

MINUTES

North Dakota State Water Commission Bismarck, North Dakota

March 9, 2016

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on March 9, 2016. Governor Jack Dalrymple, Chairman, called the meeting to order at 1:30 p.m., and requested Todd Sando, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Dalrymple announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:

Governor Jack Dalrymple, Chairman
Tom Bodine, representing Doug Goehring, Commissioner,
North Dakota Department of Agriculture, Bismarck
Arne Berg
Maurice Foley
Larry Hanson
George Nodland
Harley Swenson
Robert Thompson
Douglas Vosper

OTHERS PRESENT:

Todd Sando, State Engineer, and Chief Engineer-Secretary,
North Dakota State Water Commission, Bismarck
State Water Commission Staff
Approximately 50 people interested in agenda items

The attendance register is on file with the official minutes.

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

TODD SANDO, STATE ENGINEER - RETIREMENT ANNOUNCEMENT, EFFECTIVE JULY 5, 2016

Todd Sando, North Dakota's 17th State Engineer, officially announced his retirement, effective July 5, 2016, after admirably serving the people of North Dakota

for more than 31 years. Secretary Sando began his career with the State Water Commission in 1985 as a water resource engineer. In July, 2010, the State Water Commission appointed Secretary Sando as State Engineer, who also serves as Chief Engineer and Secretary to the State Water Commission.

Secretary Sando reflected on his tenure as State Engineer that was fulfilled with phenomenal opportunities and monumental growth in water development, and successful management of water resources throughout the state. He said "there have been many memorable projects and experiences throughout my career, with the record flooding events that took place in 2011, and the construction and operation of the Devils Lake outlets which are certainly some of the highlights. I am immensely thankful to the State Water Commission and for the opportunity to serve our state and the citizens of North Dakota."

Governor Dalrymple stated that Secretary Sando has done an outstanding job managing North Dakota's tremendous water resources at a time of unprecedented growth across our state. "He has been instrumental in the management of North Dakota's surface and ground water resources during a period of record growth and development across the state, played a key role in North Dakota's flood response recovery and prevention efforts, and floodplain regulation. He has directed the development of critical flood control and water supply projects throughout the state and has worked extensively to advance management practices involving interstate and international water resources." Governor Dalrymple expressed his gratitude and appreciation to Secretary Sando stating that "his distinguished and exemplary service will enhance the lives of people of the great State of North Dakota for generations to come. We thank him for his many years of dedicated public service and we wish him well in his retirement."

The State Water Commission members discussed the State Engineer's position vacancy application and interview process. It was the recommendation of Governor Dalrymple that a State Engineer's search committee be selected - Commission members Arne Berg, George Nodland, Maurice Foley, and Robert Thompson volunteered to serve on the committee. Others interested in serving on the committee are requested to contact the North Dakota Human Resource Management Services. It was the consensus of the Commission members that the vacancy announcement post on March 10, 2016, with a closing date of April 8, 2016 for accepting applications.

It was moved by Commissioner Foley, seconded by Commissioner Thompson, and unanimously carried, that the North Dakota Human Resource Management Services Officer be directed to post the State Engineer vacancy announcement, position number 770-6725, on March 10, 2016, with a closing date of April 8, 2016 for accepting applications.

CONSIDERATION OF AGENDA

The agenda for the March 9, 2016 State Water Commission meeting was presented; there were no modifications.

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

CONSIDERATION OF DRAFT MINUTES OF DECEMBER 11, 2015 STATE WATER COMMISSION MEETING - APPROVED

The draft final minutes of the December 11, 2015 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Berg, seconded by Commissioner Hanson, and unanimously carried, that the draft final minutes of the December 11, 2015 State Water Commission meeting be approved as prepared.

CONSIDERATION OF DRAFT MINUTES OF FEBRUARY 9, 2016 STATE WATER COMMISSION MEETING - APPROVED

The draft final minutes of the February 9, 2016 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Berg, seconded by Commissioner Hanson, and unanimously carried, that the draft final minutes of the February 9, 2016 State Water Commission meeting be approved as prepared.

STATE WATER COMMISSION - PROGRAM BUDGET EXPENDITURES AND CONTRACT FUND ALLOCATIONS, 2015-2017 BIENNIUM

In the 2015-2017 biennium, the State Water Commission has two line items - administrative and support services, and water and atmospheric resources expenditures. The allocated program expenditures for the period ending January 31, 2016 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 for the 2015-2017 biennium, **APPENDIX "B"**, provides information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund. The current Contract Fund total allocation for projects is \$629,418,761 with expenditures of \$145,199,543. A balance of \$395,589,365 remains available to commit to projects in the 2015-2017 biennium.

**STATE WATER COMMISSION -
RESOURCES TRUST FUND
AND WATER DEVELOPMENT
TRUST FUND REVENUES,
2015-2017 BIENNIUM**

Oil extraction tax deposits into the Resources Trust Fund total \$87,398,118, through February, 2016, and are currently \$55,079,239 above originally-budgeted revenues. A revised forecast has been prepared that projects the oil extraction revenue for the 2015-2019 biennium will be short by \$54,960,797 from the original projection of \$264,259,277.

No deposits have been received for the Water Development Trust Fund (tobacco settlement) in the 2015-2017 biennium. The first planned deposit is for \$8,900,000 in April, 2016.

**CITY OF BEULAH, WATER TREATMENT
SYSTEM IMPROVEMENTS PROJECT -
TOTAL GRANT/LOAN (\$3,520,000) -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$2,640,000);
AND LOAN APPROVAL (\$880,000)
(SWC Project No. 2050-BEU)**

A request from the city of Beulah was presented for the State Water Commission's consideration for state cost participation towards their water treatment system improvements project. The proposed project involves the design and construction of a membrane system at the water treatment plant, additional lagoon capacity for waste handling, and well field improvements to provide sufficient water quality and quantity to accommodate the increased water demand which is attributed to growth related to the oil and energy development in the area. The project engineer's cost estimate is \$5,800,000, of which surge funding of \$1,400,000 will be used towards pre-construction engineering costs and a portion of construction engineering and construction costs, and the remaining balance of \$4,400,000 to be considered for 80 percent cost share funding (\$3,520,000).

Representatives from the city of Beulah appeared before the Commission to present technical information relative to upgrading and expanding their existing water treatment plant and wells to accommodate planned growth. Discussion included options that were considered which included water service from the Southwest Pipeline Project. Because of the significant costs for construction of a transmission pipeline and upgrading the water treatment plant capacity, the city decided to pursue the option which is being presented before the Commission. In the past, the State Water Commission has encouraged the connection of communities into a regional system in its project design and development and, as the city of Beulah's project was further discussed at this meeting, the Commission members reiterated their support of regionalization.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant not to exceed an allocation of \$2,640,000 of the eligible costs from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), with construction engineering and construction costs funded at 60 percent; and approve a 20 percent loan with a 1.5 percent interest rate and a 20-year loan in the amount of \$880,000 from the State Water Commission's Infrastructure Revolving Loan Fund, to support the city of Beulah's water treatment system improvements project.

It was moved by Commissioner Swenson and seconded by Commissioner Foley that the State Water Commission approve funding of 80 percent of the eligible items (\$4,400,000) for a total amount not to exceed \$3,520,000 to be disbursed as follows:

1) approve a 60 percent state cost participation grant of the construction engineering and construction eligible costs not to exceed an allocation of \$2,640,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020). This approval is contingent upon the availability of funds; and

2) approve a 20 percent loan in the amount of \$880,000 from the State Water Commission's Infrastructure Revolving Loan Fund, managed by the Bank of North Dakota, at an interest rate of 1.5 percent with a 20-year term, to the city of Beulah to support their water treatment system improvements project.

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

**CITY OF WILLISTON 2015
WATER SYSTEM IMPROVEMENTS -
APPROVAL OF COSTS INCURRED
AFTER MAY 13, 2015 ELIGIBLE
FOR COST SHARE
(SWC Project No. 2050-WLL)**

On October 6, 2015, the State Water Commission adopted a motion approving a state cost participation grant not to exceed a total allocation of \$10,890,472 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), with

pre-construction engineering eligible costs funded at 35 percent, and construction engineering and construction eligible costs funded at 60 percent, to the city of Williston to support their 2015 water supply infrastructure improvements on the following projects to address continued growth from oil exploration and production:

- 1) 11th Street Water Main
- 2) 16th Avenue Water Main
- 3) High School Area Improvements Water Main
- 4) Wegley Green Acres
- 5) Williston Park Water Supply
- 6) West Reservoirs
- 7) 26th Street Water Main
- 8) Hi-Lands Water Supply

The current North Dakota State Water Commission Cost Share Policy, Procedure, and General Requirements, Section I, E. Ineligible Items, states, "Work and costs incurred prior to a cost share approval date, except for emergencies as determined by the Chief Engineer," are excluded from cost share.

2015 Senate Bill 2020, the State Water Commission's appropriation, Section 17, State Water Commission Project Funding Designations, states, "Of the funds appropriated in the water and atmospheric resources line item in section 1 of this Act from funds available in the resources trust fund, water development trust fund, and the line of credit available from the Bank of North Dakota, \$85,000,000 was included for municipal water projects. Senate Bill 2020 was filed with the North Dakota Secretary of State on May 13, 2015.

The October, 2015 cost share request from the city of Williston specified the projects were a part of major infrastructure work that needed to be completed in 2015, the recommendation to the State Water Commission on October 6, 2015 did not indicate that the projects were in various stages of design and construction. It was the recommendation of Secretary Sando that the State Water Commission approve costs incurred after May 13, 2015 as eligible costs for the city of Williston 2015 system improvements.

It was moved by Commissioner Hanson and seconded by Commissioner Berg that the State Water Commission approve costs incurred after May 13, 2015 as eligible costs for the city of Williston 2015 system improvements.

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

**GARRISON RURAL WATER
DISTRICT, SYSTEM EXPANSION -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$2,003,550)
(SWC Project No. 2050-GAR)**

A request from the Garrison Rural Water District was presented for the State Water Commission's consideration for state cost participation for their water supply improvements project. The objective of the proposed project will

include construction of new water storage facilities and pump stations that will increase the water supply capacity and provide adequate volume and pressure to all existing users as well as future users in the areas identified for growth. The project engineer's cost estimate is \$2,761,000, with pre-construction engineering eligible costs of \$168,000, and construction engineering and construction eligible costs of \$2,593,000.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant not to exceed \$2,003,550 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), with pre-construction engineering eligible costs funded at 35 percent, and construction engineering and construction eligible costs funded at 75 percent, to the Garrison Rural Water District to support their system expansion project.

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve a state cost participation grant not to exceed \$2,003,550 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), with pre-construction engineering eligible costs funded at 35 percent, and construction engineering and construction eligible costs funded at 75 percent, to the Garrison Rural Water District to support their system expansion project. This approval is contingent upon the availability of funds.

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

**NORTHEAST REGIONAL WATER
DISTRICT, CITY OF DEVILS LAKE
WATER SUPPLY PROJECT -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION (\$16,696,920)
(\$15,010,000-GRANT; \$1,686,920-LOAN)
(SWC Project No 2050-NOE)**

On December 11, 2015, the State Water Commission adopted a motion approving a state cost participation grant not to exceed an allocation of \$533,750 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) towards the feasibility study, with pre-construction eng-

ineering eligible costs funded at 35 percent, to the Northeast Regional Water District to support the city of Devils Lake water supply project.

The Northeast Regional Water District is proposing a project to address a water supply for the Langdon rural water branch of the Northeast Regional Water District, the city of Langdon, and system capacity for an additional project to add 150 new rural users in the Langdon rural water branch. The proposed project provides regionalization with the city of Devils Lake by constructing a pipeline to bring treated water from the city of Devils Lake's water treatment plant. The project engineer's cost estimate is \$23,400,625, with pre-construction engineering eligible costs of \$1,525,000, and construction engineering and construction eligible costs of \$21,875,625. The project includes a 20.7 percent buy-in of Devils Lake's non-grant cost of \$4,689,144 for providing 600 gallons per minute from the city's water supply system capacity of 2,900 gallons per minute.

The current State Water Commission cost share policy provides funding for the construction engineering and construction through a combination grant and loan not to exceed 80 of the eligible costs. A request from the Northeast Regional Water District was presented for the State Water Commission's consideration for a state cost participation grant of 75 percent for the eligible construction engineering and construction costs, and a 5 percent loan from the State Water Commission's Infrastructure Revolving Loan Fund.

Gordon Johnson, Manager, Northeast Regional Water District, provided technical information relative to the proposed project. Mr. Johnson stated the project would pass through the Greater Ramsey Water District service area, but he reiterated the District's re-assurance that the project would not encroach on the Ramsey service area and would not connect any additional water users without the concurrence of the Greater Ramsey Water District.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant not to exceed an additional allocation of \$15,010,000, with eligible construction engineering and construction costs funded at 75 percent from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020); and a 5 percent loan not to exceed \$1,686,920 from the State Water Commission's Infrastructure Revolving Loan Fund, with an interest rate of 1.5 percent and a 20-year term, to the Northeast Regional Water District to support their city of Devils Lake water supply project.

It was moved by Commissioner Berg and seconded by Commissioner Swenson that the State Water Commission approve a state cost participation grant not to exceed an additional allocation of \$15,010,000, with eligible construction engineering and construction costs funded at 75 percent from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020); and a 5 percent loan not to exceed \$1,686,920 from the State

Water Commission's Infrastructure Revolving Loan Fund, with an interest rate of 1.5 percent and a 20-year term, to the Northeast Regional Water District to support their city of Devils Lake water supply project.

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

These approvals increase the total state cost participation allocation to \$17,230,670 (\$15,543,750 (grants) and \$1,686,920 (loan).

***SOUTHEAST WATER USERS
DISTRICT, SYSTEM-WIDE EXPANSION -
APPROVAL OF ADDITIONAL
STATE COST PARTICIPATION
GRANT (\$11,791,000)
(SWC Project No. 2050-SOE)***

A request from the Southeast Water Users District was presented for the State Water Commission's consideration for state cost participation for the design and construction of their system-wide expansion project. The objective of the proposed project is to provide water

service to 350 rural users throughout the unserved areas and capacity for the city of Walcott.

On October 8, 2015, the State Engineer approved an allocation of \$35,000 (35 percent) on the pre-construction engineering eligible costs. The project engineer's revised estimated project cost is \$16,500,000, with pre-construction engineering eligible costs of \$1,372,500, and eligible construction engineering and construction costs of \$15,127,500.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant not to exceed an additional allocation of \$11,791,000 (\$11,826,000 grant less \$35,000 approved October 8, 2015) from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2010), with pre-construction engineering eligible costs funded at 35 percent, and eligible construction engineering and construction eligible costs funded at 75 percent, to the Southeast Water Users District to support their system-wide expansion project.

