North Dakota State Water Commission

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Meeting To Be Held At
Best Western Ramkota Hotel - Lamborn Room
Bismarck, North Dakota

December 13, 2013
9:00 A.M., CST

AGENDA

A. Roll Call

B. Consideration of Agenda *Information pertaining to the agenda items is available on the State Water Commission's website at http://www.swc.nd.gov*

C. Consideration of Draft Minutes of October 7, 2013 SWC Meeting **

D. State Water Commission Financial Updates:
   1) Agency Program Budget Expenditures
   2) 2013-2015 Biennium Resources Trust Fund and Water Development Trust Fund Revenues

E. Consideration of Following Requests for Cost Share:
   1) Upper Maple River Dam Construction Project **
   2) North Branch Park River Watershed Comprehensive Flood Damage Reduction Feasibility Study-Walsh Co. **
   3) Michigan Spillway Flood Control Project - Nelson Co. **
   4) City of Underwood Floodwater Outlet - McLean County **
   5) Sheyenne River Snag and Clear, Reaches 1 and 3 **
   6) Mouse River Snag and Clear - Ward County **
   7) Scandia/Scotia Drain - Bottineau County **
   8) Pembina County Drain No. 78 **
   9) Rust Drain No. 24 Channel Improvements - Traill County **
   10) USGS Cooperative Hydrologic Monitoring Program **
   11) Bank of North Dakota - Ag Pace Program **
   12) Will and Carlson Consulting Services **

F. 2013-2015 Biennium State Water Supply Projects:
   1) Traill Rural Water District, Phase III **

G. 2014 North Dakota Drinking Water State Revolving Loan Fund

H. Fargo-Moorhead Area Diversion Project Report

AGENDA - Page 2

I. Mouse River Enhanced Flood Protection Project:
   1) Project Update
   2) Mouse River Stochastic Study **

J. Southwest Pipeline Project:
   1) Project Update
   2) Funding Appropriation for Southwest Pipeline Project **
   3) Contract 8-3, Killdeer Mountains Elevated Tank **
   4) Contract 3-1H, OMND Water Treatment Plant Expansion **
   5) Capital Repayment and REM Rates for 2014 **

K. Northwest Area Water Supply Project Update

L. Devils Lake:
   1) Project and Hydrologic Updates
   2) Devils Lake West Outlet Standpipe Repair **
   3) Devils Lake Outlet Awareness Project Manager

M. Missouri River:
   1) Project Update
   2) Ordinary High Water Mark Delineation **

N. State Water Commissioner-Hosted Meetings Report

O. Garrison Diversion Conservancy District Report

P. Red River Valley Water Supply Project

Q. Western Area Water Supply (WAWS) Project:
   1) Project Update
   2) Independent Water Providers
   3) Western Area Water Supply Authority

R. Other Business

S . 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

December 13, 2013

The North Dakota State Water Commission held a meeting at the Best Western Ramkota Hotel, Bismarck, North Dakota, on December 13, 2013. Governor Jack Dalrymple, Chairman, called the meeting to order at 9:00 a.m., and requested Todd Sando, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Dalrymple announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:
Governor Jack Dalrymple, Chairman
Arne Berg, Member from Devils Lake
Maurice Foley, Member from Minot
Larry Hanson, Member from Williston
George Nodland, Member from Dickinson
Harley Swenson, Member from Bismarck
Robert Thompson, Member from Page
Douglas Vosper, Member from Neche

STATE WATER COMMISSION MEMBER ABSENT:
Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck

OTHERS PRESENT:
Todd Sando, State Engineer, and Chief Engineer-Secretary,
North Dakota State Water Commission, Bismarck
State Water Commission Staff
Approximately 75 people interested in agenda items

The attendance register is on file with the official minutes.

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

CONSIDERATION OF AGENDA

The agenda for the December 13, 2013 State Water Commission meeting was presented; there were no modifications.

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

CONSIDERATION OF DRAFT MINUTES OF OCTOBER 7, 2013 STATE WATER COMMISSION MEETING - APPROVED

The draft final minutes of the October 7, 2013 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Foley, seconded by Commissioner Thompson, and unanimously carried, that the draft final minutes of the October 7, 2013 State Water Commission meeting be approved as prepared.

STATE WATER COMMISSION BUDGET EXPENDITURES, 2013-2015 BIENNIUM

In the 2013-2015 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 October 30, 2013, reflecting 17 percent of the 2013-2015 biennium, were presented and discussed by David Laschkewitsch, State Water Commission's Director of Administrative Services. The expenditures, in total, are within the authorized budget amounts. ***SEE APPENDIX "A"***

The Contract Fund spreadsheet, attached hereto as ***APPENDIX "B"***, provides information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund. The total amount allocated for projects is $305,799,751 leaving an unobligated balance of $400,094,342 available to commit to projects in the 2013-2015 biennium.

RESOURCES TRUST FUND AND WATER DEVELOPMENT TRUST FUND REVENUES, 2013-2015 BIENNIUM

Oil extraction tax deposits into the Resources Trust Fund total $100,213,769 through November, 2013 and are currently $13,058,819, or 15 percent above budgeted revenues.

No deposits have been received for the Water Development Trust Fund (tobacco settlement) in the 2013-2015 biennium. The first planned deposit is for approximately $9,000,000 in April, 2014.

UPPER MAPLE RIVER DAM PROJECT (STEELE COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($3,991,500) (SWC Project No. 1878-02)

A request from the Maple-Steele Joint Water Resource District was presented for the State Water Commission's consideration for 65 percent state cost participation for the Upper Maple River Dam construction project. The environmental assessment and federal permitting efforts for the project were completed, and the Section 404 permit was issued by the U.S. Army Corps of Engineers in November of 2013. The proposed dam is located in the E1/2 of Section 35, Township 144 North, Range 56 West, and will be constructed to a maximum height of 35 feet with an elevation of 1,230 feet msl and a top width of 20 feet with 3:1 side slopes.

The proposed project involves a road raise to maintain access, and breaching of Sussex Dam, which is in need of repair and obstructs migration of fish and other organisms. Removal of the dam would restore river continuity and is a key component of the Section 404 permit for the project. The State Water Commission's policy provides for a 65 percent cost share for breaching of Sussex Dam.

Construction of the dam embankment across the Maple River channel and adjacent floodplain will cause direct impacts to existing wetlands in those areas. As a requirement of the Section 404 permit, those wetland impacts must be mitigated through the creation of new replacement wetlands.

The District and the parties benefitting from this proposed floodwater detention facility are moving forward to the next phases of the project that will ultimately lead to the construction of the dam, anticipated by June of 2014, efforts to secure commitments for financial assistance for the project, and preparations commencing with the assessment vote in order to determine whether the project will proceed to construction. A preliminary design was completed in 2010, and the final design and right-of-way acquisition for the project will not be completed until after a successful vote occurs.

The project engineer's total cost estimate is $7,925,000, of which $4,152,500 is determined eligible for state cost participation (Sussex Dam breach - $70,500 is determined eligible for 65 percent state cost participation ($45,825), and $4,082,000 is determined eligible for a 60 percent state cost participation as a flood control project ($2,449,200) for a total state cost participation of $2,495,025. The District requested right-of-way expenses of $2,500,000 be included with their cost share request as an exception to the existing State Water Commission policy.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation not to exceed a total of $2,495,025 (Sussex Dam breach - $45,825 (65 percent), and for a flood control project - $2,449,200 (60 percent) from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020).

It was moved by Commissioner Thompson and seconded by Commissioner Vosper that the State Water Commissioner approve state cost participation not to exceed a total allocation of $3,451,350 (Sussex Dam breach - $45,825 (65 percent), flood control project - $1,836,900 (45 percent), right-of-way costs - $1,125,000 (45 percent), and engineering costs - $443,625 (35 percent) from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Maple-Steele Joint Water Resource District to support the Upper Maple River Dam construction project.

In discussion of the motion and a detailed project overview from representatives of the Maple-Steele Joint Water Resource District, the Commission members deliberated at length. The District requested the State Water Commission's favorable consideration of their request.

A substitute amendment to the original motion was offered by Commissioner Thompson and seconded by Commissioner Hanson that the State Water Commission approve state cost participation not to exceed a total allocation of $3,991,500 (Sussex Dam breach - $42,300 (60 percent), flood control project - $2,449,200 (60 percent), and right-of-way costs - $1,500,000 (60 percent), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Maple-Steele Joint Water Resource District to support the Upper Maple River Dam 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.

Governor Dalrymple called the question on the substitute amendment to the original motion, and asked for a roll call vote:

Commissioners Berg, Hanson, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioners Foley, Nodland and Swenson voted nay. Recorded votes were 5 ayes; 3 nay. Governor Dalrymple announced the substitute amendment to the original motion carried.

Governor Dalrymple called the question on the original motion, as amended, and asked for a roll call vote:

Commissioners Berg, Hanson, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioners Foley, Nodland and Swenson voted nay. Recorded votes were 5 ayes; 3 nay. Governor Dalrymple announced the original motion, as amended, carried.

NORTH BRANCH PARK RIVER WATERSHED COMPRENHENSIVE FLOOD DAMAGE REDUCTION FEASIBILITY STUDY PROJECT (WALSH COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($134,400) (SWC Project No. 2046)

A request from the Walsh County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the North Branch Park River Watershed Comprehensive Flood Damage Reduction Feasibility study to investigate potential solutions to alleviate flooding in the North Branch Park River watershed. Significant flooding occurred along the Park River and its tributaries in 2013 particularly along Cart Creek and the North Branch Park River. Rural residences, communities including Crystal, Hoople, and Grafton, and agricultural lands were impacted by flooding from the North Branch watershed.

The local stakeholders group, including the Walsh, Pembina, and Cavalier county water resource districts, are developing a purpose and project goals statement for the project that will provide information on current flood risk from the watershed and define the recommended level of flood protection as a result of project components. The comprehensive approach builds on the ongoing Park River comprehensive detention planning effort and will focus on establishing a strategy to meet the desired future condition outlined in the statement. Detaining flood waters in impoundment sites is anticipated to be a major component as well as structural and non-structural measures where a higher level of flood protection is desired for communities and rural residences.

The project engineer's total cost estimate is $280,000, of which $268,800 is determined eligible for state cost participation as a feasibility study of 50 percent of the eligible costs ($134,400). The District requested the State Water Commission's consideration for an exception to the current cost share policy for consistency with exceptions allowed to communities in the Red River basin including back-to-back flooding and a limited ability to pay for project development.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a feasibility study at 50 percent of the eligible costs, not to exceed an allocation of $134,400 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B.

1020), to the Walsh County Water Resource District to support the North Branch Park River Watershed Comprehensive Flood Damage Reduction Feasibility Study. This recommendation is not a deviation from the State Water Commission's current cost share policy.

It was moved by Commissioner Berg and seconded by Commissioner Vosper that the State Water Commission approve state cost participation as a feasibility study at 50 percent of the eligible costs, not to exceed an allocation of $134,400 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Walsh County Water Resource District to support the North Branch Park River Watershed Comprehensive Flood Damage Reduction Feasibility Study. This action is contingent upon the availability of funds.

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

MICHIGAN SPILLWAY PROJECT (NELSON COUNTY) - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION ($1,076,705) (SWC Project No. 1932)

The Michigan Spillway project is located in Sections 13, 23, 26, 34 and 35, Township 154 North, Range 59 West (Enterprise township), and Sections 18, 19 and 20, Township 154 North, Range 58 West (Sarnia township), Nelson county. The project will utilize a ditch moving the water to a pumping station located in the NE1/4 of Section 23, Township 154 North, Range 59 West, to Dry Run Creek, a tributary to the Middle Branch of the Forest River.

The constructed drain will be 8.03 miles in length with a drainage area of approximately 35,400 acres, and constructed with a maximum cut of 22 feet, 3:1 side slopes, and a 12- to 16-foot bottom width. Approximately 3,310 feet of previously open channel will be converted to a corrugated metal pipe arch.

On August 30, 2005, the State Water Commission passed a motion approving state cost participation not to exceed an allocation of $461,696, of which $311,696 (40 percent of the eligible costs) was allocated from the funds appropriated to the State Water Commission in the 2005-2007 biennium, and a Legislature earmark of $150,000 from the funds obligated for water-related damage to infrastructure in Nelson county (H.B. 1021) for construction of the city of Michigan's spillway rural flood control assessment drain. During the 2009-2011 session, the Legislature earmarked an additional $350,000 specifically designated for the Michigan Spillway project.

Because of project design and realignment modifications, the project engineer's revised cost estimate was $2,250,000. On June 1, 2010, the State Water Commission approved an allocation not to exceed an additional $738,304 (state obligation of $1,550,000, less $311,696 approved on August 30, 2005 and $500,000 from legislative earmarks).

The project engineer's current revised project costs are $4,041,086, of which all costs are determined eligible for a 60 percent state cost participation as a flood control project ($2,424,652). A request from the Nelson County Water Resource District was presented for the State Water Commission's consideration for a 69 percent state cost participation.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation at 60 percent as a flood control project not to exceed an additional allocation of $874,652 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) (state obligation of $2,424,652, less $311,696 approved on August 30, 2005, $738,304 approved on June 1, 2010, and $500,000 from legislative earmarks), to the Nelson County Water Resource District to support the Michigan Spillway project.

It was moved by Commissioner Hanson and seconded by Commissioner Vosper that the State Water Commission approve a 60 percent state cost participation as a flood control project not to exceed an additional allocation of $874,652 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) (state obligation of $2,424,652, less $311,696 approved on August 30, 2005, $738,304 approved on June 1, 2010, and $500,000 from legislative earmarks), to the Nelson County Water Resource District to support the Michigan Spillway project.

In discussion of the motion, representatives from the Nelson County Water Resource District expressed appreciation for the Commission's support, provided detailed information relating to their project, and requested the Commission's favorable consideration of their request.

A substitute amendment to the original motion was offered by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve a 65 percent state cost participation as a flood control project not to exceed an additional allocation of $1,076,705 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) (state obligation of $2,626,705 (65 percent), less $311,696 approved on

August 30, 2005, $738,304 approved on June 1, 2010, and $500,000 from legislative earmarks), to the Nelson County Water Resource District to support the Michigan Spillway project. This action is contingent upon the availability of funds.

Governor Dalrymple called the question on the substitute amendment to the original motion, and asked for a roll call vote:

Commissioners Berg, Foley, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioner Hanson voted nay. Recorded votes were 7 ayes; 1 nay. Governor Dalrymple announced the substitute amendment to the original motion carried.

Governor Dalrymple called the question on the original motion, as amended, and asked for a roll call vote:

Commissioners Berg, Foley, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioner Hanson voted nay. Recorded votes were 7 ayes; 1 nay. Governor Dalrymple announced the original motion, as amended, carried.

This action increases the total state allocation to $2,626,705 to the Nelson County Water Resource District to support the Michigan Spillway project.

CITY OF UNDERWOOD FLOOD-WATER OUTLET PROJECT (MCLEAN COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($1,100,727) (SWC Project No. 1554)

A request from the McLean County Water Resource District was presented for the State Water Commission's consideration for a 60 percent state cost participation for the City of Underwood Floodwater Outlet project.

The city has experienced flooding caused by excessive runoff from rural areas in the watershed that are draining into natural sloughs adjacent to the community causing adverse impacts to homes and other infrastructure in and around the city. The city's storm sewer system does not have the capacity to control the amount of floodwater reaching the city. The feasibility study has been completed identifying potential options for mitigating the flooding problems, the city has partnered with the McLean County Water Resource District to develop a floodwater control project that will address the issue.

The proposed project would involve the construction of a diversion system that would bypass the floodwater to a natural outlet downstream. This diversion would involve sections of buried concrete pipe and open channels. The new outlet would include a control gate allowing the system to be managed to prevent adverse impacts downstream.

The project engineer's total cost estimate is $2,300,000, of which $1,931,100 is determined eligible for state cost participation ($1,100,727). Based on an analysis to determine the effective watershed area that would be contributing to each of the two sloughs, approximately five percent of the watershed area lies within the city limits. Under the State Water Commission's cost share policy, storm water management is considered an ineligible item, therefore, the cost share participation was reduced accordingly.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a flood control project at 57 percent of the eligible costs, not to exceed an allocation of $1,100,727 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the McLean County Water Resource District to support the City of Underwood Floodwater Outlet project.

It was moved by Commissioner Foley and seconded by Commissioner Nodland that the State Water Commission approve state cost participation as a flood control project at 57 percent of the eligible costs, not to exceed an allocation of $1,100,727 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the McLean County Water Resource District to support the City of Underwood Floodwater Outlet project. This action is contingent upon the availability of funds.

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

SHEYENNE RIVER SNAG AND CLEAR PROJECT, REACHES I AND III (CASS COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($165,000) (SWC Project No. 568)

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation to snag and clear two reaches of the Sheyenne River. The Reach 1 project would commence at State Highway 46 along the Cass County-Richland County line and proceed downstream to the Horace diversion inlet structure in Section 19 of Stanley

township. The Reach III project would begin at the Sheyenne River closure structure located north of County Road 10 and proceed downstream to the Red River of the North.

The proposed work involves the removal of all fallen trees, standing trees in imminent danger of falling into the channel, driftwood, snags, loose stumps and trunks, and standing stumps which are encountered within the Sheyenne River channel and are lodged/leaning on the immediate bank slopes between the upstream and downstream limits. All snagged material will be appropriately disposed of. The District intend to hire a competent and experienced contractor to complete the 2013-2014 projects.

The project engineer's total cost estimate is $360,000, of which $330,000 is determined eligible for state cost participation as a snag and clear project at 50 percent of the eligible costs ($165,000).

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 $165,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the Sheyenne River snag and clear project, Reaches I and III.

It was moved by Commissioner Hanson and seconded by Commissioner Berg 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 $165,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the Sheyenne River snag and clear project, Reaches I and III. This action is contingent upon the availability of funds.

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

MOUSE RIVER SNAG AND CLEAR PROJECT (WARD COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($347,466) (SWC Project No. 1523)

A request from the Ward County Water Resource District was presented for the State Water Commission's consideration for state cost participation to snag and clear areas of the Mouse River upstream from Minot.

During the 2011 flood event and the 2013 spring melt, fallen trees, debris and sediment accumulated along and within the banks of the river between Burlington and Minot. All work will be within the banks of the river and will not take place on the levee. The project areas and estimates of cost include: 1) Brooks Addition located in Section 12, Township 155 North, Range 84 West - $259,782; 2) Country Club located in Section 18, Township 155 North, Range 83 West - $381,145; and 3) Tierrecita Vallejo located in Section 21, Township 155 North, Range 83 West - $54,005.

The proposed work involves the removal of all fallen trees, standing trees in imminent danger of falling into the channel, driftwood, snags, loose stumps and trunks, and standing stumps which are encountered within the Mouse River channel and are lodged/leaning on the immediate bank slopes between the upstream and downstream limits. All snagged material will be appropriately disposed of.

The project engineer's total cost estimate is $694,932, of which all is determined eligible for state cost participation as a snag and clear project at 50 percent of the eligible costs ($347,466).

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 $347,466 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Ward County Water Resource District to support the Mouse River snag and clear project.

It was moved by Commissioner Foley and seconded by Commissioner Hanson 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 $347,466 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Ward County Water Resource District to support the Mouse River snag and clear project. This action is contingent upon the availability of funds.

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

SCANDIA/SCOTIA DRAIN PROJECT (BOTTINEAU COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($140,634) (SWC Project No. 1056)

A request from the Bottineau County Water Resource District was presented to the State Water Commission for state cost participation for the Scandia/Scotia Drain project.

The area has experienced flooding since 2007. The proposed project would involve drainage improvements to an existing natural waterway in Scandia and Scotia townships in north central Bottineau county, which would include the removal of ponding water upstream of the roadways caused by inadequate culverts, removing channel obstructions, and improving the culvert system.

The project engineer's total cost estimate is $317,181, of which $312,520 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($140,634). An assessment district has been established to fund the improvements, and Drain Permit No. 3950 has been approved.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of $140,634 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Bottineau County Water Resource District to support the Scandia/Scotia Drain project.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of $140,634 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Bottineau County Water Resource District to support the Scandia/Scotia Drain project. This action is contingent upon the availability of funds.

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

PEMBINA COUNTY DRAIN NO. 78 OUTLET EXTENSION PROJECT - APPROVAL OF STATE COST PARTICIPATION ($287,778) (SWC Project No. 2043)

A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation in the Pembina County Drain No. 78 Outlet Extension project.

Drain Nos. 27 and 30 were constructed in the early 1900s and were not given individual outlets to the Red River but rather shared a common outlet with Drain No. 20, which was eventually extended and improved into the current Drain No. 66. The landowners within the area of Drain Nos. 27 and 30 requested the drains be combined into one drain, presently referred to as Drain No. 78. The landowners petitioned for an outlet to the Red River for Drain No. 78 to improve agricultural drainage and minimize flooding damages.

The proposed project involves the construction of approximately 1.5 miles of Drain No. 78 with 4:1 side slopes commencing in the NE1/4 of Section 18, Township 160 North, Range 50 West, and ending in the NW1/4 of Section 16, Township 160 North, Range 50 West.

The project engineer's total cost estimate is $920,442, of which $639,506 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($287,778).

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of $287,778 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Pembina County Water Resource District to support the Pembina County Drain No. 78 Outlet Extension project.

It was moved by Commissioner Vosper and seconded by Commissioner Berg that the State Water Commission approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of $287,778 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Pembina County Water Resource District to support the Pembina County Drain No. 78 Outlet Extension project. This action is contingent upon the availability of funds.

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

RUST DRAIN NO. 24 CHANNEL IMPROVEMENT PROJECT (TRAILL COUNTY) - APPROVAL OF STATE COST PARTICIPATION ($187,736) (SWC Project No. 1242)

A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Rust Drain No. 24 Channel Improvement project. Rust Drain No. 24 is an existing legal assessment drain located in Traill county approximately 10 miles southeast of the community of Buxton. The primary purpose of the project is to provide an adequate gradient to the channel bottom and properly-sized culvert crossings along the channel.

The proposed project is approximately 2.2 miles long located in the N1/2 of Sections 1-4, Township 147 North, Range 49 West, in Bingham township. The project will widen and deepen the drain and upgrade existing crossings with corrugated steel pipe arch culverts and riprap. The channel bottom width is 10 feet and the drain will have 4:1 side slopes. The channel will outlet at the Red River in the NW1/4NW1/4 of Section 1, Township 147 North, Range 49 West.

The project engineer's total cost estimate is $650,000, of which $417,192 is determined eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs ($187,736). An assessment district was established and Drain Permit No. 4309 is approved.

It was the recommendation of Secretary Sando that the State Water Commission approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of $187,736 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Traill County Water Resource District to support the Rust Drain No. 24 Channel Improvement project.

It was moved by Commissioner Hanson and seconded by Commissioner Vosper that the State Water Commission approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of $187,736 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Traill County Water Resource District to support the Rust Drain No. 24 Channel Improvement project. This action is contingent upon the availability of funds.

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

SWC/USGS COOPERATIVE STATEWIDE HYDROLOGIC MONITORING PROGRAM - APPROVAL OF STATE COST PARTICIPATION ($491,275), AND $22,510 AS DIRECT LABORATORY SERVICES PROVIDED BY COMMISSION (SWC Project No. 1395)

A request from the U.S. Geological Survey was presented for the State Water Commission's consideration for state cost participation in the cooperative statewide hydrologic monitoring program which consists of three components: stream gaging to measure flow rate and volume, stream water quality monitoring, and aquifer water level and water quality monitoring.

