the general fund and at five percent interest per year, for the biennium beginning July 1, 2011, and ending June 30, 2013.

SECTION 5. LOAN FUNDING AND REPAYMENT PRIORITY. Funding from sections 2, 3, and 4 of this Act must be structured so that funding is provided, as needed, first from the $25,000,000 zero interest loan from the state water commission, second from the $50,000,000 loan from the Bank of North Dakota, third from the $25,000,000 loan from the general fund, and last from the $10,000,000

loan from the resources trust fund. Repayment of loans must be structured so that repayment is first of the $50,000,000 loan from the Bank of North Dakota, second of the $25,000,000 loan from the general fund for deposit of the principal in the general fund and interest in the resources trust fund, third from the $10,000,000 loan from the resources trust fund for deposit in the resources trust fund, and last of the $25,000,000 zero interest loan from the state water commission for deposit in the resources trust fund. The western area water supply authority shall repay the loans for the project from revenues from the project, and the authority may prepay loans within the priority without penalty. Upon repayment of the state water commission zero interest loan, the authority shall provide five percent of the net profits to the state water commission for deposit by the state treasurer in the resources trust fund until June 30, 2040.

SECTION 6. SECOND PHASE ANTICIPATED FUNDING. At the request of the western area water supply authority, the state water commission shall consider a loan of $40,000,000 from the resources trust fund for inclusion within the state water commission's budget. The state water commission shall consult and work cooperatively with the water-related topics overview committee in setting the priority of the loan within the budget.

SECTION 7. EMERGENCY. This Act is declared to be an emergency measure.

Speaker of the House

President of the Senate

Chief Clerk of the House

Secretary of the Senate

This certifies that the within bill originated in the House of Representatives of the Sixty-second Legislative Assembly of North Dakota and is known on the records of that body as House Bill No. 1206 and that two-thirds of the members-elect of the House of Representatives voted in favor of said law.

Vote: Yeas 81 Nays 12 Absent 1

Speaker of the House

Chief Clerk of the House

This certifies that two-thirds of the members-elect of the Senate voted in favor of said law.

Vote: Yeas 39 Nays 8 Absent 0

President of the Senate

Secretary of the Senate

Received by the Governor at 1:24 P.M. on April 27, 2011.

Approved at 1:30 P.M. on May 3, 2011.

Governor

Filed in this office this 5th day of May, 2011,

at 11:31 o'clock A.M.

Secretary of State

BYLAWS OF WESTERN AREA WATER SUPPLY AUTHORITY

(revised _____ __, 2011)

ARTICLE 1. CREATION OF WAWSA

Section 1.01. Creation of WAWSA. The Western Area Water Supply Authority ("WAWSA") was created pursuant to N.D.C.C. Chapter 61-40 (the "Act"). WAWSA is a political subdivision of the State of North Dakota, a governmental agency, body politic and corporate with the authority to exercise the powers specified in the Act, or which may be reasonably implied.

Section 1.02. Conflict with the Act. In the event of a conflict between these Bylaws and the Act, the Act shall control.

ARTICLE 2. MEMBERSHIP

Section 2.01. Membership Generally. Membership in WAWSA consists of political subdivisions within McKenzie, Williams, Burke, Divide and Mountrail Counties that have entered into a Water Supply Agreement with WAWSA (each a "Member" and collectively, the "Members"). "Water Supply Agreement" means a water supply agreement, in a form approved by WAWSA, which includes provisions for financial participation in the project.

Section 2.02. Founding Membership. The initial Members shall be Williams Rural Water District, McKenzie County Water Resource District, the City of Williston, R&T Water Supply Association and BDW Water System Association (each a "Founding Member" and collectively, the "Founding Members"). A Founding Member shall cease being a Founding Member for purposes of these Bylaws when such Founding Member is no longer a Member.

Section 2.03. Additional Members. Additional political subdivisions may be admitted as a "Member" upon the 2/3 majority approval of the existing Board.

Section 2.04. Removal of Members. Any Member shall cease being a Member for purposes of this Agreement upon termination or expiration of such Member's Water Supply Agreement with WAWSA. In addition, a Founding Member shall cease being a Member if such Founding Member does not execute a Water Supply Agreement by August 1, 2013.

ARTICLE 3. POWERS AND COMPOSITION OF BOARD OF DIRECTORS

Section 3.01. Powers of the Board. The WAWSA shall be governed exclusively by a board of directors (the "Board"). The Members have no right to participate directly in the governance of WAWSA or to vote on any matter. The Board shall have all of the powers enumerated in the Act and all powers reasonably implied therefrom.

Section 3.02. Composition of the Board.

(a) Voting Members. Each Founding Member shall be entitled to appoint two (2) voting directors to the Board. Each director must be a water user of its respective Member entity. The Board may grant one or more other Members the right

to appoint one or more voting directors to the Board. Each director appointed by a Founding Member or other Member is referred to as an "Appointed Director". In addition, the North Dakota State Engineer will designate one voting director to the Board.

(b) Non-Voting Members. The Board may appoint additional non-voting members to the Board to serve in an advisory capacity only (each an "Associate Director").

Section 3.03. Removal of Directors. Any Member may remove any Appointed Director appointed by such Member. The Board may remove any Associate Director. If any Member ceases being a Member, all Appointed Directors appointed by such former Member shall be removed automatically.

Section 3.04. Vacancies. Vacancies on the Board resulting from the death, resignation, removal or disqualification of an Appointed Director shall be filled by the Member who appointed such Appointed Director. Vacancies with respect to Associate Directors may be filled by the Board.

Section 3.05. Term. Each Appointed Director shall serve for a one (1) year term unless such Appointed Director earlier resigns, dies, is disqualified or is removed by the Member appointing such Appointed Director. The term of each Associate Director shall be for a one (1) year term. All directors can be reappointed.

Section 3.06. Alternate Designation. The State Engineer and any Member appointing an Appointed Director periodically may designate an alternate to such Appointed Director to attend meetings and to act on such Appointed Director's behalf. Such designation shall be submitted in writing to the Secretary and shall be signed by the State Engineer or the chief executive officer of the Member who appointed such Appointed Director, respectively. A duly designated designee of an Appointed Director may vote in place of the designating Appointed Director on any issues other than any amendment to these Bylaws. The presence of a duly designated designee of an Appointed Director constitutes the presence of such Appointed Director for quorum purposes.

Section 3.07. Committees. The Board from time to time may authorize the Chair to create one or more committees, with such authority as may be designated by the Board.

ARTICLE 4. BOARD OF DIRECTORS MEETINGS

Section 4.01. Regular Meetings. The Board shall meet not less than quarterly, at a place, date and time designated by the Chair. The Board may cancel or postpone any regularly scheduled meeting. Any business of WAWSA may be conducted at a regular meeting, regardless of whether such business is specifically identified in a regular meeting notice.

Section 4.02. Special Meetings. Special meetings of the Board may be called by the Chair and must be called by the Chair upon the request of a majority of the Appointed Directors. The Chair shall designate the place, date and time of each special meeting. The business of a special meeting shall be limited to the purpose for calling the meeting as stated in the notice of such special meeting.

Section 4.03. Location of Meeting. Unless otherwise specified in the applicable meeting notice, all meetings of the Board shall be held at the Williston City Hall.

Section 4.04. Notice of Meetings.

(a) Regular Meetings. Notice of any regular meeting shall be given at least twenty (20) days previously thereto by written notice delivered personally, or mailed to each Appointed Director and each Associate Director at his or her business address, or by e-mail. The notice shall include an agenda generally describing the subject matter to be considered at the meeting. Any Appointed Director may place items on the agenda of a regular meeting by written request submitted at least fifteen (15) days prior to the scheduled meeting date. The failure to give notice to any Associate Director of a regular meeting shall not affect the validity of the notice or prevent the holding of the regular meeting or the transaction of business thereat.

(b) Special Meetings. Notice of any special meeting shall be given at least six (6) days previously thereto by written notice delivered personally or mailed to each Appointed Director and each Associate Director at his or her business address, or by e-mail, provided that a special meeting may be held at any time when all members of the board are present or consent in writing. The notice shall identify the business to be conducted at the special meeting. The failure to give notice to any Associate Director of a special meeting shall not affect the validity of the notice or prevent the holding of the special meeting or the transaction of business thereat.

Section 4.05. Miscellaneous Notice Provisions. If mailed, a notice shall be deemed to be delivered when deposited in the United States mail addressed as provided in Section 4.04 , with postage thereon prepaid. If notice is given by e-mail, such notice shall be deemed to be delivered when the e-mail is delivered to the recipient. Notice of an adjourned meeting need not be given other than by announcement at the meeting at which adjournment is taken.

Section 4.06. Organization of Meetings. The Chair, or in the absence of the Chair, the Vice-Chair, shall preside over all meetings of the Board. If neither the Chair nor the Vice-Chair are present, the Chair shall designate another Appointed Director to preside over the meeting. The Secretary, or in the absence of the Secretary, a person appointed by the Chair, shall act as the secretary for all meetings of the Board. Meetings of the Board shall be governed by the parliamentary rules as outlined in Robert's Rules of Order Newly Revised, except as otherwise provided in these Bylaws or in resolutions or policies adopted by the Board.

Section 4.07. Remote Communications. Meetings of the Board may be conducted by any means of remote communication (e.g., videoconference or teleconference) through which all of the directors may simultaneously participate with each other during the meeting. Participation in a meeting by remote communications constitutes presence in person at the meeting.

Section 4.08. Public Meetings. All Board meetings shall be open to the public to the extent required by North Dakota open meeting laws and shall comply with the notice requirements of N.D.C.C. § 44-04-20.

ARTICLE 5. QUORUM AND VOTING

Section 5.01. Quorum.

(a) Subject to Section 5.01(b), a quorum to transact business at any meeting of the Board requires an Appointed Director appointed from at least 80 percent of the Member entities.

(b) If a quorum is not present at any regular or special meeting of the Board, upon the request of 3/4 of the Appointed Directors, the Chair, pursuant to Article 4, shall call a special meeting as soon as reasonably practical to consider the matters that were to have been considered at the meeting at which a quorum was not present. A quorum to transact business at such a special meeting requires only 3/4 of the Appointed Directors.

Section 5.02. Action by the Board. Except as otherwise provided in Section 5.03, the Board takes action by the affirmative vote of a majority of votes cast at a duly called and convened meeting of the Board.

Section 5.03. Supermajority Voting. The following actions shall require the affirmative vote of not less than 2/3 of the votes cast at a duly called and convened meeting of the Board:

(a) Granting any Member the right to appoint one or more Appointed Directors;

(b) The establishment of the initial Average Annual Water Volume of a newly admitted Member;

(c) The incurrence of indebtedness, other than trade debt incurred in the ordinary course of business;

(d) The modification or amendment of any Water Supply Agreement;

(e) The modification or establishment of water rates;

(f) The removal of the Chair; and

(g) The modification or amendment of these Bylaws.

Section 5.04. Number of Votes.

(a) Base Vote. Each Appointed Director shall have one (1) vote.