It was moved by Commissioner Berg and seconded by Tom Bodine, representing Commissioner Goehring, that the State Water Commission approve a state cost participation grant not to exceed an additional allocation of \$11,791,000 (\$11,826,000 grant less \$35,000 approved October 8, 2015) from the funds appropriated to

the State Water Commission in the 2015-2017 biennium (S.B. 2010), with pre-construction engineering eligible costs funded at 35 percent, and eligible construction engineering and construction costs funded at 75 percent, to the Southeast Water Users District to support their system-wide expansion project. This approval is contingent upon the availability of funds.

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

This approval increases the total state cost allocation grants to \$11,826,000 the the Southeast Water Users District, system-wide expansion project.

***WALSH RURAL WATER
DISTRICT, SYSTEM EXPANSION
PHASES I AND II - APPROVAL OF
5 PERCENT LOAN (\$250,490)
(SWC Project No. 2050-WAL)***

The Walsh Rural Water District, system expansion, Phases I and II, involves the design and construction of a project that will include the addition of 15 new rural users and upsizing approximately 30 miles of undersized pipeline. The pipeline expansion is required due to system expansion and increased demand over the past 10-15 years. The additional pipeline will ensure adequate pressure and water supply service to all current and new users. The project engineer's cost estimate is \$2,929,800, with pre-construction engineering eligible costs of \$260,000, and construction engineering and construction eligible costs of \$2,669,800.

On December 11, 2015, the State Water Commission adopted a motion approving a state cost participation grant not to exceed an allocation of \$2,093,350 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), with pre-construction engineering eligible costs funded at 35 percent, and eligible construction engineering and construction costs funded at 75 percent, to the Walsh Rural Water District to support their system expansion project, Phases I and II.

The current State Water Commission cost share policy provides funding for a combination grant and loan not to exceed 80 percent of the eligible costs. A request from the Walsh Rural Water District was presented for the State Water Commission's consideration for a 5 percent loan from the State Water Commission's Infrastructure Revolving Loan Fund.

It was the recommendation of Secretary Sando that the State Water Commission approve a 5 percent loan for the pre-construction engineering eligible costs and the eligible construction engineering and construction costs not to exceed \$250,490 from the State Water Commission's Infrastructure Revolving Loan Fund, with an interest rate of 1.5 percent and a 20-year term, to the Walsh Rural Water District to support their system expansion project, Phases I and II.

It was moved by Commissioner Vosper and seconded by Commissioner Nodland that the State Water Commission approve a 5 percent loan for the pre-construction engineering eligible costs and the eligible construction engineering and construction costs not to exceed \$250,490 from the State Water Commission's Infrastructure Revolving Loan Fund, with an interest rate of 1.5 percent and a 20-year term, to the Walsh Rural Water District to support their system expansion project, Phases I and II. This approval is contingent upon the availability of funds.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 GRANT (\$529,075)
(SWC Project No. 2041)**

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. The data collection consists of three components: stream

gaging to measure flow rate and volume, stream and lake 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.

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 includes real-time monitoring capabilities to the continuous recorder wells.

The State Water Commission has participated in a cooperative statewide hydrologic monitoring program since the 1950s. The total cost of the monitoring program for federal Fiscal Year 2016 is \$1,014,240, of which the State Water Commission's obligation of this amount is \$529,075 (52.1 percent); the remaining \$485,165 will be provided by the U.S. Geological Service.

It was the recommendation of Secretary Sando that the State Water Commission approve a federal 2016 Fiscal Year obligation of \$529,075 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) to the U.S. Geological Survey Water Science Center, to support the cooperative statewide hydrologic monitoring program.

It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve a federal 2016 Fiscal Year obligation of \$529,075 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the U.S. Geological Survey Water Science Center to support the cooperative statewide hydrologic monitoring program. This approval is contingent upon the availability of funds.

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

**RICHLAND COUNTY LEGAL
DRAIN NO. 2 RECONSTRUCTION
AND EXTENSION PROJECT -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$535,500)
(SWC Project No. 1176)**

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Legal Drain No. 2 reconstruction and extension project. The project is located in Richland county near the city of Colfax.

Legal Drain No. 2 was constructed in the early 1900s with steep side slopes and a narrow channel. The proposed project will widen the existing channel and flatten the side slopes to 4:1 stabilizing the channel and increasing the capacity to reduce flooding. Bids will be advertised in March, 2016, with construction completion anticipated in late 2016. An application for a Section 404 permit has been filed with the Corps of Engineers; and a drain permit application is currently pending.

The proposed project consists of the reconstruction of 3.5 miles of the existing drain channel and the construction of a new extension of approximately 3/4 mile. The extension will be constructed in the location of an existing road and private drainage ditch. The drain flows east and discharges into the Wild Rice River in Section 25 of Eagle South Township. The last easterly 1/2 mile of drain will not be reconstructed as it was completed as a NRCS project in the past, and 1.5 miles of drain, in the middle of the complex, which was modified in 2004-2007 will not be modified. The project engineer's cost estimate is \$1,675,000, of which \$1,190,000 is determined eligible as a rural flood control project at 45 percent (\$535,500).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant of 45 percent as a rural flood control project, not to exceed an allocation of \$535,500 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the Legal Drain No. 2 reconstruction and extension project.

It was moved by Commissioner Swenson and seconded by Commissioner Vosper that the State Water Commission approve a state cost participation grant of 45 percent as a rural flood control project, not to exceed an allocation of \$535,500 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the Legal Drain No. 2 reconstruction and extension project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

**BUXTON TOWNSHIP IMPROVEMENT
DISTRICT NO. 68 (TRAILL COUNTY) -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$512,090)
(SWC Project No. 1311)**

A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Buxton Township Improvement District No. 68 project for pre-construction engineering

and construction of the project. The proposed project will improve the capacity of the existing road ditches, allow agricultural drainage to enter the channel with greater flexibility, and eliminate standing water currently present in existing road ditches that over time are saturating the roadbed causing stability issues.

On June 17, 2015, the State Engineer approved \$15,745 for the preliminary engineering costs for the project. The District completed the preliminary engineering design, and the assessment vote was passed in December, 2015. A drain permit application is currently pending.

The project engineer's cost estimate is \$1,604,495, of which \$1,076,702 is determined eligible for cost share participation as a rural flood control project at 45 percent (\$484,516), and \$78,784 is determined eligible for pre-construction engineering at 35 percent (\$27,574), for a total state cost participation grant of \$512,090.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant at 45 percent of the eligible costs as a rural flood control project, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$512,090 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Traill County Water Resource District to support the Buxton Township Improvement District No. 68 project.

It was moved by Commissioner Berg and seconded by Commissioner Nodland that the State Water Commission approve a state cost participation grant at 45 percent of the eligible costs as a rural flood control project, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$512,090 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Traill County Water Resource District to support the Buxton Township Improvement District No. 68 project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

**LAKE BERTHA FLOOD CONTROL
PROJECT NO. 75 (CASS COUNTY) -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$201,350)
(SWC Project No. 2065)**

A request from the Cass County Joint Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Lake Bertha Flood Control Project No. 75 located in the Lake Bertha basin situated in Eldred Township in

Cass County near the city of Alice, North Dakota.

Cass County Highway 6 has been inundated by high water levels in the basin and numerous other township roadways have also been impacted with some currently remaining underwater. The basin naturally flows to the north into an existing drainage channel that discharges into Buffalo Creek, a tributary of the Maple River, and contributes to flooding downstream. The proposed project will include a controlled outlet that would enable the District to mitigate the damages caused by excess water levels in recent years and provide an opportunity to utilize the existing storage capacity within the basin for future floodwater detention benefits. A portion of the existing channel will be modified to accommodate the depth and size of the new outlet. Initial estimates indicate that more than 3,000 acre-feet of storage could be provided if the project is constructed.

The project engineer's cost estimate is \$541,780, of which \$363,858 is determined eligible for state cost participation at 52.5 percent as a water retention and rural flood control project (\$191,025), and \$29,500 is determined eligible for state cost participation at 35 percent for pre-construction engineering (\$10,325), for a total state cost participation of \$201,350.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant of 52.5 percent of the eligible costs as a water retention and rural flood control project, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$201,350 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Cass County Joint Water Resource District to support the Lake Bertha Flood Control Project No. 75.

It was moved by Commissioner Thompson and seconded by Commissioner Vosper that the State Water Commission approve a state cost participation grant of 52.5 percent of the eligible costs as a water retention and rural flood control project, and 35 percent of the

eligible costs for pre-construction engineering, not to exceed a total allocation of \$201,350 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Cass County Joint Water Resource District to support the Lake Bertha Flood Control Project No. 75. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

***RICHLAND COUNTY LEGAL DRAIN
NO. 31 IMPROVEMENTS PROJECT -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$161,852)
(SWC Project No. 1174)***

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Legal Drain No. 31 improvements project, located near the city of Fairmount, North Dakota.

The proposed project consists of channel reconstruction of approximately 2.1 miles on three sites on the existing drain which flows northerly and discharges to the Wild Rice River northeast of Great Bend, North Dakota. The channel bottom will be widened to 8 feet with 4:1 side slopes, and the side slopes of the drain will be flattened to 4:1 at all three locations. Drop structures will be added to address erosion issues.

FEMA will provide funding assistance as part of the 2013 disaster declaration, and the local funding will be obtained from the Drain No. 31 maintenance assessment district as well as participation from the Richland County Highway Department for the bridge replacement costs. Land acquisition was scheduled for February, 2016, with a bid date anticipated in March, 2016. An Application to Drain permit was submitted to the Office of the State Engineer in December, 2015, and a Corps of Engineers Section 404 permit was applied for in January, 2016. Both permit applications are currently pending review. The project engineer's cost estimate is \$580,000, of which \$359,670 is determined eligible for state cost participation at 45 percent as a rural flood control project (\$161,852).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant of 45 percent of the eligible costs as a rural flood control project, not to exceed an allocation of \$161,852 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the Richland County Legal Drain No. 31 improvements project.

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It was moved by Commissioner Swenson and seconded by Commissioner Vosper that the State Water Commission approve a state cost participation grant of 45 percent of the eligible costs as a rural flood control project, not to exceed an allocation of \$161,852 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the Richland County Legal Drain No. 31 improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

***SHORTFOOT CREEK WATERSHED
PLANNING PROGRAM (SARGENT
COUNTY) - APPROVAL OF STATE COST
PARTICIPATION GRANT (\$154,000)
(SWC Project No. 1303)***

A request from the Sargent County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Shortfoot Creek Watershed planning program. Rural areas along

Shortfoot Creek have experienced significant flooding and damages particularly as a result of spring snowmelt events. The District will follow the Natural Resource Conservation Service's (NRCS) small watershed planning process to find solutions to the flooding problems in the watershed.

The proposed planning process will have six milestone reporting points with the NRCS. The approach will involve the creation of project development teams tasked with identifying the local problems facing the watershed and sorting through practical alternatives for addressing those problems. Multiple alternatives will be identified by the team and preliminary designs, geotechnical investigations, cost estimates, and a comprehensive benefit-cost analysis will be completed. The team's findings will be presented to the District and local stakeholders for consideration for further advancement of the project. NRCS will approve the final watershed plan and environmental assessment.

The project engineer's cost estimate is \$940,000, of which the Natural Resources Conservation Service will contribute \$500,000. All of the remaining costs of \$440,000 is determined eligible for state cost participation at 35 percent (\$154,000).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a planning study at 35 percent of the eligible costs, not to exceed an allocation of \$154,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Sargent County Water Resource District to support the Shortfoot Creek Watershed Planning Program.

It was moved by Commissioner Nodland and seconded by Commissioner Swenson that the State Water Commission approve a state cost participation grant of 35 percent of the eligible costs as a planning study, not to exceed an allocation of \$154,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Sargent County Water Resource District to support the Shortfoot Creek Watershed Planning Program. This approval is contingent upon the availability of funds.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 VALLEY
FLOOD CONTROL PROGRAM -
CITY OF LISBON PERMANENT FLOOD
CONTROL PROJECT, CONSTRUCTION
OF PHASE I - LEVEE E PROJECT -
APPROVAL OF ADDITIONAL STATE COST
PARTICIPATION GRANTS (\$2,098,000);
AND LOAN TO CITY OF LISBON (\$527,000)
(SWC Project No. 1991-06)**

On June 19, 2013, the State Water Commission adopted a motion approving a state cost participation grant of 90 percent not to exceed an allocation of \$700,650 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371 for the Sheyenne River Valley Flood Protection Program to assist the city of Lisbon with their preliminary engineering design and legal costs

associated with development of a permanent flood control project, Phase I - Levee C. The city was granted an exception to policy because of devastation by multiple years of flooding.

On May 20, 2015, the State Water Commission adopted a motion to approve a state cost participation grant of 90 percent not to exceed an additional allocation of \$142,200 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), for a total state cost participation grant of \$842,850 for the Sheyenne River Valley Flood Protection Program to the City of Lisbon, Phase I - Levee E to assist in the engineering and legal services.

A request from the city of Lisbon was presented for the State Water Commission's consideration for state cost participation for construction of Phase I - Levee E project. The proposed project will be constructed in the central portion of the city along the east side of the Sheyenne River with an earthen levee of 1,100 linear feet of permanent flood protection construction. This levee will provide flood protection to homes and the city's infrastructure. The project engineer's estimated cost is \$2,625,000, of which \$2,622,500 is eligible for state cost participation at 60 percent of the eligible costs as a flood control project (\$1,573,500).

It was the recommendation of Secretary Sando that the State Water Commission: 1) approve a state cost participation grant as a flood control project at 60 percent of the eligible costs (\$1,573,500); 2) provide an exception from its current cost share policy to approve an additional state cost participation grant of 20 percent of the eligible costs (\$524,500) to mitigate the flood risk from the Devils Lake outlets, which would provide a total state cost participation grant of 80 percent not to exceed a total additional allocation of \$2,098,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Lisbon for construction of its permanent flood protection project, Phase I - Levee E; and 3) approve a 30-year loan from the State Water Commission's Infrastructure Revolving Loan Fund to the city of Lisbon for the local cost share (\$527,000), with an interest rate of 1.5 percent.