The stream gaging network provides stream flow statistics that are needed for a wide variety of applications including the design of flood control structures, bridges, culverts, general water resource planning, floodplain mapping, water management, and permitting. Many of the gaging sites provide real-time data, which was crucial in responding to the flood events that occurred in 2009 and 2011.

Water samples are collected for chemical analysis at specific stream sites during high and low-flow periods and at selected lakes. This data is used to determine the suitability of the chemical quality for beneficial use, interpret area hydrology, and to assess changes in the quality resulting from the stresses of both man-induced activities and natural processes caused by climatic variations. The water quality data also provides planners with a basis to assess if waste water resulting from beneficial use can be discharged into surface water bodies. Examples include the siting of industrial plants that require waste water discharge and the ongoing operation of the Devils Lake outlets.

Monitoring ground-water levels and quality in wells completed in selected aquifers throughout the state provides essential information used to allocate and manage the state's ground-water resources. The data collection system was recently upgraded to include real-time monitoring capabilities to the continuous recorder wells.

The State Water Commission has participated in the cooperative statewide hydrologic monitoring program since the 1950s. The total cost of the monitoring program for Fiscal Year 2014 is $938,370, of which the State Water Commission's obligation of this amount is $513,785 (55 percent) ($491,275 - state cost participation, and $22,510 - direct laboratory analysis services provided by the Commission in conjunction with the cooperative work); the remaining $424,585 will be provided by the U.S. Geological Service.

It was the recommendation of Secretary Sando that the State Water Commission approve a total 2014 Fiscal Year obligation of $513,785, of which an allocation not to exceed $491,275 would be provided from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 2010), and $22,510 would be obligated as direct laboratory analysis services provided by the Commission in conjunction with the cooperative work.

It was moved by Commissioner Swenson and seconded by Commissioner Berg that the State Water Commission approve a total 2014 Fiscal Year obligation of $513,785, of which an allocation not to exceed $491,275 would be provided from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 2010), to the U.S. Geological Survey to support the cooperative statewide hydrologic monitoring program, and $22,510 would be obligated as direct laboratory analysis services provided by the Commission. This action is contingent upon the availability of funds.

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

BANK OF NORTH DAKOTA AGPACE PROGRAM FOR IRRIGATION DEVELOPMENT IN NORTH DAKOTA - APPROVAL OF ALLOCATION OF $200,000 (SWC Project No. 1389)

On October 23, 2001, the State Water Commission approved a request from the North Dakota Irrigation Association allocating $1,000,000 from the funds appropriated to the State Water Commission in the 2001-2003 biennium to supplement the AgPace Program administered by the Bank of North Dakota to buy-down the interest on loans for first-time borrowers that wish to develop new or enhance on-farm enterprises. Those funds provided an additional $20,000 of interest buy-down after the initial Bank of North Dakota maximum was reached. Unused funds from this authorization have been carried over each biennium since that time; the current remaining balance in the fund is $21,312.14.

A request from the North Dakota Irrigation Association was presented for the State Water Commission's consideration for an additional allocation of $200,000 to the Bank of North Dakota to supplement the AgPace program for buying down interest on loans for the development of new irrigation.

It was the recommendation of Secretary Sando that the State Water Commission approve an additional allocation not to exceed $200,000 from the funds appropriated to the State Water Commission In the 2013-2015 biennium (H.B. 1020), to supplement the Ag Pace program administered by the Bank of North Dakota for buying down interest on loans for the development of new irrigation.

It was moved by Commissioner Berg and seconded by Commissioner Hanson that the State Water Commission approve an additional allocation not to exceed $200,000 from the funds appropriated to the State Water Commission In the 2013-2015 biennium (H.B. 1020), to supplement the Ag Pace program administered by the Bank of North Dakota for buying down interest on loans for the development of new irrigation. This action is contingent upon the availability of funds.

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

APPROVAL OF REQUEST FROM GARRISON CONSERVANCY DISTRICT FOR RENEWAL OF CONTRACT WITH WILL AND CARLSON; AND COST SHARE OF $70,000 FROM JULY 1, 2013 TO JUNE 30, 2015 (SWC Project No. 237)

A request was presented from the Garrison Diversion Conservancy District to continue participation in support of the Will and Carlson consulting contract in the amount of $70,000 for services relating to the appropriation under the Garrison Diversion Unit.

The State Water Commission initially entered into a cost share agreement for the services of Peter Carlson in 1991. Since that time, Mr. Carlson has provided services for the State of North Dakota in Washington, DC relating to the Dakota Water Resources Act, Missouri River issues, Devils Lake, the Northwest Area Water Supply (NAWS) Project, agricultural irrigation, and hydro power generation. Considerable efforts are still needed to obtain funding through the Dakota Water Resources Act, and federal projects affecting North Dakota.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed $70,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to renew the Will and Carlson consulting contract from July 1, 2013 to June 30, 2015. These funds are to be cost shared 50 percent with the Garrison Diversion Conservancy District.

It was moved by Commissioner Thompson and seconded by Commissioner Foley that the State Water Commission approve an allocation not to exceed $70,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to renew the Will and Carlson consulting contract from July 1, 2013 to June 30, 2015. These funds are to be cost shared 50 percent with the Garrison Diversion Conservancy District. This action is contingent upon the availability of funds.

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

TRAILL RURAL WATER DISTRICT REGIONAL WATER SUPPLY, PHASE III - APPROVAL OF ADDITIONAL 2013-2015 BIENNIUM STATE FUNDS ($368,000) (SWC Project No. 237-03)

The Traill Rural Water District conducted a water study for a regional system to meet the water needs of the cities of Hillsboro, Mayville, Galesburg, and Grandin to address the future Environmental Protection Agency's (EPA) water quality and quantity regulations. The studies indicated that the Galesburg aquifer could meet the projected water needs.

Following are previous State Water Commission actions:

On December 9, 2005, the State Water Commission approved a 65 percent grant, not to exceed an allocation of $134,000, from the Garrison Diversion Conservancy District Water Development and Research Fund for the water study ($59,250) and the feasibility study ($74,750).

On February 4, 2008, the State Water Commission approved a 70 percent federal/state grant not to exceed an allocation of $2,492,000 (federal Fiscal Year 2008 MR&I Water Supply program grant not to exceed $984,000, and an allocation not to exceed $1,508,000 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020)), to the Traill Rural Water District regional water supply, Phase I, for the development of a new Galesburg aquifer well field for the total regional water supply and transmission pipeline to the Mayville water treatment plant, and a raw water pipeline from a new transfer station to the Hillsboro water treatment plant. The total estimated project cost was $29,170,500.

On June 23, 2008, the State Water Commission approved a 70 percent grant not to exceed an allocation of $1,519,000 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020), to the Traill Rural Water District regional water supply, Phase II, to support the distribution improvements to the system that would allow full service to the cities of Galesburg and Grandin. The revised estimated cost of Phase II was $3,967,120.

On April 28, 2009, the State Water Commission approved a 70 percent grant not to exceed an additional allocation of $2,551,500 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S.B. 2020), to the Traill Rural Water District regional water supply, Phase I ($1,659,000) and Phase II ($892,500), due to increased costs related to bid items and additional alternatives for Phases I and II.

On August 18, 2009, the State Water Commission approved a grant allocation not to exceed $1,300,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Traill Rural Water District regional water supply, Phase III, which included additional well field development, installation of membranes in the existing Mayville water treatment plant, and construction of a new membrane water treatment plant at Hillsboro.

On September 1, 2010, the State Water Commission approved a 70 percent grant not to exceed an additional allocation of $200,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 2020), to the Traill Rural Water District regional water supply, Phase I ($32,000) and Phase II ($168,000).

On December 10, 2010, the State Water Commission approved an additional grant allocation of $1,450,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Traill Rural Water District regional water supply, Phase III.

The total state grants allocated to date are $8,528,500 (Phase I - $3,199,000; Phase II - $2,579,500; and Phase III - $2,750,000).

The final project cost for Traill Rural Water District, Phase III, Mayville project, is $5,989,828, of which $5,926,645 is determined as eligible costs. The overall federal/state grant of $4,255,860 is 71.8 percent identified from two sources (USDA Rural Development federal grant - $2,505,860; and a 30 percent state grant - $1,750,000). A request from the Traill Rural Water District was presented for the State Water Commission's consideration for an additional state grant of $151,750 to increase the total overall grant to 75 percent.

The final project cost for Traill Rural Water District, Phase III, Hillsboro project, is $10,613,452, of which all costs are determined eligible costs. The current 73 percent grant of $7,743,950 is identified from two sources (a 63.5 percent U.S. Corps of Engineers Section 594 fund federal grant - $6,743,950; and a 9.4 percent state grant - $1,000,000). The federal grant allowed Phase III to receive a higher grant percentage than the originally anticipated 70 percent. A request from the Traill Rural Water District was presented for the State Water Commission's consideration for an additional state grant of $216,250 to increase the overall grant to 75 percent.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant of 30 percent of the eligible costs, not to exceed an additional allocation of $28,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Traill Rural Water District to support Phase III, city of Mayville project. The current grant for Phase III, city of Hillsboro project, is 73 percent, therefore, no additional grant funding was recommended.

It was moved by Commissioner Thompson and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant not to exceed an additional allocation of $151,750 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Traill Rural Water District, Phase III, to support the city of Mayville project.

In discussion of the motion, representatives from the city of Mayville and Hillsboro expressed appreciation for the Commission's support, provided detailed information relating to their projects, and requested the Commission's favorable consideration of their requests which included additional state cost participation grants of $151,750 for the city of Mayville and $216,250 for the city of Hillsboro.

A substitute amendment to the original motion was offered by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve a state cost participation grant not to exceed an additional allocation of $368,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Traill Rural Water District, Phase III, to support the city of Mayville and the city of Hillsboro projects. This action is contingent upon the availability of funds, and is subject to future revisions.

Governor Dalrymple called the question on the substitute amendment to the original motion, and asked for a roll call vote:

Commissioners Berg, Foley, Hanson, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the substitute amendment to the original motion unanimously carried.

Governor Dalrymple called the question on the original motion, as amended, and asked for a roll call vote:

Commissioners Berg, Foley, Hanson, Nodland, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the original motion, as amended, unanimously carried.

This action increases the total state grant allocations to $8,896,500 (Phase I - $3,199,000; Phase II - $2,579,500; and Phase III - $3,118,000).

SAFE DRINKING WATER ACT - APPROVAL OF PROJECT PRIORITY LIST IN FY 2014 INTENDED USE PLAN, DATED NOVEMBER 25, 2013 (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 Act 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 November 18, 2013.

In accordance with North Dakota Century Code 61-28-1, the Department must administer and disburse the funds with the approval of the State Water Commission. The Department must establish assistance priorities and expend grant funds pursuant to the priority list for the Drinking Water State Revolving Loan Fund.

David Bruschwein, North Dakota Department of Health, presented the Fiscal Year 2014 Intended Use Plan for the North Dakota Drinking Water Revolving Loan Fund, dated November 25, 2013, for the State Water Commission's consideration. The 2014 Intended Use Plan is attached hereto as ***APPENDIX "C"***. The comprehensive project priority list includes 200 projects, with a cumulative total project cost of $672,000,000 for Fiscal Years 1997 through 2014. The fundable list for Fiscal Year 2014 is anticipated to be approximately $22,700,000 with 16 projects. Following the Commission's approval of the 2014 Comprehensive Project Priority List and Fundable List, the Department will submit an application to the U.S. Environmental Protection Agency for the program. Commission approval will enable the Department to proceed with disbursement of funds once the Agency has approved the capitalization grant.

It was the recommendation of Secretary Sando that the State Water Commission approve the comprehensive project priority list and the fundable list for Fiscal Year 2014 as listed in the 2014 Intended Use Plan, dated November 25, 2013, and authorize the North Dakota Department of Health to administer and disburse the Fiscal Year 2014 program funds pursuant to the 2014 Intended Use Plan.

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve the comprehensive project priority list and the fundable list for Fiscal Year 2014 as listed in the 2014 Intended Use Plan, dated November 25, 2013, and authorize the North Dakota Department of Health to administer and disburse the Fiscal Year 2014 program funds pursuant to the 2014 Intended Use Plan.

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

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

Keith Berndt, Fargo, representing Cass county, provided a report on the Fargo Moorhead Area Diversion project. An outline of the presentation is attached hereto as ***APPENDIX "D"***.

Final passage of a new Water Resources Development Act is anticipated in early 2014, which is expected to contain authorization for the Fargo Moorhead Area Diversion project. A bipartisan conference is working to reconcile the difference between the two versions of the bill that passed the

United States House of Representatives and the United States Senate, both versions authorize construction to begin on the diversion project. In addition to authorizing the diversion plan, the legislation also provides a comprehensive plan for improving the country's flood control projects and modernizing ports and waterways.

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

The Mouse River Enhanced Flood Protection project status report was provided, which is detailed in the staff memorandum dated November 26, 2013, and attached hereto as ***APPENDIX "E"***.

STOCHASTIC MODEL FOR MOUSE RIVER BASIN - APPROVAL OF STATE COST PARTICIPATION ($200,000) (SWC Project No. 1758)

Unprecedented flooding in the Mouse River Basin in 2011 caused extensive damage to the city of Minot and numerous smaller communities in North Dakota, Saskatchewan, and Manitoba. The severe flooding prompted the International Souris River Board to create a Mouse River task force to prepare a plan of study for evaluating potential reservoir operation changes and flood control measures to manage future floods and droughts. The task force plan indicated a need for developing stochastic methods to simulate future floods and droughts. The plan also indicated a need to evaluate the effects of multi-decadal climate variability and/or possible climate change on future flood and drought risk. The work described in the proposal would provide the scientific basis for evaluating uncertainty in future climate for the Mouse River basin and develop a stochastic model for simulating future streamflows that are consistent with climatic uncertainty, cover a full range of possibilities from extreme drought to extreme flood, and provide unbiased estimates of flood and drought risk during the 2014-2050 simulation period.

Although the International Joint Commission has not activated the task force to begin work identified in the Plan of Study that will review and update the International Agreement and analyze revisions to the Mouse River operating plan activities are under consideration in preparation for this work including the Mouse River regional and reconstructed hydrology which has been undertaken and is in review by the U.S. Army Corps of Engineers. The task force is allotted two years to complete its work.

One of the critical tasks of the Plan of Study is to perform and incorporate the results of stochastic and climatological studies. Discussions have been pursued with the U.S. Geological Survey regarding commissioning these studies so the information would be available to the task force. A project proposal prepared by the U.S. Geological Survey entitled "Stochastic model for

Mouse River basin precipitation, evapotranspiration, and streamflow for 2014-2050" was presented for the State Water Commission's consideration. The study proposal will produce: 1) a climatological model to identify the long-term scale of climatic (wet-dry) variation in the Mouse River basin; 2) a stochastic set of conditions (precipitation, temperature, evaportranspiration) which follows these trends, extending from 2014 to 2050; 3) a stochastic water balance model to simulate unregulated flows; and 4) a simplified reservoir operational model to route regulated flows. The estimated total cost of the study is $280,000. The U.S. Geological Survey will provide funds of $80,000 toward the studies.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation of $200,000 to the U.S. Geological Survey to support the stochastic model for simulating Mouse River basin precipitation, evapotranspiration, and streamflow for 2014-2050.

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve an allocation not to exceed $200,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.S. 1020), to the U.S. Geological Survey to support the stochastic model for simulating Mouse River basin precipitation, evapotranspiration, and streamflow for 2014-2050. This action is contingent upon the availability of funds. SEE APPENDIX "F"

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

SOUTHWEST PIPELINE PROJECT - PROJECTS REPORT (SWC Project No. 1736-99)

The Southwest Pipeline Project report was presented, which is detailed in the staff memorandum dated November 19, 2013, attached as ***APPENDIX "G"***.

SOUTHWEST PIPELINE PROJECT - APPROVAL OF APPROPRIATION (2013 HOUSE BILL 1020 - $58,000,000) (SWC Project No. 1736-99)

The Sixty-third Legislative Assembly of North Dakota (2013) mandated legislative intent in House Bill 1020, the State Water Commission's appropriation bill for the 2013-2015 biennium, that $79,000,000 be dedicated to the Southwest Pipeline Project.

The Sixty-third Legislative Assembly of North Dakota (2013), in House Bill 1269, Section 2, declared an emergency measure providing for an appropriation of $21,000,000 (out of the $79,000,000 dedicated in H.B. 1020 to the Southwest Pipeline Project) for the purpose of advancing additional construction on the Southwest Pipeline Project, effective February 19, 2013 (signed by Governor Dalrymple), and ending June 30, 2015. On February 27, 2013, the State Water Commission approved the emergency measure legislative mandate (H.B. 1269) allocation not to exceed $21,000,000.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed $58,000,000 from the funds appropriated in 2013 House Bill 1020 ($79,000,000 less $21,000,000 approved by the State Water Commission on February 27, 2013 under H.B. 1269) dedicated to the Southwest Pipeline Project.

It was moved by Commissioner Nodland and seconded by Commissioner Hanson that the State Water Commission approve an allocation not to exceed $58,000,000 from the funds appropriated to the State Water Commission in 2013 House Bill 1020 dedicated to the Southwest Pipeline Project. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Hanson, Nodland, Swenson, Vosper, and Governor Dalrymple voted aye. Commissioner Thompson voted nay. Recorded votes were 7 ayes, 1 nay. Governor Dalrymple announced the motion carried.

SOUTHWEST PIPELINE PROJECT - AWARD OF CONTRACT 8-3, MERCER-OLIVER-NORTH DUNN REGIONAL SERVICE AREA, KILLDEER MOUNTAIN ELEVATED TANK, TO MAGUIRE IRON, INC., SIOUX FALLS, SD (SWC Project No. 1736-99)

On October 18, 2013, bid packages were opened for Southwest Pipeline Project, Oliver-Mercer-North Dunn Regional Service Area, Killdeer Mountain Elevated Tank, Contract 8-3. The scope of work generally consists of furnishing and installing one 250,000 gallon pedestal spheroid style elevated steel potable water storage tank with 170 feet to overflow, access road, related piping, foundation, control vault, and site work. The reservoir will be located in Dunn county, 9 miles west and 3 miles north of the city of Killdeer. This tank will serve the rural residents in the Grassy Butte, Killdeer Mountains and Fairfield service areas. The contract documents stipulate a substantial completion date of October 1, 2014.

Three bid packages were received for Contract 8-3 from Maguire Iron, Inc., Sioux Falls, SD; Phoenix Fabricators & Erectors, Inc., Avon, IN; and Caldwell Tanks, Inc., Louisville, KY. All bid packages appeared in

order and were opened. All of the bids received were significantly higher than the engineer's estimate ($1,088,500), due to the increased cost of construction and construction materials in the North Dakota oil impact area. The apparent low bid received was $1,277,000 submitted by Maguire Iron, Inc., Sioux Falls, SD.

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 Maguire Iron, Inc., Sioux Falls, SD appeared to be in accordance with the advertisement for construction bid and the bid documents, and considered to be a responsive bid. It was the recommendation of the project engineer to award Contract 8-3 to Maguire Iron, Inc., Sioux Falls, SD. The award of the contract and notice to proceed are dependent on the satisfactory completion and submission of the contract documents by Maguire Iron, Inc., and review/approval by the Commission's legal counsel.

The contract will be funded from the 2013-2015 biennium State Water Commission allocation to the Southwest Pipeline Project.

It was the recommendation of Secretary Sando that the State Water Commission approve the award of Southwest Pipeline Project, Oliver-Mercer-North Dunn Regional Service Area, Killdeer Mountain Elevated Tank, Contract 8-3, to Maguire Iron, Inc., Sioux Falls, SD, in the amount of $1,277,000.

It was moved by Commissioner Foley and seconded by Commissioner Hanson that the State Water Commission approve the award of Southwest Pipeline Project, Oliver-Mercer-North Dunn Regional Service Area, Killdeer Mountain Elevated Tank, Contract 8-3, to Maguire Iron, Inc., Sioux Falls, SD, in the amount of $1,277,000. This action is contingent upon the satisfactory completion and submission of the contract documents by Maguire Iron, Inc., and the review/approval by the Commission's legal counsel.

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

SOUTHWEST PIPELINE PROJECT - AWARD OF CONTRACT 3-IH, OLIVER-MERCER-NORTH DUNN REGIONAL SERVICE AREA, WATER TREATMENT PLANT, PHASE II, EXPANSION EQUIPMENT INSTALLATION, TO NORTHERN PLAINS CONTRACTING, INC., WOLVERTON, MN-GENERAL CONSTRUCTION; AND TO EDLING ELECTRIC, INC., BISMARCK, ND-ELECTRICAL CONSTRUCTION (SWC Project No. 1736-99)

On December 6, 2013, bid packages were opened for Southwest Pipeline Project, Oliver-Mercer-North Dunn Regional Service Area Water Treatment Plant, Phase II, Expansion and Equipment Installation, Contract 3-IH. The scope of work generally consists of the installation of owner-purchased membrane treatment and ozone equipment; furnishing and installing three additional vertical turbine pumps and two centrifugal pumps; process piping; chemical feed systems; furnishing and installing associated electrical power feed conduit and wiring; and instrumentation.

Separate bid schedules and scopes of work were provided for the General and Electrical contracts as required by state law. A combined single bid was also provided under the project to encompass all individual scopes of work. The project location is at the existing Oliver-Mercer-North Dunn water treatment plant site located approximately 8 miles north of Zap. The contract documents stipulate a substantial completion date of August 1, 2014 with a milestone completion date of June 15, 2014 for all work that requires a shutdown of the existing plant.

The bid form was divided into three bid schedules: Schedule I for General Construction, Schedule II for Electrical Construction, and Schedule III for a combined single bid. Three bid packages were received - two bids under Bid Schedule I, one bid under Bid Schedule II, and one bid under Bid Schedule III. All bid packages appeared in order and were opened. The apparent low bid received for Schedule I, General Construction was from Northern Plains Contracting, Inc., Wolverton, MN in the amount of $1,494,900; Schedule II, Electrical Construction was from Edling Electric, Inc., Bismarck, ND in the amount of $396,400; and Schedule III, single combined bid was from PKG Contracting, Inc., Fargo, ND, in the amount of $1,932,200. All of the bids received were significantly higher than the engineer's estimates due to the increased cost of construction and construction materials and decreased availability of contractors to do the work because of oil impacts in North Dakota.

The contract documents allow the State Water Commission to select the most advantageous bids. Based on the project engineer's review, the bids received for Schedule I for General Construction from Northern Plains Contracting, Inc., Wolverton, MN, and Schedule II for Electrical Construction from Edling Electric, Inc., Bismarck, ND appeared to be in accordance with the advertisement for construction bid and the bid documents, and are considered to be

responsive bids. It was the recommendation of the project engineer to award Contract 3-IH, General Construction, to Northern Plains Contracting, Inc., Wolverton, MN, and Contract 3-IH, Electrical Construction, to Edling Electric, Inc., Bismarck, ND. The award of the contracts and notices to proceed are dependent on the satisfactory completion and submission of the contract documents by Northern Plains Contracting, Inc. and Edling 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 Commission to award Southwest Pipeline Project Contract 3-IH, General Construction, to Northern Plains Contracting, Inc., Wolverton, MN, in the amount of $1,494,900 based on Bid Schedule I, and Southwest Pipeline Project Contract 3-IH, Electrical Construction, to Edling Electric, Inc., Bismarck, ND, in the amount of $396,400 based on Bid Schedule II.