(b) Additional Votes Based on Water Volume. In addition to the base vote provided in Section 5.04(a), each Appointed Director shall be entitled to a number of additional votes equal to 1/2 of the quotient of the Average Annual Water Volume, as determined by the Board, of the Member appointing such director, divided by 100,000,000. The calculation of additional votes set forth in this Section may result

in an Appointed Director being entitled to a fraction of a vote, but in no event will that fractional vote be less than ½ of a vote for any Member entitled to a fractional vote. Each Member shall designate in writing to the Chair which of such Member's Appointed Directors shall be entitled to cast fractional votes. All fractional votes held by any Appointed Director appointed by a Member shall be transferred to and cast by the designated Appointed Director appointed by such Member.

"Average Annual Water Volume" means for any Member and on each Determination Date (as hereinafter defined), the total number of gallons of water purchased by such Member during the immediately preceding three (3) calendar years (exclusive of Excluded Industrial Water Sales during such period), divided by three and rounded to the nearest 100,000,000 gallons. "Excluded Industrial Water Sales" means for any period: (i) industrial water sales at water depots during such period; and (ii) other sales during such period at fixed customer locations to industrial users for oil field use (e.g., fracking, well maintenance, etc.), unless such sales are made pursuant to a supply agreement with an initial term of not less than 10 years.

(c) Limitations on Additional Votes. Notwithstanding Section 5.04(b) to the contrary, if the calculation of additional votes set forth in Section 5.04 at any time results in the Appointed Directors appointed by a single Member holding in the aggregate more than 45% of the aggregate votes held by all Appointed Directors (such Member being referred to as the "Majority Member"), then the aggregate number of votes held by the Appointed Directors appointed by the Majority Member shall be reduced to the number of votes equal to 45% of the aggregate votes held by all Appointed Directors (subject to Section 5.04(b)'s provisions on fractional votes, the reduced number of votes shall be allocated equally among the Appointed Directors appointed by the Majority Member).

(d) Initial Average Annual Water Volume. Until the first Determination Date (as hereinafter defined) on January 1, 2015, the Average Annual Water Volume for each Founding Member shall be as follows:

Founding Member:	Average Annual Water Volume:
Williams Rural Water District	100 million gallons
McKenzie County Water Resource District	200 million gallons
The City of Williston	700 million gallons
R&T Water Supply	100 million gallons
BDW Water System Association	0 gallons

(e) Subsequent Average Annual Water Volume. Beginning on January 1, 2015, and on January 1 of every three (3) years thereafter (each a "Determination Date") the Average Annual Water Volume shall be determined and the number of additional votes of each Appointed Director under Section 5.04(b) shall be recalculated. Notwithstanding any recalculation of votes pursuant to this section, the calculation of additional votes for each Founding Members will not be reduced below the number initially calculated using the information in 5.04(d).

(f) Average Annual Water Volume of New Members. If a new Member is admitted to WAWSA and the Board grants such new Member the right to appoint an Appointed Director, then the Board shall establish the initial Average Annual Water Volume to serve as such for purposes of Section 5.04(b) until the next Determination Date. If at the next Determination Date such new Member has not purchased water from WAWSA for a full three years, the Member's purchases shall be annualized for purposes of calculating such Member's Average Annual Water Volume on such Determination Date.

(g) Associate Directors. Associate Directors shall not have any voting power and shall serve only in an advisory capacity.

ARTICLE 6. OFFICERS

Section 6.01. Elections of Officer. The officers of WAWSA shall consist of a chair (the "Chair"), a vice-chair (the "Vice-Chair"), a secretary (the "Secretary"), and a treasurer (the "Treasurer"). At the first regular meeting of the Board and at the first meeting of the Board held each calendar year, the Board shall elect such officers. Each officer shall serve until his or her successor is elected and qualified, unless sooner removed pursuant to these Bylaws. The Chair and the Vice-Chair must be Appointed Directors. Neither the Secretary nor the Treasurer must be members of the Board. The office of Secretary and Treasurer may be held by the same individual.

Section 6.02. Removal of Officers. Officers may be removed by a 2/3 vote of the Board at any time, with or without cause.

Section 6.03. Vacancies. A vacancy in an office because of death, resignation, removal, disqualification, or other cause may be filled for the unexpired portion of the term in the manner determined by the Board.

Section 6.04. Officer Responsibilities.

(a) Chair. The Chair shall be the principal executive officer of WAWSA. The Chair shall preside at all meetings of the Board of Directors, shall appoint all committee members as needed, shall sign and execute all authorized contracts, notes or other obligations in the name of WAWSA, unless otherwise authorized by the Board, shall call special meetings of the Board when the Chair deems it necessary, and shall do and perform, in addition to the usual duties pertaining to the office, such other duties as from time to time may be assigned by the Board.

(b) Vice-Chair. The Vice-Chair shall preside at meetings of the Board in the absence of the Chair and will perform such other duties as from time to time may be assigned by the Board.

(c) Secretary. The Secretary shall attend all meetings of the Board, and when required, all meetings of standing committees, record all proceedings of the meetings in a book to be kept for that purpose, give or cause to be given notice of all meetings of the Board, record all votes of the Board, prepare and distribute minutes of all meetings, and perform other duties prescribed by the Board or the Chair.

(d) Treasurer. The Treasurer shall keep accurate financial records for WAWSA, deposit all money, drafts, and checks in the name of and to the credit of WAWSA in the banks and depositories designated by the Board, perform all recording and fiscal duties relating to the billing and collection of amounts owed WAWSA, prepare all checks, drafts, or orders for payment of money issued in the name of WAWSA for signature by the Chair, prepare annual budgets for WAWSA, and perform other duties prescribed by the Board or the Chair.

Section 6.05. Delegation. Notwithstanding the duties, responsibilities and authorities of the officers, herein before provided in this Article, the Board, may, except as otherwise limited by law, delegate, wholly or in part, the responsibility and authority for, and in the regular or routine administration of one or more of the duties of a specified officer to one or more agents, or employees of WAWSA who are not directors. To the extent that the Board does so delegate duties, responsibilities, or authorities of a specified officer, that officer as such, shall be released from such duties, responsibilities and authorities.

ARTICLE 7. COMPENSATION

Compensation of officers and directors shall be fixed by the Board; provided that such compensation shall not exceed the amount per day provided members of the legislative management under N.D.C.C. § 54-35-10. WAWSA shall reimburse officers and directors for their mileage and expenses in the amount provided for by N.D.C.C. § 44-08-04 and N.D.C.C. § 54-06-09.

ARTICLE 8. STAFF

The Board has the authority to appoint and fix the compensation and reimbursement of expenses of such employees as the Board deems necessary to conduct the business and affairs of WAWSA and to procure the services of engineers and other technical experts, and to retain attorneys to assist, advise, and act for WAWSA in its proceedings.

ARTICLE 9. DEPOSITS AND GIFTS

Section 9.01. Deposits. All funds of WAWSA shall be deposited from time to time to the credit of WAWSA in such financial institutions designated as a depository of public funds pursuant to N.D.C.C. Chapter 21-04.

Section 9.02. Gifts. WAWSA may accept gifts, grants, contributions or bequests for the general purposes or any special purpose of WAWSA.

ARTICLE 10. FINANCIAL RECORDS REVIEW

The financial records of WAWSA shall be reviewed biannually by an independent certified public accountant selected by the Board.

ARTICLE 11. AMENDMENT TO BYLAWS

These Bylaws may be amended by the Board. Bylaw amendments must be reviewed and approved by the attorney general. In addition to the requirements set forth in Section 5.01, a quorum for purposes of a meeting at which any amendment or modification of these bylaws is to be considered requires the presence of 2/3 of the Appointed Directors. Unless waived by all Appointed Directors, written notice of all proposed Bylaw changes must be submitted to each Appointed Director not less than thirty (30) days prior to the date of the meeting at which such changes are to be considered.

North Dakota State Water Commission

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Agenda #1

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer–Secretary
SUBJECT: 2011 Federal MR&I Water Supply
DATE: June 13, 2011

Congress made reductions in the previously approved 2011 federal Municipal, Rural, and Industrial Water Supply (MR&I) budget of $15,650,000. The proposed MR&I budget is based on the available funding. The funding for the Northwest Area Water Supply was for work under the Bureau of Reclamation supervision on the supplemental Environmental Impact Statement. This funding remains in the Bureau's budget. The service areas in Southwest Pipeline Project are being addressed in the state funding. The new water treatment plant will be completed in the spring 2012 and is the water supply for Oliver Mercer North Dunn project area.

Project	Previous Federal MR&I	Proposed Federal MR&I
Northwest Area Water Supply	$2,000,000	$ 0
South Central Regional	$6,650,000	$9,300,000
SWPP-Oliver Mercer North Dunn	$6,650,000	$ 0
Administration	$350,000	$ 300,000
Total	**$15,650,000**	**$9,600,000**

South Central Regional Water System – The project being considered is part of the regional water system to serve Emmons, McIntosh, Logan, and Kidder counties. The 2011 project will be the $12.4 million Emmons Phase 3 and a portion of Phase 4. Work includes 211 miles of 12" to 1.5" pipeline for 256 rural users, transmission pipeline from Linton to Wishek Standpipe and service to Wishek. Also, water service would be available to Braddock and possibly Hazelton.

I recommend the State Water Commission approve a 75% cost share, not to exceed $9,300,000, to South Central Regional Water District from Federal MR&I funding. The funding is in the form of a grant towards eligible costs, contingent on available funding, subject to future revisions, and the project follows the federal MR&I program requirements.

TS:jnm/ 237-04-NAWS /237-03SOU /1736-05

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Agenda #2

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer–Secretary
SUBJECT: 2011-2013 State Water Supply
DATE: June 13, 2011

This memo requests State Water Commission water supply funds. This moves projects forward with the funds approved in the 2011-2013 State Water Commission budget.

Project	Proposed SWC 2011-2013
North Central Rural Water Consortium	$3,150,000
Stutsman Rural Water District	$6,800,000
Total	**$9,950,000**

North Central Rural Water Consortium – The Berthold - Carpio Project addresses service in northwestern Ward County. This project extends from Des Lacs to Carpio. The water supply would be from the NAWS pipeline and would extend into the rural areas. This project involves 140 miles of 4" to 1.5" pipeline for approximately 200 rural users. North Central will obtain other funding to add Carpio. Carpio does not have a centralized water system as each resident has a well or a shared well. Carpio reports that water is limiting their ability to grow with the oil boom in the area, as businesses and residents will not locate in the community. Water quality generally has high iron, manganese and total dissolved solids. Some residents report hauling all their drinking water due to lack of sources. Estimated cost is $4.84 million.

I recommend the State Water Commission approve a 65 percent cost share, not to exceed $3,150,000, towards the Berthold-Carpio Phase to the North Central Rural Water Consortium from the funds appropriated to the State Water Commission in the 2011 - 2013 biennium. The funding is available July 1, 2011. The funding is in the form of a grant towards eligible costs, contingent on available funding, and subject to future revisions.

Stutsman Rural Water System – The project being considered is part of an expansion project that has an estimated cost of $18 million and will allow for the addition of 550 new members, the city of Woodworth and the city of Streeter. The 2011 project would be for the Northern Stutsman area and the Woodworth area. The cost of $9.7 million involves 298 miles of 8" to 1.5" pipeline for 244 rural users and service to Woodworth.