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

- 1) approve a state cost participation grant as a flood control project at 60 percent of the eligible costs (\$1,573,500);***
- 2) approve a state cost participation grant to mitigate the flood risk from the Devils Lake outlets at 20 percent of the eligible costs (\$524,500); and***
- 3) approve a 30-year loan to the city of Lisbon from the State Water Commission's Infrastructure Revolving Loan Fund for the local cost share (\$527,000), with an interest rate of 1.5 percent.***

The above approvals include total state cost participation grants of 80 percent not to exceed a total allocation of \$2,098,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), and a loan in the amount of \$527,000 from the State Water Commission's Infrastructure Revolving Loan Fund to the city of Lisbon for construction of its permanent flood protection project, Phase I - Levee E.

These approvals are contingent upon the availability of funds, and satisfaction of the required permits.

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

The total state cost participation for the Sheyenne River Valley Flood Protection Program, City of Lisbon, Phase I - Levee E include: engineering and legal services - \$842,850 grant, and construction of permanent flood protection project - \$2,098,000 grant; and a loan from the State Water Commission's Infrastructure Revolving Loan Fund to the city of Lisbon for \$527,000.

EPPING DAM SPILLWAY RECONSTRUCTION (WILLIAMS COUNTY) - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION GRANT (\$719,045) (SWC Project No. 346)

On February 27, 2013, the State Water Commission adopted a motion approving a state cost participation grant at 50 percent of the eligible costs as an engineering feasibility study not to exceed an allocation of \$66,200 from

the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the William County Water Resource District to support the Epping Dam evaluation project. Epping Dam was constructed in 1935 and is regulated and inspected by the State Water Commission. The dam is located in Section 9, Township 155 North, Range 99 West, and classified as a high hazard dam.

As a result of the inspection completed by State Water Commission staff, an evaluation of the dam was recommended. The concrete chute spillway constructed in 1980 has significantly deteriorated with structural items being deficient and requires replacement or repair for dam safety purposes. A December, 2013 engineering report documented these conditions and provided recommendations relative to the required items and corrective action to prevent additional future damages and increased risk of failure. The restoration work requires a significant lowering of the reservoir levels which will be coordinated with the North Dakota Game and Fish Department.

The project engineer's total cost estimate is \$965,726, of which \$958,726 is determined eligible for a 75 percent state cost participation as a dam safety project (\$719,045). The final reconstruction design plans and specifications are expected to be completed in early 2016, with the advertisement for bids occurring in May or June, and a proposed construction start in mid-July. Project completion is anticipated in October, 2016.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant of 75 percent of the eligible costs as a dam safety project, not to exceed an additional allocation of \$719,045 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Williams County Water Resource District to support the Epping Dam spillway reconstruction project.

It was moved by Commissioner Hanson and seconded by Commissioner Berg that the State Water Commission approve state cost participation at 75 percent of the eligible costs as a dam safety project, not to exceed an additional allocation of \$719,045 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Williams County Water Resource District to support the Epping Dam spillway reconstruction project. This action is contingent upon the availability of funds.

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

This approval increases the total state allocation grants to \$785,245 to the Williams County Water Resource District to support the Epping Dam spillway reconstruction project.

***RICHLAND COUNTY LEGAL DRAIN NO. 5
(LATERAL 27) RECONSTRUCTION -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$531,000)
(SWC Project No. 1179)***

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Richland County Legal Drain No. 5 (Lateral 27) Reconstruction project, located near the city of Walcott.

Legal Drain No. 5 (Lateral 27) was constructed in the 1920s. The proposed project consists of the reconstruction of 2.75 miles of the existing drain channel. The main Drain No. 5 flows northerly and discharges into the Wild Rice River in Cass county. The project would reconstruct the Lateral 27 to increase its capacity to take a portion of the flood flow directly east to the Wild Rice River northwest of the city of Christine. This alternate outlet was proposed to provide relief to the main drain in the early 1900s but was never completed.

The outlet reconstruction will consist of two concrete drop structures into the river due to the 20-foot drop in the last 1,000 feet of channel. The design channel bottom width is 8-12 feet and the side slopes are 4:1.

The existing township road along the north side of the drain would be maintained, and the drain channel centerline would be moved to the south. A drain permit was filed in the Office of the State Engineer on January 28, 2016 and is currently pending review. A bid date is anticipated in March, 2016, with construction being completed in December, 2016. The project engineer's cost estimate is \$1,315,000, of which \$1,180,000 is determined eligible as a rural flood control project at 45 percent (\$531,000).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant at 45 percent of the eligible costs as a rural flood control project, not to exceed an allocation of \$531,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the Richland County Legal Drain No. 5 (Lateral 27) Reconstruction project.

It was moved by Commissioner Swenson and seconded by Commissioner Vosper that the State Water Commission approve a state cost participation grant at 45 percent of the eligible costs as a rural flood control project, not to exceed an allocation of \$531,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the Richland County Legal Drain No. 5 (Lateral 27) Reconstruction project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 FLOOD CONTROL PROJECT (NELSON COUNTY) - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION GRANT (\$382,049) (SWC Project No. 1932)

The Michigan Spillway Flood Control project is located in Sections 18, 19, and 20 of Township 154 North, Range 58 West (Sarnia Township) and Sections 13, 14, 23, 26, 34, and 35 of Township 154 North, Range 59 West (Enterprise Township) in 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 is 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-foot to 16-foot bottom width. Approximately 3,310 feet of previously open channel has been converted to a corrugated metal pipe arch.

On August 30, 2005, the State Water Commission passed a motion approving a state cost participation grant 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 legislative earmark of \$150,000 from the funds obligated for water-related damage to infrastructure in Nelson county (H.B. 1021) for construction of the Michigan spillway rural flood control assessment drain. During the 2009-2011 biennium, the Legislature earmarked an additional \$350,000 specifically designated for the Michigan Flood Control 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 additional allocation not to exceed \$738,304 (eligible costs of \$1,550,000, less \$311,696 approved on August 30, 2005 and \$500,000 from legislative earmarks).

On December 13, 2013, the State Water Commission passed a motion approving a 65 percent state cost participation grant 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) (eligible costs 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). These approvals total state funds of \$2,626,705.

Because of additional costs to satisfy the required permits and price increases, the project engineer's revised cost estimate is \$4,628,853, all of which is determined eligible for a 65 percent state cost participation grant (\$3,008,754). A request was presented for the State Water Commission's consideration for a state cost participation grant of 65 percent not to exceed an additional \$382,049.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant at 65 percent as a flood control project not to exceed an additional allocation of \$382,049 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) (eligible costs of \$3,008,754, less \$311,696 approved on August 30, 2005, \$738,304 approved on June 1, 2010, \$1,076,705 approved on December 13, 2013, and \$500,000 from legislative earmarks), to the Nelson County Water Resource District to support the Michigan Spillway Flood Control project.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant at 65 percent as a flood control project not to exceed an additional allocation of \$382,049 from the funds

appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) (eligible costs of \$3,008,754, less \$311,696 approved on August 30, 2005, \$738,304 approved on June 1, 2010, \$1,076,705 approved on December 13, 2013, and \$500,000 from legislative earmarks), to the Nelson County Water Resource District to support the Michigan Spillway Flood Control project. This approval is contingent upon the availability of funds.

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

This approval increases the total state allocation grants to \$3,008,754 to the Nelson County Water Resource District to support the Michigan Spillway Flood Control project.

**TONGUE RIVER NRCS WATERSHED
PLAN (PEMBINA/CAVALIER COUNTIES) -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$104,703)
(SWC Project No. 1296)**

A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Tongue River NRCS Watershed plan.

The proposed study is an accepted proposal by the Red River Retention Authority for the Natural Resources Conservation Service (NRCS) Regional Conservation Partnership program funding. The study will evaluate benefits of retention in the Tongue River watershed between the existing Senator Young Dam and Renwick Dam. Through this reach of the Tongue River, flood flows often leave the channel and cause flood damages to agricultural properties and infrastructure in the region. The proposed study will engage the general public, federal, state and local agencies to clearly define the purpose and need, scope of potential resource impacts, evaluate alternatives, and determine a preferred alternative. All planning is partially funded by NRCS and will follow the required planning procedures defined by Public Law 83-566.

The project engineer's cost estimate is \$799,151, of which the Natural Resource Conservation Service will contribute \$500,000. All of the remaining costs of \$299,151 are determined eligible for state cost participation at 35 percent (\$104,703) as a study.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a study at 35 percent of the eligible costs not to exceed an allocation of \$104,703 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Pembina County Water Resource District to support the Tongue River NRCS Watershed Plan.

It was moved by Commissioner Nodland and seconded by Commissioner Swenson that the State Water Commission approve a state cost participation grant as a feasibility study at 35 percent of the eligible costs not to exceed an allocation of \$104,703 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Pembina County Water Resource District to support the Tongue River NRCS Watershed plan. This approval is contingent upon the availability of funds.

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

***NORTH BRANCH ANTELOPE CREEK
NRCS WATERSHED PLAN (RICHLAND
COUNTY) - APPROVAL OF STATE COST
PARTICIPATION GRANT (\$113,400)
(SWC Project No. 1301)***

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the North Branch Antelope Creek NRCS Watershed study.

The proposed study is one of the 20 accepted proposals by the Red River Retention Authority for the Natural Resources Conservation Service (NRCS) - Regional Conservation Partnership program funding. Numerous previous studies have identified the Antelope Creek in Richland county as one of the larger contributors to downstream flooding in the upper Red River basin due to the timing of the runoff. This watershed has significant potential to control runoff to provide the most effective detention of flood waters in the upper region. Flooding of small cities, rural farmsteads, and agricultural land will be addressed by the NRCS process as well as erosion issues. The study is intended to identify a potential alternative, complete a partial design, and permit retention of floodwaters within the watershed. All planning is partially funded by NRCS and will follow the required planning procedures defined by Public Law 83-566. The study is expected to be completed in September, 2018.

The project engineer's cost estimate is \$824,000, of which the Natural Resource Conservation Service will contribute \$500,000. All of the remaining costs of \$324,000 are determined eligible for state cost participation at 35 percent (\$113,400) as a study.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a study at 35 percent of the eligible costs not to exceed an allocation of \$113,400 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the North Branch Antelope Creek NRCS Watershed plan.

It was moved by Commissioner Nodland and seconded by Commissioner Swenson that the State Water Commission approve a state cost participation grant as a feasibility study at 35 percent of the eligible costs not to exceed an allocation of \$113,400 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland County Water Resource District to support the North Branch Antelope Creek NRCS Watershed plan. This approval is contingent upon the availability of funds.

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

**CASS COUNTY DRAIN NO. 23
CHANNEL IMPROVEMENTS -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$137,181)
(SWC Project No. 1179)**

A request from the North Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Cass County Drain No. 23 channel improvements project.

The proposed project involves the reconstruction of one mile of channel located south of Gardner, North Dakota. The improvements will begin upstream of the existing culvert in the northeast corner of Section 12 and continue upstream to immediately downstream of the culverts at the northwest corner of Section 12 in Gardner Township.

The proposed work includes moving the centerline away from the township road and flattening the channel side slopes to improve the capacity and prevent sloughing. Erosion protection will be added upstream of the downstream crossing to prevent head cutting. The proposed channel bottom width is 10 feet, and the side slopes on the field side are 4:1, and side slopes on the road side of the drain will vary between 4:1 and 5:1.

The project engineer's cost estimate is \$365,000, of which \$290,270 is determined eligible as a rural flood control project at 45 percent (\$130,622), and \$18,740 is determined eligible as pre-construction engineering at 35 percent (\$6,559), for a total state cost participation grant of \$137,181.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$137,181 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the North Cass Water Resource District to support the Cass County Drain No. 23 channel improvements project.

It was moved by Commissioner Nodland and seconded by Tom Bodine, representing Commissioner Goehring, that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$137,181 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the North Cass Water Resource District to support the Cass County Drain No. 23 channel improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

**CITY OF UNDERWOOD FLOODWATER
OUTLET PROJECT (MCLEAN COUNTY) -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION GRANT (\$382,541)
(SWC Project No. 1554)**

\$1,100,727 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), for the city of Underwood floodwater outlet project, Phase I.

On December 13, 2013, the State Water Commission approved a request from the McLean County Water Resource District for a state cost participation grant at 57 percent of the eligible costs not to exceed an allocation of

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 was completed identifying the potential options for mitigating the flooding problems. The city partnered with the McLean County Water Resource District to develop a floodwater control project that would address the issue.

Since the previous State Water Commission state cost participation approval, the lowest bid for Phase I was higher than anticipated due to increased unit prices. Further changes were also required that were not identified when the project was originally submitted to the State Water Commission but were necessary to complete the project. The project engineer's revised cost estimate is \$2,684,223, of which \$2,602,225 is determined eligible for state cost participation as a flood control project at 57 percent of the eligible costs (\$1,483,268). Based on an analysis to determine the effective watershed area that would be contributing to each of the two sloughs, approximately 5 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 a state cost participation grant of 57 percent (95 percent of 60 percent of the eligible costs) as a flood control project, not to exceed an additional allocation of \$382,541 (eligible costs of \$1,483,268 less \$1,100,727 approved on December 13, 2013) from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), 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 Thompson that the State Water Commission approve a state cost participation grant of 57 percent as a flood control project, not to exceed an additional allocation of \$382,541 (eligible costs of \$1,483,268 less \$1,100,727 approved on December 13, 2013) from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the McLean County Water Resource District to support the city of Underwood floodwater outlet project. This approval is contingent upon the availability of funds.

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

This approval increases the total state allocation grant to \$1,483,268 for the City of Underwood Floodwater Outlet project.

**CASS COUNTY DRAIN NO. 15
CHANNEL IMPROVEMENTS -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$296,562)
(SWC Project No. 1071)**

A request from the Maple River Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Cass County Drain No. 15 channel improvements project.

The proposed project is the reconstruction of approximately 2.1 miles of an existing legal assessment drain located north of the city of Leonard, North Dakota, which has experienced significant channel bottom erosion and side slope failure. The drain will be reconstructed with a 10-foot channel bottom width, 4:1 side slopes, and a flatter channel profile. The District is expecting to begin project design and right-way-acquisition in the spring of 2016, and complete construction by the end of 2016.

The project engineer's cost estimate is \$732,500, of which \$611,386 is determined eligible as a rural flood control project at 45 percent (\$275,124), and \$61,250 is determined eligible as pre-construction engineering at 35 percent (\$21,438).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$296,562 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 15 channel improvements project.

It was moved by Commissioner Nodland and seconded by Tom Bodine, representing Commissioner Goehring, that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$296,562 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 15 channel improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

**CASS COUNTY DRAIN NO. 37
CHANNEL IMPROVEMENTS -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$230,326)
(SWC Project No. 1088)**

A request from the Maple River Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Cass County Drain No. 37 channel improvements project. The proposed project is

the reconstruction of approximately one mile of an existing legal assessment drain located west of the city of Davenport, North Dakota within Addison Township of Cass County, which has experienced significant channel bottom erosion and side slope failure. The drain will be reconstructed with a 10-foot channel bottom width, 4:1 side slopes, and a flatter channel profile. The District is expecting to begin project design and right-way-acquisition in the spring, 2016, and complete construction by the end of 2016.