It was moved by Commissioner Nodland and seconded by Commissioner Vosper that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 3-IH, General Construction, to Northern Plains Contracting, Inc., Wolverton, MN, in the amount of $1,494,900 based on Bid Schedule I, and Southwest Pipeline Project Contract 3-IH, Electrical Construction, to Edling Electric, Inc., Bismarck, ND, in the amount of $396,400 based on Bid Schedule II. This action is contingent upon the satisfactory completion and submission of the contract documents by Northern Plains Contracting, Inc. and Edling Electric, Inc., and the review/approval by the Commission's legal counsel.

Commissioners Berg, Foley, Hanson, Nodland, 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 CAPITAL REPAYMENT RATES, AND REPLACEMENT AND EXTRAORDINARY MAINTENANCE RATES FOR 2014 (SWC Project No. 1736-99)

Under the Agreement for the Transfer of Management, Operations, and Maintenance Responsibilities for the Southwest Pipeline Project, the Southwest Water Authority is required to submit a budget to the State Water Commission's secretary by December 15 of each year. The budget is deemed approved unless the Commission's secretary notifies the Authority of his disapproval by February 15. The Southwest Water Authority submitted its budget on November 20, 2013.

On October 19, 1998, the State Water Commission approved an amendment to the Transfer of Operations Agreement, which changed the Consumer Price Index (CPI) date used for calculating the project's capital repayment rates from January 1 to September 1. This amendment was necessary to bring the transfer of operations into line with the water service contracts and streamline the budget process. The agreement specifies that the water rates for capital repayment be adjusted annually based on the Consumer Price Index; the September 1, 2013 CPI was 233.9 versus 230.4 on September 1, 2012. The State Water Commission has the responsibility of adjusting the capital repayment rates annually.

At the June 22, 2005 meeting, the State Water Commission approved the 2005 capital repayment rate for rural users in Morton county receiving water through the Missouri West Water system transmission pipelines at $22.00 per month. Applying the Consumer Price Index adjustment to this figure results in a 2014 rate for these users of $27.17 per month.

The rate for replacement and extra-ordinary maintenance (REM) was approved by the State Water Commission at its February 9, 1999 meeting at $0.35 per thousand gallons. The original rate of $0.30 per thousand gallons was approved in 1991. Based on a recent study conducted by Bartlett & West/AECOM to determine the REM rate, which included the entire present and future planned infrastructure for the Southwest Pipeline Project, it is proposed to increase the REM rate to $0.50 from $0.40 per thousand gallons.

In preparation of the budget for 2014, the Southwest Water Authority proposed a $20.00 per thousand gallons water rate for oil industry contracts, which is an increase from the $18.25 per thousand gallons rate approved for 2013. The capital repayment rate for oil industry contracts, other than the Dickinson water depot built by the Southwest Water Authority, is proposed to increase to $6.67 from the $6.11 per thousand gallons, and increasing the REM rate to $6.67 from $1.00 per thousand gallons.

The capital repayment rate for the Dickinson water depot is proposed at $2.24 per thousand gallons with the REM rate at $4.67 per thousand gallons.

It was the recommendation of Secretary Sando that the State Water Commission concur with the proposed 2014 Southwest Pipeline Project capital repayment and replacement and extraordinary rates as presented. These proposed rates were approved by the Southwest Water Authority board of directors at its December, 2013 meeting:

Capital repayment for contract and rural customers:

Contract users	$ 1.12 per thousand gallons
Morton county with water service from Missouri West Water System	$ 27.17 per month
Other rural users	$ 34.30 per month

Capital Repayment for oil industry contracts:

City of Dickinson water depot	$ 2.24 per thousand gallons
Other oil industry contracts	$ 6.67 per thousand gallons

Replacement and extraordinary maintenance (REM):

Contract and rural users	$ 0.50 per thousand gallons
City of Dickinson water depot	$ 4.67 per thousand gallons
Other oil industry contracts	$ 6.67 per thousand gallons

It was moved by Commissioner Swenson and seconded by Commissioner Thompson that the State Water Commission approve the proposed 2014 capital repayment and replacement and extraordinary maintenance rates for the Southwest Pipeline Project as recommended.

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

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

The Northwest Area Water Supply (NAWS) project and construction status reports were provided, which are detailed in the staff memorandum dated November 27, 2013, and attached as ***APPENDIX "H".***

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

The Devils Lake hydrologic report, and project updates were provided, which are detailed in the staff memorandum, dated November 27, 2013, attached as ***APPENDIX "I".***

DEVILS LAKE WEST OUTLET STANDPIPE REPAIRS - APPROVAL OF $1,300,000 (SWC Project No. 416-10)

The State Water Commission members were informed of failures that occurred at the Round Lake and Josephine standpipes, which resulted in a shut-down of the Devils Lake west outlet for investigation.

The investigation determined there was significant damage to the center column of the Round Lake standpipe and there was evidence of similar failure beginning in the center column of the Josephine standpipe. Repairs to both standpipes are estimated at $1,300,000.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed $1,300,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium for repairs to the Devils Lake west end outlet standpipes.

It was moved by Commissioner Vosper and seconded by Commissioner Berg that the State Water Commission approve an allocation not to exceed $1,300,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium for repairs to the Devils Lake west end outlet standpipes. This action is contingent upon the availability of funds.

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

DEVILS LAKE OUTLET AWARENESS COORDINATOR - JOE BELFORD RECOGNIZED FOR ADDRESSING FLOOD-RELATED EFFORTS IN DEVILS LAKE BASIN (SWC Project No. 416-01)

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 coordinator, presently occupied by Joe Belford. The intended goal of this position was to function as a communicator to parties relative to the Devils Lake outlet projects and their flood protection benefits. The Devils Lake outlet awareness coordinator contract is funded through December 31, 2013.

Mr. Belford was recognized for his outstanding leadership and commitment of time, energy, and talent as the Devils Lake Outlet Awareness coordinator from 1998 to 2013 addressing flood-related issues in the Devils Lake basin. Governor Dalrymple expressed his gratefulness stating that Joe Belford's "admirable and dedicated efforts in promoting acceptance and understanding of the issues from a greater Red River basin perspective will continue to enhance the lives of people of the great State of North Dakota for generations to come."

MISSOURI RIVER REPORT (SWC Project No. 1392)

The Missouri River report was provided, which is detailed in the staff memorandum dated November 22, 2013, and attached hereto as ***APPENDIX "J"***.

MISSOURI RIVER - APPROVAL OF FUNDS FOR ORDINARY HIGH WATER MARK DELINEATIONS ($95,618) TO HOUSTON ENGINEERING, INC., BISMARCK, ND (SWC Project No. 1625)

Sovereign land is defined in North Dakota Century Code (NDCC) as "those areas, including beds and islands, lying within the ordinary high water mark of navigable lakes and streams." North Dakota Administrative Code defines the ordinary high water mark (OHWM) as "that line below which the action of the water is frequent enough either to prevent the growth of vegetation or to restrict its growth to predominantly wetland species. Islands in navigable streams and waters are considered to be below the ordinary high water mark in their entirety." The OHWM needs to be determined in order to accurately identify what lands are sovereign and are the responsibility of the State Engineer to "manage, operate, and supervise" as prescribed in NDCC 61-33.

The State Water Commission members were informed of issues relative to the location of the OHWM along the left bank of the Missouri River from the Misty Waters boat ramp to north of Sundown Acres in Burleigh county. On August 20, 2013, the State Engineer published a Request for Qualifications (RFQ) to delineate the OHWM at the defined location. Following the RFQ process, Houston Engineering, Inc., Bismarck, ND, was selected to conduct the OHWM delineations in 2014 using the OHWM Delineations Guidelines developed by the State Engineer in 2007.

In an effort to provide a potential phased approach for doing the required delineation work, it was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed $95,618 to Houston Engineering, Inc., Bismarck, ND, to delineate the ordinary high water mark along the left bank of the Missouri River starting at the abandoned Burnt Creek boat landing and ending above the Sundown Acres housing development to allow the State Engineer to identify and manage sovereign lands as required in North Dakota Century Code 61-33.

It was moved by Commissioner Swenson and seconded by Commissioner Hanson that the State Water Commission approve an allocation not to exceed $95,618 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to Houston Engineering, Inc., Bismarck, ND, to delineate the ordinary high water mark along the left bank of the Missouri River starting at the abandoned Burnt Creek boat landing and ending above the Sundown Acres housing development, to allow the State Engineer to identify and manage sovereign lands as required in North Dakota Century Code 61-33. This action is contingent upon the availability of funds.

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

STATE WATER PLAN - COMMISSIONER-HOSTED MEETINGS (SWC Project No. 322)

2013 House Bill 1206 requires the State Water Commission to hold commissioner-hosted meetings within the six major drainage basins of the state (Red River, James River, Mouse River, upper and lower Missouri River, and Devils Lake) as part of the water planning and budgeting process. The primary purpose of the meetings is to facilitate local project sponsor participation in the biennial water planning process.

Two rounds of meetings are proposed, the first round of six meetings were held in November and December, 2013. The agenda for the first round of meetings included: 1) outline the type of information that project sponsors will need to provide to the State Water Commission for consideration of inclusion in the agency's funding priorities for the 2015-2017 biennium; 2) provide an overview of the new draft project prioritization guidance concept; and 3) summarize changes, respond to questions, and collect input regarding proposed modifications to the State Water Commission's cost share policy. The draft Project Prioritization Guidance Concept was presented, the purpose of the prioritization concept is to assist with water project prioritization during future biennia. The draft modifications to the State Water Commission cost share policy were also provided. The second round of six meetings will be scheduled in the summer of 2014 for the purpose of collecting updated information from project sponsors.

GARRISON DIVERSION CONSERVANCY DISTRICT (SWC Project No. 237)

Dave Koland, Garrison Diversion Conservancy District general manager, provided a status report relating to the efforts of the Red River Valley Water Supply project, and the District's ongoing activities.

RED RIVER VALLEY WATER SUPPLY PROJECT REPORT (SWC Project No. 325)

Michelle Klose provided an update on the Red River Valley Water Supply project, which was authorized by the Dakota Water Resources Act of 2000 to provide a reliable water supply of quality drinking water for the Red River valley. The Garrison Diversion Unit Import to the Sheyenne River was selected as the preferred alternative after considering water permitting, environmental impacts, technical, hydrologic and design evaluations. The final Environmental Impact Statement was released in December, 2007. The Red River Valley Water Supply project is awaiting a record of decision from the Secretary of the Interior, and congressional authorization to use the Missouri River.

The Commission members were informed that the Commission staff and others are currently drafting a Request for Proposals to conduct a Red River Valley Water Supply value engineering study around the project alternatives to supply water from the Missouri River to the Red River valley users. The overall goal of the study is to assist the state in the selection of the alignment discussed in the proposal that would provide the best opportunity to complete the Red River Valley Water Supply project.

Governor Dalrymple exited the meeting due to scheduling commitments, and designated Secretary Sando to preside.

WESTERN AREA WATER SUPPLY PROJECT REPORT (SWC Project No. 1973)

2011 House Bill 1206 created the Western Area Water Supply (WAWS) project, under chapter 61-40 of the North Dakota Century Code. The project report was provided, which is detailed in the staff memorandum dated November 27, 2013, and attached as ***APPENDIX "K".***

Representatives of the Independent Water Providers appeared before the State Water Commission members and offered the following proposed policy changes regarding the expansion of the WAWS industrial water supply:

1) Rigorous State Water Commission (SWC) oversight of the WAWS project, especially with regard to rural build-out;

2) In reviewing any application for industrial water supply for oil and gas development, the SWC is requested to publish the application information on the SWC website for 30 days, and evaluate the request using the following criteria:
    a. objections from other providers of industrial water supply;
    b. private sector capacity to meet the requested demand;
    c. location and proximity of other private water supply infra-structure in the area;
    d. status of domestic water supply restrictions from the participating WAWS member, and whether the participating member is meeting all domestic water demands;
    e. whether the request follows the depot plan and financing structure approved by the 2011 Legislature in H.B.1206, or is it a deviation of that plan;
    f. the length of time for which the industrial water supply is requested; and
    g. the status of industrial water supply payments to meet obligations set forth in Section 19 of S.B. 2233; and

3) Any fees or charges for maintaining or operating the WAWS facilities shall be subject to SWC approval, after WAWS provides consultation with the State Engineer and SWC staff.

Representatives of the Western Area Water Supply Authority appeared before the State Water Commission and provided a status report focusing on current and future project efforts. Comments were offered from the Authority relative to the Independent Water Providers proposed policy changes. No action was taken by the State Water Commission at this meeting.

During other business, Gordon Johnson, North Valley Rural Water District, requested the State Water Commission reconsider its action taken during the October 7, 2013 meeting on water supply projects that were approved for a state cost participation allocation grant of 50 percent. Mr. Johnson provided detailed project information, and requested a 75 percent state cost participation grant for each of the projects, which was the original cost share request. The State Water Commission members discussed the request, and asked Mr. Johnson to resubmit his request for further review. No action was taken by the State Water Commission at this meeting.

There being no additional business to come before the State Water Commission, Secretary Sando adjourned the meeting at 1:30 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 OCTOBER 30, 2013
BIENNIUM COMPLETE: 17%

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	19-Nov-13 PROGRAM TOTALS
ADMINISTRATION				
Allocated	2,492,011	2,323,966		4,815,977
Expended	403,017	234,099		637,116
Percent	16%	10%		13%
			Funding Source:	
			General Fund:	0
			Federal Fund:	10,272
			Special Fund:	626,843
PLANNING AND EDUCATION				
Allocated	1,334,304	301,110	107,000	1,742,414
Expended	192,061	38,102	13,452	243,615
Percent	14%	13%	13%	14%
			Funding Source:	
			General Fund:	0
			Federal Fund:	34,003
			Special Fund:	209,612
WATER APPROPRIATION				
Allocated	4,632,809	548,947	1,215,267	6,397,023
Expended	735,983	104,010	55,949	895,943
Percent	16%	19%	5%	14%
			Funding Source:	
			General Fund:	0
			Federal Fund:	0
			Special Fund:	895,943
WATER DEVELOPMENT				
Allocated	6,258,796	14,555,905	3,313,200	24,127,901
Expended	972,050	1,537,682	17,558	2,527,289
Percent	16%	11%	1%	10%
			Funding Source:	
			General Fund:	0
			Federal Fund:	214,394
			Special Fund:	2,312,895
STATEWIDE WATER PROJECTS				
Allocated			629,600,000	629,600,000
Expended			21,802,137	21,802,137
Percent			3%	3%
			Funding Source:	
			General Fund:	0
			Federal Fund:	0
			Special Fund:	21,802,137
ATMOSPHERIC RESOURCE				
Allocated	993,898	712,307	4,694,692	6,400,897
Expended	188,260	52,638	445,907	686,805
Percent	19%	7%	9%	11%
			Funding Source:	
			General Fund:	0
			Federal Fund:	0
			Special Fund:	686,805
SOUTHWEST PIPELINE				
Allocated	468,291	12,927,500	101,616,741	115,012,532
Expended	100,124	995,401	3,960,804	5,056,329
Percent	21%	8%	4%	4%
			Funding Source:	
			General Fund:	0
			Federal Fund:	456,692
			Special Fund:	4,599,637
NORTHWEST AREA WATER SUPPLY				
Allocated	650,021	16,498,500	53,800,540	70,949,061
Expended	83,470	259,487	34,142	377,099
Percent	13%	2%	0%	1%
			Funding Source:	
			General Fund:	0
			Federal Fund:	0
			Special Fund:	377,099
PROGRAM TOTALS				
Allocated	16,830,130	47,868,235	794,347,440	859,045,805
Expended	2,674,965	3,221,419	26,329,949	32,226,333
Percent	16%	7%	3%	4%

FUNDING SOURCE:	ALLOCATION	EXPENDITURES	REVENUE	
GENERAL FUND	0	0	GENERAL FUND:	104,684
FEDERAL FUND	37,310,283	715,361	FEDERAL FUND:	999,270
SPECIAL FUND	821,735,522	31,510,971	SPECIAL FUND:	28,547,047
TOTAL	859,045,805	32,226,333	TOTAL:	29,651,002

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2013-2015 BIENNIUM

Oct-13

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
FLOOD CONTROL					
FARGO	136,740,340	36,740,340	2,103,713	100,000,000	34,636,627
GRAFTON	7,175,000	7,175,000	0	0	7,175,000
MINOT	3,857,260	3,857,260	24,297	0	3,832,963
BURLEIGH COUNTY	1,282,400	1,282,400	0	0	1,282,400
VALLEY CITY	350,625	350,625	0	0	350,625
LISBON	700,650	700,650	0	0	700,650
FORT RANSOM	225,000	225,000	0	0	225,000
RICE LAKE RECREATION DISTRICT	2,842,200	2,842,200	0	0	2,842,200
RENWICK DAM	1,281,376	1,281,376	0	0	1,281,376
MOUSE RIVER FLOOD CONTROL	32,761,600			32,761,600	
SHEYENNE RIVER FLOOD CONTROL	22,141,705			22,141,705	
FLOODWAY PROPERTY ACQUISITIONS					
MINOT	33,684,071	33,684,071	916,939	0	32,767,132
WARD COUNTY	9,698,169	9,698,169	569,272	0	9,128,897
VALLEY CITY	1,822,598	1,822,598	0	0	1,822,598
BURLEIGH COUNTY	442,304	442,304	0	0	442,304
SAWYER	184,260	184,260	0	0	184,260
LISBON	888,750	888,750	0	0	888,750
WATER SUPPLY					
REGIONAL & LOCAL WATER SYSTEMS	80,026,227	55,574,309	5,448,743	24,451,918	50,125,565
FARGO WATER TREATMENT PLANT	27,864,069	12,864,069	533,711	15,000,000	12,330,358
SOUTHWEST PIPELINE PROJECT	85,972,021	27,972,021	4,599,637	58,000,000	23,372,384
NORTHWEST AREA WATER SUPPLY	21,241,433	7,241,433	117,233	14,000,000	7,124,200
COMMUNITY WATER LOAN FUND - BND	15,000,000	15,000,000	5,000,000	0	10,000,000
WESTERN AREA WATER SUPPY	79,000,000	40,000,000	0	39,000,000	40,000,000
RED RIVER VALLEY WATER SUPPLY	11,000,000			11,000,000	
IRRIGATION DEVELOPMENT	5,493,548	493,548	45,000	5,000,000	448,548
GENERAL WATER MANAGEMENT					
OBLIGATED	20,729,048	20,729,048	219,085	0	20,509,963
UNOBLIGATED	68,739,117			68,739,117	0
DEVILS LAKE					
BASIN DEVELOPMENT	68,085	68,085	4,484	0	63,601
OUTLET	872,403	872,403	0	0	872,403
OUTLET OPERATIONS	15,140,805	5,140,805	1,375,277	10,000,000	3,765,528
DL TOLNA COULEE DIVIDE	102,975	102,975	0	0	102,975
DL EAST END OUTLET	4,074,011	4,074,011	0	0	4,074,011
DL GRAVITY OUTFLOW CHANNEL	13,686,839	13,686,839	0		13,686,839
WEATHER MODIFICATIONS	805,202	805,202	123,997	0	681,205
TOTALS	705,894,092	305,799,751	21,081,387	400,094,342	284,718,364