I recommend the State Water Commission approve a 70 percent cost share, not to exceed $6,800,000, towards the Stutsman Expansion Project to the Stutsman Rural Water District from the funds appropriated to the State Water Commission in the 2011 - 2013 biennium. The funding is available July 1, 2011 and is in the form of a grant towards eligible costs, contingent on available funding, and subject to future revisions.

TS:jnm/237-03NOC /237-03STU

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 Hydrologic Update
DATE: June 9, 2011

The water surface elevation on June 9, 2011 for Devils Lake was 1454.26 ft-msl. The previous record of 1452.05 was eclipsed on April 11, 2011. The water surface elevation of Devils Lake rose 2.6 feet from its January 1, 2011 elevation of 1451.65 to June 9, 2011.

Normally the lake peak occurs near the 1st of July. If the Devils Lake Basin avoids large rain events for the rest of the summer it may be at or near its peak elevation for the year. The 2009 spring rise was 3.5 feet at an inflow of 540,000 ac.-ft and the 2010 spring rise was 1.8 feet at an inflow of 312,000 ac.-ft. The total storage of Devils Lake (including Stump Lake) is now 4.14 Million ac-ft. and area is 207,000 ac., which is an increase of 477,000 ac. ft. of storage and 28,000 ac. area from a year ago. The data above was collected from the stage/storage table which is found on the State Water Commission website.

Analysis from the National Weather Service of stage/storage criteria indicates that the USGS table may not be accurate for water surface elevations at this time. The differences were noted from LIDAR elevations, which indicates that the surface area of the lake complex holds significantly higher storage then shown on the USGS stage/storage curves. Comparison of stage/storage data from the State Water Commission website indicates that this data is between the USGS stage/storage and the LIDAR stage/storage data. Additional analysis is being conducted.

North Dakota State Water Commission

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Agenda #2)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, State Engineer
SUBJECT: Devils Lake Outlet Project Update
DATE: June 9, 2011

The releases of Devils Lake water from the outlet into the Sheyenne River began on May 26, 2011 at 150 cfs. The flow near Bremen on the Sheyenne River was at approximately 400 cfs, the flow at Cooperstown was 780 cfs and was expected to drop below channel constraints prior to the outlet water reaching that location. This year's starting date is similar to the last two years, the 2009 start was on May 22nd and 2010 start was May 21st. The sulfate concentration below Bald Hill Dam from March 29, 2011 was found to be 357 mg/L and will not constrain releases due to sulfate concentrations. Flow was increased to 250 cfs on June 8, 2011.

Spring flow from a tributary near Round Lake washed a roadway embankment, exposing the 64"outlet pipe near the pump station. The pipe was realigned; backfill was replaced and compacted, repairing the pipe for operation. This did not affect the start date of the outlet.

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Agenda #3

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer- Secretary
SUBJECT: East Devils Lake Outlet Project
DATE: June 13, 2011

a) Project Update: Design work by Bartlett & West/AECOM continues on the East Devils Lake Outlet Project. The initial geotechnical investigation is completed and the second phase geotechnical investigation is ongoing at this time. The wetland criteria requirements have been addressed with the United States Fish and Wildlife Service, Army Corps of Engineers and Natural Resource Conservation Service. Cultural resource Class I: Literature Search and Class II: Reconnaissance Inventory have been completed within reservation boundaries. Pipe procurement bids were opened on May 31, 2011; four bids were received and were publicly opened and read. Three of the bids were for the steel bid packages and one bid for the reinforced concrete pipe bid package. Notices of intent to award have been sent to the low bidders contingent upon final approval from the North Dakota State Water Commission.

b) Pipe Procurement Contract: Based on bids received for the 96-inch diameter pipe the apparent low bidder for Schedule A (High Pressure Steel, 8000 linear feet) is Northwest Pipe Company (NWP) from Saginaw, Texas. For Schedule B (Low Pressure, 19,400 linear feet) the apparent low bidder was Cretex Concrete Products Midwest (Cretex), from Menoken, North Dakota. It is recommended to award the contract of Schedule A to NWP in the amount of $5,012,073. Also to award the contract for Schedule B to Cretex for concrete pipe in the amount of $10,386,375, for a total cost of $15,398,448.

c) Pump Procurement Contract: Five pumps are required for the project, one 50-cfs and four 75-cfs pumps. One additional 75-cfs pump is also included in the price quote, which can be used as a back up pump or to increase discharge capacity. Pre-purchasing of the pumps was completed from quotes from applicable pump manufactures, Weir Floway would supply the pumps, motors and pump cans at a cost of $2,850,000. Estimated cost for five 42-inch butterfly valves and ten 30 - 42-inch check valves is $750,000, from Val-matic and/or Pratt. Total estimated cost for pumps, motors and valves is $3,600,000.

d) Electric Supply Contract: Two electric utilities are capable of supplying power to the pump location; proposals were received from both Ottertail Power Company and Nodak Electric/Minnkota Power. The proposals from both electric utilities were comparable in power costs, however Otter Tail's proposal does not require any capital costs to construct the infrastructure while the proposal from Nodak Electric/Minnkota Power requires substantial infrastructure capital costs.

e) Land Acquisition: Easement and land acquisition for the project, which includes intake, pump station; terminal structure and route alignment is estimated to cost $400,000.

f) Site Preparation: A contract for clearing and grubbing and site preparation is required for intake area and pipe delivery areas, estimated contract for this work is $1,100,000.

g) Engineering Services: To complete final engineering design and construction phase services which includes procurement of materials, contractor prequalification, bidding, construction observation, initial construction surveying and staking, and contract administration for the timeframe of June 2011 to June 2012, at an estimated cost of $4,950,000.

h) Additional contracts that will be bid and brought to the State Water Commission at a future meeting are:
   - Construction of intake and installation of pumps.
   - Installation of pipe
   - Construction of terminal structure, rock filter

The total estimated cost of the East Devils Lake Outlet is in the range of $75 - $85 million

I recommend the State Water Commission approve the award and authorize the Chief Engineer-Secretary to enter into contracts with Northwest Pipe Company to supply 8,000 linear feet of steel pipe in the amount of $5,012,073; with Cretex Concrete Products Midwest to supply 19,400 linear feet of pipe in the amount of $10,386,375; with Weir Floway to supply 6 pumps in the amount of $2,850,000; and with Val-matic and/or Pratt to supply valves in the amount of $750,000. It is also recommended that the State Water Commission authorize the Chief Engineer-Secretary to negotiate and approve the Electric Supply Contract in the best interest of the project.

I further recommend the State Water Commission approve $400,000 for property acquisition; $1,100,000 for site preparation; and $4,950,000 for Engineering Services and authorize the Chief Engineer-Secretary to enter into the necessary contracts for these services.

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Agenda #4

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer- Secretary
SUBJECT: Tolna Coulee Control Structure Project
DATE: June 13, 2011

a) Project Description: The project consists of a combination of sheet pile, embankment, and a steel stop log weir structure. The purpose of this project is to allow the natural erosion of the divide between Stump Lake and the Tolna Coulee, while protecting downstream communities from an uncontrolled release of the water in Stump Lake. To this end, this structure is designed to allow flow in the Tolna Coulee to cause erosion the same as would occur naturally while providing the ability to lower the lake elevation in a controlled manner as the divide erodes. It is not the purpose of this project to impound water in Stump Lake above the natural outlet elevation, as it exists now or what it may become in the future. This project is a cooperative effort between the water commission and the US Army Corps of Engineers.

b) Project Update: The Corps continues to work on the design of the project, which is at the 60% review phase. As part of their design effort, the Corps is developing a cost estimate for the project. The cost estimate is not available at the time of the writing of this memo, but we anticipate having the estimate to present at the commission meeting on June 21. Negotiation of the agreement between the Army Corps of Engineers and the North Dakota State Water Commission for the design and construction of the proposed control structure is ongoing. We anticipate recommending funding for this project at the commission meeting, contingent on the establishment of the agreement between the two agencies.

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Agenda #5

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer–Secretary
SUBJECT: City of Fargo Water Treatment Plant
DATE: June 10, 2011

The city of Fargo requested grant funding of $600,000 towards a $1,200,000 pilot study. The City intends to conduct a pilot study using reverse osmosis (RO) membranes to define engineering design details that are critical to apply RO membrane treatment in Fargo. The purposes of the pilot study generally include:

- Demonstrate the effectiveness of the proposed processes in meeting the targeted finished water quality goals (sulfate reduction, hardness reduction, bromide reduction, etc.).
- Establish full-scale design and operating parameters for the proposed processes.
- Determine the pretreatment requirements for downstream processes.
- Determine the potential for fouling and means of mitigating fouling.
- Project the expected long-term performance of the membrane processes.

The pilot study will be conducted at the Fargo WTP beginning in July and continuing through April 2012 to evaluate seasonal water supply variation impacts on the membrane processes.

Upon successful demonstration of the pilot study, the City intends to start the design and equipment procurement process for the necessary improvements. The City anticipates requesting 50 percent cost share for the design and equipment procurement costs at that time, which will likely be early 2012. Further, they anticipate requesting additional funding for a 50 percent cost share of the construction costs in the 2011-2013 biennium and the 2013-2015 biennium.

I recommend the State Water Commission approve a 50 percent cost share, not to exceed $600,000, towards the reverse osmosis treatment process to the city of Fargo, from the funds appropriated to the State Water Commission in the 2011-2013 biennium. The funding is in the form of a grant towards eligible costs, contingent on available funding, and subject to future revisions.

TS:jnm/237-03/FAR

CITY OF Fargo

May 13, 2011

FARGO WATER TREATMENT PLANT

Fargo Water Treatment Plant
435 14th Avenue South
Fargo, North Dakota 58103
Phone (701) 241-1469
FAX (701) 241-8110

Todd Sando, PE, State Engineer
North Dakota State Water Commission
900 East Boulevard Avenue
Bismarck, ND 58505

Re: Cost Share Request
Downstream Water Quality Impacts from Devils Lake
City of Fargo Water Treatment Plant Improvements

Dear Todd:

The City of Fargo would like to formally request a 50 percent cost share from the North Dakota State Water Commission (SWC) for the project costs associated with drinking water treatment plant improvements that are necessary to address the downstream water quality impacts from operation of the Devils Lake outlet. The City of Fargo has been conducting a Facility Planning study related to this project and has identified several important next steps, which will require use of the State funds. The City intends to conduct a pilot study using reverse osmosis (RO) membranes to define engineering design details that are critical to apply RO membrane treatment in Fargo. The purposes of the pilot study generally include:

- Demonstrate the effectiveness of the proposed processes in meeting the targeted finished water quality goals (sulfate reduction, hardness reduction, bromide reduction, etc.).
- Establish full-scale design and operating parameters for the proposed processes.
- Determine the pretreatment requirements for downstream processes.
- Determine the potential for fouling and means of mitigating fouling.
- Project the expected long-term performance of the membrane processes.