The project engineer's cost estimate is \$571,000, of which \$472,362 is determined eligible as a rural flood control project at 45 percent (\$212,563), and \$50,750 is determined eligible as pre-construction engineering at 35 percent (\$17,763).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$230,326 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 37 channel improvements project.

It was moved by Commissioner Nodland and seconded by Tom Bodine, representing Commissioner Goehring, that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$230,326 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 37 channel improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

**CASS COUNTY DRAIN NO. 39
CHANNEL IMPROVEMENTS -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$221,871)
(SWC Project No. 1089)**

A request from the Maple River Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Cass County Drain No. 39 channel improvements project. The proposed project is

the reconstruction of approximately one mile of an existing legal assessment drain located west of the city of Davenport, North Dakota within Maple River Township of Cass County, which has experienced significant channel bottom erosion and sliding on the side slopes. The drain will be reconstructed with a stable 12-foot channel bottom width, 4:1 side slopes on the field side and 3:1 on the road side, and a flatter channel profile. The District is expecting to begin project design and right-way-acquisition in the spring, 2016, and complete construction by the end of 2016.

The project engineer's cost estimate is \$550,500, of which \$454,546 is determined eligible as a rural flood control project at 45 percent (\$204,546), and \$49,500 is determined eligible as pre-construction engineering at 35 percent (\$17,325).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$221,871 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 39 channel improvements project.

It was moved by Commissioner Nodland and seconded by Tom Bodine, representing Commissioner Goehring, that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$221,871 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 39 channel improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

**SHEYENNE-MAPLE FLOOD CONTROL
DISTRICT NO. 1, WATER QUALITY
MITIGATION IMPROVEMENTS -
APPROVAL OF STATE COST
PARTICIPATION GRANT (\$198,023)
(SWC Project No. 2066)**

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Sheyenne-Maple Flood Control District No. 1, water quality mitigation improvements project. The proposed

project is to improve the water quality within the protected area of the West Fargo diversion when the diversion is in operation.

In recent years, high flows in the Sheyenne River have resulted in the West Fargo diversion being operated for long periods during summer causing the river channel between the closure gates to become stagnant. This causes significant algae growth resulting in water quality concerns for habitat and visual/odor impacts to residents. The proposed project will bypass the existing diversion closure structure through a pipe system running parallel to the structure.

The project engineer's cost estimate is \$365,000, of which \$316,094 is determined eligible for construction of the flood control modifications project at 60 percent (\$189,656), and \$23,906 is determined eligible as pre-construction engineering at 35 percent (\$8,367).

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant for construction of the modifications to the flood control project at 60 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$198,023 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the Sheyenne-Maple Flood Control District No. 1, water quality mitigation improvements project.

It was moved by Commissioner Thompson and seconded by Commissioner Nodland that the State Water Commission approve a state cost participation grant for construction of the modifications to the flood control project at 60 percent of the eligible costs, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$198,023 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the Sheyenne-Maple Flood Control District No. 1, water quality mitigation improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, Foley, Hanson, Nodland, Thompson, Vosper, and Governor Dalrymple voted aye. Commissioner Swenson voted nay. Recorded vote was 8 ayes; 1 nay. Governor Dalrymple announced the motion carried.

**FEDERAL 2016 FISCAL YEAR
MR&I WATER SUPPLY FUNDING -
APPROVAL OF \$11,411,500
(SWC Project Nos. 237-03BRL,
237-03CAS, 237-03CRR, 237-03CSS,
237-03KIN, 237-03-NGL, 237-03RUG,
237-03WAH, 237-03WES, 1736-99)**

The proposed federal 2016 Fiscal Year allocation for the Garrison Diversion Unit includes funding of \$15,560,000 for the following projects under the North Dakota Municipal, Rural and Industrial (MR&I) Water Supply program. On July 29, 2015, the State Water Commission adopted a motion approving federal

2016 Fiscal Year MR&I grants not to exceed \$4,148,500 for the cities of Gladstone, Glenburn, Makoti, Mohall, and Sherwood:

City of Burlington:

The city of Burlington is proposing construction of a 300,000-gallon water tower and new water main to address current and future demands of the system. The project engineer's estimated cost is \$2,593,333, which is determined eligible for a 60 percent grant (\$1,556,000). The city currently serves 1,060 people,

The city's project engineer informed the Commission members that the funding request for construction of a 300,000-gallon water tower could be considered in the future when the subdivision water demands require the additional water. The current need is for construction to begin in 2016 on the new 10-inch water main to address current and future demands of the system. The project engineer's cost estimate for the water main is \$1,000,000, which is determined eligible for a 60 percent grant (\$600,000).

Cass Rural Water Users District, Leonard Service Area:

The Cass Rural Water Users District is proposing the installation of 25 miles of distribution pipeline to serve 35 rural water users and 60 individual service connections within the city of Leonard, North Dakota to address water quality issues with arsenic. The project engineer's cost estimate is \$3,167,000, with costs of \$3,160,000 eligible for a 75 percent grant (\$2,370,000).

City of Carrington:

The city of Carrington is proposing construction of a new 500,000-gallon elevated water storage tank and installation of a new high service pump building to address current and future demands of the system. The city serves 2,075 people, service areas of the Stutsman Rural Water District, and service areas of the

Greater Ramsey Water District. The water supply is from ground water wells. The project engineer's cost estimate is \$3,185,000, with costs of \$3,166,667 eligible for a 60 percent grant (\$1,900,000).

City of Casselton:

The city of Casselton is proposing construction of a 500,000-gallon water tower to address current and future demands of the system. The city currently serves 2,491 people and purchases water from the Cass Rural Water Users District. The project engineer's cost estimate is \$2,110,000, with costs of \$2,080,000 eligible for a 60 percent grant (\$1,248,000).

City of Kindred:

The city of Kindred is proposing construction of a new 150,000-gallon water storage tank to address the current and future demands of the system. The city serves 722 people with a water supply from the Cass Rural Water Users District. The project engineer's eligible cost estimate is \$1,225,000, which is determined eligible for a 60 grant (\$735,000).

City of New England:

The city of New England is proposing construction of a new 200,000-gallon water storage tank and installation of a new water main to address the current and future demands of the system. The city serves 632 people and the water supply is from the Southwest Pipeline Project. The project engineer's cost estimate is \$2,799,872, with costs of \$2,654,167 eligible for a 60 percent grant (\$1,592,500).

City of Rugby:

The city of Rugby is proposing improvements to the water treatment plant to increase efficiency of the booster pump station, lime handling system, and electrical upgrades. The city serves 2,900 people and the All Seasons Water Users District systems. The project engineer's cost estimate is \$763,000, which is determined eligible for a 60 percent grant (\$458,000).

City of Wahpeton:

The city of Wahpeton is proposing improvements to the water treatment plant to increase efficiency and capacity in the lime handling system and for electrical upgrades. The city serves 7,853 people with their water supply from ground water wells. The project engineer's cost estimate is \$1,600,000, which is determined eligible for a 60 percent grant (\$960,000).

City of Westhope:

The city of Westhope is proposing the installation of a new water main to address the current and future demands of the system. The city serves 427 people with their water supply from ground water wells. The project engineer's cost estimate is \$425,000, which is determined eligible for a 60 percent grant (\$255,000).

Southwest Pipeline Project:

The Southwest Pipeline projects currently being constructed are the supplemental raw water intake, at an estimated cost of \$18,900,000, and the city of Dickinson water treatment plant, at an estimated cost of \$31,700,000. The request is for an MR&I grant of \$1,000,000.

It was the recommendation of Secretary Sando that the State Water Commission approve federal 2016 Fiscal Year grants for the projects listed (\$11,411,500, includes \$293,000 for state administration), not to exceed a total allocation of \$15,560,000 (includes \$4,148,500 previously approved on July 29, 2015).

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission approve federal 2016 Fiscal Year Municipal, Rural and Industrial Water Supply (MR&I) program grants not to exceed an allocation of \$11,411,500 for the projects listed (includes \$293,000 for state administration), for a total federal 2016 Fiscal Year MR&I grant of \$15,560,000 (includes \$4,148,500 previously approved on July 29, 2015):

- 1) approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$600,000, to the city of Burlington to support their water main project;***
- 2) approve a federal 2016 Fiscal Year MR&I grant of 75 percent of eligible costs, not to exceed an allocation of \$2,370,000, to the Cass Rural Water Users to support the city of Leonard service area project;***
- 3) approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$1,900,000, to the city of Carrington to support their water tower project;***
- 4) approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$1,248,000, to the city of Casselton to support their water tower project;***
- 5) approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$735,000, to the city of Kindred to support their water tower project;***

6) **approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$1,592,500, to the city of New England to support their water tower project;**

7) **approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$458,000, to the city of Rugby to support their water treatment plant improvements project;**

8) **approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$960,000, to the city of Wahpeton to support their water treatment plant improvements project;**

9) **approve a federal 2016 Fiscal Year MR&I grant of 60 percent of the eligible costs, not to exceed an allocation of \$255,000, to the city of Westhope to support their water system improvements project; and**

10) **approve a federal 2016 Fiscal Year MR&I grant not to exceed \$1,000,000 for the Southwest Pipeline Project.**

These approvals are contingent upon the availability of funds, satisfaction of the federal Municipal, Rural and Industrial Water Supply program requirements, and are subject to future revisions.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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)**

Jason Benson, Cass County Engineer, provided updates on the local, state and federal efforts currently underway on the Fargo Moorhead Area Diversion project, and provided copies of the testimony presented by Tim Mahoney, Fargo Mayor, and Colonel Daniel Koprowski, Corps of Engineers District Commander, to the Interim Legislative Water Topics Overview Committee on March 8, 2016.

Mr. Benson reported that the Corps of Engineers had announced their new construction starts in February and the Fargo Moorhead Diversion is one of 6 new starts with \$5,000,000 allocated by the Corps for

2016. The Diversion Authority is working with the Corps on the Project Cooperative Agreement which they expect to sign in July. The project is being split into two phases, one phase consists of the Corps constructing the dam for the retention area beginning with the diversion inlet structure. They hope to issue the first construction contract this fall. Under the other phase, the Diversion authority will construct the 30-mile diversion channel through a public private partnership, known as P3. They plan to begin construction in the fall of 2017, with both phases planned to be completed in 2024.

Governor Dalrymple summarized a meeting held with local sponsors on March 8, 2016, at which State Engineer Sando informed Mayor Mahoney and others that they would need a construction permit for the dam and that one of the permit requirements is that the applicant needs to make known how they intend to address property rights. The State Engineer will decide if the property rights have been adequately addressed prior to permitting.

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

The Southwest Pipeline Project report was presented, which is detailed in the staff memorandum dated February 22, 2016, and included as ***APPENDIX "C"***.

***SOUTHWEST PIPELINE PROJECT -
AWARD OF CONTRACT 3-2D,
SECTION III - ELECTRICAL
CONSTRUCTION CONTRACT, TO
EDLING ELECTRIC, INC. (\$2,899,500)
(SWC Project No. 1736-99)***

Southwest Pipeline Project Contract 3-2D is for the construction of the 6 million gallons per day (MGD) water treatment plant that is designed to serve the growing needs of the Southwest Pipeline Project served by the water treatment plant located in Dickinson.

As required by North Dakota Century Code §48-01.1-06, the contract was divided into three sections: Section I - General Construction Contract, Section II - Mechanical Construction Contract, and Section III - Electrical Construction Contract. Bids for Contract 3-2D were opened on September 24, 2015. On October 10, 2015, the State Water Commission awarded Section I - General Construction Contract to John T. Jones Construction, Inc., and Section II - Mechanical Construction Contract to Williams Plumbing and Heating, Inc. Section III - Electrical Construction Contract was not awarded because the single bid received was more than 100 percent over the project engineer's estimate.

The scope of work for the Section III - Electrical Construction Contract includes switchgear, panel boards, VFDs, motor starters and conduit and wiring of power for the facility. The contract also includes the

following: furnishing and installing all power, lighting, electrical distribution, emergency power panels, MCC's and associated equipment; furnishing and installing all wiring and field connections to and for electrical items supplied under the General and Mechanical contracts and owner-purchased equipment; furnish and install 1000 KW diesel-powered standby engine generator with support slab and ATS; installation of owner-purchased instrumentation and control equipment; furnish and install lightning protection system and fire alarm; perform short-circuit and protective device coordination study and arc flash hazard analysis; and perform field testing. Two Bid Alternatives were included in the bid form - Bid Alternate 1 for the walk-in enclosure for the standby generator, and Bid Alternate 2 for reducing the use of rigid metallic electrical conduit.

Bids for Contract 3-2D, Section III - Electrical Construction Contract, were opened on January 28, 2016. Three bid packages were received from Edling Electric, Inc., Denny's Electric & Motor Repair, and Muth Electric, Inc.; all three bids were opened. The low bid was received from Edling Electric, Inc., and is a responsive bid in accordance with the Invitation for Construction Bids and Bid documents. It was the recommendation of the project engineer to award Section III - Electrical Construction Contract for the Base Bid plus Bid Alternate 2 to Edling Electric, Inc. in the amount of \$2,899,500.

The contract documents require that the State Water Commission award the contract within 60 calendar days after the bid opening as stipulated in the Invitation for Construction Bids, that date would be March 28, 2016. Because the funding for this contract may be used to qualify for future federal cost sharing through the state's Municipal, Rural and Industrial Water Supply program, the award of the contract requires concurrence from the Garrison Diversion Conservancy District and the Bureau of Reclamation, Dakotas Areas Office. The award of the contract and the Notice to Proceed are dependent on the satisfactory completion and submission of the contract documents by the contractor, and the 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 3-2D, Section III - Electrical Construction Contract to Edling Electric, Inc., in the amount of \$2,899,500 based on the Base Bid plus Bid Alternate 2.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 3-2D, Section III - Electrical Construction Contract to Edling Electric, Inc., in the amount of \$2,899,500 based on the Base Bid plus

Bid Alternate 2. This approval is contingent upon the satisfactory completion and submission of the contract documents by the contractor, review/approval by the Commission's legal counsel, and concurrence from the Garrison Diversion Conservancy District and the Bureau of Reclamation, Dakota Areas office.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 4-1F/4-2C,
PUMP STATION STANDBY ENGINE
GENERATOR UPGRADES, TO EDLING
ELECTRIC, INC. (\$1,847,000)
(SWC Project No. 1736-99)***

Southwest Pipeline Project Contract 4-1F/4-2C is for the pump station standby engine generator upgrades.