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2013-2015 Biennium

PROGRAM OBLIGATION

Approved By	SWC No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Oct-13 Balance
				Flood Control:				
SB 2020	1928	5000	City of Fargo	Fargo Flood Control Project	6/23/2009	36,740,340	2,103,713	34,636,627
SWC	1771	5000	City of Grafton	Grafton Flood Control Project	3/11/2010	7,175,000	0	7,175,000
SB 2371	1974-06	5000	Souris River Joint WRI	Mouse River Enhanced Flood - pd to SRJWRB	12/9/2011	16,257	14,504	1,754
SB 2371	1974-08	5000	Souris River Joint WRI	Mouse River Reconnaissance Study to Meet Fed Guic	2/15/2013	10,603	9,793	809
	1974-09	5000	Souris River Joint WRI	4th Ave NE & Napa Valley/Forest Rd Flood Improvem	10/7/2013	3,830,400	0	3,830,400
SB 2371	1992-01	5000	Burleigh Co. WRD	Burleigh County's Tavis Road Storm Water Pump Stat	6/13/2012	1,282,400	0	1,282,400
SB 2371	1344	5000	Valley City	Sheyenne River Valley Flood Control Project	6/19/2013	350,625	0	350,625
SB 2371	1344	5000	Lisbon	Sheyenne River Valley Flood Control Project	6/19/2013	700,650	0	700,650
SB 2371	1344	5000	Fort Ranson	Sheyenne River Valley Flood Control Project	6/19/2013	225,000	0	225,000
	1997	5000	Rice Lake Recreation I	Renwick Dam Rehabilitation	6/13/2012	2,842,200	0	2,842,200
SWC	849	5000	Pembina Co. WRD	Renwick Dam Rehabilitation	5/17/2010	1,281,376	0	1,281,376
				Subtotal Flood Control		***54,454,851***	***2,128,010***	***52,326,841***
				Floodway Property Acquisitions:				
SB 2371	1993-05	5000	City of Minot	Minot Phase 1 - Floodway Acquisitions	1/27/2012	9,276,071	916,939	8,359,132
	1993-05	5000	City of Minot	Minot Phase 2 - Floodway Acquisitions	10/7/2013	24,408,000	0	24,408,000
SB 2371	1523-05	5000	Ward County	Ward County Phase 1, 2 & 3 - Floodway Acquisitions	1/27/2012	9,525,664	569,272	8,956,392
SB 2371	1523-02	5000	Ward County	Chaparelle Highwater Berm Project	2/27/2013	172,505	0	172,505
SB 2371	1504-05	5000	ValleyCity	Valley City Phase 1 - Floodway Acquisitions	12/9/2011	656,768	0	656,768
	1504-05	5000	ValleyCity	Valley City Phase 2 - Floodway Acquisitions	7/23/2013	1,165,830	0	1,165,830
SB 2371	1992-05	5000	Burleigh Co. WRD	Burleigh Co. Phase 1 - Floodway Acquisitions	3/7/2012	442,304	0	442,304
SB 2371	2000-05	5000	City of Sawyer	Sawyer Phase 1 - Floodway Acquisitions	6/13/2012	184,260	0	184,260
	1991-05	5000	City of Lisbon	Lisbon - Floodway Acquisition	9/27/2013	888,750	0	888,750
				Subtotal Floodway Property Acquisitions		***46,720,152***	***1,486,211***	***45,233,941***
SWC				***MRI Water Supply Advances:***				
	2373-24	5000	Garrison Diversion	Traill Regional Rural Water (Phase III)	8/18/2009	1,000,000	0	1,000,000
				MRI Water Supply Grants:				
	2373-32	5000	North Central Rural Wa	NCRW (Berthold-Carpio)	6/21/2011	2,807,902	2,253,176	554,726
	2373-33	5000	Stutsman Rural WRD	Stutsman Rural Water System - Phase II	6/21/2011	2,395,692	1,427,024	968,668
	2373-35	5000	Grand Forks - Traill WF	Grand Forks - Traill County WRD	6/13/2012	2,725,415	760,037	1,965,377
	2373-36	5000	Stutsman Rural WRD	Stutsman Rural Water System - Phase IIB, III	2/27/2013	10,000,000	987,092	9,012,908
	2373-37	5000	North Central Rural Wa	NCRW (Plaza)	2/27/2013	299,300	21,414	277,886
	1782-01	5000	McLean-Sheridan WRI	Blue & Brush Lakes Expansion Project	2/27/2013	100,000	0	100,000
	2373-38	5000	Stutsman Rural WRD	Kidder Co & Carrington Area Expansion	7/23/2013	1,207,000	0	1,207,000
	2373-39	5000	North Central Rural Wa	Carpio Berthold Phase 2	7/23/2013	1,950,000	0	1,950,000
	2373-40	5000	South Central Regional	Kidder County Expansion	7/23/2013	196,500	0	196,500
	2373-41	5000	North Central Rural Wa	Granville-Deering Area	7/23/2013	180,000	0	180,000
	2373-42	5000	Greater Ramsey WRD	SW Nelson County Expansion	7/23/2013	150,000	0	150,000
				Subtotal MRI Water Supply		***23,011,809***	***5,448,743***	***17,563,065***
				Water Supply Grants:				
	2050-01	5000	Missouri West Water S	South Mandan	10/7/2013	400,000	0	400,000
	2050-02	5000	Grand Forks Traill WRI	Improvements	10/7/2013	3,390,000	0	3,390,000
	2050-03	5000	Langdon RWD	ABM Pipeline Phase 1	10/7/2013	1,040,000	0	1,040,000
	2050-04	5000	Langdon RWD	North Valley Nekoma	10/7/2013	800,000	0	800,000
	2050-05	5000	North Valley WD	ABM Pipeline Phase 1	10/7/2013	565,000	0	565,000
	2050-06	5000	North Valley WD	93 Street	10/7/2013	1,290,000	0	1,290,000
	2050-07	5000	North Valley WD	Rural Expansion	10/7/2013	862,500	0	862,500
	2050-08	5000	Walsh RWD	Ground Storage	10/7/2013	684,000	0	684,000
	2050-09	5000	City of Park River	Water Tower	10/7/2013	1,350,000	0	1,350,000
	2050-10	5000	City of Surrey	Water Supply Improvements	10/7/2013	1,500,000	0	1,500,000
	2050-11	5000	Cass RWD	Phase 2 Plant Improvements	10/7/2013	2,600,000	0	2,600,000
	2050-12	5000	Central Plains WD	Improvements	10/7/2013	1,450,000	0	1,450,000
	2050-13	5000	City of Mandan	New Raw Water Intake	10/7/2013	1,270,000	0	1,270,000
	2050-14	5000	City of Mandan	Water Treatment Plant Improvements	10/7/2013	726,000	0	726,000
	2050-15	5000	City of Washburn	New Raw Water Intake	10/7/2013	1,795,000	0	1,795,000
	2050-16	5000	Tri-County WRD	Improvements	10/7/2013	650,000	0	650,000
	2050-17	5000	Barnes Rural WRD	Improvements	10/7/2013	4,600,000	0	4,600,000
	2050-18	5000	City of Grafton	Water Treatment Plant Phase 3	10/7/2013	2,600,000	0	2,600,000
	2050-19	5000	City of Grand Forks	Water Treatment Plant Improvements	10/7/2013	4,990,000	0	4,990,000
				Subtotal State Water Supply		***32,562,500***	***0***	***32,562,500***
	1984-02	5000	City of Fargo	Fargo Water Treatment Plant	6/13/2012	12,864,069	533,711	12,330,358
	1736-05	8000	SWPP	Southwest Pipeline Project	7/1/2013	27,972,021	4,599,637	23,372,384
	2374	9000	NAWS	Northwest Area Water Supply	7/1/2013	7,241,433	117,233	7,124,200
	2044-01	5000	Bank of North Dakota	Community Water Facility Fund	10/7/2013	15,000,000	5,000,000	10,000,000
	1973-02	5000	Bank of North Dakota	Western Area Water Supply - Loan	10/7/2013	40,000,000	0	40,000,000
				Subtotal Water Supply		***103,077,522***	***10,250,580***	***92,826,942***

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2013-2015 Biennium

PROGRAM OBLIGATION

Approvec By	SWC No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Oct-13* Balance
				Irrigation Development:				
SWC	222	5000	Buford Trenton Irrigatio	Buford Trenton Irrigation Transmission Line Reroute	7/23/2013	350,000	0	350,000
SWC	1389	5000	Bank of ND	BND AgPace Program	10/23/2001	25,966	20,000	5,966
SWC	AOC/IRA	5000	ND Irrigation Assoc	ND Irrigation Association	7/1/2013	100,000	25,000	75,000
SWC	1968	5000	Garrison Diversion	2009-11 McClusky Canal Mile Marker 7.5 Irrigation Pr	6/1/2010	17,582	0	17,582
				Subtotal Irrigation Development		***493,548***	***45,000***	***448,548***
				General Water Management				
				Hydrologic Investigations:		***900,000***		
SWC	1400/13	3000	Houston Engineering	Houston Engineering Water Permit Application Reviev	11/7/2011	1,975	1,975	0
SWC	1400/14	3000	Houston Engineering	Houston Engineering Water Permit Application Reviev	11/29/2012	10,910	3,991	6,919
SWC	1400	3000	Gordon Sturgeon	Consultant Services	3/23/2013	22,400	11,200	11,200
	862/859	3000	Arletta Herman	Arletta Herman- Well Monitor	8/28/2012	896	896	0
	967	3000	Holly Messmer - McDai	Holly Messmer - McDaniel - Well Monitor	4/19/2012	0	0	0
	1690	3000	Holly Messmer - McDai	Holly Messmer - McDaniel - Well Monitor	4/19/2012	624	624	0
	1703	3000	Thor Brown	Thor Brown- Well Monitor	3/27/2012	1,076	1,076	0
	1707	3000	Thor Brown	Thor Brown- Well Monitor	4/26/2011	1,268	1,267	0
	1761	3000	Gloria Roth	Gloria Roth - Well Monitor	4/19/2013	345	345	0
	1761	3000	Fran Dobits	Fran Dobits - Well Monitor	6/1/2011	575	575	0
	2041	3000	U. S. Geological Surve	Conversion of 17 groundwater recorder wells to real-ti	7/16/2013	34,000	34,000	0
	1395	3000	U. S. Geological Surve	Investigations of Water Resources in North Dakota	9/25/2013	491,275	0	491,275
	1395D	3000	U. S. Geological Surve	Eaton Irrigation Project on the Souris River	7/13/2012	15,300	0	15,300
				Hydrologic Investigations Obligations Subtotal		***580,643***	***55,949***	***524,694***
				Remaining Hydrologic Investigations Authority		***319,357***		
				Hydrologic Investigations Authority Less Payments				
				General Projects Obligated		***19,702,231***	***36,318***	***19,665,913***
				General Projects Completed		***126,818***	***126,818***	***0***
				Subtotal General Water Management		***20,729,048***	***219,085***	***20,509,963***
				Devils Lake Basin Development:				
SWC	416-01	5000	DLJWRB	DL Joint WRB Manager	7/1/2013	60,000	0	60,000
SWC	416-05	2000	Joe Belford	DL Downstream Acceptance	7/1/2013	8,085	4,484	3,601
SWC	416-07	5000	Multiple	Devils Lake Outlet	7/1/2013	872,403	0	872,403
SWC	416-10	4700	Operations	Devils Lake Outlet Operations	7/1/2013	5,140,805	1,375,277	3,765,528
SWC	416-13	5000	Multiple	DL Tolna Coulee Divide	7/1/2013	102,975	0	102,975
SWC	416-15	5000	Multiple	DL East End Outlet	7/1/2013	4,074,011	0	4,074,011
SWC	416-17	5000	Multiple	DL Emergency Gravity Outflow Channel	9/21/2013	13,686,839	0	13,686,839
				Devils Lake Subtotal		***23,945,119***	***1,379,761***	***22,565,358***
SWC		7600		Weather Modification	7/1/2011	805,202	123,997	681,205
				TOTAL		***305,799,751***	***21,081,387***	***284,718,364***

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2013-2015 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Oct-13* Balance
HB 1009	1986	5000	2013-15	USDA-APHIS,ND Dept Agricu	USDA Wildlife	8/20/2013	250,000	0	250,000
HB 1020	1932	5000	2005-07	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment Drain	8/30/2005	500,000	0	500,000
HB 2305	1963	5000	2009-11	Emmons County WRD	Beaver Bay Embankment Feasibilitly Study	8/10/2009	53,644	26,318	27,326
SB 2020	1131	5000	2009-11	Nelson Co. WRD	Flood Related Water Projects	6/1/2011	55,455	0	55,455
SE	1967	5000	2009-11	Grand Forks Co. WRD	Grand Forks County Legal Drain No. 55 2010 Contruc	11/30/2010	9,652	0	9,652
SE	1301	5000	2009-11	City of Lidgerwood	City of Lidgerwood Engineering & Feasibility Study for	2/4/2011	15,850	0	15,850
SE	1607	5000	2011-13	Ward Co. WRD	Flood Inundation Mapping of Areas Along Souris & De	6/15/2011	13,011	0	13,011
SE	1301	5000	2011-13	City of Wahpeton	City of Wahpeton Water Reuse Feasibility Study/Richl	9/8/2011	2,500	0	2,500
SE	391	5000	2011-13	Sargent Co WRD	Sargent Co WRD, Silver Lake Dam Emergency Repai	10/12/2011	2,800	0	2,800
SE	1312	5000	2011-13	Walsh Co. WRD	Skyrud Dam 2011 EAP	12/15/2011	10,000	0	10,000
SE	1312	5000	2011-13	Walsh Co. WRD	Union Dam 2011 EAP	12/15/2011	10,000	0	10,000
SE	1577	5000	2011-13	Burleigh Co. WRD	Fox Island 2012 Flood Hazard Mitigation Evaluation St	5/22/2012	23,900	0	23,900
SE	1998	5000	2011-13	Grand Forks Co. WRD	Upper Turtle River Dam #1 2012 EAP	6/28/2012	10,000	0	10,000
SE	1303	5000	2011-13	Sargent Co WRD	Shortfoot Creek Preliminary Soils Analysis & Hydraulic	6/29/2012	24,861	0	24,861
SE	2002	5000	2011-13	Grand Forks Co. WRD	Trutle River Dam #4 2012 EAP	6/29/2012	10,000	0	10,000
SE	2003	5000	2011-13	Southeast Cass WRD	Re-Certification of the Horace to West Fargo Diversio	6/29/2012	42,835	0	42,835
SE	2005	5000	2011-13	Grand Forks Co. WRD	Turtle River Dam #8 2012 EAP	6/29/2012	10,000	0	10,000
SE	2008	5000	2011-13	City of Mapleton	Mapleton Flood Control Levee Project	6/29/2012	24,410	0	24,410
SE	2003	5000	2011-13	Southeast Cass WRD	Re-Certification of the West Fargo Diversion Levee Sy	7/26/2012	45,879	0	45,879
SE	1681	5000	2011-13	U.S. Geological Survey	Repair & stabilization of the Missouri River bank adjac	9/6/2012	28,000	0	28,000
SE	AOC/RRBC	5000	2011-13	Red River Basin Commission	Stream Gaging & Precipitation Network Study in the R	9/14/2012	20,000	0	20,000
SE	1993	5000	2011-13	Houston Engineering	Minot 100-yr Floodplain Map and Profiles	10/9/2012	10,000	0	10,000
SE	2001	5000	2011-13	Traill Co. WRD	Elm River Diversion Project	10/31/2012	10,423	0	10,423
SE	1992	5000	2011-13	Burleigh Co. WRD	Burleigh Co Flood Control Alternatives Assessment	1/30/2013	25,175	0	25,175
SE	1991	5000	2011-13	City of Lisbon	Sheyenne River Snagging & Clearing Project	2/12/2013	5,000	0	5,000
SE	1461	5000	2011-13	Pembina Co. WRD	O'Hara Bridge Bank Stabilization	4/26/2013	24,633	0	24,633
SE	1289	5000	2011-13	McKenzie Co. Weed Control E	Control of Noxious Weeds on Sovereign Lands	6/11/2013	24,810	0	24,810
SE	871	5000	2011-13	Pembina Co. WRD	Pembina Snagging & Clearing Project	6/14/2013	7,500	0	7,500
SE	1174	5000	2013-15	Richland Co. WRD	Drain No. 31 Reconstruction Project	8/30/2013	32,393	0	32,393
SE	1965	5000	2013-15	NCRS & Corps St. Louis Dist.	Joint LiDAR Collection	9/12/2013	40,000	0	40,000
SE	1640	5000	2013-15	U.S. Geological Survey	Maintenance of gaging station on Missouri River below	9/25/2013	8,710	0	8,710
SE	1244	5000	2013-15	Traill Co. WRD	Traill Co. Drain No. 27 (Moen) Lateral Channel Improv	9/27/2013	29,914	0	29,914
SE	1296	5000	2016-15	Pembina Co. WRD	Bathgate-Hamilton & Carlisle Watershed Study	10/17/2013	38,500	0	38,500
SE	1814	5000	2013-15	Richland Co. WRD	Wild Rice River Snagging & Clearing - Reach 2	10/17/2013	49,500	0	49,500
SE	1814	5000	2013-15	Richland Co. WRD	Wild Rice River Snagging & Clearing - Reach 3	10/17/2013	49,500	0	49,500
SWC	1932	5000	2005-07	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	8/30/2005	1,012,219	0	1,012,219
SWC	620	5000	2007-09	Lower Heart WRD	Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SWC	1921	5000	2007-09	Morton Co. WRD	Square Butte Dam No. 6/(Harmon Lake) Recreation F	3/23/2009	821,058	0	821,058
SWC	1638	5000	2009-11	Mutiple	Red River Basin Non-NRCS Rural/Farmstead Ring Di	6/23/2009	226,364	0	226,364
SWC	1069	5000	2009-11	North Cass Co. WRD	Cass County Drain No. 13 Improvement Reconstructic	8/18/2009	122,224	0	122,224
SWC	1088	5000	2009-11	Maple River WRD	Cass County Drain No. 37 Improvement Recon	8/18/2009	92,668	0	92,668
SWC	1960	5000	2009-11	Ward Co. WRD	Puppy Dog Coulee Flood Control Diversion Ditch Cons	8/18/2009	796,976	0	796,976
SWC	1792	5000	2009-11	Southeast Cass WRD	SE Cass Wild Rice River Dam Study Phase II	12/11/2009	130,000	0	130,000
SWC	322	5000	2009-11	ND Water Education Foundati	ND Water: A Century of Challenge	2/22/2010	36,800	0	36,800
SWC	1244	5000	2009-11	Traill Co. WRD	Traill Co. Drain No. 27 (Moen) Reconstruction & Exten	3/11/2010	336,491	0	336,491
SWC	1577	5000	2009-11	Mercer Co. WRD & City of Ha	Hazen Flood Control Levee (1517) & FEMA Accreditat	3/11/2010	184,984	0	184,984
SWC	1966	5000	2009-11	City of Oxbow	City of Oxbow Emergency Flood Fighting Barrier Syste	6/1/2010	188,400	0	188,400
SWC	281	5000	2009-11	Three Affiliated Tribes	Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	646	5000	2009-11	City of Fargo	Christine Dam Recreation Retrofit Project	10/26/2010	184,950	0	184,950
SWC	646	5000	2009-11	City of Fargo	Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	0	44,280
SWC	347	5000	2009-11	City of Velva	City of Velva's Flood Control Levee System Certificatic	3/28/2011	102,000	0	102,000
SWC	1161	5000	2009-11	Pembina Co. WRD	Drain 55 Improvement Reconstruction	3/28/2011	13,846	0	13,846
SWC	1245	5000	2009-11	Traill Co. WRD	Traill Co. Drain No. 28 Extenstion & Improvement Proj	3/28/2011	336,007	0	336,007
SWC	1969	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain #	3/28/2011	38,154	0	38,154
SWC	1970	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain #	3/28/2011	39,115	0	39,115
SWC	1344	5000	2011-13	Southeast Cass WRD	Southeast Cass Sheyenne River Diversion Low-Flow (	6/14/2011	716,609	0	716,609
SWC	980	5000	2011-13	Maple River WRD	Maple River Watershed Food Water Retention Study/	9/21/2011	0	0	0
SWC	1101	5000	2011-13	Dickey Co. WRD	Yorktown-Maple Drainage Improvement Dist No. 3	9/21/2011	354,500	0	354,500
SWC	1101	5000	2011-13	Dickey-Sargent Co WRD	Riverdale Township Improvement District #2 - Dickey	9/21/2011	500,000	0	500,000
SWC	1219	5000	2011-13	Sargent Co WRD	City of Forman Floodwater Outlet	9/21/2011	31,472	0	31,472
SWC	1252	5000	2011-13	Walsh Co. WRD	Walsh Co. Reconstruction Drain No. 97	9/21/2011	24,933	0	24,933
SWC	1705	5000	2011-13	Red River Joint Water Resour	Red River Joint WRD Watershed Feasibility Study - Pl	9/21/2011	60,000	0	60,000
SWC	1975	5000	2011-13	Walsh Co. WRD	Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	37,742	0	37,742
SWC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	9/21/2011	500,000	0	500,000
SWC	829	5000	2011-13	Rush River WRD	Rush River WRD Berlin's Township Improvement Dist	10/19/2011	163,695	0	163,695
SWC	1224	5000	2011-13	Traill Co. WRD	Preston Floodway Reconstruction Project	10/19/2011	208,570	0	208,570
SWC	1978	5000	2011-13	Richland & Sargent Joint WRI	Richland & Sargent WRD RS Legal Drain No. 1 Exten	10/19/2011	245,250	0	245,250
SWC	1918	5000	2001-13	Maple River WRD	Normanna Township Improvement District No. 71	12/9/2011	287,900	0	287,900
SWC	1983	5000	2011-13	City of Harwood	City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,500
SWC	1138	5000	2011-13	Pembina Co. WRD	Drain No. 8 Reconstruction Project	3/7/2012	12,215	0	12,215
SWC	1227	5000	2011-13	Traill Co. WRD	Mergenthal Drain No. 5 Reconstruction	3/7/2012	84,670	0	84,670
SWC	1396	5000	2011-13	U.S. Geological Survey	(USGS) Missouri River Geomorphic Assessment	3/7/2012	90,000	10,000	80,000
SWC	1989	5000	2011-13	Barnes Co WRD	Hobart Lake Outlet Project	3/7/2012	266,100	0	266,100
SWC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diverstion Project	3/7/2012	43,821	0	43,821
SWC	PS/WRD/JAM	5000	2011-13	James River Joint WRD	James River Engineering Feasibility Study Phase 1	3/7/2012	29,570	0	29,570
SWC	227	5000	2011-13	Eaton Flood Irrigation District	District's Mouse River Riverbank Stabilization Project	6/13/2012	120,615	0	120,615
SWC	829	5000	2011-13	Rush River WRD	Rush River Watershed Retention Plan	6/13/2012	0	0	0
SWC	1063	5000	2011-13	Rush River WRD	Amenia Township Improvement District Drain No. 74 F	6/13/2012	459,350	0	459,350
SWC	1344	5000	2009-11	Southeast Cass WRD	Horace Diversion Channel Site A (Section 7 - Phase V	6/13/2012	1,812,822	0	1,812,822
SWC	1344	5000	2009-11	Southeast Cass WRD	Sheyenne Diversion Exterior Pump Station	6/13/2012	3,751	0	3,751
SWC	1344	5000	2011-13	Southeast Cass WRD	Sheyenne Diversion Phase VI - Weir Improvements	6/13/2012	225,050	0	225,050
SWC	1523	5000	2011-13	Ward Co. WRD	Countryside Villas/Whispering Meadows Drainage Imp	6/13/2012	157,211	0	157,211
SWC	1806-02	5000	2011-13	City of Argusville	Re-Certification of the City of Argusville Flood Control	6/13/2012	84,164	0	84,164

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2013-2015 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Oct-13* Balance
SWC	2007	5000	2011-13	Maple River WRD	Pontiac Township Improvement District No. 73 Project	6/13/2012	500,000	0	500,000
SWC	2010	5000	2011-13	Barnes Co WRD	Meadow Lake Outlet	6/13/2012	500,000	0	500,000
SWC	1878-02	5000	2011-13	Maple River WRD	Upper Maple River Dam Environmental Assessment -	6/13/2012	112,500	0	112,500
SWC	1992	5000	2011-13	Burleigh Co. WRD	Bismarck Flood Control Channel Project	9/17/2012	187,500	0	187,500
SWC	1996	5000	2011-13	Traill Co. WRD	Drain #62 - Wold Drain Project	9/17/2012	112,400	0	112,400
SWC	2003-02	5000	2011-13	Southeast Cass WRD	Re-Certification of the West Fargo Diversion Levee Sy	9/17/2012	91,400	0	91,400
SWC	2009-02	5000	2011-13	Southeast Cass WRD	Recertification of the Horace to West Fargo Diversion	9/17/2012	72,600	0	72,600
SWC	2012	5000	2011-13	Southeast Cass WRD	Lower Sheyenne River Watershed Retention Plan	9/17/2012	80,000	0	80,000
SWC	2013	5000	2011-13	Richland-Cass Joint WRD	Wild Rice River Watershed Retention Plan	9/17/2012	90,000	0	90,000
SWC	2014	5000	2011-13	Traill Co. WRD	Elm River Watershed Retention Plan	9/17/2012	75,000	0	75,000
SWC	1069	5000	2011-13	North Cass - Rush River JWR	Drain #13 Channel Improvements	9/27/2012	217,000	0	217,000
SWC	1401	5000	2009-11	Pembina Co. WRD	International Boundary Roadway Dike Pembina	9/27/2012	331,799	0	331,799
SWC	240	5000	2011-13	Eddy County WRD	Warwick Dam Repair Project	12/7/2012	110,150	0	110,150
SWC	1303	5000	2011-13	Sargent Co WRD	Frenier Dam Improvement Project	12/7/2012	158,373	0	158,373
SWC	1523	5000	2011-13	Ward Co. WRD	Souris River Minot to Burlington Snagging & Clearing	12/7/2012	109,000	0	109,000
SWC	1705	5000	2011-13	Red River Joint Water Resour	Red River Basin Distributed Plan Study	12/7/2012	560,000	0	560,000
SWC	2019	5000	2011-13	Valley City	Sheyenee River Snagging & Clearing Project	12/7/2012	75,000	0	75,000
SWC	2020	5000	2011-13	Minot Park District	Souris Valley Golf Course Bank Stabilization	12/7/2012	335,937	0	335,937
SWC	346	5000	2011-13	Williams County WRD	Epping Dam Evaluation Project	2/27/2013	66,200	0	66,200
SWC	1135	5000	2011-13	Pembina Co. WRD	Drain #4 Reconstruction Project	6/19/2013	221,628	0	221,628
SWC	1207	5000	2011-13	Richland Co. WRD	Drain #65 Extension Project	6/19/2013	123,200	0	123,200
SWC	1312	5000	2011-13	Walsh Co. WRD	Forest River Flood Contral Feasibility Study	6/19/2013	79,956	0	79,956
SWC	1438	5000	2011-13	Cavalier County WRD	Mulberry Creek Phase IV Reconstruction Project	6/19/2013	324,010	0	324,010
SWC	1992	5000	2011-13	Burleigh Co. WRD	Burnt Creek Flood Restoration Project	6/19/2013	87,805	0	87,805
SWC	2022	5000	2011-13	Pembina Co. WRD	Drain #73 Project	6/19/2013	350,400	0	350,400
SWC	AOC/RRBC	5000	2013-15	Red River Basin Commission	Red River Basin Commission Contractor	7/1/2013	200,000	0	200,000
SWC	PS/WRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Joint Water Board (MRRIC) T. FLECK	7/1/2013	40,000	0	40,000
SWC	PS/WRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Joint Water Board, (MRJWB) Start up	7/1/2013	20,000	0	20,000
SWC	AOC/WEF	5000	2013-15	ND Water Education Foundati	ND Water Magazine	7/1/2013	36,000	0	36,000
SWC	PS/WRD/USRJV	5000	2013-15	Upper Sheyenne River Joint V	Upper Sheyenne River WRB Administration (USRJWF	7/1/2013	12,000	0	12,000
SWC	1753	5000	2013-15	Ward Co. Hwy Dept	County Road 18 Flood Control Project	7/23/2013	133,268	0	133,268
SWC	1859	5000	2013-15	ND Dept of Health	NonPoint Source Pollution, Section 319	8/20/2013	200,000	0	200,000
SWC	1444	5000	2011-13	City of Pembina	US Army Corps of Eng Section 408 Review City Flood	9/19/2013	146,700	0	146,700
SWC	1270	5000	2013-15	Burleigh Co. WRD	Apple Creek Industrial Park Levee Feasibility Study	10/7/2013	65,180	0	65,180
SWC	2004	5000	2013-15	Grand Forks Co. WRD	Drain No. 57 Project	10/7/2013	413,576	0	413,576
SWC	2040	5000	2013-15	Walsh Co. WRD	Drain #74 Project	10/7/2013	317,852	0	317,852
SWC	PS/WRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Coordinator	10/7/2013	175,000	0	175,000
					TOTAL		19,702,231	36,318	19,665,913

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2013-2015 Biennium
Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Oct-13* Balance
SWC	228	5000	2011-13	U.S. Geological Survey	Additional USGS gage Missouri River- ANNUAL	9/17/2012	8,500	8,500	0
SWC	1219	5000	2011-13	Sargent Co WRD	District Drain No. 4 Reconstruction Project	9/21/2011	125,500	86,723	38,777
SE	1289	5000	2013-15	McKenzie Co. Weed Control Board	Control of Noxious Weeds on Sovereign Lands	9/20/2013	10,496	9,779	717
SE	1395	5000	2013-15	U.S. Geological Survey	Operation & maintenance of seven water level monitori	7/16/2013	17,500	17,500	0
SWC	416-18	5000	2011-13	ND Game & Fish	DL Johnson Farms Water Storage Site	6/10/2011	125,000	4,316	120,685
SWC	CON/WILL-CA	5000	2011-13	Garrison Diversion	Will/Carlson Consultant	10/17/2011	26,174	0	26,174
					TOTAL		313,170	126,818	186,352

2014 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

November 25, 2013

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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 Table

Attachment 5- Amounts Available to Transfer Between State Revolving Fund Programs

Attachment 6- Sources and Uses Table

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 federal allotments for fiscal years (FY) 1997 through 2013 totaled $162,238,767 and the anticipated 2014 allotment is $9,000,000. Allotted funds are provided by the EPA through capitalization grants and matched 20% by North Dakota.