The pilot study will be conducted at the Fargo WTP beginning in July and continuing through April 2012 to evaluate seasonal water supply variation impacts on the membrane processes. The total estimated cost for the pilot study is approximately $1,200,000. At this time, the City would like to formally request a 50 percent cost share from the SWC for the pilot study costs.

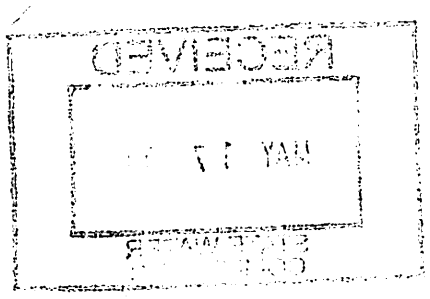
Upon successful demonstration of the pilot study, the City intends to start the design and equipment procurement process for the improvements necessary to reach our finished water quality goals. The City anticipates requesting the 50 percent cost share from the SWC for the design and equipment procurement costs at that time, which will likely be early 2012. Further, we anticipate requesting additional funding through the SWC for a 50 percent cost share of the construction costs in the remainder of the 2011-2013 biennium and in the 2013-2015 biennium.

Thank you for your attention to this very important project for the City of Fargo. We appreciate your consideration of this request and will be happy to address any questions or comments that you may have.

Sincerely,

Bruce P. Grubb
Enterprise Director

c: Dennis Walaker, Mayor
Pat Zavoral, City Administrator
Eric Dodds, AE2S


RECEIVED
MAY 17

City of Fargo
Sulfate Treatment Capital Improvements
Last updated: October 28, 2010

NEED FOR PROJECT

- The City of Fargo must make capital improvements to its Water Treatment Plant (WTP) to address increased sulfate concentrations in the City's raw water supply source, Sheyenne River, due to the operation of the Devils Lake Emergency Outlet.
  - ✓ Unexpected water quality concerns are primarily attributed to elevated sulfate concentrations in the Devils Lake basin, which is discharged through the Emergency Outlet into the Sheyenne River north of Lake Ashtabula. (Other constituents in the water, such as bromide, hardness, chloride, sodium, total dissolved solids, total organic carbon, and others may also pose challenges for the City of Fargo.)
  - ✓ Both the Environmental Protection Agency and the North Dakota Department of Health state that sulfate levels which exceed 250 mg/L are not acceptable for consumption by the public.
  - ✓ The current stream standard for sulfate in the Sheyenne River is 450 mg/L, however the State of North Dakota is actively pursuing a variance in the stream standard for sulfate in the Sheyenne River and Red River to allow for increased pumping from Devils Lake. The variance is expected to allow sulfate concentrations of 750 mg/L in the Sheyenne River and 500 mg/L in the Red River.
  - ✓ Water containing high levels of sulfates may have a laxative effect on consumers, especially persons unaccustomed to the water, such as transient populations.
  - ✓ Since sulfate levels have not been an issue in the past, Fargo's existing WTP was not designed to treat for or remove sulfate.
  - ✓ The City of Fargo estimates that the capital investment necessary to adapt its 30 mgd facility to address the sulfate issues will cost between $50 and 70 million, depending on the source water sulfate concentration. Assuming the stream standard and sulfate concentrations increase to 750 mg/L, the estimated capital investment will be $70 million.
  - ✓ The City of Fargo is exploring options to develop a larger regional water system that will serve not only Cass Rural Water Users District, but also the City of West Fargo and other regional users. As such, sulfate treatment improvements for the Fargo water treatment system will benefit all regional users.
- The State Water Commission (SWC) expanded the Emergency Outlet from a capacity of 100 cubic feet per second (cfs) to 250 cfs in 2010. In addition, the SWC is proceeding with plans to further increase the capacity of the existing Emergency Outlet and construct a second outlet on the east side of Devils Lake where sulfate concentrations are even higher.

PROPOSED PROJECT

Given the serious, yet unexpected water quality and treatment issues associated with elevated sulfate concentrations in the City's source water, combined with the potential need for capacity expansion to serve regional water users, the City of Fargo is commencing a thorough facility planning effort for its WTP to further define the necessary capital improvements to address the sulfate issue. Initial, high-level planning has indicated that the City will need to construct new treatment processes either at a satellite site or at the existing WTP. The new treatment processes will likely include reverse osmosis membranes, however, other technologies could be explored. The sulfate treatment process will need to be integrated into the City's existing WTP to ensure consistent and flexible drinking water production operations. Based on the 30 mgd capacity of the existing WTP, the goal to meet the EPA's secondary standard of 250 mg/L, and an expected source water sulfate concentration of 750 mg/L, pending approval of the stream standard variance, the initial planning efforts have suggested a capital improvements cost of $70 million. The City of Fargo would like to commence the design and construction of the sulfate treatment capital improvements as soon as possible as the Emergency Outlet (and future outlet) will continue to operate to relieve flooding in the Devils Lake basin.

COST SUMMARY AND POTENTIAL FUNDING SOURCES

	2011 – 2013 Biennium		2013 – 2015 Biennium		
	MR&I	Local	MR&I	Local	Total
Sulfate Treatment Plant	$15,000,000	$15,000,000	$20,000,000	$20,000,000	$70,000,000
Project Total	$15,000,000	$15,000,000	$20,000,000	$20,000,000	$70,000,000
Percentage of Total	50%	50%	50%	50%	100%

CITY OF Fargo

AE2S

North Dakota State Water Commission

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Agenda #6

MEMORANDUM

TO: Governor Jack Dalrymple
ND State Water Commission Members

FROM: Todd Sando, Chief Engineer and Secretary

SUBJECT: Renewal of Contract for Devils Lake Outlet Awareness Project Manager

DATE: June 1, 2011

The State Water Commission (Commission), Garrison Conservancy District (C-District), Forward Devils Lake Corporation (Forward DL), and the Devils Lake Basin Joint Water Resource Board (Joint Board), are aware that there are public entities and private individuals concerned with the management of the Sheyenne and Red Rivers as they relate to the operation of the Devils Lake Emergency Outlet Project (Outlet Project). These parties determined that a Devils Lake Outlet Awareness Project Manager (Manager) should be hired to function as a communicator to parties about the Outlet Project and its flood protection benefits.

The intended goal of this position is to work with and educate downstream interests through an approved information program associated with the Outlet Project. The need for a position that interacts with local entities and the public by providing accurate information related to the Outlet Project continues to exist.

The Joint Board has requested that the Commission approve of this program for the 2011-2013 biennium for a total amount of $98,000, which includes the Manager's expenses up to a maximum of $26,000. Cost-share partners in this contract will include the Commission, which will pay up to $32,340, the C-District which will pay up to $32,340, the Joint Board will pay up to $21,560 for salary plus provide up to $5,000 in-kind service, and Forward Devils Lake will pay up to $11,760 to the State Water Commission upon billing. The District, Joint Board, and Forward DL will reimburse the Commission for actual Project Manager expenses, based on quarterly expense reports. This agreement will provide the manager with 24 payments of $3,000 per month, up to a maximum total of $72,000 through the biennium.

I recommend that the Commission approve a two-year renewal of the project, from July 1, 2011 through June 30, 2013, in the amount not to exceed $32,340 from the funds appropriated to the Commission in the 2011-2013 biennium, contingent upon the availability of funds.

LK:MN:dp:416-05

North Dakota State Water Commission

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Agenda #7

MEMORANDUM

TO: Governor Jack Dalrymple
ND State Water Commission Members

FROM: Todd Sando, Chief Engineer and Secretary

SUBJECT: Renewal of Contract for Devils Lake Basin Joint Water Resource Board Manager

DATE: June 1, 2011

The State Water Commission (Commission) has a long history of promoting watershed management along watershed lines, and the Devils Lake Basin Joint Water Resource Board (Board) has shown a commitment to this concept, demonstrated through their support of the State Outlet, management of ESAP and Sweetwater-Morrison Storage program, the Graham's Island Road Raise, long-term water quality sampling and analysis in basin coulees, and their most recent update of the Devils Lake Basin Water Management Plan.

The Commission has supported watershed management along watershed lines through the cost-share of a managerial position for the Board. The Board Manager is an essential position in ensuring that the goals and objectives of the Board are carried out in a timely and professional manner. Without this position's efforts, it is a near certainty that the Board would not have been able to achieve its many accomplishments. The Board has requested continued support through the 2011-2013 biennium.

By approving this renewal, the Commission agrees to continue financial support for the 2011-2013 biennium by providing 50 percent cost share for salary, benefits, travel, and office expenses for the Joint Board's full-time manager, not to exceed $30,000 annually, or $60,000 for the duration of the contract. The Commission will pay the Joint Board for actual expenses, based on quarterly expense reports, as approved by the Commission.

I recommend that the Commission approve a two-year renewal of the project, from July 1, 2011 through June 30, 2013 in the amount not to exceed $60,000 from the funds appropriated to the Commission in the 2011-2013 biennium, contingent upon the availability of funds.

LK:MN:dp: 416-01

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Agenda #8

MEMORANDUM

TO: Governor Jack Dalrymple
ND State Water Commission Members

FROM: Todd Sando, Chief Engineer and Secretary

SUBJECT: 2011 Devils Lake Outlet Mitigation Plan approval

DATE: June 1, 2011

Beginning in 1993, as Devils Lake began its historically unprecedented rise, the State Water Commission (SWC) has been at the forefront of efforts to combat flooding in the basin. The lake level has now risen 30 feet expanding from about 49,000 acres to over 200,000 acres. At its overflow elevation of 1458 feet msl, where it naturally spills into the Sheyenne River, Devils Lake will cover more than 261,000 acres.

To combat the growing flooding problem, local, state, and federal authorities adopted a three-pronged approach in the mid 1990s: infrastructure protection for roads, levees, and relocations; upper basin water management, including water storage in the upper basin; and discharge of flood water through and emergency west-end outlet to the Sheyenne River. This approach was designed with the interests of both Devils Lake basin and downstream residents in mind. The principal concept has been to mange water and flood damage within the Devils Lake basin, while attempting to prevent a potentially catastrophic natural overflow through Tolna Coulee to the Sheyenne River. The 2011 Devils Lake Outlet Mitigation plan developed by staff with input from stakeholders, including the Devils Lake Outlet Advisory Committee, provides important direction in addressing problems that could arise downstream from emergency measures taken at Devils Lake to protect the safety and general welfare of both basin and downstream residents.

The plan has two key components; construction of emergency outlets to remove floodwater from Devils Lake and a course of action to address downstream issues along the Sheyenne River that may result from operating the emergency outlet projects. They are explained in the attached draft document. We are requesting the SWC review and give formal approval to the proposed mitigation plan.

I recommend that the Commission approve the 2011 Devils Lake Outlet Mitigation Plan and direct its use as a guide in addressing problems along the Sheyenne River that may result from operation of the state's emergency Devils Lake outlets.

TS:LK:dp

2011 Devils Lake Outlet Mitigation Plan

Introduction

Beginning in 1993, as Devils Lake began its historically unprecedented rise, the State Water Commission (SWC) has been at the forefront of efforts to combat flooding in the basin. Since 1993, when Devils Lake was at elevation 1422.6 feet above mean sea level (msl), it has risen almost 30 feet to its 2011 record elevation of over 1454 feet msl, expanding from about 49,000 acres in size to over 200,000 acres. At its overflow elevation of 1458 feet msl, where it naturally spills into the Sheyenne River, Devils Lake will cover more than 261,000 acres.