The scope of work for Contract 4-1F/4-2C generally consists of relocating the existing 1,000 kW Dodge pump station

standby engine generator to the Dickinson finished water pump station, furnishing and installing one new 1,500 kW (nominal) standby engine generator with fuel tank and transfer switch at the Dodge pump station; relocating the existing 1,500 kW Richardton pump station standby engine generator to the intake booster pump station; and furnishing and installing one new 2,000 kW (nominal) standby engine generator with fuel tank at the Richardton pump station. The work also includes extending the existing concrete pad and conduit at the Richardton pump station to accommodate the larger engine generator and installation of a new concrete pad, conduit, and a manual transfer switch at the intake booster pump station. The work includes all incidental work associated with the proper installation and connections of both new generators and the relocated generators including wiring, startup, and testing.

Three bid packages were received for Contract 4-1F/4-2C. Two bid packages were found to be in order and opened on January 28, 2016, these bid packages were received from Edling Electric, Inc., Bismarck, North Dakota, and Denny's Electric & Motor Repair, Inc., Dickinson, North Dakota. The contractor's signature on the bid bond for the third bid from Radtke Services, LLC, of Belfield, North Dakota was not attested and, therefore, the bid was not opened. The low bid was received from Edling Electric, Inc., Bismarck, North Dakota, and is a responsive bid in accordance with the Invitation for Construction Bids and Bid documents. It was the recommendation of the project engineer to award Southwest Pipeline Project Contract 4-1F/4-2C to Edling Electric, Inc., Bismarck, North Dakota, in the amount of \$1,847,000.

The contract documents require that the State Water Commission award the contract within 60 calendar days after the bid opening as stipulated in the Invitation for Construction Bids, that date would be March 28, 2016. The award of the contract and the Notice to Proceed are dependent on the satisfactory completion and submission of the contract documents by the contractor, and the 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 4-1F/4-2C to Edling Electric, Inc., Bismarck, North Dakota, in the amount of \$1,847,000.

It was moved by Commissioner Vosper and seconded by Commissioner Nodland that the State Water Commission authorize the Secretary to the Commission to award Southwest Pipeline Project Contract 4-1F/4-2C to Edling Electric, Inc., Bismarck, North Dakota, in the amount of \$1,847,000. This approval is contingent upon the satisfactory completion and submission of the contract documents by the contractor, and review/approval by the Commission's legal counsel.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 -
AUTHORIZE SECRETARY TO
COMMISSION TO EXECUTE
CONTRACTS FOR TRANSFER
OF SERVICE AREA
(SWC Project No. 1736-99)**

On December 11, 2015, the State Water Commission authorized the Secretary to the Commission to execute the Southwest Pipeline Project contract for the transfer of service area between the Southwest Water Authority, the State Water Commission, and the city of

Killdeer. This was the first annexation agreement negotiated between a city served by the Southwest Pipeline Project and the Southwest Water Authority.

The Southwest Water Authority is negotiating a transfer of service contract with other communities within the 12-county service area, excluding the city of Dickinson. The Authority is presently in negotiation with the city of Dickinson regarding the terms of their transfer.

It was the recommendation of Secretary Sando that the State Water Commission authorize the Secretary to the Commission to execute the Southwest Pipeline Project contract for transfer of service area with other cities within the service area.

It was moved by Commissioner Swenson and seconded by Commissioner Hanson that the State Water Commission authorize the Secretary to the State Water Commission to execute contracts for the transfer of the service area between the Southwest Water Authority, the State Water Commission, and other cities within the project service area.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 -
PROJECT UPDATE
(SWC Project No. 237-04)***

The Northwest Area Water Supply (NAWS) project update was provided, which is detailed in the staff memorandum dated February 17, 2016, and included as ***APPENDIX "D"***.

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

The Mouse River Enhanced Flood Protection project status report was provided, which is detailed in the staff memorandum dated February 22, 2016, and included as ***APPENDIX "E"***.

***MOUSE RIVER ENHANCED
FLOOD PROTECTION PROJECT -
STRUCTURE ACQUISITION, RELOCATION,
OR RING DIKE (STARR) PROGRAM -
APPROVAL OF \$7,200,000
(SWC Project No. 1974)***

The Mouse River Enhanced Flood Protection project is a basin-wide program which provides flood control for all residents, urban and rural, in the Mouse River basin. The need for an acquisition program in these areas was identified in the rural reaches component of the preliminary engineering study. In response, the Souris River Joint Board developed the Structure Acquisition, Relocation, or Ring Dike (StARR) program, whereby the rural residents would be given an opportunity to participate in the program. Additional phases of the StARR program will be implemented based on the availability of state and local funds, and will be subject to the State Water Commission's cost share policy requirements.

The Souris River Joint Board held a series of public meetings and has identified 165 potential properties at an estimated total cost of \$24,000,000. A request from the Souris River Joint Board was presented for the State Water Commission's consideration for state cost participation for Phase I of the project (\$12,000,000), to be matched with a combination of sales tax proceeds from the city of Minot and a local contribution from each property owner.

It was the recommendation of Secretary Sando that the State Water Commission approve a state cost participation grant of 60 percent of the eligible costs, not to exceed an allocation of \$7,200,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Structure Acquisition, Relocation, or Ring Dike (StARR) program.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant of 60 percent of the eligible costs, not to exceed an allocation of \$7,200,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Structure Acquisition, Relocation, or Ring Dike (StARR) program. This approval is contingent upon the availability of funds.

Commissioners Berg, Tom Bodine representing Commissioner Goehring, 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 ENHANCED
FLOOD PROTECTION PROJECT -
ENVIRONMENTAL ENGINEERING -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION GRANT (\$987,000)
(SWC Project No. 1974)***

On October 7, 2013, the State Water Commission adopted a motion authorizing the engineering costs for the design of the 4th Avenue Northeast Floodwalls, and the Forest Road and Napa Valley Flood Improvements for the Mouse River Enhanced Flood Protection

project eligible for a cost share participation grant of 60 percent, and approved an allocation not to exceed \$3,830,400 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Souris River Joint Board to support the engineering costs.

On March 11, 2015, the State Water Commission adopted a motion approving a 60 percent state cost participation grant not to exceed an allocation of \$3,000,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the Souris River Joint Board to support the environmental engineering efforts for the Mouse River Enhanced Flood Protection project. These approvals total the state cost participation allocation grants to \$6,830,400.

Because of the complexity of the engineering tasks for the Mouse River Enhanced Flood Protection project, Phase 1, 2, and 3, involving permitting requirements and the environmental impact statement process, a request from the Souris River Joint Board was presented for the State Water Commission's consideration for a 60 percent state cost participation for an additional allocation of \$987,000 for the engineering costs for Phases 1, 2, and 3 of the Mouse River Enhanced Flood Protection project.

It was the recommendation of Secretary Sando that the State Water Commission approve a 60 percent state cost participation grant not to exceed an additional allocation of \$987,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the engineering environmental efforts for the Mouse River Enhanced Flood Control project, Phases 1, 2, and 3. The Commission's affirmative approval would increase the total state cost participation grants to \$7,817,000.

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve a 60 percent state cost participation grant not to exceed an additional allocation of \$987,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the engineering environmental efforts for the Mouse River Enhanced Flood Control project, Phases 1, 2, and 3. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

These approvals increase the total state allocation grants to \$7,817,000 for the Mouse River Enhanced Flood Protection project, Phases 1, 2, and 3, engineering environmental efforts.

**DEVILS LAKE HYDROLOGIC
AND PROJECT UPDATES
(SWC Project No. 416-10)**

The Devils Lake hydrologic report and project updates are detailed in the staff memorandum dated February 24, 2016, and included as **APPENDIX "F"**.

**DEVILS LAKE OUTLETS OPERATIONS -
APPROVAL OF 2015 SENATE BILL 2020
APPROPRIATION FOR OPERATIONS
OF DEVILS LAKE OUTLETS (\$11,000,000)
(SWC Project No. 416-10)**

The Sixty-fourth Legislative Assembly of North Dakota included \$11,000,000 in Senate Bill 2020, the State Water Commission's appropriation bill for the 2015-2017 biennium, for the operations of the Devils Lake outlets.

It was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed \$11,000,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) for the operations of the Devils Lake outlets.

It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve an allocation not to exceed \$11,000,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) for the operations of the Devils Lake outlets. This action is contingent upon the availability of funds.

**2016 SPRING FLOOD OUTLOOK
(SWC Project No. 1431)**

The 2016 spring flood outlook was provided, which is detailed in the staff memorandum dated February 25, 2016, and included as **APPENDIX "G"**.

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

The Missouri River report was provided, which is detailed in the staff memorandum dated February 18, 2016, and included as **APPENDIX "H"**.

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

Duane DeKrey, Garrison Diversion Conservancy District general manager, provided a status report on the District's activities relating to the MR&I Water

Supply program federal funding process, the Red River Valley Water Supply project, and operations and maintenance efforts.

There being no further business to come before the State Water Commission, Governor Dalrymple adjourned the March 9, 2016 meeting at 4:50 p.m.





Jack Dalrymple, Governor
Chairman, State Water Commission



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

STATE WATER COMMISSION
 ALLOCATED PROGRAM EXPENDITURES
 FOR THE PERIOD ENDED JANUARY 31, 2016
 BIENNIUM COMPLETE: 29%

APPENDIX "A"
 March 9, 2016

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	17-Feb-16 PROGRAM TOTALS
ADMINISTRATION				
Allocated	2,729,489	2,806,129		5,535,618
Expended	787,567	465,504		1,253,072
Percent	29%	17%		23%
			General Fund:	0
			Federal Fund:	22,108
			Special Fund:	1,230,963
PLANNING AND EDUCATION				
Allocated	1,472,573	352,990		1,825,563
Expended	426,205	61,581		487,786
Percent	29%	17%		27%
			General Fund:	0
			Federal Fund:	81,825
			Special Fund:	405,961
WATER APPROPRIATION				
Allocated	5,762,691	1,185,300	1,372,844	8,320,835
Expended	1,568,827	167,627	13,000	1,749,454
Percent	27%	14%	1%	21%
			General Fund:	0
			Federal Fund:	13,000
			Special Fund:	1,736,454
WATER DEVELOPMENT				
Allocated	4,713,717	10,742,500	1,562,500	17,018,717
Expended	1,249,583	3,204,102	272,287	4,725,972
Percent	27%	30%	17%	28%
			General Fund:	0
			Federal Fund:	79,113
			Special Fund:	4,646,859
STATEWIDE WATER PROJECTS				
Allocated			959,003,567	959,003,567
Expended			113,990,911	113,990,911
Percent			12%	12%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	113,990,911
REGULATORY DIVISION				
Allocated	2,828,565	2,947,500	15,000	5,791,065
Expended	579,681	262,674	0	842,356
Percent	20%	9%	0%	15%
			General Fund:	0
			Federal Fund:	340,041
			Special Fund:	502,315
ATMOSPHERIC RESOURCE				
Allocated	1,107,158	743,382	4,885,212	6,735,752
Expended	301,174	89,736	541,896	932,805
Percent	27%	12%	11%	14%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	932,805
SOUTHWEST PIPELINE				
Allocated	512,995	10,461,744	97,502,498	108,477,237
Expended	183,577	3,403,682	19,502,125	23,089,384
Percent	36%	33%	20%	21%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	23,089,384
NORTHWEST AREA WATER SUPPLY				
Allocated	705,632	13,910,277	31,611,573	46,227,482
Expended	171,037	887,565	322,714	1,381,315
Percent	24%	6%	1%	3%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	1,381,315
PROGRAM TOTALS				
Allocated	19,832,820	43,149,822	1,095,953,194	1,158,935,836
Expended	5,267,650	8,542,472	134,642,932	148,453,055
Percent	27%	20%	12%	13%

STATE WATER COMMISSION
 PROJECTS/GRANTS/CONTRACT FUND
 2015-2017 BIENNIUM

	Jan-16				
	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
FLOOD CONTROL					
FARGO	228,506,200	159,506,200	24,868,110	69,000,000	134,638,090
GRAFTON	33,925,000	8,925,000	785,627	25,000,000	8,139,373
MOUSE RIVER FLOOD CONTROL	46,513,397	8,002,347	1,864,370	38,511,050	6,137,977
VALLEY CITY	32,208,354	14,208,354	3,752,029	18,000,000	10,456,325
LISBON	15,807,952	3,807,952	3,107,400	12,000,000	700,552
FORT RANSOM	225,000	225,000	0	0	225,000
WILLISTON	7,000,000			7,000,000	
RENWICK DAM	23,320	23,320	0	0	23,320
MISSOURI RIVER FLOOD CONTROL	4,000,000	4,000,000	4,000,000	0	0
FLOODWAY PROPERTY ACQUISITIONS					
MINOT	23,879,316	23,879,316	4,450,096	0	19,429,220
WARD COUNTY	6,046,590	6,046,590	31,243	0	6,015,347
VALLEY CITY	267,403	267,403	0	0	267,403
BURLEIGH COUNTY	232,649	232,649	0	0	232,649
SAWYER	184,260	184,260	0	0	184,260
LISBON	45,485	45,485	0	0	45,485
BURLINGTON	43,350	43,350	0	0	43,350
STATE WATER SUPPLY					
REGIONAL & LOCAL WATER SYSTEMS	122,097,566	122,097,566	25,976,834	0	96,120,731
FARGO WATER TREATMENT PLANT	22,768,775	22,768,775	6,750,001	0	16,018,774
GRAND FORKS WATER TREATMENT PLANT	30,000,000			30,000,000	
SOUTHWEST PIPELINE PROJECT	104,832,765	104,832,764	23,089,384	0	81,743,380
NORTHWEST AREA WATER SUPPLY	15,754,482	5,754,482	657,181	10,000,000	5,097,301
WESTERN AREA WATER SUPPLY AUTHORITY	82,201,384	82,201,384	25,632,896	0	56,568,488
RED RIVER VALLEY WATER SUPPLY	12,521,328	12,521,328	3,032,845	0	9,488,483
CENTRAL NORTH DAKOTA WATER SUPPLY	70,070,800	70,800	69,804	70,000,000	997
UNOBLIGATED STATE WATER SUPPLY	34,747,719			34,747,719	
GENERAL WATER MANAGEMENT					
OBLIGATED	27,469,438	27,469,438	9,325,481	0	18,143,957
UNOBLIGATED GENERAL WATER	45,456,568			45,456,568	
DEVILS LAKE					
OUTLET	870,802	870,802	0	0	870,802
OUTLET OPERATIONS	18,534,210	7,534,210	3,419,742	11,000,000	4,114,468
DL EAST END OUTLET	2,774,011	2,774,011	0	0	2,774,011
REVOLVING LOAN FUND					
GENERAL WATER PROJECTS	11,000,000	886,500	886,500	10,113,500	0
WATER SUPPLY	25,000,000	10,239,475	3,500,000	14,760,525	6,739,475
TOTALS	1,025,008,125	629,418,761	145,199,543	395,589,365	484,219,218