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 2014 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 $9,000,000 (anticipated amount). State match bonds were issued in 2011 to provide the 20 percent match for capitalization grants from FY2012-FY2017.

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.

Finalized Project Priority Lists may be amended to include new non-emergency projects. Amendments are subject to public review and comment and may require State Water Commission approval.

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).

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

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 considered a Priority System because they score eleven or higher in the Enforcement

Tracking Tool 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 sixty nine (169) loans totaling $385,625,596 have been approved to date. One hundred forty eight (148) of these loans (totaling $176,296,374 or 46 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

Congress has mandated in several previous appropriations bills that 20 to 30 percent of assistance provided from DWSRF capitalization grants be in the form of additional subsidies. The DWSRF program provides 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 median household income (based on 2006-2010 American Communities Survey (ACS) 5-Year Estimate).

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 $1.0 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 ranked projects on the project priority list.

It is unknown at this time if mandatory additional subsidization will apply to the FY2014 DWSRF allotment. To address this potential requirement, the fundable portion of the 2014 comprehensive project priority list depicts at least 20 percent ($1,800,000) additional subsidization through loan forgiveness. Adjustments will be made, as necessary, based on the actual required subsidization level and capitalization grant amount.

Mandatory Green Project Reserve (GPR) Set-Aside

Congress has mandated in several previous appropriations bills that 10 to 20 percent of assistance provided from DWSRF capitalization grants, to the extent there are sufficient eligible project applications, 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 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 2014 DWSRF capitalization grant requirements. Projects on the PPL meeting one or more objectives are designated as GPR.

It is unknown at this time if mandatory GPR will apply to the FY2014 allotment. To address this potential requirement, the fundable portion of the 2014 comprehensive

project priority list depicts at least 20 percent ($1,800,000) of GPR. Adjustments will be made, as necessary, based on the actual GPR requirement and capitalization grant amount.

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 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 2014. The anticipated FY 2014 federal DWSRF allotment for North Dakota is $9,000,000. The NDDH intends to set aside $954,000 of the allotment for non-project activities. The NDDH also intends to reserve $486,000 of set-aside funds for use in future years. The state program administration (PWSS Program) set-aside is $500,000 and an additional $400,000 will be held in reserve for future years. The 2 percent set-aside is for small system technical assistance is $94,000 and an additional 86,000 will be held in reserve for use in future years. The 4 percent set-aside for DWSRF administration is $360,000. 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. The 2 percent set-aside will be held for ongoing and future small system technical assistance. Should the FY2014 capitalization grant be different from $9,000,000, the set-aside for DWSRF program administration will be adjusted to 4 percent of the actual capitalization grant awarded. The amount held in reserve from the 2 percent and state program administration will be changed to hold in reserve the remainder of the set-aside that is not being taking in the FY2014.

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 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 administration fees 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 these communities with operator safety training. The NDDH closely monitors demand and need for this set-aside to avert over-accumulation of funds.

The 10 percent state program administration set-aside will be used to help fund administration of the PWSS program in pursuit of its mission. 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. Another source of funding for the 1:1 match is credit for state match funds spent in 1993 on administration of the PWSS program. This credit is good for up to half of the 1:1 match with a maximum credit of $167,240 per year. This match credit does not represent spendable 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. This loan administration 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. 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. Also, starting in 2008 the loan administration fees are used as a source of 1:1 match that is required when using the state program administration set-aside to administer the PWSS program.

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.

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 2017 match requirements.

Anticipated Proportionality Ratio

Bonds were sold in late 2011 to provide the required 20 percent state match for 2012 through 2017. Payments were made using 100 percent state match funds until all of the match funds were disbursed. The program is in an over-matched condition at this time. Funds will be disbursed at a rate of 100 percent federal, leveraged, or FCLA funds because of this over-match condition.

Disbursement of Funds

Funds will be dispersed in the following order: federal, state match, leveraged bond proceeds, and FCLA. To increase the rate of draw for both capitalization grant and

leveraged funds, leveraged bonds proceeds will be used to fund loan payment requests. Capitalization grant funds will be immediately requested to replace the disbursed leveraged bond proceeds and deposited into the FCLA account.

The DWSRF is currently over-matched with no state match funds available for disbursement. Set-asides are closely monitored and disbursed quickly when requests are made to ensure timely expenditure and over-accumulation. All federal funds are disbursed in a first-in, first-out manner.

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 2013. 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. Attachment 5 itemizes the amount of funds transferred to and from the DWSRF program.

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 2.0 percent for PWSs that qualify for tax-exempt financing and 3.0 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 2013 North Dakota twenty-year competitive bond sales, the current market interest rate is 3.0 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 if needed to maintain program viability. The interest rate on these loans will be more than regular DWSRF interest rate, which currently is 2.5 percent (which includes the 0.5 percent administration fee).

Sources and Uses of Funds

Attachment 6 depicts a detailed breakdown of sources and uses of funds from FY1997 through FY2014. Sources of funds include $14,649,962 in funds available from prior years. An additional $8,046,000 of new funds are anticipated to become available in 2014. Thus $22,695,962 of funds is available for projects. All of the funds are allocated to projects as shown in the Comprehensive Project Priority List and Fundable List (Attachment 2). This amount does not include any leveraged bonds, but the NDDH is prepared to issue bonds if the near-term loan demand exceeds available funds.

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.

Currently Grafton and BDW have open STAG grants and must provide a 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 $23.0 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. On December 13, 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 total coliform rule, 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 total coliform rule, 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 6/30/13, the fund utilization rate, as measured by the ratio of executed loans to funds available for projects, was 98 percent, which is above the national average of 90 percent. For 2014, the goal of the DWSRF program is to maintain the fund utilization rate at 90 percent or above.
   b. Through 6/30/13, the rate at which projects progressed as measured by disbursements as a percentage of assistance provided was 74 percent. This is below the national average of 80 percent. The FY 2014 goal is to return the construction pace to 80 percent.
   c. The DWSRF program funded 6 projects, including 1 loan increase, in 2013 totaling $69.4 million and serving a population of 131,794. For 2014, the goal of the DWSRF program is to fund 16 loans, totaling $22.7 million and serving a population of 9,700.

4. Set asides, Small System Technical Assistance
   a. In 2013, 149 systems received training. For 2014, the goal is 120.
   b. In 2013, 56 systems received on-site technical assistance. The goal for 2014 is 75.

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 2014 IUP at a public hearing held in Bismarck on November 18, 2013. Written comments were also accepted until November 22, 2013. No comments were received at the November 18 hearing. One written comment was received. The City of Jamestown requested to update a previously ranked project and requested one ranked project be divided into three separate and distinct projects. These changes were made to the Comprehensive Project Priority List.

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 priority systems in the Enforcement Tracking Tool, 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 2014[1]

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	
							Project	Cumulative	Type	Cost($1000)
1	38	3100744-01	*New Town* [2]	2,500	WTP expansion	2014	4,925	4,925		
2	35	3100838-02	*Ross* [2]	630	Replacement wells, chlorine contact tank	2014	699	5,624		
3	32	0901530-01	*Leonard*	223	Consolidation of existing users to regional water system (arsenic)	2015	3,600	9,224		
4	28	5300809-04	*Ray* [2]	1,600	New treated water storage reservoir and transmission main	2014	3,334	12,558	B/C, wtr & nrg effcy	3,334
5	28	0700198-02	*Columbus*	125	Watermain replacement, smart meters, treated water storage reservoir	2014	1,585	14,143		
6	26	2600556-01	*Lehr*	80	Well and watermain replacement	2014	400	14,543		
7	24	4100428-01	*Gwinner*	753	FE/MN removal equipment, membrane treatment and WTP renovation	2014	2,086	16,629		
8	24	2900789-03	*Pick City*	123	Installation of water reservoir	2014	1,125	17,754		
9	23	1000543-06	*Langdon*	1,878	New well field	2015	6,000	23,754		
10	23	4000854-02	*St. John*	341	Well rehabilitation and transmission main replacement	2014	250	24,004		
11	23	1100306-01	*Ellendale*	1,394	Water tank replacement	2015	1,244	25,248		
12	22	2000203-06	*Cooperstown*	984	WTP rehabilitation	2014	210	25,458		
13	22	2900789-04	*Pick City*	123	Watermain replacement	2014	1,500	26,958		
14	21	1000543-04	*Langdon*	1,878	Intake structure and raw water transmission line improvements	2015	3,200	30,158		
15	21	2300535-02	*Kulm*	354	Water tower replacement	2014	900	31,058		
16	21	4000834-02	*Rolla*	1,280	WTP upgrade	2014	3,700	34,758		
17	20	5100593-02	*Makoti*	154	New reservoir	2014	1,125	35,883		
18	20	2701506-01	*Arnegard*	700	New distribution system	2016	4,078	39,961		
19	20	0300553-04	*Leeds*	427	WTP improvements	2014	313	40,274		
20	20	0700344-01	*Flaxton*	66	Watermain replacement and additional well	2014	417	40,691		
21	20	5200927-02	*Sykeston*	117	Watermain replacement	2014	2,060	42,751		
22	20	4000834-01	*Rolla*	1,280	Watermain replacement & looping	2014	4,320	47,071		
23	20	0201032-02	*Wimbledon*	216	Water tower replacement	2014	775	47,846		
24	19	4701303-04	*SRWD*	3,048	Treated water reservoir, booster station, watermain and WTP improvements	2014	7,295	55,140		
25	19	5201309-02	*CPWD*	2,607	Booster station improvements and back up generation	2015	1,270	56,410		
26	19	5000408-03	*Grafton*	4,913	Filtration, backwash recycle, and misc WTP improvements	2015	7,260	63,670		
27	19	1900162-01	*Carson*	319	Watermain replacement	2014	4,201	67,871		
28	19	0300553-03	*Leeds*	427	Upgrade wells, transmission lines, pumps	2014	313	68,184		
29	19	0300553-06	*Leeds*	427	Watermain replacement and looping	2014	550	68,734		
30	19	0300553-05	*Leeds*	427	Water tower improvements	2014	400	69,134		
31	18	0900217-01	*Davenport*	252	New transmission main, increased storage and control replacement	2014	448	69,582		
32	18	3700314-06	*Enderlin*	1,082	New lime softening WTP & storage	2014	8,065	77,647		
33	18	4700922-03	*Streeter*	170	New well	2014	300	77,947		
34	18	4000833-02	*Rolette*	594	Watermain replacement	2014	4,600	82,547		
35	17	2900074-01	*Beulah*	3,200	WTP improvements and water storage	2014	1,734	84,281		
36	17	0201058-03	*BRWD*	4,020	WTP rehabilitation and expansion	2014	2,624	86,904		
37	17	2500446-01	*Towner*	620	WTP improvements and well replacement	2014	1,616	88,520		

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project	
							Project	Cumulative	Type	Cost($1000)
38	17	5000408-07	*Grafton*	4,913	Pretreatment and advanced oxidation WTP improvements	2020	8,000	96,520		
39	17	2300969-01	*Verona*	85	Watermain and water meter replacement	2014	515	97,035		
40	17	5100593-03	*Makoti*	154	Watermain replacement	2014	2,500	99,535		
41	17	1500571-03	*Linton*	1,097	Watermain replacement	2014	1,362	100,897		
42	16	3201072-02	*TCWD*	2,475	WTP rehabilitation and expansion	2014	1,040	101,937		
43	16	0400638-01	*Medora*	112	Water reservoir replacement	2014	660	102,597		
44	16	5101189-02	*NPRWD*	5,903	Water storage rehabilitation	2014	1,820	104,417		
45	16	1001380-01	*Langdon RWD*	2,092	Replace or renovate transmission and water mains, reservoir and booster station	2014	3,797	108,214		
46	16	3901068-11	*SEWUD*	5,385	Reservoir D improvements	2014	389	108,603		
47	16	2300537-01	*LaMoure*	889	Water tower replacement, reservoir upgrade and pumping upgrade	2014	1,030	109,633		
48	16	5201309-03	*CPWD*	2,607	WTP improvements and membrane softening	2014	2,913	112,546		
49	16	5000773-04	*Park River*	5,042	Water tower replacement	2014	3,300	115,846		
50	16	4700922-01	*Streeter*	170	Watermain replacement	2014	500	116,346		
51	16	4700922-02	*Streeter*	170	WTP improvements	2014	300	116,646		
52	16	4000834-03	*Rolla*	1,417	New well	2014	180	116,826		
53	15	3900183-02	*Christine*	150	Watermain replacement and looping	2014	551	117,377		
54	15	4800152-01	*Cando*	1,115	Water treatment plant improvements and well replacement	2014	1,500	118,877		
55	15	2000446-02	*Hannaford*	150	Water tower replacement	2014	700	119,577		
56	15	0200958-03	*Valley City*	6,585	Watermain replacement	2014	17,000	136,577		
57	15	3900567-01	*Lidgerwood*	652	Transmission main replacement	2014	510	137,087		
58	14	2700990-03	*Watford City*	2,566	Looping project	2014	730	137,817		
59	14	3100898-01	*Stanley*	2,500	Watermain, water tower and pump replacement	2014	1,910	139,727		
60	14	0900999-05	*West Fargo*	28,500	New SW/GW WTP	2014	52,685	192,412		
61	14	0900524-01	*Kindred*	692	Water tower and watermain replacement	2015	1,061	193,473		
62	14	5300936-03	*Tioga*	1,336	Reservoir, transmission main and watermain replacement	2014	8,400	201,873		
63	14	2801487-04	*NPRWD*	4,110	Expansion of water distribution system	2014	2,600	204,473		
64	14	1801062-03	*GF-Traill RWD*	8,457	Transmission main, membrane softening, and SCADA improvements	2014	6,597	211,070		
65	14	0900134-02	*Buffalo*	225	Replace existing watermains, gate valves and hydrants	2014	1,085	212,155		
66	14	2500956-01	*Upham*	133	Gate valve replacement and water meters	2014	171	212,326		
67	14	1200748-02	*Noonan*	225	Watermain replacement	2014	471	212,797		
68	14	2500415-02	*Granville*	251	Water main replacement	2014	206	213,003		
69	14	2100726-01	*New England*	600	Watermain replacement	2015	2,650	215,653		
70	14	3700314-07	*Enderlin*	1,082	Water tower replacement	2014	1,957	217,610		
71	14	0100476-01	*Hettinger*	1,226	Watermain replacement	2015	500	218,110		
72	14	1400732-05	*New Rockford*	1,391	Watermain replacement	2014	5,000	223,110		
73	14	1100758-03	*Oakes*	1,856	Water tower replacement	2014	1,200	224,310		
74	14	1100758-04	*Oakes*	1,856	WTP expansion	2014	1,700	226,010		
75	13	5100138-01	*Burlington*	1,134	New water tower, transmission main and pump station	2014	1,608	227,618		
76	13	3900333-01	*Fairmount*	367	Water tower and controls replacement	2015	927	228,545		
77	13	3400269-02	*Drayton*	824	Replace clearwell, replace chemical feed and rehab water tower	2015	1,634	230,179		
78	13	3700574-08	*Lisbon*	2,154	Upgrade to well #1	2014	144	230,324		
79	13	0900387-01	*Gardner*	80	Watermain replacement and looping	2014	400	230,724		
80	13	3901043-01	*Wyndmere*	429	Watermain looping	2014	330	231,054		
81	13	5200458-04	*Harvey*	1,783	Water reservoir replacement	2015	1,300	232,354		
82	13	1600159-02	*Carrington*	2,600	Watermain replacement	2014	3,016	235,370		

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project	
							Project	Cumulative	Type	Cost($1000)
83	13	0200958-04	*Valley City*	6,585	Water tower replacement and tower recirculation	2018	2,950	238,320		
84	13	2000203-06	*Cooperstown*	984	Reservoir replacement	2015	600	238,920		
85	13	3700314-05	*Enderlin*	1,082	Watermain replacement (first loan in 2002)	2014	773	239,692		
86	13	2800389-05	*Garrison*	1,453	Watermain Replacement	2014	4,500	244,192		
87	13	1100758-05	*Oakes*	1,856	Well and well house replacement	2014	400	244,592		
88	12	3800397-01	*Glenburn*	380	Watermain replacement and looping	2014	1,018	245,610		
89	12	0700804-01	*Powers Lake*	400	Water treatment plant	2014	1,410	247,020		
90	12	3900443-03	*Hankinson*	919	Watermain looping	2014	561	247,581		
91	12	3400170-01	*Cavalier*	1,537	Water tower rehabilitation	2014	1,929	249,510		
92	12	5100593-01	*Makoti*	154	Well repair, new well and transmission line	2014	338	249,848		
93	12	3401128-03	*NVWD*	7,987	Transmission main capacity improvements and meter replacement	2014	5,021	254,869		
94	12	0900336-05	*Fargo*	105,539	Distribution flow control improvements	2014	570	255,439		
95	12	0900336-08	*Fargo*	105,539	Raw water intake and pump station	2014	9,015	264,454		
96	12	0900336-15	*Fargo*	105,539	Ground storage reservoir #2 and pump station	2028	15,670	280,124		
97	12	0200858-01	*Sanborn*	194	Watermain replacement	2014	500	280,624		
98	12	5000408-06	*Grafton*	4,913	Park River water intake improvements	2017	776	281,400		
99	12	4000833-01	*Rolette*	538	New well	2014	125	281,525		
100	12	2800389-04	*Garrison*	1,453	WTP expansion, new intake and pumps	2014	5,000	286,525		
101	12	1000543-05	*Langdon*	1,878	WTP rehabilitation and equalization basin upgrade	2014	7,000	293,525		
102	12	4600487-02	*Hope*	303	Service to west side of railroad tracks	2014	165	293,690		
103	12	1100758-06	*Oakes*	1,856	Water tower rehabilitation	2015	400	294,090		
104	12	3900567-02	*Lidgerwood*	652	Water reservoir demolition	2014	65	294,155		
105	11	5100923-01	*Surrey*	5,000	New water tower & transmission main	2015	3,001	297,156		
106	11	3700876-01	*Sheldon*	116	Pump and control replacement	2014	170	297,325		
107	11	0901060-01	*CRW*	10,040	Reservoir expansion, watermain upgrade and expansion (refinance)	2014	1,702	299,027		
108	11	0900999-01	*West Fargo*	28,500	Transmission main from new WTP	2014	28,325	327,352		
109	11	3900196-01	*Colfax*	121	Watermain replacement and looping	2014	439	327,791		
110	11	0200763-01	*Oriska*	128	Pump house and reservoir replacement	2014	530	328,321		
111	11	0900035-01	*Arthur*	337	Water tower replacement	2014	721	329,042		
112	11	2800389-02	*Garrison*	1,453	New water tower	2014	1,335	330,377		
113	11	2001061-01	*Dakota RWD*	3,523	Watermain replacement, upgrade vaults	2015	697	331,074		
114	11	0901060-04	*CRW*	10,040	System elevated tower	2016	3,583	334,657		
115	11	4600341-02	*Finley*	445	Water tower replacement	2015	690	335,347		
116	11	2300537-02	*LaMoure*	889	Chemical feed replacement	2014	206	335,553		
117	11	4800152-02	*Cando*	1,115	Watermain replacement	2014	1,000	336,553		
118	11	1400732-04	*New Rockford*	1,391	WTP upgrades	2014	500	337,053		
119	11	0500620-01	*Maxbass*	100	New water meters	2014	20	337,073		
120	11	3700314-04	*Enderlin*	1,082	New wells & transmission line	2014	1,648	338,721		
121	10	3900703-01	*Mooreton*	197	Replace gate valves and add bladder tank	2014	180	338,901		
122	10	5301012-05	*Williston*	22,000	New water tower, pumping station and transmission main	2014	10,135	349,036		
123	10	0900030-03	*Argusville*	300	Watermain replacement and looping	2015	973	350,009		
124	10	1300520-01	*Killdeer*	1,400	Watermain replacement	2014	1,070	351,079		
125	10	4700498-05	*Jamestown*	16,000	North east pressure zone improvements	2014	1,725	352,804		
126	10	4700498-06	*Jamestown*	16,000	Phase 3 - Transmission line	2016	8,610	361,414		
127	10	2801400-02	*McLean-S RWD*	2,300	Blue Lake and Brush Lake area improvements	2014	2,210	363,624		
128	10	5001075-03	*Walsh RWD*	3,404	Reservoir expansion	2014	1,414	365,038		
129	10	0900336-07	*Fargo*	105,539	Water tower level controls	2015	369	365,407		
130	10	0900945-02	*Tower City*	252	Watermain replacement	2014	1,300	366,707		
131	10	1501310-02	*State Line WC*	260	Water tower rehabilitation	2014	75	366,782		
132	10	2400715-01	*Napoleon*	707	Water meter replacement	2014	570	367,352		