In the mid-1990s, local, state, and federal authorities adopted a three-pronged approach: infrastructure protection for roads, levees, and relocations; upper basin water management, including water storage in upper portions of the basin; and discharge through an emergency west-end outlet to the Sheyenne River. The three-pronged approach was designed with the interests of both Devils Lake basin and downstream residents in mind. The principal concept has been to manage water and flood damage within the Devils Lake basin, while attempting to prevent a potentially catastrophic natural overflow through Tolna Coulee to the Sheyenne River. All three prongs are integral to the SWC's Devils Lake flood mitigation efforts. This Mitigation Plan provides direction in addressing potential problems that could arise downstream as an outcome of emergency measures taken at Devils Lake to help protect the safety and general welfare of both the basin and the downstream residents.

Plan Components

There are two key components to reducing the risk of downstream damages from a Devils Lake overflow. The first has been the construction of emergency outlets to remove floodwater from Devils Lake in a controlled fashion to help prevent new damages around the lake and reduce the risk of a natural catastrophic spill. The second is addressing issues downstream along the Sheyenne River that may result from the emergency outlet projects.

Emergency Outlets

The growing risk of a natural catastrophic overflow from Devils Lake to the Sheyenne River has been recognized for several years. As the lake has continued to rise, so too has the potential for a natural overflow. Recent estimates put the likelihood of a natural overflow to the Sheyenne River at 10% within the next two years, even with the current west-end emergency outlet operating. In consideration of the fact that many large-scale flood control projects are built when there is only a 1% chance of flooding in any single year, the comparative level of risk that exists for a natural spill at Devils Lake today is extremely high.

The original 100 cubic feet per second (cfs) emergency west-end outlet completed in 2005 was expanded to 250 cfs in 2010, but that is not sufficient given the recently projected record inflows. The SWC is expanding the current west-end outlet by 100 cfs, increasing its capacity to 350 cfs. In addition, a new East Devils Lake outlet with design capacity of 250 cfs is expected to be in place in 2012. Total discharge capacity from all outlets will be 600 cfs. The need for increased emergency outlet capacity is in direct response to an ongoing series of extremely wet years that continue to dramatically raise Devils Lake's elevation.

The SWC completed a preliminary analysis on a range of emergency outlet alternative routes in 2010. Nine alternatives were considered: East Devils Lake outlet to Tolna Coulee, Big Coulee Dam to a Tributary of Rock Lake, Pelican Lake to Sheyenne River, Pelican Lake to Big Coulee, Lake Irvine to Mouse River, Lake Alice to Rock Lake, East Devils Lake to Tolna Coulee through Black Slough, Stump Lake to Middle Branch Turtle River, and Morrison Lake to Middle Branch Forrest River. As indicated

above, the East Devils Lake outlet to the Tolna Coulee has been judged the most viable alternative. Design is underway, with project completion set for 2012.

In addition to increasing emergency outlet capacity, the SWC is designing a control structure just upstream of the divide where Stump Lake, now part of Devils Lake, spills naturally toward the Sheyenne River through the Tolna Coulee. This control structure will allow Devils Lake to overflow at its current natural spill elevation of 1458 feet, at a rate dictated by the local terrain. The new structure will, however, control flow should erosion occur naturally, with the goal of preventing high flows in the Sheyenne River. This will reduce the potential for catastrophic downstream damages. Erosion that would reduce the spill elevation of Devils Lake will still occur, but the discharges will be controlled.

Downstream Erosion Mitigation

The second component of this mitigation plan specifically addresses concerns of downstream landowners adjacent to the Sheyenne River. This procedure is established to address potential downstream problems that result from operation of the west-end and East Devils Lake emergency outlets.

Because the SWC recognizes and takes seriously the concerns of downstream landowners, a significant amount of information has already been gathered on baseline conditions along the Sheyenne River. Aerial surveys for documenting erosion problem areas and multiple biological assessments of the Sheyenne River have been conducted over the last decade. A new aerial survey will be conducted in 2011, following spring runoff.

Emergency Outlet Operations

The Devils Lake west-end and East Devils Lake outlets will be managed with the objective of balancing the discharge of water with protection for those downstream. As a result, when the Sheyenne River is flooding or significant precipitation events are forecasted, outlet discharges will be adjusted to mitigate the risk of compounding high flow problems.

If problems are identified that are demonstrably the result of outlet operations, operational changes will be considered to resolve those issues.

Sheyenne River Channel Capacity

The in-channel capacity of the Sheyenne River above Baldhill Dam is approximately 600 cfs. The SWC anticipates that natural flows in combination with Devils Lake outlet discharges may exceed bank capacity in some areas. Flowage easements with adjacent landowners may be pursued where occasional over-bank flooding is likely to occur.

Mitigation Procedures

The SWC has established procedures to work with riparian landowners concerning problems that may potentially result from outlet operations. Landowners are encouraged to document and report erosion and other issues so their concerns can be objectively and consistently analyzed. SWC review of a reported problem site will be completed in a timely manner. This review will include analysis of all information available and may require site visits with the affected landowner.

The Sheyenne River naturally experiences highly variable conditions, varying between extreme flooding and near zero flow. Similarly, water quality has historically varied considerably. Because of these natural variations in the aquatic condition, it is important that any claims of outlet effects be differentiated from what would have occurred naturally. Damages will be compensated in proportion,

as determined by the SWC to the impacts resulting from Devils Lake outlet discharges. Problem areas brought to the attention of the SWC by the affected landowner(s) will be considered on a case-by-case basis with emphasis on fairness to all concerns.

Filing An Application

In the event that a landowner becomes aware of a possible problem on their land that they believe is related to Devils Lake emergency outlet operations, they must notify the SWC immediately. A copy of the Devils Lake Outlet Mitigation Application Form will be provided.

SWC staff will review the completed Outlet Mitigation Application. Claims will be evaluated under the criterion outlined previously in this document. SWC staff will acknowledge receipt of the application within 15 days. Information provided in the form and other data will be used in responding to the landowner with a written reply in a timely manner. In addition, the SWC will inform the appropriate water resource district board of the mitigation application and SWC decision.

Appeal Process

Appeals will be reviewed by the SWC per NDCC 61-03-76.

> Except as more specifically provided in this title, any person aggrieved because of any action or decision of the commission under the provisions of this title has the right to a hearing by the commission if no hearing on the matter resulting in the action or decision has been held. If a hearing has been held, the person aggrieved has the right to petition for reconsideration and to appeal, all in accordance with the provisions of chapter 28-32.

The Devils Lake Outlet Management Advisory Committee, a statutorily established entity (NDCC 61-36), will be advised of all applications and the SWC's response to those applications.

Mitigation Program Funding

The SWC maintains a portion of its biennial budget to address general water management projects across the state. Cost-share for a variety of local water management projects, including the Devils Lake Outlet Mitigation Plan, are supported with this funding.

Contact information

For further information on Devils Lake outlet mitigation, please contact the SWC at:

Mailing Address:	North Dakota State Water Commission 900 East Boulevard Avenue, Dept. 770 Bismarck, ND 58505-0850
Phone:	(701) 328-2750
Fax:	(701) 328-3696
TTY	(800) 366-6888 or 711:TTY
E-mail:	swc@nd.gov

Devils Lake Outlet Mitigation Application Form

Project # 416-10

PART A - (Applicant must fill out items 1-6)

1) Applicant name(s): _____

Address (Street, City, State, Zip): _____

_____

Phone: _____

Cell phone: _____

2) Application date: _____

3) Location of problem(s) (sec/twp/rg, provide map if available): _____

_____

_____

4) Date problem occurred (from-to): _____

5) Describe the problem, including: structures damaged, acres affected, or bank footage lost: _____

_____

_____

_____

_____

_____

6) Description of problem (Please attach any additional information such as photographs or maps that will describe your claim): _____

_____

_____

_____

_____

_____

_____

PART B - (This portion to be filled out by SWC staff)

7) Decision and explanation of the State Water Commission regarding claim: _____

_____

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_____

8) Application reviewed by: _____

9) Date of SWC decision: _____

10) Date of landowner notification: _____

11) Name of Water Resource District notified: _____

12) Date of Water Resource District notification: _____

North Dakota State Water Commission

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Agenda #9

MEMORANDUM

TO: Governor Jack Dalrymple
State Water Commission Members

FROM: Todd Sando, Chief Engineer and Secretary

SUBJECT: Johnson Farms Water Storage

DATE: June 10, 2011

The State Water Commission (SWC) is committed to a three-pronged approach to flooding in the Devils Lake basin, of which upper basin water management is an integral part. Several programs exist to store water, including the Extended Storage Acreage Program (ESAP), and projects by the ND Natural Resources Trust (Trust), and the U.S. Fish and Wildlife Service. The new Devils Lake Executive Committee action plan has reinforced and placed emphasis on the need to increase upper basin storage where possible.

The Trust is pursuing a plan to acquire privately held land for a multipurpose, multi-wetland restoration project in northeastern Ramsey County. SWC staff has estimated that this project will store approximately 631 acre-feet of additional water over existing conditions. The project requires commitments from multiple funding sources, including the Wetland Reserve Program (WRP), the North American Wetlands Conservation Act, ND Game and Fish, and the Trust. The project will put the land under a 30-year WRP easement with the ND Game and Fish taking title to the land for use as a public access wildlife conservation area. Total project cost is estimated at $2,048,000, and would result in long-term water storage on land available for public use.

The Trust has requested water storage funding from the SWC in the amount of $125,000. If approved, the SWC will develop a seven-year contract for water storage at the Johnson Farms site. Annual inspections will be conducted to ensure water storage at the site for the duration of the agreement. This expenditure equates to about $30.00/acre-foot per year of storage for the duration of the contract, which is comparable to the rates paid for our existing ESAP temporary storage easements.

The acquisition plan developed by the Trust involves several partners and as a result has several contingencies. Contingencies will be spelled out in a formal Memorandum of Understanding. Should any of the partners fail to fulfill their commitment, the SWC contribution would be withheld.

I recommend the Commission approve a total of $125,00 to fund the Johnson Farms water storage site for seven years. Funding is contingent upon the availability of funds appropriated to the State Water Commission in the 2011-2013 biennium.

LK:MN:dp/416

North Dakota State Water Commission

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Agenda K

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd S. Sando, P.E., Chief Engineer - Secretary
SUBJECT: SWPP Project Update
DATE: June 1, 2011

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

Contract 3-1D OMND Water Treatment Plant Building and Membrane Equipment Installation: Work has begun progressing much better with the improved weather since spring. The slabs and exterior and interior walls for all basins in the lower level have been placed and work is progressing on the footings and exterior building walls. We are still about three months behind schedule. Estimated total project cost is $11.1 million.

Contract 3-1E OMND Water Treatment Plant Concentrate Disposal Facility: This contract will consist of roughly 11 miles of pipeline and a bore from the shore of Lake Sakakawea north of the current intake pump station out into the lake with additional pipe extended on the lake bed. A submittal set of plans has been received. A permit application has been filed with the Corps of Engineers, which has been forwarded to their real estate office and should be back in June. We are planning to advertise July 1, 2011. Estimated total project cost is $2.5 million.