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2015-2017 Biennium

				PROGRAM OBLIGATION				
Approved S/WC By	No	Dept	Sponsor	Project	Initial	Total	Total	Jan-16
					Approved Date	Approved	Payments	Balance
Flood Control:								
SB 2020	1928-01	5000	City of Fargo	Fargo Flood Control Project	6/23/2009	99,506,200	11,595,442	87,910,758
SB 2020	1928-02	5000	City of Fargo	Inferior Flood Control Project	12/11/2015	30,000,000	3,456,750	26,543,250
SB 2020	1928-03	5000	City of Fargo	Inferior Disaster Relief Fund	12/11/2015	30,000,000	9,815,918	20,184,082
	1771-01	5000	City of Grafton	Grafton Flood Control Project	3/11/2010	7,175,000	0	7,175,000
	1771-02	5000	City of Grafton	Grafton Flood Risk Reduction Project	12/5/2014	1,750,000	785,627	964,373
	1974-06	5000	Souris River Joint WRD	Development of 2011 Flood Inundation Maps	12/18/2015	5,600	0	5,600
SB 2371	1974-08	5000	Souris River Joint WRD	Mouse River Reconnaissance Study to Meet Fed Guir	2/15/2013	809	0	809
	1974-09	5000	Souris River Joint WRD	4th Ave NE & Napa Valley/Forest Rd Flood Improvem	10/7/2013	4,890,512	1,864,370	3,026,142
	1974-13	5000	Souris River Joint WRD	Broadway Pump Station	12/11/2015	1,440,000	0	1,440,000
	1758	5000	Souris River Joint WRD-no agreemen	International Joint Commission Study Board	5/29/2014	302,500	0	302,500
	1974-11	5000	Souris River Joint WRD	Funding of 214 agreement between SRJB & USACE	12/5/2014	106,500	0	106,500
	1993-01	5000	City of Minot	Downtown Infrastructure Improvements	9/15/2014	1,256,426	0	1,256,426
	1344-01	5000	Valley City	Sheyenne River Valley Flood Control Project	12/5/2015	157,296	156,993	303
	1344	5000	Valley City	Sheyenne River Valley Flood Control Project PHII	5/20/2015	340,000	0	340,000
	1504-01	5000	Valley City	Permanent Flood Protection Project	12/5/2014	9,850,444	3,595,036	6,255,408
	1504-02	5000	Valley City	Permanent Flood Protection Project (LOAN)	12/5/2014	3,860,614	0	3,860,614
SB 2371	1344-02	5000	City of Lisbon	Sheyenne River Valley Flood Control Project	6/19/2013	92,810	88,227	4,583
	1991-01	5000	City of Lisbon	Permanent Flood Protection Project	5/29/2014	561,702	414,733	146,969
	1991-03	5000	City of Lisbon	Permanent Flood Protection - Levee C Project	3/11/2015	3,153,440	2,604,440	549,000
SB 2371	1344-03	5000	Fort Ransom	Sheyenne River Valley Flood Control Project	6/19/2013	225,000	0	225,000
	849	5000	Pembina Co. WRD	Renwick Dam Rehabilitation	6/26/2014	23,320	0	23,320
	1992-02	5000	Burleigh Co. WRD	Missouri River Correctional Center	9/21/2015	1,200,000	1,200,000	0
SB 2020	1992-03	5000	Burleigh Co. WRD	Fox Island Flood Control Funding Update	9/21/2015	2,800,000	2,800,000	0
Subtotal Flood Control						198,698,173	38,377,536	160,320,637
Floodway Property Acquisitions:								
	1993-05	5000	City of Minot	Minot Phase 2 - Floodway Acquisitions	10/7/2013	23,879,316	4,450,096	19,429,220
SB 2371	1523-05	5000	Ward County	Ward County Phase 1, 2 & 3 - Floodway Acquisitions	1/27/2012	6,046,590	31,243	6,015,347
SB 2371	1504-05	5000	Valley City	Valley City Phase 1 - Floodway Acquisitions	7/23/2013	267,403	0	267,403
SB 2371	1992-05	5000	Burleigh Co. WRD	Burleigh Co. Phase 1 - Floodway Acquisitions	3/7/2012	232,649	0	232,649
SB 2371	2000-05	5000	City of Sawyer	Sawyer Phase 1 - Floodway Acquisitions	6/13/2012	184,260	0	184,260
	1991-05	5000	City of Lisbon	Lisbon - Floodway Acquisition	3/11/2015	45,485	0	45,485
	1987-05	5000	City of Burlington	Mouse River Enhanced Flood Plan Property Acquisitio	12/29/2015	43,350	0	43,350
Subtotal Floodway Property Acquisitions						30,699,053	4,481,339	26,217,714
State Water Supply Grants:								
	2373-35	5000	Grand Forks - Traill RWD	Grand Forks - Traill County WRD	6/13/2012	303,715	216,761	86,954
	2373-36	5000	Stutsman Rural RWD	Stutsman Rural Water System - Phase IIB, III	2/27/2013	4,443,172	3,816,364	626,808
	2373-38	5000	Stutsman Rural RWD	Kidder Co & Carrington Area Expansion	7/23/2013	991,361	294,679	696,683
	2373-39	5000	North Central Rural Water Consortiur	Carpio Berthold Phase 2	5/29/2014	2,970,141	478,254	2,491,888
	2373-41	5000	North Central Rural Water Consortiur	Granville-Deering Area	3/11/2015	5,594,102	1,801,537	3,792,565
	2050-01	5000	Missouri West Water System	South Mandan	3/17/2014	205,711	148,457	57,254
	2050-02	5000	Grand Forks Traill RWD	improvements	3/11/2015	4,369,058	1,683,249	2,685,809
	2050-03	5000	Northeast Regional WD	Langdon RWD - ABM Pipeline Phase 1	10/7/2013	540,526	540,437	89
	2050-04	5000	Northeast Regional WD	Langdon RWD - North Valley Nekoma	3/11/2015	859,341	806,962	52,379
	2050-05	5000	Northeast Regional WD	North Valley WD - ABM Pipeline Phase 1	3/11/2015	292,958	226,524	64,434
	2050-06	5000	Northeast Regional WD	North Valley WD - 93 Street	3/11/2015	937,870	641,403	296,467
	2050-07	5000	Northeast Regional WD	North Valley WD - Rural Expansion	5/29/2014	1,481,717	1,451,048	1,030,669
	2050-08	5000	Walsh RWD	Ground Storage	10/7/2013	322,656	169,977	152,679
	2050-09	5000	City of Park River	Water Tower	3/11/2015	633,778	567,420	66,358
	2050-10	5000	City of Surrey	Water Supply Improvements	10/7/2013	1,117,800	906,399	211,401
	2050-11	5000	Cass RWD	Phase 2 Plant Improvements	10/7/2013	3,951,363	950,723	3,000,641
	2050-13	5000	City of Mandan	New Raw Water Intake	10/7/2013	1,567,676	48,441	1,519,235
	2050-14	5000	City of Mandan	Water Treatment Plant Improvements	10/7/2013	267,521	225,616	41,905
	2050-15	5000	City of Washburn	New Raw Water Intake	10/7/2013	2,334,250	0	2,334,250
	2050-16	5000	Tri-County RWD	Improvements	10/7/2013	845,000	0	845,000
	2050-17	5000	Barnes Rural RWD	Improvements	3/11/2015	6,512,662	2,992,026	3,520,636
	2050-18	5000	City of Grafton	Water Treatment Plant Phase 3	10/7/2013	3,381,148	590,587	2,790,561
	2050-19	5000	City of Grand Forks	Water Treatment Plant Improvements	10/7/2013	3,849,151	1,471,142	2,378,009
	2050-20	5000	City of Dickinson	Capital Infrastructure	10/6/2015	9,803,461	2,509,557	7,293,904
	2050-21	5000	Watford City	Capital Infrastructure	2/27/2014	1,897,040	1,055,708	841,332
	2050-22	5000	City of Williston	Capital Infrastructure	2/27/2014	4,119,610	279,884	3,839,726
	2050-23	5000	Greater Ramsey WRD	SW Nelson County Expansion	3/17/2014	4,199,547	2,058,968	2,140,580
	2050-24	5000	All Seasons Water District	System 1 Well Field Expansion	9/15/2014	292,500	0	292,500
	2050-25	5000	All Seasons Water District	Bottineau County Extension, Phase I	7/29/2015	896,000	0	896,000
	2050-26	5000	City of Fargo	Fargo Water System Regionalization Improvements	7/29/2015	6,841,750	0	6,841,750
	2050-27	5000	City of Tioga	Tioga Water Supply Improvement Project	7/29/2015	2,190,000	1,042,711	1,147,289
	2050-28	5000	City of Mandan	Water Systems Improvement Project	10/6/2015	2,290,175	0	2,290,175
	2050-29	5000	City of Minot	Water Systems Improvement Project	10/6/2015	3,634,000	0	3,634,000
	2050-30	5000	Watford City	Water Systems Improvement Project	10/6/2015	5,435,087	0	5,435,087
	2050-31	5000	City of West Fargo	Water Systems Improvement Project	10/6/2015	3,426,210	0	3,426,210
	2050-32	5000	City of Williston	Water Systems Improvement Project	10/6/2015	10,890,472	0	10,890,472
	2050-33	5000	Stutsman RWD	Phase V Storage & Pipeline Expansion Project	10/6/2015	4,170,100	0	4,170,100
	2050-34	5000	North Prairie RWD	Storage and Water Main	10/6/2015	3,459,837	0	3,459,837
	2050-35	5000	Southeast Water Users Dist	System Wide Expansion Feasibility Study	10/6/2015	35,000	0	35,000
	2050-36	5000	City of Dickinson	Water Systems Improvement Project	10/6/2015	1,042,500	0	1,042,500
	2050-37	5000	City of Dickinson	Dickinson State Avenue South Water Main	12/11/2015	965,000	0	965,000
	2050-38	5000	Dakota Rural Water District	Reservoir C Expansion	12/11/2015	901,500	0	901,500
	2050-39	5000	Missouri West Water System	Crown Butte Service Area Expansion Phase II	12/11/2015	308,000	0	308,000
	2050-41	5000	Northeast Regional WD	City of Devils Lake Water Supply Project	12/11/2015	533,750	0	533,750
	2050-42	5000	Walsh RWD	Phase 1 & 2 System Expansion	12/11/2015	2,083,350	0	2,083,350
	2050-43	5000	All Seasons Water District	System 4 Connection to System 1	12/11/2015	4,900,000	0	4,900,000
Subtotal State Water Supply						122,097,566	25,976,834	96,120,731
	1984-02	5000	City of Fargo	Fargo Water Treatment Plant	3/17/2014	22,768,775	6,750,001	16,018,774
	1736-05	8000	SWPP	Southwest Pipeline Project	7/11/2013	104,832,764	23,089,384	81,743,380
	2374	9000	NAWS	Northwest Area Water Supply	7/11/2013	5,754,482	657,181	5,097,301
	1973-02	5000	WAWSA	WAWSA - (GRANT)	10/6/2015	12,061,806	10,623,045	1,438,761
	1973-05	5000	WAWSA	WAWSA - (GRANT)	10/6/2015	60,000,000	4,870,273	55,129,727
	1973-03	5000	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,139,578	10,139,578	0
	325-102	5000	RRWWS	Red River Valley Water Supply - Intake Design Study	5/29/2014	162,328	32,845	129,483
SB 2020	325-104	5000	Garrison Diversion	Red River Valley Water Supply Project	7/29/2015	12,359,000	3,000,000	9,359,000
	2051-101	5000	Central ND Water Supply	Black and Veatch investigation	1/27/2015	70,800	69,804	997
Subtotal State Water Supply						228,149,533	59,232,111	168,917,422

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2015-2017 Biennium

PROGRAM OBLIGATION

Approved SWC By	No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jan-16 Balance
General Water Management								
Hydrologic Investigations:							1,125,267	
1395D	3000	U. S. Geological Survey	Eaton Irrigation Project on the Souris River	7/13/2012	15,300	0	15,300	
Hydrologic Investigations Obligations Subtotal						15,300	0	15,300
Remaining Hydrologic Investigations Authority						1,109,967		
Hydrologic Investigations Authority Less Payments								
General Projects Obligated						22,677,574	5,960,325	16,717,249
General Projects Completed						3,666,597	3,365,156	301,441
Subtotal General Water Management						27,469,438	9,325,481	18,143,957
Deviils Lake Basin Development:								
SWC	416-07	5000	Multiple	Deviils Lake Outlet	7/1/2013	870,802	0	870,802
SWC	416-10	4700	Operations	Deviils Lake Outlet Operations	7/1/2013	7,534,210	3,419,742	4,114,468
SWC	416-15	5000	Multiple	DL East End Outlet	7/1/2013	2,774,011	0	2,774,011
Deviils Lake Subtotal						11,179,023	3,419,742	7,759,282
Revolving Loan Fund:								
1991-04	1050	City of Lisbon	Permanent Flood Protection - Levee C (LOAN);	3/1/2015	886,500	886,500	0	
1973-04	1050	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,000,000	3,500,000	6,500,000	
2050-40	1050	North Prairie Rural Water District	Storage & Water Mains	12/11/2015	239,475	0	239,475	
Revolving Loan Fund Subtotal						11,125,975	4,386,500	6,739,475
TOTAL						629,418,761	145,199,543	484,219,218