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project	
							Project	Cumulative	Type	Cost($1000)
133	10	2400715-02	*Napoleon*	707	Extend water service to residents with wells	2014	820	368,172		
134	10	1100758-07	*Oakes*	1,856	New reservoir, pump station and transmission main	2014	720	368,892		
135	9	2700990-05	*Watford City*	2,556	New water tower (NW)	2014	3,290	372,182		
136	9	3000596-06	*Mandan*	23,827	Transmission main replacement	2014	5,167	377,349		
137	9	3900973-04	*Wahpeton*	7,766	Well upgrades, new well and raw water transmission main	2015	1,221	378,570		
138	9	3900973-05	*Wahpeton*	7,766	Watermain replacement and looping	2016	440	379,010		
139	9	5300425-01	*Grenora*	400	Watermain replacement	2014	891	379,901		
140	9	5300425-02	*Grenora*	400	Watermain replacement	2014	883	380,783		
141	9	0900613-03	*Mapleton*	762	Watermain replacement	2016	1,622	382,406		
142	9	4900465-01	*Hatton*	777	Water tower replacement	2014	721	383,127		
143	9	1400732-03	*New Rockford*	1,391	Watermain replacement	2014	378	383,505		
144	9	2800389-03	*Garrison*	1,453	New elevated tower	2014	1,335	384,840		
145	9	3700574-09	*Lisbon*	2,154	New well field and raw water transmission main	2015	545	385,385		
146	9	3700574-10	*Lisbon*	2,154	Watermain replacement	2015	2,410	387,795		
147	9	2800989-03	*Washburn*	1,246	Water tower rehabilitation	2015	474	388,268		
148	9	5101189-03	*NPRWD*	5,903	Distribution, storage & pumping improvements	2014	1,600	389,868		
149	8	1000768-01	*Osnabrock*	160	Watermain rehabilitation	2014	200	390,068		
150	8	3200536-02	*Lakota*	781	WTP renovation and new water tower	2014	2,035	392,103		
151	8	5101447-01	*West River WD*	625	Service line replacement (from water main to curb stop)	2014	399	392,502		
152	8	2800989-05	*Washburn*	1,246	Horizontal collector well	2016	3,700	396,202		
153	8	3900973-03	*Wahpeton*	7,766	Lime storage, slaker additions & misc WTP improvements	2014	1,373	397,575		
154	8	4700498-09	*Jamestown*	16,000	Filter bay renovations and media replacement	2014	800	398,375		
155	8	3000596-08	*Mandan*	23,827	New raw water intake	2015	17,132	415,507		
156	8	3200653-02	*Michigan*	345	Water tower rehabilitation	2014	75	415,582		
157	8	3200653-03	*Michigan*	345	Curb stop replacement	2014	25	415,607		
158	8	3200653-01	*Michigan*	345	Water meter replacement and WTP upgrades	2014	88	415,695		
159	8	1400732-02	*New Rockford*	1,391	Water tower rehabilitation	2014	204	415,899		
160	8	1000543-02	*Langdon*	1,878	Water main replacement	2015	700	416,599		
161	8	1000543-03	*Langdon*	1,878	Water tower rehabilitation	2015	450	417,049		
162	8	0901060-05	*CRW*	10,040	Increased capacity to Casselton Area - wellfield, WTP, reservoir, and transmission main improvements	2015	5,220	422,269		
163	8	0900336-04	*Fargo*	105,539	Water tower (#3) rehabilitation 2014	2014	1,298	423,567		
164	8	0900336-06	*Fargo*	105,539	Water tower rehabilitation 1 & 2	2015	1,765	425,332		
165	8	0900336-09	*Fargo*	105,539	Water tower rehabilitation 4 & 5	2016	3,037	428,369		
166	8	0900336-10	*Fargo*	105,539	Radio read water metering improvements	2017	8,774	437,143		
167	8	0900336-11	*Fargo*	105,539	Low lift transfer pump station	2020	8,389	445,532		
168	8	0900336-12	*Fargo*	105,539	WTP residuals facility	2018	24,674	470,206		
169	8	0900336-13	*Fargo*	105,539	Water tower rehabilitation 6 & 7	2017	2,292	472,498		
170	8	0900336-14	*Fargo*	105,539	Water tower rehabilitation 8 & 9	2021	2,233	474,731		
171	7	2901054-01	*Zap*	231	Water storage rehabilitation	2014	141	474,871		
172	7	3900333-02	*Fairmount*	367	Watermain replacement and looping	2014	639	475,510		
173	7	2700990-04	*Watford City*	2,566	New water tower (SW)	2015	1,890	477,400		
174	7	3000596-07	*Mandan*	23,827	Pressure problem correction and water tower rehabilitation	2015	1,244	478,644		
175	7	0900999-04	*West Fargo*	24,000	Additional new well	2014	500	479,144		
176	7	0900999-02	*West Fargo*	28,500	Underground storage reservoir	2014	2,493	481,637		
177	7	4100357-01	*Forman*	504	Water tower replacement	2014	773	482,409		
178	7	0801031-01	*Wilton*	711	Watermain replacement	2014	21,563	503,972		
179	7	2800989-04	*Washburn*	1,245	Watermain replacement	2015	2,072	506,044		
180	7	0900166-02	*Casselton*	2,329	Water tower replacement	2015	1,845	507,889		

Priority Ranking	Priority Points	Project No.	System Name	Present Population	Project Description	Construction Start Date	Cost ($1000)		Green Project	
							Project	Cumulative	Type	Cost($1000)
181	7	1800410-04	*Grand Forks*	55,158	WTP, facility plan, and design	2016	133,000	640,889		
182	7	1800410-03	*Grand Forks*	55,518	Water distribution improvements-24th Ave. S. (S. 12th St. to Cherry St.)	2014	1,086	641,975		
183	7	0900945-01	*Tower City*	252	Water tower rehabilitation	2014	144	642,119		
184	7	3800397-01	*Glenburn*	380	Water tower rehabilitation	2014	424	642,543		
185	6	5100868-03	*Sawyer*	367	Transmission line replacement	2017	556	643,099		
186	6	4700498-08	*Jamestown*	16,000	SCADA Improvements	2014	403	643,502		
187	6	4700498-10	*Jamestown*	16,000	East end reservior renovations	2016	495	643,997		
188	6	4700498-07	*Jamestown*	16,000	Water meter replacement	2016	1,539	645,536		
189	5	0801154-04	*SCRWD*	15,400	Distribution to Braddock, Kyntire & Wishek	2014	10,300	655,836		
190	5	3800877-02	*Sherwood*	251	Watermain replacement	2014	376	656,212		
191	5	4900803-01	*Portland*	606	Water tower replacement	2014	721	656,933		
192	5	0600119-01	*Bowman*	1,600	Watermain replacement	2014	530	657,463		
193	5	2700990-02	*Watford City*	2,566	Watermain replacement	2014	465	657,928		
194	5	0900999-06	*West Fargo*	28,500	Surface water intake structure	2014	3,900	661,828		
195	5	3601424-02	*GRWD*	3,508	Water system expansion	2014	4,000	665,828		
196	4	0900999-07	*West Fargo*	28,500	North side water tower	2015	2,266	668,094		
197	2	2601055-01	*Zeeland*	141	Water meter replacement	2014	200	668,294		
198	2	2800953-01	*Underwood*	812	Water tower rehabilitation	2014	813	669,107		
199	2	2801430-03	*Garrison RWD*	1,498	New reservoir and pump station	2014	659	669,766		
200	2	0900999-03	*West Fargo*	28,500	South side water tower	2014	2,266	672,032		

(1) - It is unknown at this time if mandatory additional subsidization and GPR will apply to the 2014 DWSRF allotment. To address these potential requirements, funding levels of $1,800,000 and $900,000 have been assumed for additional subsidization (as loan forgiveness) and GPR, respectively. Adjustments will be made, as necessary, based on the actual requirements and capitalization grant amount.

(2) - These projects appear eligible for 60% loan forgiveness with a cap of $1,000,000 of loan forgiveness. The actual loan forgiveness amount is dependant upon available funds. Loan forgiveness eligibility will be confirmed when the loan application is submitted.

Abbreviations

B/C = Business Case for Green Project Reserve Required
Cat = Categorically Approved Green Project Reserve Project
FE/MN = Iron and Manganese
GPR = Green Project Reserve
GW = Groundwater
nrg effcy = Energy Efficiency
SCADA = Supervisory Control and Data Acquisition
SW = Surface Water
WTP = Water Treatment Plant
wtr effcy = Water Efficiency

BRWD = Barnes Rural Water District
CPWD = Central Plains Water District
CRW = Cass Rural Water
GRWD = Greater Ramsey Water District
NPRWD = North Prairie Rural Water District
NVWD = North Valley Water District
SCRWD = South Central Regional Water District
SEWUD = Southeast Water Users District
SRWD = Stutsman Rural Water District
TCWD = Tri-County Water District
WRWD = Williams Rural Water District
RWD = 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

OCTOBER, 2013

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 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)	10
C. Correction of a serious water supply problem 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)	7
D. Correction of a moderate water supply problem 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)	4
E. Correction of a minor water supply problem 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)	2

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 2006-2010 ACS 5-Year Estimates)

< 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 2006-2010 ACS 5-Year Estimates)

>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 2006-2010 ACS 5-Year Estimates)

≤ 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 9/30/2013	Transferred To Loan Fund	Expended Through 9/30/2013	Balance Available	Planned Set-Asides For 2014	Total Set-Aside Funds Available 2014	Reserved Through 2013	Reserved From 2014 Allotment	Total Reserved Through 2014
4% Administration	6,718,884	0	6,400,235	318,649	360,000	678,649	0	0	0
10% State Program Assistance									
PWSS Supervision	1,870,000	0	977,082	892,918	500,000	1,392,918	0	400,000	400,000
Source Water Protection									
Capacity Development									
Operator Certification									
2% Small System Technical Assistance	2,545,332	0	2,273,785	271,547	94,000	365,547	0	86,000	86,000
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	12,390,096	820,612	10,086,370	1,483,114	954,000	2,437,114	0	486,000	486,000

Fee Type	Collected Through 9/30/13	Transferred to Loan Fund	Expended Through 09/30/13	Balance Available 09/30/13	Projected Funds 01/01/14 - 12/31/14	Total Funds Available Through 12/31/14	Total Funds Held Through 12/31/14
Loan Fee	6,330,954	0	523,762	5,807,192	876,735	7,207,689	6,683,927

(1) The set-aside amounts are based on percentages (4%, 2%, or 10%) of the respective federal DWSRF allotments. The FY 1997 through 2013 allotments have been awarded. The anticipated allotment for FY 2014 is $9,000,000. The FY 2014 allotment will be applied for by July 1, 2014. The funds expended and the balance available are a of September 30, 2013. The loan fee amounts reflect loans approved up to September 30, 2013. 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 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.

Attachment 5
Amounts Available to Transfer Between State Revolving Fund Programs
North Dakota Drinking Water State Revolving Loan Fund Program

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			9	9
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	3	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	23.2
2004	Transfer		0	2.6	23.6	20.6
2005	DW Grant	24.8			26.3	23.3
2005	Transfer		0	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			41	25
2008	Transfer		0	3	44	22
2009	DW Grant	35.7			46.7	24.7
2009	Transfer		0	0.7	47.7	24
2010	DW Grant	40.1			52.1	28.8
2010	Transfer		0	0.8	52.9	28
2011	DW Grant	43.2			56	31.1
2012	DW Grant	46.1			59.9	34
2013	DW Grant	48.6			62.4	36.5
2014	DW Grant	51.1			65.1	39.2
2014	Transfer		**0**	**0**	65.1	39.2

Attachment 6
Sources and Uses Table
North Dakota Drinking Water State Revolving Loan Fund Program
Cumulative Amounts as of September 30, 2013

	SOURCES
Federal Capitalization Grants	162,238,767.00
State Match	35,932,137.00
Transfers from CWSRF	22,577,672.00
Net Leveraged Bonds	103,941,728.00
Investment Earnings	33,941,218.00
Interest Payments	32,037,057.00
Principal Repayments	94,565,257.00
TOTAL SOURCES OF FUNDS	$485,233,836

	USES
4% Administration	6,718,884.00
2% SSTA	2,545,332.00
10% DW Program Set-Aside	1,870,000.00
15% Local Asst. Set-Aside	435,268.00
Transfers to CWSRF	10,000,000.00
Reserves	7,082,623.00
Bond Principal Repayments	18,166,252.00
Bond Interest Expense	33,572,396.00
Arbitrage	755,617.00
Closed Agreements	385,625,502.00
Loans Approved by Industrial Commission	3,812,000.00
TOTAL USES OF FUNDS	$470,583,874

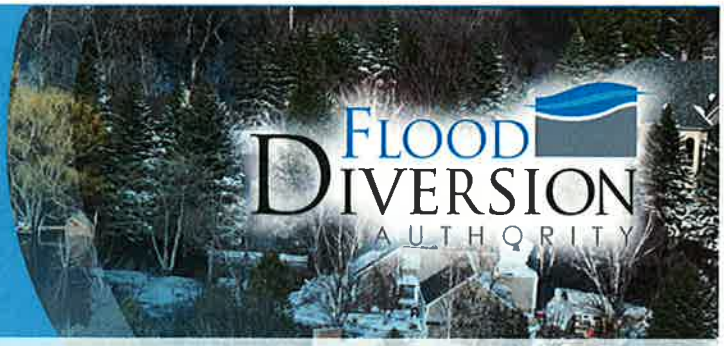
DWSRF Funds Available for Projects in 2014*	$14,649,962

	ANNUAL SOURCES FOR 2014
FY14 Capitalization Grant	9,000,000.00
Set-asides taken from FY14 Capitalization Grant	(954,000.00)
State Match (if applicable)	-
Leveraged Bonds (if applicable)	-
Transfers with CW +/- (if applicable)	-
Total New 2014 Funds	$8,046,000
TOTAL DWSRF FUNDS AVAILABLE FOR 2014	$22,695,962
TOTAL DWSRF PROJECTS ON FUNDABLE LIST	$22,695,962
AVAILABLE FUNDS	$0

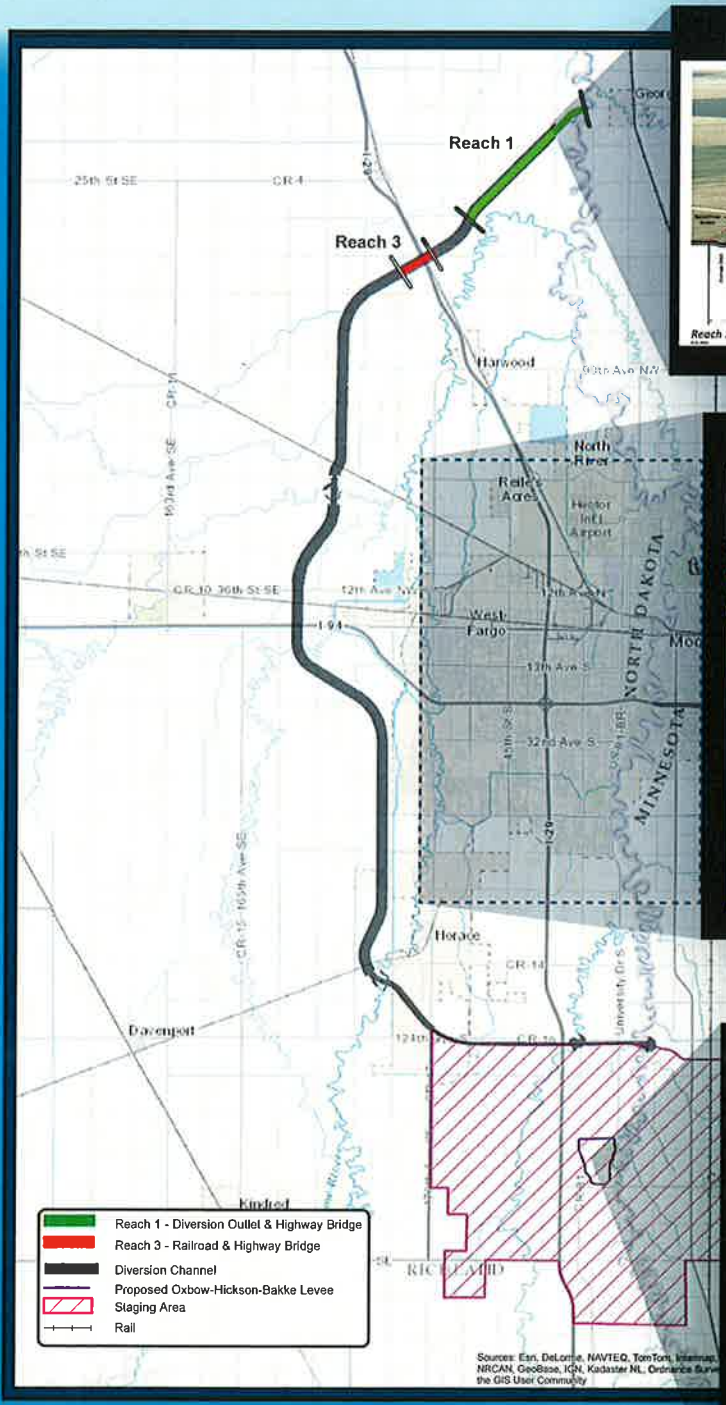
APPENDIX "D"
December 13, 2013

FM Area Diversion Project

FLOOD PROTECTION FOR 1 IN 5 NORTH DAKOTANS



UPDATE TO STATE WATER COMMISSION DEC. 13, 2013



DIVERSION CHANNEL


Reach 1 Artist Rendering

Federally Authorized by U.S. House and Senate

95% Designed - Reaches 1-4, including County bridges

IN-TOWN FLOOD PROTECTION

Diversion-related flood protection for Downtown Fargo approved and expected to begin in 2014

14 Miles of Existing Levees Built Since 2009

Adopted Additional $247 Million Comprehensive Flood Protection Plan, including 11 Miles of Levees

OXBOW-HICKSON-BAKKE**

Ring Levee Construction expected to begin in 2014

Provides ~200 Residences with 500-year Flood Protection

North Dakota State Water Commission

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

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E. Chief Engineer - Secretary
SUBJECT: Mouse River Enhanced Flood Protection Project SWC 1974
DATE: November 26, 2013

Following the action of the Commission at the last meeting approving cost share for design engineering of two components of the project, the Souris River Joint Board and the City of Minot have been developing the agreements and relationships necessary to begin the work. The date for release of the Request for Proposals has not yet been determined.

State Water Commission staff has been working with the International Joint Commission, the International Souris River Board, and local sponsors on a plan of study that will review and update the International Agreement. A recommendation to begin the studies necessary for this effort is provided in a separate memo.

TSS:JTF:pdh/1974

Project Proposal – Stochastic model for simulating Souris River Basin precipitation, evapotranspiration, and streamflow for 2014-50

Submitted to North Dakota State Water Commission by U.S. Geological Survey, North Dakota Water Science Center

BACKGROUND

Historically unprecedented flooding in the Souris River Basin in 2011 caused extensive damage to Minot, North Dakota, and numerous smaller communities in Saskatchewan, Manitoba and North Dakota. The severe flooding prompted the International Souris River Board to create a Souris River Flood Task Force, which prepared a plan of study for evaluating potential reservoir operation changes and flood control measures to manage future floods and droughts (ISRB, 2013). The task force plan indicated a need for developing stochastic methods to simulate future floods and droughts that, like 2011, may be extremely unlikely judging by the available historical record but may not be so extreme in a much longer historical context. Furthermore, the plan indicated a need to evaluate the effects of multi-decadal climate variability and/or possible climate change on future flood and drought risk. The work described in this proposal would provide the scientific basis for evaluating uncertainty in future climate for the Souris Basin and develop a stochastic model for simulating future streamflows that are consistent with climatic uncertainty, cover the full range of possibilities from extreme drought to extreme flood, and provide unbiased estimates of flood and drought risk during the 2014-50 simulation period.

PURPOSE AND SCOPE

The purposes of the proposed work are to 1) evaluate available precipitation and temperature records from meteorological stations (1900-present) and tree ring climate proxy data (circa 1500's to present) from the Souris and surrounding basins to determine if climate in the basin is subject to multi-decadal to century-scale changes; 2) develop a stochastic model for simulating precipitation, temperature, and potential evapotranspiration (ET) data that reproduces the long-term behavior (frequency, duration, and spatial extent of wet/dry periods, etc.) of the historical data; 3) develop a stochastic water-balance model for simulating unregulated inflows to major upstream reservoirs and downstream tributary and local inflows in response to precipitation, ET, soil-moisture storage, and groundwater or surface runoff; and 4) develop a simplified reservoir storage/flow routing model to approximate regulated flows. To make the simulation model efficient for generating 10's of thousands of potential future realizations, it will be necessary to select an appropriate time scale and spatial resolution. It is anticipated that a 10-day time step and a spatial resolution of about 8 km x 8 km will be sufficient for simulating the climatic inputs, performing the water-balance analysis, and simulating the required flows.

The stochastic simulations will be used to scope potential reservoir operation changes or flood control measures being considered and select the most promising features for more detailed engineering and design studies. Selected realizations from the stochastic model will be disaggregated to a daily time step for use in deterministic storage and routing models such as a model being developed by the Corps of Engineers (Corps of Engineers, 2013).

APPROACH

Task 1. Analysis of long-term climate variability/change

The study region for the climate analysis will include the Souris Basin and parts of surrounding basins including the Assiniboine, Red, Devils Lake, and Missouri River Basins (fig. 1). Long-term meteorological stations (at least 80 years of record) from Canada (provinces of Manitoba and Saskatchewan) and the U.S. (NOAA) will be identified and daily precipitation and temperature data from each station aggregated to obtain times series of temperature and precipitation for three 4-month seasons – November-February, March-June, and July-October. Using an approach similar to Vecchia (2002), variable transformations and periodic autoregressive models will be used to model the precipitation and temperature data for each station. Long-term persistence will be modeled using a Markov Chain Monte Carlo approach similar to Vecchia (2008). Such persistence consists of abrupt changes between wet and dry states and is caused by ocean temperature and atmospheric pressure anomalies. Gradual increases or decreases due to climate change (for example, increase in temperature due to global warming) also will be examined.

The time series model described in the previous paragraph can be calibrated using observed station data to reproduce seasonal temperature and precipitation fluctuations during wet or dry periods. However, to accurately determine the frequency and duration of the periods requires a much longer record. Therefore, climate proxy data based on tree rings will be used to help determine the frequency, duration, and severity of wet and dry periods. Pre-existing tree ring data for the study region (fig. 1), dating back to about the 16th century, will be compared to long-term simulations from the time series model to ensure that the model is accurately reproducing long-term climatic persistence and variability. Tree ring records from the Saskatchewan (Fleming and Sauchyn, 2013) and South Dakota (Shapely and others, 2005) and lake sediments from Devils Lake (Vecchia, 2008) clearly indicate the presence of long-term climatic persistence in the interior of North America.