Contract 2-8B Main Transmission Line from Hazen to Stanton and Beulah to Center Elevated Tank: This contract was awarded to Kamphuis Pipeline Company last July. The contractor began work on this project April 18, 2011. Progress has been impressive, with three pipe-laying crews working concurrently with some crews making up to 3000 ft per day. The contractor is requesting a 30-day extension to the June 15, 2011 substantial completion. Estimated total project cost is $5.1 million.

Contract 5-15A Zap Potable Reservoir: This contract was awarded to Maguire Iron Inc. in July, 2010. Site work began in late October. Steel was delivered to the site last month and reservoir erection has begun. The substantial completion date is June 15, 2011. The contractor anticipates substantial completion in September. Estimated total project cost is $1.4 million.

Contract 5-16 Center Elevated Tank: This Contract will be for the construction of a 750,000 gallon elevated tank with an overflow height of 175 feet. Bids were opened March and the contract was awarded to Landmark Structures, Inc. A preconstruction conference was held May 11, 2011 and work on the foundation commenced shortly thereafter. The substantial completion date is July 15, 2012. Estimated total project cost is $1.8 million.

Contract 2-8C/D Main Transmission Line from Center Elevated Tank to Center: This contract will consist of 40.4 miles of PVC pipeline and will take water from the Center Elevated Tank to the City of Center and south to the Missouri West Water System north of New Salem. Bids were opened April 21, 2011. The State Water Commission moved to award the contract to Niebur

Development May 31, 2011. We have received concurrence from the Garrison Diversion Conservancy District and the Bureau of Reclamation. The Notice of Award has been issued.

Contract 7-9C Zap Service Area Rural Distribution Line Phase I: This contract will consist of roughly 157 miles of PVC rural distribution pipeline and will serve 263 users including rural users, coal plants, and mines. A submittal plan set was received for this contract and easement acquisition is progressing. We have met with the Bureau of Reclamation regarding the cultural resource and are awaiting the cultural resource clearance and anticipate advertising July 1, 2011. Estimated total project cost is $5.1 million.

Contract 4-3A/4-4A Jung Lake and Ray Christensen Pump Station Upgrades: This contract was bid and awarded in March with substantial completion scheduled for October. Estimated total project cost is $544,000.

Design work has begun on Contract 7-9D Zap Service Area Rural Distribution Line Phase II. This contract will consist of 140 miles of PVC pipeline serving 232 users. Cultural resource work will be performed this summer in anticipation of bidding in late fall or winter. Estimated total project cost is $5.8 million.

Design work is nearing completion of Contract 2-8E Main Transmission Line from OMND WTP to Killdeer Mountain Area. This contract will consist of 44.5 miles of PVC pipeline and will be the main transmission line for the Dunn Center Service Area. The capacity of this line will likely be increased to meet additional needs in the area, specifics of which are currently under investigation.

Little Missouri River Erosion

A specific authorization was executed directing Bartlett & West to develop a solution to the Little Missouri River erosion near Badlands Ministries Bible Camp and the Harold Hugelin ranch south of Medora. We met on site with the U.S. Army Corps of Engineers Regulatory personnel June 9, 2011. We plan to aggressively address this situation when flows in the river subside.

TSS:TJF/1736-05

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Agenda L

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer-Secretary
SUBJECT: NAWS – Project Update
DATE: June 13, 2011

Supplemental EIS

Reclamation has selected Cardno ENTRIX as the firm to complete the Supplemental EIS for NAWS. Reclamation has experience with this firm with issues before the State Department, and other more involved environmental issues. A contract has been executed and Cardno ENTRIX will be on site for a preliminary meeting this month.

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 did 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
2-2C Kenmare	10/1/08	Northern Improvement	$4,853,166.87	$164,764.63
5-2C Storage	3/27/09	Caldwell Tanks, KY	$1,843,903.64	$93,270.18
2-2D Mohall	7/24/09	American Infrastructure, CO **In Default – Being taken on by the Bonding Co - EMC**	$5,196,586.13	$293,011.04
2-3A Minot AFB	1/4/11	S.J. Louis Construction	$5,864,000.00	$5,864,000.00
2-3B Upper Souris/Glenburn	1/4/11	S.J. Louis Construction	$3,747,982.00	$3,747,982.00
Total Remaining Construction Contract Obligations				**$10,163,027.85**

Table 2 – Design Work on Upcoming NAWS Construction Contracts		
	Bid Opening Planned	Contract Cost Estimate
7-1A Filtration & Piping Minot WTP	Summer 2011, received Court approval	$10 million

Contract 2-2C – The contract includes 52 miles of 10"-12" pipeline for the Kenmare-Upper Souris pipeline. The contract was awarded to Northern Improvement on October 1, 2008. The substantial completion letter was signed on November 20th. Water service to Kenmare was started on December 7, 2009. Water service to Upper Souris Water District at the Donnybrook turnout started December 22, 2009. The seeding for portions of the contract has completed, however there are several areas requiring reseeding. Contract closeout is expected following final seeding.

Contract 5-2C - The contract includes a 1 million gallon storage reservoir near Kenmare. The welded tank was lifted in place on the concrete pedestal on November 18, 2009. The tank is now in service. Start up and testing of the cathodic protection will be completed in June 2011.

Contract 2-2D - The contract covers 62 miles of pipeline for the Mohall/Sherwood/All Seasons pipeline. The contract was awarded to American Infrastructure, Colorado. There remains 2000 feet of pipe to be placed. Contractor provided notice of voluntary default. We are working with their bonding company EMC to have the remaining work completed. We are also proving EMC contact information to all subcontractors and suppliers who are calling saying they have worked on the project and have not been paid to date. EMC is close to selecting a completion contractor. An onsite inspection took place June 1st with Houston Engineering, EMC, and a representative from S.J. Louis to examine the remaining work.

Contract 2-3A – The contract covers 13 miles of 24" pipeline between the north side of Minot to the Minot Air Force Base. Work was scheduled to start the second week of May, but has been delayed due to the weather. Some equipment is on site, but no other materials have been delivered.

Contract 2-3B – The contract covers the 13 miles of 16" pipeline north of the Minot Air Force Base along Highway 83 to provide service to Upper Souris Water District at their treatment plant and at Glenburn. Work was scheduled to start in mid-May, but is also delayed by the weather. Some pipe and equipment is on site.

Design on 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 plans and specifications should be ready for advertisement by mid to late June 2011.

TSS:TJF/237-4

North Dakota State Water Commission

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Agenda #1

MEMORANDUM

TO: Governor Jack Dalrymple
North Dakota Water Commission Members

FROM: Todd Sando P.E.
Chief Engineer-Secretary

SUBJECT: Legislative Summary

DATE: June 13, 2011

House Bill 1107 – Water Permit Adjudicative Proceedings – This is an agency bill that provides a more efficient procedure for public hearings by allowing two types of hearings, informational and adjudicative.

House Bill 1206 – Creates the Western Area Water Supply Authority and authorizes the Western Area Water Supply Project – This bill authorizes the Western Area Water Supply Authority to build the project using loans from the Resources Trust Fund, the Bank of North Dakota and the general fund. The WAWS authority is required to report to the Water Commission and provide updates on the bidding, planning, construction, operation, and financial status of the project. They are also required to present the overall plan and contract plans and specifications to the Commission for approval. If the project defaults on their loan payments the Commission becomes the governing board and takes ownership of the project.

House Bill 1318 – Allows the Garrison Diversion Conservancy District to create special assessment districts for irrigation projects and requires the Conservancy District to report periodically to the state water commission on the development and status of irrigation projects. This legislation contains a July 31, 2013 expiration date.

House Bill 1413 – Relates to removal of dangers in or on the bed of navigable waters. This bill changes the sentence reading, "the State Engineer shall issue an order to the person responsible for the object" to "the State Engineer may issue an order to the person responsible for the object."

House Bill 1459 and Senate Bill 2280 – These bills both relate to the installation and permitting or subsurface drainage systems. These bills make the local water resource district responsible for the permitting unless they determine that the drainage is of statewide significance at which time the State Engineer is responsible for granting approval.

House Concurrent Resolution 3019 – This resolution urges the US Army Corps of Engineers to

immediately cease wrongful denial of access and requirement of payment for the natural flows of the Missouri River.

Senate Bill 2020 – This is the agency's appropriation bill. Legislative changes include funding the Director of Water Development from the Resources Trust Fund rather than the general fund; eliminating future repayments from the City of Grand Forks for their flood control project; earmarking $250,000 for a grant to wildlife services for animal control; and earmarking $250,000 for Nelson County flood related water projects.

Senate Bill 2068 – This is an agency bill that statutorily authorizes the State Engineer or designee to execute contracts on behalf of the Commission.

Senate Bill 2101 – This bill increases the fees to obtain and renew a water well contractor certificate.

Senate Bill 2282 – This ties the compensation rate of the Commission members and Atmospheric Resources Board members to the rate of pay received by legislative members.

North Dakota State Water Commission

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Agenda M 2-4)

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water State Water Commission

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

SUBJECT: NDSWC Authorization to Provide Funding from Appropriated Funds, Sixty-Second Legislative Assembly 2011 – SB 2020 Legislative Intent for Fargo Flood Control, Nelson County Flooding, Wildlife Services Animal Management (SWC No. 1753)

DATE: June 1, 2011

The 2011 North Dakota Legislature included legislative intent language in Senate Bill 2020 for Fargo Flood Control, Nelson County Flooding, and Wildlife Services Animal Management. As is commonly done with legislative intent projects, State Water Commission authorization is sought to provide the necessary funding.

SECTION 7. FARGO FLOOD CONTROL PROJECT FUNDING - EXEMPTION. Of the funds appropriated in the water and atmospheric resources line item in section 1 of this Act, $30,000,000 is for Fargo Flood Control projects, for the biennium beginning July 1, 2011, and ending June 30, 2013. Any funds not spent by June 30, 2013, are not subject to section 54-44.1-11 and must be continued into the next or subsequent bienniums and may be expended only for Fargo Flood Control projects. Except as otherwise provided, these funds may be used only for land purchases and construction, including right-of-way acquisition costs and may not be used for the purchase of dwellings. No more than ten percent of these funds may be used for engineering, legal, planning, or other similar purposes. The city of Fargo, Cass County, and the Cass County joint water resource district must approve any expenditures made under this section. Costs incurred by non-state entities for dwellings or other real property that are not paid by state funds are eligible for application by the non-state entity for cost-sharing with the state.

The State Engineer may amend the Fargo Flood Control agreement for the current $45,000,000, to include the 2011 appropriations of $30,000,000. Total state funding for Fargo Flood Control is $75,000,000.