STATE WATER COMMISSION
PROJECTS/GRANTS/CONTRACT FUND
2015-2017 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jan-16 Balance
SWC	240	5000	2011-13	Eddy County WRD	Warwick Dam Repair Project	12/7/2012	110,150	0	110,150
SWC	281	5000	2009-11	Three Affiliated Tribes	Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	322	5000	2009-11	ND Water Education Foundati	ND Water: A Century of Challenge	2/22/2010	36,800	0	36,800
SWC	346	5000	2011-13	Williams County WRD	Epping Dam Evaluation Project	2/27/2013	66,200	0	66,200
SE	346	5000	2013-15	Williams County WRD	Design Engineering for Epping Dam Safety Repair	3/30/2015	21,333	12,874	8,459
SWC	347	5000	2009-11	City of Velva	City of Velva's Flood Control Levee System Certificati	3/28/2011	102,000	69,503	32,497
SE	399	5000	2013-15	Barnes Co WRD	Kathryn Dam Feasibility Study	9/19/2014	21,250	0	21,250
SWC	568	5000	2013-15	Southeast Cass WRD	Sheyenne River Reaches Snagging & Clearing Projec	12/5/2014	94,238	0	94,238
SE	568	5000	2013-15	Barnes Co WRD	Sheyenne River Snagging & Clearing Project	4/17/2015	49,500	0	49,500
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I, II, &	12/11/2015	294,000	0	294,000
SE	571	5000	2013-15	Oak Creek WRD	Oak Creek Snagging & Clearing Project	3/30/2015	3,672	2,565	1,107
SWC	620	5000	2007-09	Lower Heart WRD	Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SWC	645	5000	2009-11	City of Fargo	Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	0	44,280
SWC	646	5000	2009-11	City of Fargo	Christine Dam Recreation Retrofit Project	10/26/2010	184,950	0	184,950
SE	662	5000	2015-17	Walsh Co. WRD	Park River Snagging & Clearing	1/12/2016	29,264	0	29,264
SWC	710	5000	2015-17	Maple River WRD	Upper Swan Creek Channel Improvement Project	10/6/2015	171,763	0	171,763
SWC	829	5000	2011-13	Rush River WRD	Rush River WRD Berlin's Township Improvement Dist	10/19/2011	101,317	0	101,317
SE	841	5000	2013-15	Maple River WRD	Garsteig Dam Repair Project	1/26/2015	40,163	0	40,163
SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #5(Garsteig Dam)	12/11/2015	125,473	0	125,473
SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #12(Absaraka Dam)	12/11/2015	109,032	0	109,032
SE	848	5000	2015-17	Sargent Co WRD	Tewaukon WS-T-1-A (Brummond-Lubke) Dam EAP	12/18/2015	20,000	0	20,000
SE	848	5000	2015-17	Sargent Co WRD	Tewaukon WS-T-7 (Nelson) Dam EAP	12/18/2015	20,000	0	20,000
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Gate Repair	9/4/2015	53,700	34,528	19,172
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Emergency Action Plan	9/29/2015	63,680	0	63,680
SWC	980	5000	2015-17	Cass Co. Joint WRD	Rush River Watershed Delention Study	1/7/2016	154,000	0	154,000
SWC	980	5000	2013-15	Cass Co. Joint WRD	Swan Creek Watershed Detention Study PHII	3/11/2015	120,750	0	120,750
SWC	980	5000	2015-17	Cass Co. Joint WRD	Upper Maple River Watershed Detention Study	1/11/2016	154,000	0	154,000
SWC	1064	5000	2013-15	Rush River WRD	Cass County Drain No. 2 Channel Improvements Proj	3/11/2015	106,989	31,476	75,513
SWC	1101	5000	2011-13	Dickey Co. WRD	Yorktown-Maple Drainage Improvement Dist No. 3	12/11/2015	798,562	0	798,562
SWC	1101	5000	2011-13	Dickey-Sargent Co WRD	Riverdale Township Improvement District #2 - Dickey	9/21/2011	500,000	0	500,000
SWC	1135	5000	2011-13	Pembina Co. WRD	Drain #4 Reconstruction Project	6/19/2013	2,673	0	2,673
SE	1140	5000	2015-17	Pembina Co. WRD	Drain 11 Outlet Extension Cost Overrun Project	7/7/2015	5,088	0	5,088
SWC	1161	5000	2009-11	Pembina Co. WRD	Drain 55 Improvement Reconstruction	3/28/2011	13,846	0	13,846
SE	1179	5000	2013-15	Richland Co. WRD	Drain #5 (27) Reconstruction Project	3/30/2015	13,543	0	13,543
SWC	1217	5000	2013-15	Tri-County WRD	Tri-County Drain Reconstruction Project	3/11/2015	911,881	0	911,881
SWC	1219	5000	2011-13	Sargent Co WRD	City of Forman Floodwater Outlet	9/21/2011	31,472	0	31,472
SE	1219	5000	2013-15	Sargent Co WRD	Drain No. 8 Channel Improvement Preliminary Engine	5/7/2015	6,650	0	6,650
SWC	1227	5000	2011-13	Trail Co. WRD	Mergenthal Drain No. 5 Reconstruction	9/15/2014	18,502	6,277	12,225
SWC	1242	5000	2013-15	Trail Co. WRD	Rust Drain No. 24 Project	12/13/2013	25,152	3,002	22,150
SE	1264	5000	2013-15	Barnes Co WRD	Little Dam Repurposing Feasibility Study	6/17/2015	16,100	0	16,100
SWC	1270	5000	2013-15	Burleigh Co. WRD	Apple Creek Industrial Park Levee Feasibility Study	10/7/2013	65,180	0	65,180
SE	1270	5000	2015-17	City of Wilton	Wilton Pond Dredging Recreation Project	12/29/2015	35,707	0	35,707
SWC	1273	5000	2015-17	City of Oakes	James River Bank Stabilization	12/11/2015	262,500	0	262,500
SWC	1285	5000	2013-15	LaMoure County	LaMoure Co Memorial Park Streambank Restoration	9/15/2014	91,042	0	91,042
SE	1287	5000	2013-15	McHenry Co. WRD	Souris River Snagging & Clearing Project	2/3/2015	15,000	0	15,000
SE	1289	5000	2011-13	McKenzie Co. Weed Control	Control of Noxious Weeds on Sovereign Lands	9/30/2015	12,514	0	12,514
SWC	1294	5000	2013-15	Nelson Co. Park Board	Stump Lake Park Bank Stabilization Project	3/11/2015	115,436	0	115,436
SE	1296	5000	2013-15	Pembina Co. WRD	Bathgate-Hamilton & Carlisle Watershed Study	10/17/2013	45,226	38,500	6,726
SE	1301	5000	2009-11	City of Lidgerwood	City of Lidgerwood Engineering & Feasibility Study for	2/4/2011	15,850	0	15,850
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	1303	5000	2013-15	Sargent Co WRD	Gwinner Dam Improvement Feasibility Study Program	4/17/2015	42,844	0	42,844
SE	1303	5000	2013-15	Sargent Co WRD	Upper Wild Rice Watershed Study	6/24/2015	73,500	0	73,500
SE	1314	5000	2013-15	Wells Co. WRD	Hurdsfield Area Drain Preliminary Engineering Project	6/11/2015	35,000	0	35,000
SE	1314	5000	2015-17	Wells Co. WRD	Oak Creek Lateral E Reconstruction	12/29/2015	20,173	0	20,173
SE	1328	5000	2015-17	North Cass Co. WRD	Drain No. 23 Channel Improv Preliminary Engineering	9/30/2015	5,775	0	5,775
SWC	1389	5000	2013-15	Bank of ND	BND AgPace Program	12/13/2013	180,316	24,737	155,578
SE	1396-01	5000	2013-15	Trout, Raley, Montano, Witwe	Missouri River Recovery Program	11/17/2015	75,000	8,337	66,663
SWC	1401	5000	2015-17	Pembina Co. WRD	International Boundary Roadway Dike Pembina	12/11/2015	386,032	26,155	359,877
SE	1403	5000	2015-17	ND Water Resources Researc	(NDWRR) Student Fellowship Program	12/23/2015	18,850	0	18,850
SWC	1418	5000	2013-15	City of Bisbee	Big Coulee Dam Feasibility Study	5/29/2014	10,963	0	10,963
SWC	1418	5000	2013-15	City of Bisbee	Design & Repair of Big Coulee Dam	3/11/2015	862,218	0	862,218
SWC	1438	5000	2011-13	Cavalier County WRD	Mulberry Creek Phase IV Reconstruction Project	6/19/2013	102,019	0	102,019
SWC	1486	5000	2015-17	Griggs Co. WRD	Thompson Bridge Outlet No. 4 Project	10/6/2015	621,661	0	621,661
SWC	1523	5000	2015-17	Ward Co. WRD	Robinwood Bank Stabilization Project	10/6/2015	256,449	0	256,449
SWC	1523	5000	2015-17	Ward Co	Flood Control County Road 18	5/29/2015	325,208	232,538	92,670
SWC	1554	5000	2013-15	McLean Co. WRD	City of Underwood Floodwater Outlet Project	12/13/2013	1,100,727	1,004,376	96,351
SWC	1613	5000	2013-15	North Cass Co. WRD	Cass County Drain No. 55 Channel Improvements Prc	9/15/2014	99,923	42,152	57,771
SWC	1625	5000	2013-15	Houston Engineering	(OHWM) Ordinary High Water Mark Delineations	8/20/2014	4,560	0	4,560
SWC	1638	5000	2009-11	Multiple	Red River Basin Non-NRCS Rural/Farmstead Ring Di	6/23/2009	177,864	0	177,864
SE	1640	5000	2013-15	U.S. Geological Survey	(USGS) Maintenance of gaging station on Missouri Ri	9/25/2013	8,710	0	8,710
SE	1650	5000	2015-17	Sargent Co WRD	Drain #7 Channel Improvements Study	1/17/2016	6,214	0	6,214
SE	1667	5000	2015-17	Trail Co. WRD	Goose River Snagging & Clearing	12/18/2015	47,500	0	47,500
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	1705	5000	2011-13	Red River Joint Water Resour	Red River Basin Distributed Plan Study	12/7/2012	560,000	0	560,000
SE	1815	5000	2013-15	Ransom Co. WRD	Sheyenne River Snagging & Clearing - Fort Ransom F	6/11/2015	6,350	0	6,350
SE	1842	5000	2013-15	Southeast Cass WRD	Wild Rice River Snagging & Clearing	10/27/2015	57,000	0	57,000
SWC	1859	5000	2015-17	ND Dept of Health	NPS Pollution Project	7/29/2015	200,000	0	200,000
SE	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement Preliminary Engine	9/29/2015	17,500	0	17,500
SWC	1921	5000	2007-09	Morton Co. WRD	Square Butte Dam No. 6/(Harmon Lake) Recreation F	3/23/2009	731,002	0	731,002
SWC	1960	5000	2009-11	Ward Co. WRD	Puppy Dog Coulee Flood Control Diversion Ditch Con	8/18/2009	796,976	0	796,976
HB 2305	1963	5000	2009-11	Emmons County WRD	Beaver Bay Embankment Feasibility Study	8/10/2009	18,078	0	18,078
SWC	1968	5000	2013-15	Garrison Diversion	McClusky Canal Mile Marker 10 & 49 Irrigation Project	3/17/2014	256,321	204,707	51,614
SWC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	5/20/2015	1,601,325	148,246	1,453,079

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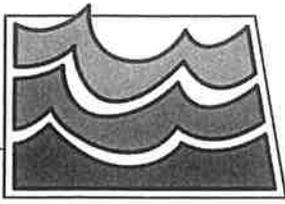
GENERAL PROJECT OBLIGATIONS

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Jan-16 Balance
SWC	1978	5000	2011-13	Richland & Sargent Joint WRD	Richland & Sargent WRD RS Legal Drain No. 1 Exten	7/23/2015	245,250	145,910	99,340
SWC	1983	5000	2011-13	City of Harwood	City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,500
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
SE	1991	5000	2011-13	City of Lisbon	Sheyenne River Snagging & Clearing Project	2/12/2013	5,000	0	5,000
SWC	1991	5000	2013-15	City of Lisbon	Sheyenne Riverbank Stabilization Project	9/15/2014	163,720	114,152	49,568
SWC	1992	5000	2011-13	Burleigh Co. WRD	Burnt Creek Flood Restoration Project	7/29/2015	179,890	0	179,890
SE	1974	5000	2015-17	USGS	USGS Web-Based Mouse River Information Page	1/19/2016	24,700	0	24,700
SWC	2008	5000	2013-15	City of Mapleton	Recertification of Flood Control Levee System Project	3/17/2014	101,100	0	101,100
SWC	2019	5000	2011-13	Valley City	Sheyenne River Snagging & Clearing Project	12/7/2012	75,000	0	75,000
SWC	2022	5000	2011-13	Pembina Co. WRD	Drain #73 Project	6/19/2013	350,400	0	350,400
SWC	2042	5000	2013-15	Bottineau Co. WRD	Haas Coulee Drain Project	9/15/2014	500,000	181,269	318,731
SWC	2043	5000	2013-15	Pembina Co. WRD	District's Drain 78 Outlet Extension Project	12/13/2013	287,778	270,149	17,629
SWC	2045	5000	2013-15	Mercer Co. WRD	LIDAR Collection Project	5/29/2014	10,425	0	10,425
SWC	2045	5000	2013-15	McKenzie Co. Commission	LIDAR Collection Project	9/15/2014	262,308	0	262,308
SE	2045	5000	2013-15	Stark County	Stark County LIDAR Collection Project (FEMA)	7/17/2015	33,584	0	33,584
SE	2055	5000	2015-17	Red River Joint Water Resour	Lower Red Basin Regional Detention Study	7/17/2015	45,500	0	45,500
SE	2058	5000	2015-17	City of Grafton	Grafton Debris Removal Plan	9/17/2015	3,900	0	3,900
SWC	2059	5000	2015-17	Park River Joint WRD	North Branch Park River NRCS Watershed Study	10/6/2015	81,200	0	81,200
SWC	2060	5000	2015-17	Walsch Co. WRD	Forest River Watershed Study	10/6/2015	114,100	0	114,100
SWC	2063	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #8(Embdn Dam)	12/11/2015	113,500	0	113,500
SWC	1878-02	5000	2011-13	Maple-Steele WRD	Upper Maple River Dam Construction Phase	12/13/2013	4,702,936	3,220,855	1,482,081
SWC	AOC/ASS	5000	2015-17	Assiniboine River Basin	Assiniboine River Basin Initiative Funding	7/29/2015	100,000	25,000	75,000
SWC	AOC/IRA	5000	2015-17	ND Irrigation Association (NDI)	ND Irrigation Association	10/6/2015	100,000	25,000	75,000
SWC	AOC/RRBC	5000	2015-17	Red River Basin Commission	Red River Basin Commission Contractor	5/20/2015	200,000	50,000	150,000
SWC	AOC/WEF	5000	2015-17	ND Water Education Foundati	ND Water Magazine	5/20/2015	36,000	9,000	27,000
SE	AOC/WUA	5000	2011-13	ND Water Users Association	Dave Koland Term as WUA President	3/23/2015	9,672	2,534	7,138
SE	ASNDS	5000	2015-17	NDSU	Oaks Irrigation Research Site - New Linear Irrigation S	11/18/2015	25,636	0	25,636
SB2020	ASNDS	5000	2015-17	NDSU	Fargo Moorhead Diversion Agricultural Impact (Study)	1/20/2016	80,000	0	80,000
SE	CON/CAR	5000	2015-17	Garrison Diversion	Will and Carlson Consulting Services	1/12/2016	17,500	0	17,500
SE	PSWRDBUR	5000	2015-17	Burleigh Co. WRD	Pebble Creek Golf Course - Hay Creek Bank Stabiliza	10/15/2015	22,782	0	22,782
SWC	PSWRD/DEV	5000	2015-17	Devils Lake Joint WRB	DL Manager	5/20/2015	60,000	0	60,000
SWC	PSWRD/ELM	5000	2013-15	Elm River Joint WRD	Dam #3 Safety Improvements Project	9/15/2014	7,297	1,625	5,672
SWC	PSWRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board, (MRJWB) Start up	5/20/2015	20,000	0	20,000
SWC	PSWRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board (MRRIC) T. FLECK	5/20/2015	45,000	9,528	35,472
SWC	PSWRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Coordinator	10/7/2013	37,094	14,327	22,767
SWC	PSWRD/UPP	5000	2015-17	Upper Sheyenne River Joint V	Upper Sheyenne River WRB Administration (USRJWF	5/20/2015	12,000	1,003	10,997
TOTAL							22,677,574	5,960,325	16,717,249