Task 2. Stochastic simulation of precipitation, temperature, and potential ET

The time series model described previously for simulating seasonal precipitation and temperature data will be used to simulate future climatic inputs at the spatial and temporal scale required for a stochastic water-balance analysis. Simulated precipitation and temperature data for each meteorological station for the March-June and July-October seasons will be disaggregated into 3 values per month, or an approximately 10-day time step, using a two-stage statistical disaggregation technique. In the first stage, seasonal values will be disaggregated into monthly values and in the second stage, monthly values will be disaggregated into 3 values per month. In the winter season (November-February), precipitation generally remains in frozen storage and

average temperatures are generally below freezing. Therefore, for that season precipitation and temperature will be assumed to be constant for each 10-day time step.

The simulated point-wise data for the locations of the meteorological stations needs to be used to simulate values for an 8 km x 8 km grid of pixels covering the Souris Basin (approximately 1,000 pixels). This will be done using a locally weighted regression on latitude, longitude, and elevation to interpolate values for the center of each pixel (Ryberg and others, 2012). Potential ET for each time step and pixel will be computed from the simulated temperature data using the Hamon method.

Task 3. Stochastic water-balance model for simulating unregulated streamflow

In a report on Regional Reconstructed Hydrology of the Souris River (Corps of Engineers, 2013), the Corps of Engineers developed estimates of daily unregulated streamflows for 1946-2011 for inflows to major upstream reservoirs (Boundary, Rafferty, and Alameda), major downstream tributary flows, and local flows for intermediate reaches for the Souris River Basin upstream of its confluence with the Assinibione River. These unregulated flows will be aggregated to a 3-per-month time step and used along with the precipitation, temperature, and potential ET data for the same period to develop a water-balance model for estimating runoff (discharge per unit area) for each sub-basin. A water-balance model developed by Vining and Vecchia (2007), with potential modifications, will be used simulate snow accumulation and melt, groundwater storage, actual ET, surface runoff, and groundwater runoff on the basis of precipitation, temperature, and potential ET. Model parameters will be estimated so that the modeled runoff is unbiased (modeled and actual runoff have the same mean for any given time of year) and the variability of modeled runoff for any given time of year matches variability of actual runoff. In addition, serial correlation of runoff for each sub-basin and cross-correlation between runoff from different sub-basins will be maintained. After carefully verifying the model for the calibration period, it can be used along with the stochastic simulation model for precipitation, temperature, and potential ET to simulate realizations of future flows for 2014-50.

Task 4. Stochastic simulation of regulated streamflow using simplified storage/routing model

The generated sequences, or traces, of unregulated streamflow for 2014-50 will be converted to traces of regulated streamflow using a conceptual reservoir storage and flow routing model. The approach will be similar to a simulation model developed for the Sheyenne River to evaluate the effects of the Devils Lake outlet (Vecchia, 2011). Each upstream reservoir will be represented by a series of interconnected storage compartments. Inflows and net evaporation (precipitation minus evaporation on the lake surface) will be available from the stochastic water-balance model and reservoir outflow will be computed using fixed algorithms to mimic actual operating rules as closely as possible. Reservoir outflows will be routed downstream and combined with tributary inflows and local inflows. Major downstream regulation, such as Lake Darling and impoundments in Des Lacs and J. Clark Salyer wildlife refuges, will be simulated using a series of interconnected storage compartments in a similar manner to the upstream reservoirs. Storage and routing equations for computing regulated flows for a 10-day time step are much simpler than those required for a daily time step. The storage and routing model will be calibrated and verified

by comparing available known gaged flows from Environment Canada and USGS gaging stations to simulated regulated flows for 1946-2011 and ensuring that the simulated flows are statistically representative of known flows.

RELEVANCE AND BENEFITS

Following the extreme flood of 2011, municipal, provincial/state, and national water management agencies need to re-evaluate the adequacy of existing flood protection measures and determine if new zoning laws, flood insurance rates, or flood control projects are required to protect future life and property throughout the Souris Basin. Recent droughts, such as the drought of 1988-91, also point to the need for re-evaluating reservoir operating rules during drought periods. This proposed work would provide essential data and information for evaluating the best alternatives to carry forward in order to manage risk during the highly variable and unpredictable future of the Souris Basin in coming decades. With respect to the Souris River Task Force Plan of Study (ISRB, 2013), this work would satisfy the requirements for project 8 (stochastic simulation of future flows) and project 11 (climate change scenarios), and provide much of the input data required for projects 11-15.

PRODUCTS

Results of the analysis of long-term climate variability/change will be published as a journal article in a peer-reviewed journal such as the Canadian Water Resources Journal or the Journal of the American Water Resources Association. Results of the entire investigation will be distributed in a USGS Scientific Investigation Report (SIR) that will be available online. Also, data will be made available on the USGS North Dakota Water Science Center website.

WORKPLAN

This workplan is only an estimate, and may be adjusted based on future modifications to the proposed scope or initial start date.

	FY2014												FY2015		
Task	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
1.Climate analysis (including journal article)		X	X	X	X										
2.Stochastic climate simulation model				X	X	X									
3.Stochastic water-balance model						X	X	X	X						
4.Storage/routing model									X	X	X	X			
SIR writing, review, publication											X	X	X	X	X

BUDGET

The following budget represents estimated costs for all salary, benefits, and travel.

Task	Fiscal Year	Cost (USGS)	Cost (NDSWC)	Cost (Total)
Climate analysis	2014	$ 25,000	$ 25,000	$ 50,000
Stochastic climate simulation model	2014	15,000	35,000	50,000
Stochastic WB model	2014	10,000	60,000	70,000
Storage/routing model	2014	10,000	60,000	70,000
SIR	2014	5,000	5.000	10,000
	2015	15,000	15,000	30,000
Total all tasks		$ 80,000	$ 200,000	$ 280,000

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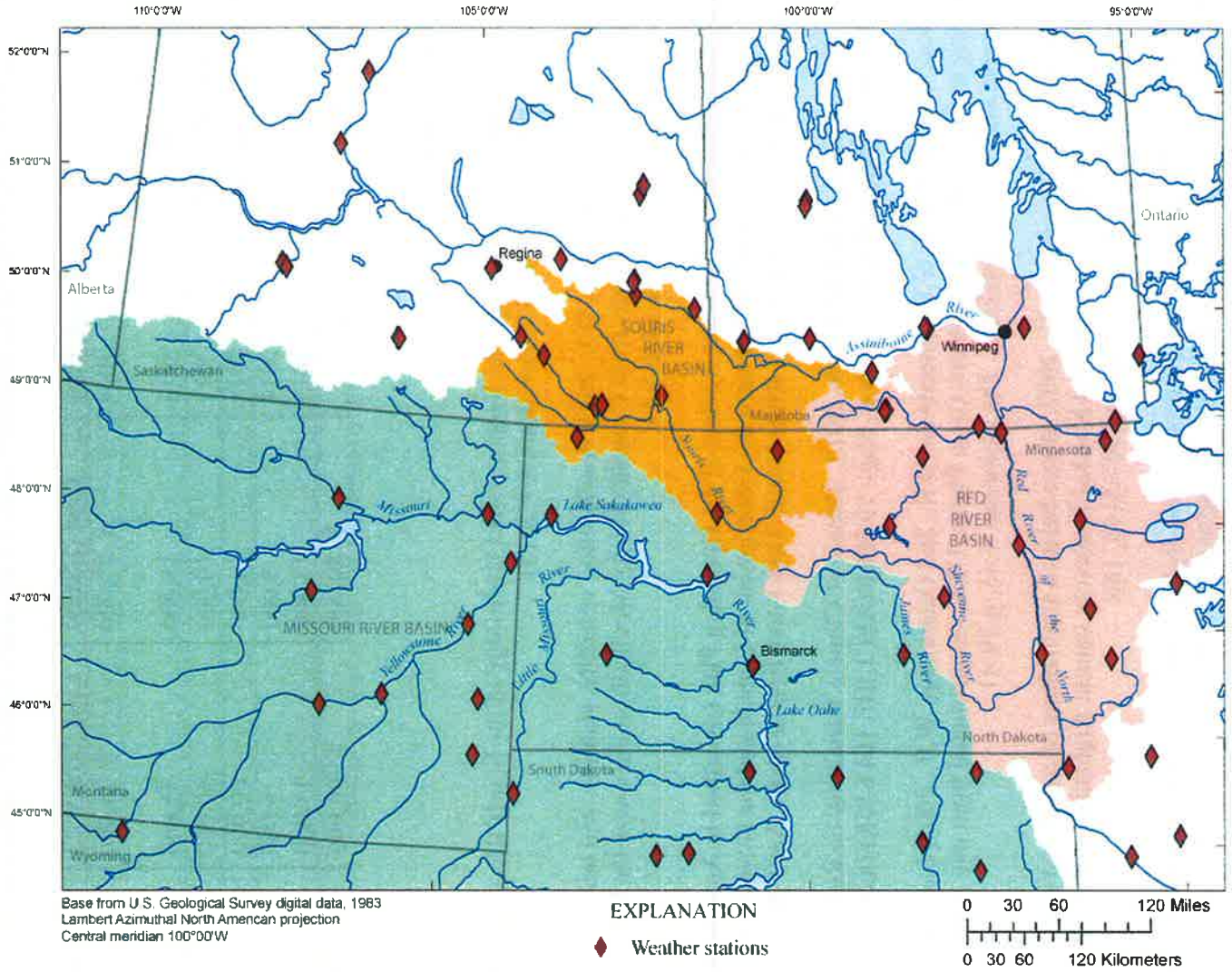

Figure 1. Study area for analysis of climate variability/change, including the Souris Basin and parts of surrounding basins, and locations of meteorological stations with long-term historical record of daily precipitation and temperature.

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd S. Sando, P.E., Chief Engineer - Secretary
SUBJECT: SWPP Project Update
DATE: November 19, 2013

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

Zap Service Area (SA) Rural Distribution System 7-9C & 7-9D:
Pipeline installation is complete on Contract 7-9C and the contractor is working on punch list items. Pipeline installation is complete on Contract 7-9D; all users have been turned over to Southwest Water Authority (SWA) as ready for service.

Center SA Rural Distribution System 7-9E & 7-9F:
The State Water Commission (SWC) at its October 7, 2013 meeting awarded the contract to Eatherly Constructors Inc. Notice of Award has been sent to the contractor and we are waiting for the executed contract documents from the contractor.

Contract 7-9E is the west Center SA rural distribution system. Preliminary design drawings have been forwarded to the archeology sub consultant. We anticipate the cultural survey to be completed this Fall, the results of which will be incorporated in the design of the submittal set of plans. We anticipate bidding this contract early next year.

Contract 2-8E/2-8F Dunn Center SA Main Transmission Line (MTL):
Contract 2-8E is the MTL from the OMND WTP to a combination reservoir and booster station north of Halliday (Dunn Center booster station). This contract was awarded on May 21, 2013 and the contractor started installation on July 24, 2013. This contract involves furnishing and installing approximately 25 miles of pipe, an above grade booster station with concrete reservoir, PRV/Control vault, road crossings and related appurtenances. The contractor has installed roughly 13 miles of pipe. The substantial completion date is July 1, 2014.

Contract 2-8F is the MTL west of Halliday to west of Killdeer. Water from the OMND WTP will be pumped to the Dunn Center booster station and again from the Dunn Center booster station to the Dunn Center elevated tank. Difficulties in easement acquisition have delayed bidding of this contract. This contract will be bid once a satisfactory percentage of easements have been secured.

Contract 4-6 Dunn Center SA Pumps inside OMND WTP:
The Notice to Proceed was issued on June 17, 2013. The preconstruction conference was held on July 18, 2013. The contractor mobilized to site on September 17, 2013. The substantial

completion date is December 31, 2013. The contractor has completed demolition and the concrete work required for the new pump bases. The foundation and slab to support the oxygen generation building was included as a change order to this contract and the concrete placement is complete.

Contract 5-17 Dunn Center Elevated Reservoir:
This contract includes furnishing and installing a 1,000,000 gallon elevated composite reservoir. The notice to proceed for this contract was issued on July 16, 2013. A preconstruction conference was held on August 22, 2013 and the construction commenced the same day. Foundation work is complete and the contractor has completed 19 rings out of the total 23 rings in the pedestal. The pedestal and dome for the tank is expected to be complete this winter. The substantial completion date is August 15, 2014.

Contract 5-15B 2nd Zap Reservoir:
This contract includes furnishing and installing a 1,650,000 gallon ground storage reservoir. Contract documents have been executed and notice to proceed was issued on August 9, 2013. The substantial completion date is August 15, 2014. Contractor has not requested for a preconstruction conference for this contract.

Contract 8-3 Killdeer Mountain Elevated Reservoir:
This contract includes furnishing and installing a 250,000-gallon elevated reservoir. This contract was bid on October 18, 2013. The bid results and recommendation to award are discussed in a separate memo.

OMND Water Treatment Plant (WTP) Phase II Expansion:
Contract documents for contract 3-1G – Membrane Systems Procurement have been executed and submittals have been reviewed. This contract is a sole source procurement contract. The Original Base Bid, as provided as a Bid Alternate for the SWPP Contract 3-1C Phase One Membrane Procurement, is listed on the bid form in the Amount of $1,731,800.00. As specified in the SWPP 3-1C Contract Documents, an inflation adjustment was applied to the bid from the time the SWPP Contract 3-1C Bid was received (November 2009) until May 2013 (The date when the contract was awarded) using the Engineering New Record (ENR) US Material Cost Index for the Minneapolis Region. This inflation adjustment, as provided in the Contract Documents, is $356,231.92. The total base bid including the inflation adjustment up to May 2013 is $2,088,031.92. Contract documents have been executed by all parties and a Notice to Proceed with Construction Phase Services was issued on October 8, 2013. The inflation adjustment included in the bid did not include the inflation costs incurred from May 2013 until the Notice to Proceed for the Construction Phase Services was issued as agreed upon in the contract agreement. A draft change order in the amount of $43,539.00 has been forwarded to Wigen for review. The change order covers this inflation adjustment from May 2013 to August 2013, and also changes identified with Phase I operation. Final shipment dates will be discussed during the pre-construction conference for 3-1H sometime in January 2014.

Contract documents have been executed and Notice to Proceed was issued on August 6, 2013 for Contract 3-1F, Ozone Procurement System. Submittals are under review for this contract. The

anticipated delivery date will be adjusted following a pre-construction meeting for the installation Contract 3-1H.

The scope of Contract 3-1H OMND WTP Phase II expansion generally consists of the installation of the membranes and equipment procured by 3-1F and 3-1G contracts, furnishing and installing process pumps, piping, installing VFD drive for the pump, furnishing and installing motor starters, furnishing and installing electrical power feed conduit and wiring, furnishing and installing instrumentation control wiring and making all connections. This contract is divided into General and Electrical contract. The contract is currently being advertised for bids with bid opening on December 6, 2013.

Other Contracts

Contract 7-1C/7-8H Hydraulic Improvements in the Davis Buttes, New Hradec and South Fryburg SA:
This contract is substantially complete. We have been contacted by one of the suppliers indicating non-payment by the contractor and we are also aware that the supplier has contacted the bonding company making a claim against the contractor's bond. Retainage is usually not released on contracts prior to receipt of lien waivers from the suppliers. The claim that we are aware of will be covered by the retainage that we have on this contract.

Contract 8-1A New Hradec Reservoir:
This contract involves furnishing and installing a 296,000 gallons fusion powder coated bolted steel reservoir. The contract documents were executed on May 16, 2013 and the Notice to Proceed was issued on June 3, 2013. Foundation earthwork is completed. The substantial completion date was September 15, 2013. Foundation concrete work is ongoing. Additional retainage is being withheld to cover possible liquidated damages.

Contract 4-5 Finished Water Pumping Station (FWPS):
Geotechnical testing at the finished water pumping station is complete. A memorandum of understanding that addresses the cost sharing of the joint FWPS has been executed between the City, SWC and SWA. The City of Dickinson owns the approximate 4-acre lot east of the existing WTP. The new 6 MGD WTP will be located at that site and the land cost of the lot will be used towards City's cost share towards the FWPS. The city has appraised the land at $750,000. R.M.Hoefs & Associates from Fargo was hired to do an appraisal for the SWC and the appraised value was $1,065.000.

We have received the 50% submittal set of plans for the FWPS from Bartlett & West/ AECOM. The environmental scan of the groundwater sample at the FWPS detected the presence of low concentration of total petroleum hydrocarbons as diesel range organics. Additional samples at the FWPS and at the WTP site have been collected and were analyzed for contaminants. Water analysis at the WTP site indicate no diesel fuel organics at this location in excess of the Maximum Contaminant Level (MCL) of 0.5 mg/L. A pumping test was also conducted in October at the FWPS to establish hydro-geologic parameters such as transmissivity so that

estimates of the water quantity requiring treatment can be developed. This contract is expected to be bid in January 2014.

Contract 1-2A Supplemental Raw Water Intake:
Contract documents have been executed. Project specifics, such as definite size of caisson, intake pipe and method of construction are necessary in order to finalize the US Army Corps of Engineers (USACE) permit and construction license. The contractor indicated that they would like to use reinforced concrete pipe with an outside diameter of 101" with an inside diameter of 78" to 80" at the preconstruction conference. The contractor is also proposing 7m (22.96 ft) inside diameter caisson. We have been working with USACE to finalize the easement and temporary construction license. The contractor anticipates installing a dewatering well this winter to assess the groundwater conditions and commence construction next spring.

Contract 3-2 Six (6) MGD Water Treatment Plant at Dickinson:
Specific authorizations for completing the bid ready documents for the membrane filtration equipment procurement (Contract 3-2A) and softening equipment procurement (Contract 3-2B) have been executed with BW/AECOM. Equipment procurement is the first step in the design of the WTP. The specifications of the process equipment largely determine the WTP layout, piping design, and process design, which will be incorporated in the WTP building design. The design of the WTP will likely require 9 to 12 months. We anticipate bidding the WTP construction contract in Spring 2015.

Project Update:

July Storm Damage:
The windstorm on July 8, 2013 resulted in damage to the Halliday reservoir and telemetry antenna at the Dodge Pump Station. The tank, built in 1995, is 31 feet in diameter and 47 feet in height. The tank was designed with the possibility to be raised to a future height of 63 feet. Hydraulic analysis as to whether raising the tank is necessary is ongoing. Cost estimates from Engineering America Inc., (EAI) the original tank contractor, have been received. The cost to replace the 5 rings of damaged panels is approximately $157,000. The cost to increase the height of the tank adds an additional $70,000. It appears that vacuum caused by high winds caused the tank wall to collapse. The tank manufacturer suggested increasing the steel thickness of the top panels in order to address the vacuum issue. A cost estimate of around $40,000 was quoted for increasing the steel thickness in the top 5 rings. BW/AECOM advised that raising the tank to an overflow of 61 feet was not worth the added cost. The SWA instructed EAI to proceed with the replacing the 5 rings of the tank. EAI has ordered the steel for the tank and it is anticipated that the tank repair will take place during third week of December.

City of Rhame:
The City of Rhame voted to connect to the SWPP at its July 9, 2013 special election. Rhame did not elect to connect to SWPP when the Bowman-Scranton Service Area was constructed in 2000-2003, so no capacity for them was included in the design. Service to Rhame requires paralleling 3 miles of pipeline on the suction side of the Rhame Booster, connection to the city's

distribution system and upgrading the pumps in the Rhame booster from 15 hp to 20 hp. The City of Rhame is responsible for the parallel piping, connection to the city's distribution system and 25% of the pump upgrades. The remaining 75% of the pump replacement cost will be requested from the Replacement and Extraordinary Maintenance funds. The City of Rhame has hired BW/AECOM as their engineer for this project. City of Rhame is responsible for the estimated project cost of $375,000 and has been approved for Community Development Block Grant to cover portions of this project. The City is currently working with landowners to obtain the necessary easements.

TSS:SSP:1736-99

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer-Secretary
SUBJECT: NAWS – Project Update
DATE: November 27, 2013

Supplemental EIS

Reclamation continues to work on the Supplemental Environmental Impact Statement (SEIS). Comments have been provided to Reclamation by the cooperating agencies on Chapter 1 (Introduction), Chapter 3 (Affected Environment), Transbasin Effects Analysis Technical Report, and Appraisal Level Design Report. Reclamation and their consulting team are currently drafting Chapter 2 (Alternatives) and Chapter 4 (Environmental Impacts). Chapter 2 will be presented to the Cooperating Agency Team in December along with responses to comments on previously review components. Chapter 4 will be reviewed and presented in a Cooperating Agency Team meeting in January. The draft SEIS is roughly 90% complete and should be out for review in early spring of 2014. The original schedule anticipated a draft SEIS last summer, but additional time was needed in order to ensure a scientifically sound and procedurally correct NEPA document.

Manitoba & Missouri Lawsuit

The Federal Court issued an order on March 5, 2010, requiring Reclamation to take a hard look at (1) the cumulative impacts of water withdrawal on the water levels of Lake Sakakawea and the Missouri River, and (2) the consequences of biota transfer into the Hudson Bay Basin, including Canada. The most recent order dated October 25, 2010, allows construction on the improvements in the Minot Water Treatment Plant to proceed. However, it does not allow design work to continue on the intake. The court ordered a conference call on November 15, 2012. The court expressed concerns about construction taking place under the previously approved and unopposed injunction modifications possibly affecting the outcome of the SEIS. A briefing explaining the additional construction on the northern tier, justifying the need and explaining the independence from supply or biota treatment alternatives was filed December 6, 2012. Missouri and Manitoba filed responses January 6, 2013 and our response was filed January 22, 2013. The Court issued an opinion on March 1, 2013 modifying the injunction to not permit 'new pipeline construction or new pipeline construction contracts'. We are working with our legal counsel to determine what we are able to work on while Reclamation is completing the environmental review.

Current Construction

All current construction contacts are substantially complete with only minor punch list items and finishing clean up and reclamation work remaining. Remaining obligations are primarily retainage on all contracts.

Design and Construction Update

Table 1 - NAWS Contracts under Construction

Contract	Contract Award	Contractor	Contract Amount	Remaining Obligations
2-2D Mohall	7/24/09	American Infrastructure, CO **In default – assumed by the surety - EMC**	$5,196,586.13	$407,919.91
2-3A Minot AFB	1/4/11	S.J. Louis Construction	$6,291,181.65	$158,693.68
2-3B Upper Souris/Glenburn	1/4/11	S.J. Louis Construction	$3,869,118.35	$111,430.96
7-1A Minot WTP Filter Rehab and SCADA	11/30/11	PKG Contracting, Inc. Main Electric, Inc.	$8,258,678.85	$681,006.85
Total Remaining Construction Contract Obligations				**$1,359,051.40**

TSS:TJF:pdh/237-4

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: Devils Lake – Projects and Hydrologic Update

DATE: November 27, 2013

Hydrologic Update

The current Devils Lake water surface elevation is at 1452.24 ft-msl. The lake is 0.9 feet higher than it was last year at this time. The total volume of the lake is 3.77 million ac-ft and total area is 185,000 acres. Annual inflow was about 420,000 acre-feet for 2013, which is the 4 highest recorded. During the Devils Lake Basin Joint Water Resource Board meeting on November 13th, the members reported that soil moisture within their counties is variable but overall the soils are slightly to mostly saturated.