SECTION 8. LEGISLATIVE INTENT - STATE WATER COMMISSION PROJECTS AND GRANTS.
It is the intent of the sixty-second legislative assembly that of the funds appropriated in the water and atmospheric resources line item in section 1 of this Act, the State Water Commission provide funding for the following grants and projects, for the biennium beginning with the effective date of this Act, and ending June 30, 2013: Grant to wildlife services for animal control $250,000 and $250,000 for flood-related water projects to the Nelson County Water Resource District

The State Engineer may transfer $250,000 to USDA-APHIS-North Dakota Wildlife Services for the administration and support of animal control/beaver management in order to restore normal water flow in rivers, streams and creeks.

The State Engineer may enter into agreements providing Nelson County Water Resource District with a total of $250,000. The District has estimated that $35,000 is needed for projects North of Lakota; $45,000 for projects North of Michigan; $125,00 for Emergency License needs; $25,000 for Stump Lake Diking Flood Protection; and $20,000 for Michigan Spillway Operating Plan/Cooperation with Walsh County on Matejcek Dam.

It is recommended that the State Water Commission authorize the projects identified in Senate Bill 2020, Sections 7 and 8. The State Engineer may execute contracts on behalf of the State Water Commission to provide funding from agency appropriations. Authorization is subject to the entire recommendation contained herein and the availability of funds.

North Dakota State Water Commission

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Agenda #4

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, State Engineer
SUBJECT: Missouri River Update
DATE: June 15, 2011

On June 13, system storage in the six mainstem reservoirs was 71.2 million acre-feet (MAF), 12.9 MAF above the average system storage for the end of June, and 11.7 MAF more than last year. Currently, system storage is matching the previous maximum end of June system storage. The previous record maximum end of June system storage was 71.2 MAF in 1997. The year-to-date runoff into the Missouri River System above Sioux City is 17.6 MAF, 262% of normal. The Corps predicts runoff above Sioux City for 2011 to be 54.6 MAF, 220% of normal. This projected inflow will be the highest inflow to date, 5.6 MAF more than the previous record inflow of 49.04 MAF in 1997.

On June 13, Lake Sakakawea was at an elevation of 1853.3 feet msl, 3.3 feet into the Flood Pool and 0.7 feet below of the top of the spillway gates; this is 10 feet higher than a year ago and 17.1 feet above its average daily elevation for June. The maximum daily elevation June elevation is 1853.7, which occurred in 1997. Releases from Garrison are planned to go to 140,000 cfs on June 13, 145,000 cfs on June 16, and 150,000 cfs on June 17. Releases will then be held at 150,000 cfs through most of the summer. Prior to this event the maximum flow out of Lake Sakakawea was 65,200 cfs in 1975.

According, to the USGS the stage and flow on June 13 in Bismarck were 17.85 feet and 140,000 cfs, respectively. The average June gage stage at Bismarck is 6.14 (USGS Gage 06342500 Monthly Statistics, period of record 2000- 2010). The average June flow at Bismarck is 23,400 cfs (USGS Gage 06342500 Monthly Statistics, period of record 1954 -2010). The previous stage record, post-dam, was 16.11 feet (instantaneous value) in 2009, which was caused by an ice jam. The 2005 Burleigh County FEMA Flood Insurance Study (FIS) states there is a 1% chance every year (or commonly referred to as the 100 year flow) of 94,000 cfs, and a 0.2% chance every year (or commonly referred to as the 500 year flow) of 148,000 cfs.

The elevation of Lake Oahe was 1618.3 feet msl on June 13; this is 2 feet higher than last year and 13.6 feet higher than the average daily June elevation. The maximum daily June elevation for Oahe was 1618.7 in 1996. On June 13 the release from Lake Oahe was 150,400 cfs. A release of 150,000 cfs will be held through the summer. Prior to this event the maximum flow out of Lake Oahe was 59,300 cfs in 1997.

According to the USGS the stage on June 13 in Pierre was 18.96 feet. The average June gage stage at Pierre is 8.05 feet (USGS Gage 06440000 Monthly Statistics, period of record 1989-2010). The 2004 Hughes County FEMA Flood Insurance Study (FIS) states there is a 1% chance every year (or commonly referred to as the 100 year flow) of 70,000 cfs at Pierre.

The elevation of Ft. Peck was 2251.9 feet msl on June 13; this is 22.8 feet higher than a year ago and 20.7 feet higher than the average daily June elevation. The previous maximum daily June elevation for Ft. Peck was 2250.0 in 1975. On June 13 the release from Ft. Peck was 63,700 cfs. The Corps plans on releasing 65,000 cfs June 13 through June 19 and then dropping back to 60,000 cfs indefinitely.

According to the USGS the stage on June 13 in Williston was 29.27 feet. The average June gage stage at Williston is 18.53 feet (USGS Gage 06330000 Monthly Statistics, period of record 1966 – 2002). The previous record stage was set in 1912 and was 28.0 feet.

As of June 13 the mountain snowpack was 75 percent and 85 percent of the normal April 15 peak in the "Total above Fort Peck" and the "Total Fort Peck to Garrison" reaches, respectively. The "Total above Fort Peck" reach appears to have peaked on May 2 at 141%. The "Total Fort Peck to Garrison reach appears to have peaked on April 15 at 136 %. Normally the mountain snowpack peaks near April 15.

The following provides some background and the timeline leading up to the high discharges from Lake Sakakawea:
March 1 – According to the Master Manual the Corps is to have the system at or near to the following operating levels for the year by March 1.

Fort Peck – 2235.8 ft (Base of Annual Flood Control – 2234 ft)
Lake Sakakawea – 1838.5 ft (Base of Annual Flood Control – 1837.5 ft)
Lake Oahe – 1607.7 (Base of Annual Flood Control – 1607.5 ft)
System – 57.6 MAF (Base of Annual Flood Control – 56.8 MAF)

The Master Manual sets March 1 as its operating starting date due to the predictability of inflows between August 1 and March 1 (Master Manual pg VI -14). The System storage levels that are met on March 1 was designed to serve authorized purposes during a 12-year drought such as that experienced during the 1930's (Master Manual pg VI-18)

April 1 – The total mountain snowpack above Fort Peck was 116% and the total mountain snowpack between Fort Peck and Garrison was 112% of normal

April 13 – NDSWC voices concern over high volumes of water in the Missouri River System at the Annual Operating Plan (AOP) meeting, see attached comments.

April 20 – North Dakota State Engineer, Todd Sando sent a letter to Brigadier General McMahon, Commander of the Portland Division, stating his concern with the high volume of water in the reservoirs, the unknown snowpack, and the relatively low downstream releases. "I am concerned with the high levels of Lake Sakakawea and Lake Oahe, and the above normal snowpack that will be generating a great deal of addition runoff. We are concerned your forecast does not adequately address the current conditions of the basin and the potential for above

normal precipitation this summer." See attached.

May 1 – Corps releases mountain snowpack data showing snowpack conditions that were 136% and 141% above normal peak, total above Fort Peck and total Between Fort Peck and Garrison, respectively. Previous to May 1 the snowpack was tracking fairly close to normal. The late peaking, above normal mountain snowpack seemed to be unanticipated.

May 5 – City/County/State Agency's and Corps officials meet to discuss potential for high releases out of Lake Sakakawea, according to the Corps forecast there was a potential for releases of 55,000 cfs. Looking at the USGS gage rating curve and including a -1.3' shift this gave an estimated crest stage of 14'.

May 6 – Corps releases a press release stating that they are planning increasing releases out of Garrison to 49,000 cfs by Mid May.

May 10, 11 – 2.5 to 3.5 inches of rain fall in eastern Montana

May 20 – Corps sends out a press release announcing Garrison Dam releases will increase to 60,000 cfs

May 20-22 – 5-8 inches of rain fall in eastern Montana, western South Dakota, and northern Wyoming

May 23 – Corps sends out a press release announcing Garrison dam releases will increase to 75,000 cfs

May 24 – Corps sends out a press release announcing Garrison dam releases will increase to 85,000 cfs

May 25 – 1.5 to 2 inches of rain fall over eastern Montana

May 26 – Corps announces via conference call they will increase releases to 110,000 cfs – 120,000 cfs from lower 5 reservoirs, and 50,000 cfs from Fort Peck

May 28 – The Corps anticipates more rain and announces increases to releases to 150,000 cfs from the lower 5 reservoirs, and 50,000 cfs from Fort Peck.

May 30-31 – 2 to 4 inches of rain fall in Montana

June 1 – Corps opens Lake Sakakawea spillway gates for the first time

There have been many questions as to whether the Corps could have better managed the system to reduce flooding. The following presents a couple of operating scenarios that could have reduced flooding with the benefit of hindsight.

Scenario 1:

The volume of water that passed the Bismarck gage between March 1[1] and June 12 was 9.47 MAF. If the Corps had increased releases so that the unshifted stage at Bismarck was 11. 5 ft[2], or 46,000 cfs on April 13 as the State Water Commission advised, an additional 1.25 MAF could have been released. That is the difference between 1853.3 on June 13 to a potential elevation of 1849.9 feet on June 13. Or if the additional 1.25 MAF had been used in holding back releases, flows of 46,000 cfs could have been maintained through Bismarck until June 5, at which time the Corps would have to ramp up to the current release schedule.

Scenario 2:
If the Corps had increased releases so that the unshifted stage at Bismarck was 11.5 feet, or 46,000 cfs on March 1 and disregarded any potential ice jam problems or other flood concerns in the Bismarck area. The Corps could have evacuated an additional 2.4 MAF which would have resulted in a reservoir elevation of 1846.7 feet on June 13. Or if the additional 2.4 MAF had been used in holding back releases, flows of 46,000 cfs could have been maintained through Bismarck until June 12, at which time the Corps would have to ramp up to the current release schedule.

It is easy to look back, and evaluate the many different scenarios that could have taken place. Scenarios can be developed in hindsight that might have lessened the flood impact. However, the 9 – 17.5 inches of rain in large portions of the basin could not have been foreseen. In addition, the inflows this year are potentially 5.56 MAF, or more, above the previous record inflow. In short there is a lot of water in the basin, and potentially more to come in the unforeseeable future, if releases had been increased at an earlier date it is likely it would have just delayed the inevitable.

BE:KC:mmb/1392

[1] Target date for annual target levels to be met in order to begin reservoir operations for the year.
[2] If the stage in Bismarck goes much above this, residents start noticing and getting concerned about River water levels.

North Dakota State Water Commission

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Agenda #2)

MEMORANDUM

TO: Governor Jack Dalrymple
State Water Commission Members

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

DATE: June 10, 2011

SUBJECT: Request for cost-share participation with the Missouri River Joint Water Board

The Missouri River Joint Water Board (Board) is requesting a continuation of cost-share assistance from the Water Commission to help cover costs associated with maintaining the activities of the Board during the 2011-2013 biennium. In previous bienniums, the Water Commission has provided cost-share of up to $20,000. The Board is requesting that same amount for the 2011-2013 biennium.

The MRJWB has had a number of successes, as outlined in their May 16, 2011, letter. And, to continue on with that successful track record, the Board is requesting $20,000 during the 2011-2013 biennium to:

- Continue retention of a secretary-treasurer and water resource consultant;
- Fund basic office expenses, travel, and transportation to meetings;
- Continue to act as a local sponsor for the U.S. Army Corps' study under the Missouri River Protection and Improvement Act, Title VII; and
- Continue to provide a unified voice pertaining to issues affecting the Missouri River system, such as the Corps' Annual Operating Plans, the emergent habitat program, sovereign land management, and the prison farm project.

I recommend that the State Water Commission approve cost-share for 50 percent of the Board's eligible costs, not to exceed $20,000, during the 2011-2013 biennium.

TS:lk:pf/PS/WRD/MRJ

Missouri River Joint Water Board

3501 Winnipeg Drive, Bismarck ND 58503 Phone 701.202.5459

May 16, 2011

Todd Sando
State Engineer
ND State Water Commission
900 E Boulevard Ave. Dept 770
Bismarck, ND 58505-0850

Re: Missouri River Joint Water Board
Cost Share Agreement

Dear Todd:

This letter is a request for continued SWC cost share involvement for the Missouri River Joint Water Board (Board). In past years the SWC has assisted our Board with a biennium amount of $20,000 which is used by us to accommodate costs associated with the maintaining of the activities of our board. We thank you for those past contributions.

We believe the Joint Board has been successful. One very significant achievement has been our ability to act as a local sponsor for the current study being undertaken by the Corp of Engineers relative to the Missouri River Protection and Improvement Act, Title VII which is an effort to study and determine mitigation measures for siltation and erosion issues of the Missouri River. We have also provided an effective forum for the local member water boards to jointly exercise certain powers and provide a cooperative and coordinated effort in addressing the management, conservation, protection, development, and control of water resources in the Missouri River basin.

By this letter, we are requesting continued funding support in the amount of $20,000 for the 2011-2013 biennium. State Water Commission funds will be used along with Joint Board funds to:

1. Continue retention of a secretary/treasurer
2. Continue retention of a water resource consultant
3. Fund travel and transportation to meetings
4. Assist with general office expenses
5. Continue to act as local sponsor on the aforementioned COE Study
6. Continue to provide a unified voice on River and Lake issues including the AOP, Emergent Habitat Program, Sovereign Lands issues, Prison Farm Project and other items

We understand the State Water Commission is meeting in June 14, 2011 at 1:30 pm. Please present our request, as possible, at that time. If you feel advisable, we will be in attendance at the meeting to address any questions which may arise.

Again, we want to thank you for your support and the support of your staff, especially Lee Klapprodt and Pat Fridgen for providing guidance to the Missouri River Joint Water Board.

We continue to serve as a resource to collect and disseminate information to our various members so they can all be better informed and effective water managers.

If you require any additional information, please let me know.

Sincerely,

Ken Royse, Chairman

c.c. Greg Lange, MRJWB
Wade Bachmeier, MRJWB
Ron Sando, MRJWB
Ken Royse, MRJWB

North Dakota State Water Commission

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

Agenda #3

MEMORANDUM

TO: Governor Jack Dalrymple
State Water Commission Members

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

DATE: June 10, 2011

SUBJECT: Funding for Terry Fleck to continue his involvement with the Missouri River Recovery Implementation Committee (MRRIC) during the 2011-2013 biennium.

The Missouri River Joint Water Board (Board) has requested a continuation of an existing agreement between the Board, and the State Water Commission. The Board has requested that the Water Commission cover 50% of costs, up to $40,000 during the 2011-2013 biennium to support Terry Fleck's efforts on the Missouri River Recovery Implementation Committee (MRRIC), as a representative of upper-basin recreation.

The purpose of the requested funding is to cover Fleck's expenses for travel to meetings, and to help the Board pay a portion of his salary.

The Board is also asking the Garrison Diversion Conservancy District to cover 37.5%, up to $30,000. The Board and other local sponsors will cover the remaining expenses.

A background fact sheet on MRRIC is attached, along with a letter of request from the Board.

I recommend that the Water Commission provide cost-share of up to $40,000 to the Missouri River Joint Water Board to assist with costs associated with Terry Fleck's representation of the State of North Dakota on MRRIC through June 2013.

TS:lk:pf/PS/WRD/MRJ

Missouri River Joint Water Board

3501 Winnipeg Drive, Bismarck ND 58503 Phone 701.202.5459

May 16, 2011

Mr. Todd Sando, State Engineer
North Dakota State Water Commission
900 East Boulevard Ave.
Bismarck, ND 58505

Re: Requested continuation of agreement for funding to Missouri River Joint Water Board for Terry Fleck, MRRIC Committee

Dear Mr. Sando,

This letter is a request for continued SWC cost share involvement to the Missouri River Joint Water Board (Board) for coordination and support for funding of Mr. Terry Fleck to represent the interests of North Dakota on the Missouri River Recovery Implementation Committee (MRRIC). This funding would be in support of an ongoing agreement in place between us, the State Water Commission (Commission) and the Garrison Diversion Conservancy District (District).

The current agreement, which was entered into in March of 2009, allows for a cost contribution from the Commission and District to provide financial support to Terry Fleck as he represents the upper basin stakeholder interests relative to recreation on the MRRIC. As you are aware, the MRRIC is comprised of state, federal, and stakeholder interests relative to investigating a program of ecosystem recovery within the Missouri River basin.

The original agreement was structured as follows:

- 25% of the expected total cost was by local contributors, not to exceed $5,000
- 25% of the expected total cost was by the District, not to exceed $5,000
- 50% of the expected total cost was by the Commission, not to exceed $10,000

The original agreement was amended several times during its life to accommodate increased and unforeseen costs. As originally approved it did not anticipate the significant number of meetings and travel expenses which were required by Mr. Fleck in fulfilling his obligations to the committee.

This request seeks funding for the 2011 - 2013 biennium as follows:

- 50% of the expected total cost by the SWC, estimated at $40,000 for the biennium
- 37.5% of the expected total cost by the District, estimated at $30,000 for the biennium
- 12.5% of the expected total cost by the Board, estimated at $10,000 for the biennium

Please review this proposal and notify us if this is acceptable, or not. By copy of this letter we are also requesting the District for their consideration of participation as noted.

If you would like discussion of this request at the June 14, 2011 Commission meeting we will plan to be in attendance.

Thanking you in advance for your consideration of our request.

Sincerely,

Ken Royse
Chairman
Missouri River Joint Water Board

c.c. Greg Lange, MRJWB
Terry Fleck
Dave Koland, General Manager GDCD
Ken Royse
Wade Bachmeier

Missouri River Recovery Implementation Committee

What/Who is the MRRIC?

The Missouri River Recovery Implementation Committee (MRRIC) is a 70-member committee made up of federal, state, tribal, and stakeholder representatives from throughout the basin. MRRIC is authorized by Section 5018 of the Water Resources Development Act of 2007 and established by the Assistant Secretary of the Army for Civil Works. The Committee makes recommendations and provides guidance on a study of the Missouri River and its tributaries, as well as on the existing Missouri River recovery and mitigation plan.

MRRIC helps guide the prioritization, implementation, monitoring, evaluation, and adaptation of recovery actions by the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service, among other agencies. The Committee includes broad stakeholder representation to ensure a comprehensive approach to Missouri River recovery implementation while providing for congressionally authorized Missouri River project purposes and to ensure public values are incorporated into the study and the recovery and mitigation plans.

MRRIC stakeholders represent a wide range of interests, ensuring that the public's values are considered and incorporated into the restoration plans. Federal agencies do not participate in decisions regarding recommendations from MRRIC, but the federal agencies support and inform the MRRIC.

- Longest river in the United States
- 2,321 miles from Three Forks, Montana to the mouth near St. Louis, Missouri
- The basin encompasses 529,000 square miles and has a population of 12 million people

A Federal Working Group of agency representatives has been appointed by the federal executives of the Missouri River Basin Interagency Roundtable. These agencies provide support to the MRRIC as the committee considers recommendations.

The Federal Working Group includes the following agencies:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture Forest Service
- Environmental Protection Agency
- Federal Highway Administration
- Maritime Administration
- National Park Service
- National Weather Service / NOAA
- U.S. Coast Guard
- USDA Natural Resources Conservation Service
- U.S. Geological Survey
- Western Area Power Administration

Missouri River Recovery Implementation Committee

MRRIC Charter

On July 1, 2008, the Assistant Secretary of the Army for Civil Works approved the Charter for the MRRIC. Approval of the MRRIC Charter was the culmination of over a year of intense work by the MRRIC Planning Group. The Planning Group was comprised of representatives of Missouri River basin Tribes, states, and a wide range of stakeholder interests that were asked by the Corps and other federal agencies to develop a Recommended Charter for the MRRIC. The broadly representative committee was uniquely tasked to recognize the social, economic, and cultural interests of stakeholders, mitigate the impacts on those interests, and advance the multiple uses of the Missouri River.

MRRIC Membership

Each federal agency head, tribal chair, and state governor may appoint one representative to the MRRIC. Stakeholder representatives apply for membership by identifying their interest in one of the 16 interest categories. New stakeholder representatives are selected annually by the U.S. Army Corps of Engineers Northwestern Division Commander. More information, including a roster of current members an explanation of the membership application process, may be found at www.MRRIC.org.

The following states, Tribes and stakeholder interests are eligible for membership on the MRRIC:

States

- Iowa
- Kansas
- Missouri
- Montana
- Nebraska
- North Dakota
- South Dakota
- Wyoming

Tribes

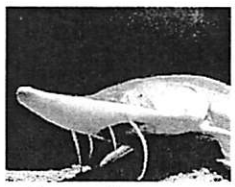
- Blackfeet Tribe
- Cheyenne River Sioux Tribe
- Chippewa-Cree Indians of the Rocky Boy's Reservation
- Crow Creek Sioux Tribe
- Crow Tribe of Montana
- Eastern Shoshone Tribe of the Wind River Reservation
- Flandreau Santee Sioux Tribe
- Fort Belknap Indian Community
- Fort Peck Assiniboine and Sioux Tribes
- Iowa Tribe of Kansas and Nebraska
- Kickapoo Tribe in Kansas
- Lower Brule Sioux Tribe
- Northern Arapaho Tribe
- Northern Cheyenne Tribe
- Oglala Sioux Tribe of the Pine Ridge Reservation
- Omaha Tribe of Nebraska
- Ponca Tribe of Nebraska
- Prairie Band of Potawatomi of Kansas
- Rosebud Sioux Tribe
- Sac and Fox Nation of Missouri in Kansas
- Santee Sioux Nation
- Sisseton-Wahpeton Oyate of the Lake Traverse Reservation
- Spirit Lake Sioux Nation
- Standing Rock Sioux Tribe
- Three Affiliated Tribes of Mandan, Hidatsa and Arikara Nation
- Turtle Mountain Band of Chippewa Indians
- Winnebago Tribe of Nebraska
- Yankton Sioux Tribe

Stakeholder Interests

- Agriculture
- Conservation Districts
- Environmental/Conservation Organizations
- Fish and Wildlife
- Flood Control
- Hydropower
- Irrigation
- Local Government
- Major Tributaries
- Navigation
- Recreation
- Thermal Power
- Water Quality
- Water Supply
- Waterway Industries
- Other interests, such as cultural and historic preservation

Interior Least Tern
(Endangered)

Piping Plover
(Threatened)



Pallid Sturgeon
(Endangered)

Missouri River Recovery Implementation Committee