Outlets

The east end outlet was started on June 18th and operated until November 9th when the pumps were shut off due to low temperatures. The west end outlet was started on July 1st and operated until October 17th when pumps were shut down due to the failure of the Round Lake standpipe (tank). Below is a summary of monthly and total volume pumped from the outlets for 2013.

Month in 2013	Volume -West End	Volume – East End	Volume - Combined
---	Acre-Feet	Acre-Feet	Acre-Feet
June	0	2,328	2,328
July	14,110	19,722	33,832
August	15,566	22,509	38,075
September	12,542	21,545	34,087
October	6,694	20,783	27,477
November	0	5,984	5,984
Totals	48,912	92,871	141,783

The total volume of 141,783 acre-feet corresponds to 10 inches of depth off the lake at elevation 1450.0. Another way to envision this volume is to consider the city limits of Devils Lake (6.5 square miles) submerged by a depth of 34 feet.

JK:EC:ph/416

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer/Secretary
SUBJECT: Missouri River Update
DATE: November 22, 2013

System/Reservoir Status

System storage on November 20 in the six mainstem reservoirs was 50.8 million acre-feet (MAF), 5.3 MAF below the base of flood control. This is 2.4 MAF below the average system storage for the end of November, and 1.9 MAF more than last year.

On November 20, Lake Sakakawea was at an elevation of 1834.7 feet msl, 2.8 feet below the base of flood control. This is 3.7 feet higher than a year ago and 0.9 feet below its average end of November elevation. The minimum end of November elevation was 1809.2 feet msl in 2006 and the maximum end of November elevation was 1846.9 feet msl in 1972.

The elevation of Lake Oahe was 1601.9 feet msl on November 20, 5.6 feet below the base of flood control. This is 8.0 feet higher than last year and 3.0 feet higher than the average end of November elevation. The minimum end of November elevation was 1573.1 feet msl in 2006, and the maximum end of November elevation was 1614.2 feet msl in 1997.

The elevation of Fort Peck was 2223.8 feet msl on November 20, 10.2 feet below the base of flood control. This is 5.3 feet lower than a year ago and 6.2 feet lower than the average end of November elevation. The minimum end of November elevation was 2199.9 feet msl in 2004, and the maximum end of November elevation was 2245.8 feet msl in 1975.

The November runoff forecast for calendar year 2013 is 25.9 MAF, 102% of normal. Runoff for the month of October this year above Sioux City, IA was 2.8 MAF, which is 240% of normal for the month of October and the second highest October runoff since recordkeeping began in 1898. October runoff in the Oahe reach was highest on record (1,873% of normal) and was second highest on record in the Fort Randall reach (4,525% of normal).

Despite the high runoff for the month of October, drought conservation measures will be implemented this winter, based on the September 1st storage check. Current releases from Garrison Dam are 13,000 cfs and it is forecasted to remain at 13,000 cfs until the end of November. It is anticipated that releases will increase to 16,000 cfs by the end of December and further increased to 18,000 cfs by the end of January.

Drought conservation measures provide that releases this winter from Gavins Point be set at 12,000 cfs. Based on river conditions and tributary inflows this winter, releases may be increased above 12,000 cfs to accommodate intakes below Gavins Point. Last winter the Corps was scheduled to release 12,000 cfs from Gavins Point as specified in the Master Manual. Due to bed degradation and low tributary flows, actual releases were held at 14,000 cfs to accommodate four downstream water system intakes. The volume of water released from the upstream reservoirs collectively due to the increased flow last winter was approximately 400,000 to 500,000 acre-feet.

Hydrometeorological Conditions

On November 15, the National Weather Service Missouri Basin River Forecast Center provided an update on basin conditions. It is predicted that the Missouri River Basin will have "Neutral" El Nino/La Nina conditions for the winter, which means that there are no indicators regarding snow accumulation in the mountains and plains. Current soil moisture is estimated to be greater than 60% in a majority of the basin, with most of the eastern part being above 80% (see attached map). The first official spring outlook for the Missouri River Basin is scheduled for mid-February.

Annual Operating Plan

Due to the recent shutdown of the federal government, the five Annual Operating Plan public meetings scheduled for October 8-10 were cancelled. A conference call was held on October 28 to provide a brief overview on basin conditions and plans for regulating the reservoir system in 2014. The Corps' public comment period closed on November 15. The State Water Commission's comments are attached.

Missouri River Recovery Implementation Committee (MRRIC)

In Section 5018 of the 2007 Water Resources Development Act (WRDA) Congress authorized the Missouri River Recovery Implementation Committee (MRRIC). The Committee is to make recommendations and provide guidance on activities resulting from the Missouri River Recovery Program (MRRP). The Committee was established in 2008. MRRIC has nearly 70 members representing local, state, tribal, and federal interests throughout the Missouri River Basin.

During a meeting in Omaha, NE from November 5 to 7, MRRIC reached final consensus on a set of actions regarding the Corps' land acquisition program, which mitigates for habitat lost to the Bank Stabilization and Navigation Project. The recommended set of actions provides for improved communication and outreach practices during the land acquisition process and future management of that land.

MRRIC received an update on the Missouri River Recovery Management Plan (MRRMP) and Environmental Impact Statement (EIS). The MRRMP and EIS is a three-year effort that will evaluate the effectiveness of actions taken by the Corps to recover the least tern, piping plover, and pallid sturgeon. The evaluation will determine modifications to current recovery efforts, if

necessary, and will result in an adaptive management plan for Missouri River Recovery Management Plan actions. The MRRMP and EIS are scheduled to be complete in May 2016. For this effort, MRRIC is currently assisting the Corps in developing a set of objectives and performance metrics that would represent the human uses and needs of the Missouri River. These objectives and performance metrics will be used by the Corps to screen the alternatives developed for the recovery of the three species.

During the November meeting, MRRIC was informed by the U.S. Fish and Wildlife Service (Service) that according to their most recent 5-year review, the Service will be recommending the de-listing of the endangered Least Tern.

Surplus Water/Reallocation

In June 2013, the Corps released their draft *Municipal and Industrial Reallocation Study* and the State Water Commission staff responded with comments. In a November 19 update, the Corps stated that all comments have been addressed and they were waiting on final approval for the incorporation of those comments into the reallocation report. The Corps is also working on completing the analysis of impacts to project purposes and on finalizing the scoping report.

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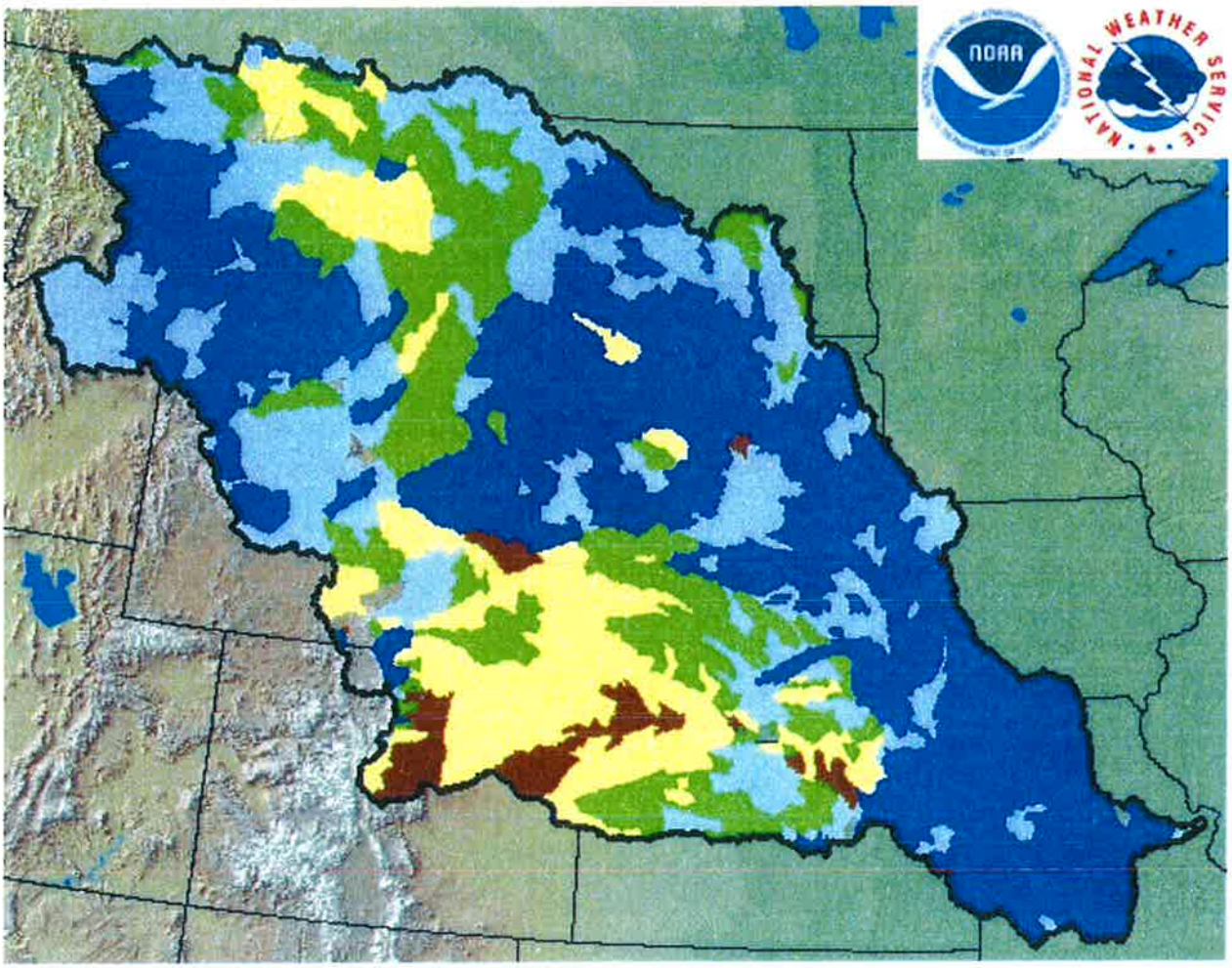

MBRFC Experimental Moisture Index
Valid: 11/21/2013

Percent Saturation

0 - 20 | 20 - 40 | 40 - 60 | 60 - 80 | 80 - 100

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October 15, 2013

Brigadier General John S. Kem
U.S. Army Corps of Engineers, Northwestern Division
Attn: Missouri River Water Management
1616 Capitol Ave, Suite 365
Omaha, NE 68102

Dear Brigadier General Kem,

It is unfortunate that the recent shutdown of the federal government has resulted in the cancellation of the Annual Operating Plan (AOP) public meetings. These meetings provide a valuable forum for the public to meet U.S. Army Corps of Engineers' (Corps) staff and have their questions answered. In the absence of a public venue, the North Dakota State Water Commission is submitting the following comments regarding the 2013-2014 AOP.

I will start by thanking the Corps for continuing their drought conservation measures. I strongly encourage the Corps to take all possible measures to conserve water. While conditions can change, history shows us that droughts typically last multiple years. Conservation of water benefits the authorized purposes of recreation, fish & wildlife, hydropower, water supply and water quality upon which our communities and regional economies are dependent. Early and consistent conservation of water is critical to lessening the affects of drought.

Last winter the Corps was scheduled to release 12,000 cfs from Gavins Point as specified in the Master Manual. Due to bed degradation and low tributary flows, actual releases were held at 14,000 cfs to accommodate four downstream water system intakes. The volume of water released from the upstream reservoirs collectively due to the increased flow last winter was approximately 400,000 to 500,000 acre-feet. It is our understanding that some of these water system intakes have not been modified since last winter to function properly at a release rate of 12,000 cfs.

The AOP specifies that winter releases from Gavins Point will be 12,000 cfs (page 13). The plan also states that these releases may be increased to meet downstream water supply needs, to the extent reasonably possible, if downstream runoff is low (page 11). The Master Manual does provide that the Corps may release water, to the extent reasonable, for water supply. At the same time, it is also reasonable to expect people to adapt to an ever-changing environment. We recognize the extenuating circumstances requiring this operational deviation; however, because drought conditions continue to affect a large portion of the upper Missouri River Basin, we urge the Corps to conserve water and ensure that inadequate water system intakes are

modified to allow them to operate at the specified minimum flow release levels. North Dakota's water users along the Missouri River System have had to make investments in water supply intakes to deal with low water levels. Downstream water users should be expected to do the same.

The AOP indicates (pages 15 and 16) that there will most likely be a full-length navigation season with flows below full service at the start of the season, followed by slightly below full service flow support following the July 1st storage check. In the past, large volumes of water were passed to provide full service and full season navigation as navigational targets were continually met - even when river reaches lacked barge traffic. In the event that there is no commercial navigation scheduled, I urge the Corps to conserve water and not provide navigation flow support when and where there is no navigation.

Last year, Mississippi River interests repeatedly pressured the Corps to provide additional releases from the Missouri River mainstem reservoirs to alleviate low water conditions in the Mississippi navigation channel. The Corps upheld its legal authority by denying support to Mississippi navigation because it is not an authorized purpose of the Pick-Sloan projects. The State of North Dakota agrees with this position and strongly encourages the Corps to continue to deny this illegal release of water.

Open water and ice jam induced flooding are concerns on the Missouri River in North Dakota. Although ice jam induced flooding can occur anywhere along the Missouri River in North Dakota, there is heightened concern in the Bismarck-Mandan area. The AOP (pages 13 and 14) states that winter releases will be increased to accommodate winter power loads and to better balance storage in the upper three reservoirs. It also specifies that releases will be temporarily reduced, most likely in December, to prevent ice-induced flooding during freeze-in followed by a gradual increase as conditions permit. The flood stage at the Missouri River at Bismarck stream gage station is 14.5 feet. In both the AOP and Master Manual (page VII-21), the Corps has indicated that they plan on preventing the exceedance of a stage of 13 feet. The Master Manual, however, states that the flood stage at the Bismarck gage is 16 feet (page VII-40). Because the flood stage has been lowered 1.5 feet since the last update of the Master Manual, I suggest that the Corps plan on preventing the exceedence of a stage of 11.5 feet, rather than 13 feet.

I also recommend increasing the fall discharge from Lake Sakakawea and reducing the winter flows to offset channel changes. Current releases from Garrison Dam are 13,000 cfs, which combined with the channel changes caused by the flood of 2011 result in the lowest stage at the Bismarck gage since the reservoir was filled. The channel changes have also increased the risk of ice jams. Finally, I recommend continued communication with other federal, state, and local entities during periods of freeze-in and ice-out to ensure awareness of rapidly changing conditions.

While it is not really an AOP issue, I remind the Corps that the State of North Dakota is adamantly opposed to any effort by the Corps to charge our water users, or interfere with water use, for water that rightfully belongs to the people of our state. The basin states have a clear right to the use of the natural flow of the Missouri River without obligation to the federal government.

Sincerely,

Todd Sando, P.E.
State Engineer

TSS:BWE:LCA:pdh/1392
cc: Jody Farhat, Chief, Missouri River Water Management Office

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: Western Area Water Supply – Project Update
DATE: November 27, 2013

Funding

The Western Area Water Supply Authority's (Authority) October capital accounting report shows approved project expenses total at $111.4 million. The Authority has drawn the $25 million loan from the Contract Fund, the $50 million loan from Bank of North Dakota, the $25 million General Fund loan, the $10 million loan from the Contract Fund, and $2.6 million from the $40 million loan from Bank of North Dakota. The original project cost estimate was $150 million for service to a population of approximately 40,000 and received approval for $110 million. The housing study indicates the population could reach 90,000 and the project cost has been updated to $368 million due to increase demand in the rural areas and increase in construction costs. The October industrial sales report shows August through October sales at $7.18 million.

Design Work

The Authority approved the project engineer to complete design on several projects for water service in McKenzie County, Williams Rural Water, R&T Rural, R&T Epping, and BDW Rural.

Construction Update

A summary of the current and completed construction contracts is shown on the attached table.

Industrial Sales and Lateral Approval

2013 Senate Bill 2233, Section 19, requires State Water Commission approvals on industrial sales connections starting August 1, 2013. The State Water Commission delegated the Chief Engineer the authority to either approve or deny these connections and contracts. Review and approval has been made on seven industrial sales applications. These lateral connections are short term in nature, such as water supply for development of an oil well, where the connection time is approximately three weeks. The one remaining active lateral will end service on December 10.

TS:MK/1973

State Water Commission - Western Area Water Supply Project Update

Progress through October 2013

Nov-27-2013

Project	Contractor	Cost	Payments	Completion
McKenzie System IV	Merryman Excavation	$8,914,563.22	$8,093,162.60	91%
8" to 2" pipeline west of Alexander - 190 Miles			Part 1	est 11/30/12
			Part 2	est 11/30/13
R&T Regional Service Pipeline To Crosby/BDW	Wagner Construction	$5,014,522.12	$4,659,648.96	81%
26 miles of 14" to 8" pipeline from Wildrose to Crosby (The original 12" line was increased to a 14" line for increase in domestic signups)				est 10/1/13
Regional Water Service Phase II Pump Station/ Meter Vault	Gen- John T Jones Const	$5,275,420.00	$5,254,271.00	100%
Heading south Williston: 5.3 MGD Station at Lewis and Clark - 6/15/2013 Heading south Williston: 5.4 MGD Station at Indian Hills - 4/15/2012 Heading south Williston: 5.2 MGD Station at Alexander - 6/30/2013	Mech- Cofell's Plumbing & Heating	$420,670.00	$382,589.00	91%
Heading north Williston: 6.6 MGD Station at 13 mile corner - 6/30/2013 Heading north Williston: 2.1 MGD Station at Ray By-Pass - 7/3/2013	Elec- John's Refrigeration & Elec	$2,496,479.60	$2,266,400.00	91%
Regional Water Service Ph II Reservoirs	Engineering America, Inc.	$5,216,020.00	$4,941,070.00	95%
0.5 MG reservoirs at Wildrose				est 11/30/12
0.5 MG reservoirs at Alexander 11-30-12				est 06/01/13
0.5 MG reservoirs at Arnegard 11-30-12				est 06/01/13
2 MG reservoirs at 13-mile corner 10-30-12				est 06/01/13
2 MG reservoirs at Ray 10-30-12				est 06/01/13
Regional Water Service Phase II Pipeline To Ray (R&T Water)	S.J. Louis Construction	$15,314,412.55	$14,572,478.97	95%
30 miles of 24" to 20" pipeline starting north of Williston and east to Ray.				6/22/13
Regional Water Service Phase II Pipeline To Watford City	Ryan Construction	$12,887,326.20	$12,758,453.00	99%
30 miles of 20" pipeline starting south of Williston and east to Watford City.				est 06/01/13
Phase II Bulk Water Fill Stations - Part 1	Lakeshore Toltest Corporation	$3,399,723.75	$2,380,505.00	70%
Approximately 8 industrial water depots are included in this phase and will range in size from 2 to 6 fill points, with a fill point averaging delivery of 200 gallons per minute over a 24 hour period.	13-Mile Corner			est 11/26/12
	Alexander			est 11/26/12
	Indian Hill			est 11/30/12
Williams Rural Water West Expansion Phase 1				est 7/31/13
Contract 1 - 7.7 miles of 16" pipeline west of Williston	Niebur Development Inc.	$2,082,127.55	$2,082,128.00	100%
Contract 2 - 7.4 miles of 16" to 10" pipeline west of Williston	Western Municipal Construction	$1,139,355.11	$1,114,355.10	98%
Bulk Water Fill Depots - Ray - Tioga				est 11/30/12
Industrial water depots are included in this phase and will range in size from 2 to 6 fill points, with a fill point averaging delivery of 200 gallons per minute over a 24 hour period.	Glacier Construction Co., Inc.	$374,772.00	$374,772.00	100%
Regional Water Service Phase II Pipeline Watford City By-Pass	Merrymen Excavation	$3,130,190.08	$3,028,730.33	97%
14 miles of 16" to 6" pipeline starting west of Watford City and continuing east.				est 05/31/13
Williston Regional Water Treatment Plant Phase III Improvements	10 MGD to 14 MGD			est 05/21/14
Contract 1 - General	PKG Contracting, Inc.	$12,187,169.00	$8,805,723.55	72%
Contract 2 - Mechanical	Williams Plumbing and Heating	$243,854.00	$97,110.00	40%
Contract 2 - Electrical	Colstrip Electrical Inc.	$1,952,238.75	$1,406,070.18	72%
Williston Regional Water Treatment Plant Phase IV Improvements	14 MGD to 21 MGD			est 01/31/15
Contract 1 - General	PKG Contracting, Inc.	$22,796,900.00	$967,809.00	4%
McKenzie System I	Wagner Construction	$1,110,450.00	$1,110,450.00	100%
8.6 miles of 12" to 2" pipeline around Watford city (Change under contract No. 1)				10/1/13
R&T Water Supply Well Expansion				
Additional Well Capacity	PKG Contracting, Inc.	$1,121,969.00	$1,065,870.55	95% 11/30/13

State Water Commission - Western Area Water Supply Project Update

Progress through October 2013 — Nov-27-2013

R&T Water Supply Water Treatment Facility Modification	PKG Contracting Inc	$328,069.00	$241,562.00	74%
				10/15/13
WRWD West Expansion				
	American General Contracting	$ 2,116,000		0%
	Maguire Iron, Inc.	$ 2,095,000		0%
MCRWD Cherry Creek Pump Station (Keene Loop)				10/1/13
Contract 1 -General	PKG Contracting, Inc.	$1,636,900.00		0%
Contract 2 - Electrical	John's Refrigeration & Electric	$750,000.00		0%
MCRWD East Transmission Line Expansion				
	Merrymen Excavation	$3,956,133.00		0%
Williston WTP Pre-Treatment Improvements				
	Jim Myer and Sons, Inc (JMS)	$518,081.00		0%
	Current Construction	$116,478,345.93	$75,603,159.24	

Completed

US 2 to County Hwy No. 7 Watermain	Metro Construction	$3,986,068.58	$3,986,068.58	Completed
24" to 12" pipeline west side Williston				12/1/11
Res No. 1 to Bakken Ind. Park Pipeline	Merryman Excavation	$4,049,188.00	$4,049,188.00	Completed
30" to 24" pipeline NW of Williston				5/31/12
26th St Pump Station	John T Jones Construction	$761,640.20	$761,640.20	Completed
Increase discharge pressure				5/4/12
NW Williston Reservoir - Ph 1	Natgun Corporation	$4,499,052.50	$4,499,052.50	Completed
5 Million Gallons Storage NW of Williston				2/26/13
Bulk Water Fill Depot - Watford City				Completed
Industrial water depots are included in this phase and will range in size from 2 to 6 fill points, with a fill point averaging delivery of 200 gallons per minute over a 24 hour period.	PKG Contracting, Inc.	$2,558,649.14	$2,558,649.14	10/31/13
	Fargo Equipment	$33,105.00	$33,105.00	5/31/12
	Completed Construction	$15,887,703.42	$15,887,703.42	
	Total Construction	$132,366,049.35	$91,490,862.66	
	Engineering/Program Management	$ 24,185,413	$ 18,977,929	
	Legal (Capitalized)	$ 870,196	$ 870,196	
	Easements	$ 1,700,000	$ 1,668,246	
	Cost Share	$ (3,020,791)	$ (3,020,791)	
	Crop Damage	$ 528,524	$ 528,524	
	Granite Peaks	$ 2,005,154	$ 2,005,154	
	Non Construction Total	$ 26,268,496	$ 21,029,258	
	Total	$158,634,545.73	$112,520,120.93	