STATE WATER COMMISSION
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COMPLETED GENERAL PROJECTS

Approved SWC		Dept	Approved		Project	Initial	Total	Total	Jan-16	
By	No		Biennium	Sponsor		Approved Date	Approved	Payments	Balance	
SWC	228	5000	2013-15	U.S. Geological Survey	(USGS) Operation & Maint of Gaging Station on the Missouri F	12/8/2014	8,970	8,970	0	
SE	274	5000	2013-15	City of Neche	FEMA Levee Certification Feasibility Study	10/17/2014	37,500	37,500	0	
SE	391	5000	2011-13	Sargent Co WRD	Sargent Co WRD, Silver Lake Dam Emergency Repairs	10/12/2011	2,800	0	2,800	
SWC	980	5000	2011-13	Maple River WRD	Maple River Watershed Flood Water Retention Study/ Maple F	2/19/2015	3,687	3,687	0	
SE	1069	5000	2015-17	North Cass & Rush River	Drain #13 Channel Improvements Project	9/29/2015	46,150	12,293	33,857	
SWC	1082	5000	2013-15	Rush River WRD	Cass Co. Drain No. 30 Channel Improvement Project	3/17/2014	5,976	5,970	6	
SWC	1224	5000	2013-15	Trall Co. WRD	Palace Drain Improvement District No. 80	5/20/2015	118,933	118,933	0	
SE	1290	5000	2015-17	McLean Co. WRD	Painted Woods Lake Flood Mitigation Study	7/7/2015	24,500	24,500	0	
SE	1311	5000	2013-15	Trall Co. WRD	Buxton Township Improvement District No. 68	6/17/2015	15,745	15,745	0	
SE	1312	5000	2011-13	Walsh Co. WRD	Skyrud Dam 2011 EAP	12/15/2011	10,000	8,073	1,927	
SE	1312	5000	2011-13	Walsh Co. WRD	Union Dam 2011 EAP	12/15/2011	10,000	8,350	1,650	
SWC	1314	5000	2013-15	Wells Co. WRD	Oak Creek Drain Lateral E Reconstruction Project	9/15/2014	73,057	73,057	0	
SWC	1396	5000	2011-13	U.S. Geological Survey	(USGS) Missouri River Geomorphic Assessment	3/7/2012	10,000	10,000	0	
SWC	1444	5000	2013-15	City of Pembina	2014 Flood Protection System Modification Project	5/29/2014	61,331	61,331	0	
SWC	1577	5000	2013-15	City of Killdeer & Dunn Co	Floodplain Mapping Project	5/29/2014	55,000	55,000	0	
SE	1607	5000	2011-13	Ward Co. WRD	Flood Inundation Mapping of Areas Along Souris & Des Lacs F	6/15/2011	13,011	0	13,011	
SE	1701	5000	2013-15	US Army Corps of Engine	Red River of the North Unsteady Flow Model	11/25/2015	17,825	17,825	0	
SWC	1758	5000	2013-15	U.S. Geological Survey	(USGS) Stochastic Model for the Mouse River Basin	12/13/2013	40,000	40,000	0	
SWC	1792	5000	2009-11	Southeast Cass WRD	SE Cass Wild Rice River Dam Study Phase II	1/29/2015	32,252	32,252	0	
SE	1814	5000	2013-15	Richland Co. WRD	Wild Rice River Snagging & Clearing - Bridge #121-2	5/28/2015	16,000	16,000	0	
SE	1842	5000	2013-15	Southeast Cass WRD	Wild Rice River Snagging & Clearing - Bridge Location Sites	2/3/2015	11,063	0	11,063	
SWC	1932	5000	2005-07	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	8/15/2014	832,207	832,207	0	
SE	1967	5000	2009-11	Grand Forks Co. WRD	Grand Forks County Legal Drain No. 55 2010 Construction	11/30/2010	9,652	9,652	0	
SWC	1970	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain # 72	3/28/2011	39,115	39,115	0	
SWC	1975	5000	2011-13	Walsh Co. WRD	Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	37,742	37,742	0	
SE	1998	5000	2011-13	Grand Forks Co. WRD	Upper Turtle River Dam #1 2012 EAP	6/28/2012	10,000	9,365	635	
SE	2002	5000	2011-13	Grand Forks Co. WRD	Trutle River Dam #4 2012 EAP	6/29/2012	10,000	8,656	1,344	
SWC	2004	5000	2013-15	Grand Forks Co. WRD	Drain No. 57 Project	10/7/2013	413,576	413,576	0	
SE	2005	5000	2011-13	Grand Forks Co. WRD	Turtle River Dam #8 2012 EAP	6/29/2012	10,000	9,069	931	
SWC	2007	5000	2011-13	Maple River WRD	Pontiac Township Improvement District No. 73 Project	5/11/2015	747,093	594,183	152,910	
SWC	2013	5000	2011-13	Richland-Cass Joint WRC	Wild Rice River Watershed Retention Plan	6/8/2015	45,905	45,905	0	
SWC	2040	5000	2013-15	Walsh Co. WRD	Drain #74 Project	10/7/2013	197,604	197,604	0	
SWC	2046	5000	2013-15	Walsch Co. WRD	North Branch Park River Comprehensive Flood Damage Redu	12/13/2013	134,400	108,772	25,628	
SWC	2048	5000	2013-15	City of Marion	Marion Flood Mitigation & Lagoon Drainage Project	5/29/2014	116,659	116,599	60	
SWC	1183/1613/160	5000	2013-15	Richland Co. WRD	Drain No. 15 Reconstruction Project	9/15/2014	60,300	49,055	11,245	
SB2009	1986-03	5000	2015-17	USDA-APHIS,ND Dept A	USDA Wildlife	9/9/2015	250,000	250,000	0	
SWC	2003-02	5000	2011-13	Southeast Cass WRD	Re-Certification of the West Fargo Diversion Levee System	7/23/2015	52,564	32,813	19,751	
SWC	2009-02	5000	2011-13	Southeast Cass WRD	Recertification of the Horace to West Fargo Diversion Levee S	9/17/2012	25,504	25,504	0	
SWC	CON/WIL/CAR	5000	2013-15	Garrison Diversion Conse	Will and Carlson Consulting Contract	12/13/2013	26,451	1,828	24,623	
SE	PSWRDCAS	5000	2015-17	Cass Co. Joint WRD	Red River Watershed Comprehensive Detention Plan Updates	11/19/2015	34,025	34,025	0	
TOTAL								3,666,597	3,365,156	301,441



North Dakota State Water Commission

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: *TSD* Todd Sando, P.E., Chief Engineer - Secretary
SUBJECT: SWPP Project Update
DATE: February 22, 2016

Oliver, Mercer, North Dunn (OMND) Regional Service Area Center SA Rural Distribution System 7-9E & 7-9F:

The State Water Commission (SWC) awarded Contract 7-9F to Eatherly Constructors, Inc. at its October 7, 2013 meeting. This contract initially consisted of 260 miles of 8" -1½" PVC pipe serving 341 rural water customers. The contractor has completed installation of approximately 231 miles of pipeline and 355 users. Twelve change orders have been signed by all parties to date, which added 63 additional users and 21 more miles of pipeline to the contract. The substantial completion date including modifications through Change Order No. 12 is August 27, 2016.

Contract 7-9E is the west Center SA rural distribution system. This contract includes furnishing and installing approximately 275 miles of 6"-1 ½ " PVC pipe serving 255 rural water customers. The SWC awarded this contract to Swanberg Construction, Valley City, North Dakota at its May 29, 2014 meeting. The contractor has completed installation of approximately 266 miles of pipeline and 248 users. The 54 users within the intermediate completion area were turned over to SWA on August 13, 2015. The contractor has requested a 27-day extension to the intermediate and substantial completion date to account for rain days and delays caused by extended load restrictions. Their request is under review. The contractor has also requested that 41 users be removed from the substantial completion date because of delays caused by easement acquisitions.

Swanberg Construction is the Contractor on Contract 7-9G, Bid Schedule 1 and they were allowed to delay the start of construction of Contract 7-9G, Bid Schedule 1 because of the pending work on Contract 7-9E and easement issues in the Contract 7-9G Bid Schedule 1 area. The intermediate completion date for Contract 7-9G Bid Schedule 1 was removed, and the 32 users removed were added to Contract 7-9E's substantial completion date. To date, eleven change orders for Contract 7-9E have been signed by all parties, which added 50 users and 19 miles of pipeline. The substantial completion date, including modifications through Change Order No. 11, is July 1, 2016.

Contract 7-9G Halliday and Dunn Center Service Area:

This contract includes furnishing and installing approximately 330 miles of 6"-1 ½ " ASTM D2241 gasketed joint pipe; 395 services; road crossings; connections to existing pipelines and other related appurtenances. The project is located in Mercer and Dunn Counties of North Dakota.

The contract has two Bid Schedules. The SWC awarded Bid Schedule 1 to Swanberg Construction Inc., and Bid Schedule 2 to Northern Improvement Company at its March 11, 2015 meeting.

Bid Schedule 1 consists of furnishing and installing approximately 170 miles of 6" – 1 ½ " ASTM D2241 PVC gasketed joint pipe and 173 services. This contract had an intermediate completion date of November 1, 2015 for installation of 37 miles of pipeline and 32 users. Because of the 50 additional users added to Contract 7-9E, and removal of intermediate completion date a new milestone completion date was added to this contract. The milestone completion date is August 1, 2016 for 123 users, and the current substantial completion date for Bid Schedule 1 is November 20, 2016 for 173 users.

Bid Schedule 2 consists of furnishing and installing approximately 164 miles of 6" – 1 ½ " ASTM D2241 PVC gasketed joint pipe and 218 services. The area is west of Halliday. The substantial completion date for Bid Schedule 2 is September 15, 2016.

The preconstruction conference for Bid Schedule 2 was held on June 17, 2015, and the contractor started construction on June 29, 2015. The contractor has completed installation of approximately 137 miles of pipeline and 171 users. The contractor has also turned over 122 users for service. To date, 16 change orders have been signed by all parties, which added 30 miles of pipeline and 80 additional users. The substantial completion date including modifications through Change Order No. 16 is May 12, 2017.

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 substantially complete on December 4, 2014.

Contract 2-8F is the MTL west of Halliday to west of Killdeer. This contract involves furnishing and installing approximately 40 miles of 16"-6" PVC pipe, connections to existing pipelines, 2 prefabricated steel meter vaults, road crossings and related appurtenances. This contract has two intermediate completion dates. The first intermediate completion date was August 15, 2014 for Bid Schedule 1, which is from north of Halliday to the Dunn Center Elevated tank. The second intermediate completion date was November 15, 2014 for Bid Schedule 2A which will provide connections to the Cities of Dunn Center and Killdeer. The Bid Schedule 2B and the entire project was to be substantially complete on or before August 1, 2015, which included 2 prefabricated below grade booster pump stations and will enable the Killdeer Mountain, Grassy Butte and a portion of the Fairfield service areas to be served from the OMND WTP.

The Commission awarded Contract 2-8F to Carstensen Contracting, Inc. during its February 27, 2014 conference call meeting. Pipeline installation is complete. Bid Schedule 1, Bid Schedule 2A and Schedule 2B were turned over for service on March 13, 2015, April 29, 2015 and September 15, 2015 respectively. The contractor requested time extensions for both contract

2-8E and 2-8F. The time extensions requested were because of delays caused by weather, wet conditions and additional rock excavation. Based on the documentation provided and review of actual field conditions, a 67-day extension was provided for Contract 2-8E, and liquidated damages for 89 days delay was deducted from the contract price. For Contract 2-8F, 134-day extension was provided, and liquidated damages for 123 days will be deducted from the contract price.

Contract 5-17 Dunn Center Elevated Reservoir:

This contract includes furnishing and installing a 1,000,000 gallon elevated composite reservoir. The substantial completion date on this contract was August 15, 2014. The tank was turned over for service on August 13, 2015. The contractor signed the latest partial pay estimate protesting the liquidated damages withheld. Pre-final inspection of the tank is complete, and the contractor was provided a punch list of items to remedy.

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 SWC awarded this contract to Maguire Iron, Inc. of Sioux Falls, South Dakota at its December 13, 2013 meeting. The substantial completion date was October 1, 2014. The tank was considered substantially complete on November 23, 2014. The contract was provided 30-day extension, and the 24 days of liquidated damages were deducted from the contract price.

OMND Water Treatment Plant (WTP) Phase II Expansion:

The SWC awarded Contract 3-1H, OMND WTP Phase II expansion to Northern Plains Contracting, Inc., and Edling Electric, Inc. at its December 13, 2013 meeting. The preconstruction conference for Contract 3-1H was held on January 29, 2014. The substantial completion date on this contract was August 1, 2014. The contract was substantially complete on September 24, 2014. The completion was delayed because of the coordination involved with keeping the WTP operational. Administrative items remain before the contract can be closed out.

Contract 5-15A 1st Zap Potable Reservoir:

The contractor repaired the settlement damage to the floor by replacing the floor panels. The tank was rechlorinated on November 14, 2015. The contractor will return in Spring of 2016 to complete final coating repairs.

Other Contracts

Contract 8-1A New Hradec Reservoir:

This contract involves furnishing and installing a 296,000-gallon 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. The substantial completion date on this contract was September 15, 2013. The tank was put into service on February 20, 2014. A partial pay estimate withholding \$207,750 was sent to the contractor. The contractor responded that he does not agree with the liquidated damages that are being assessed and will not sign the partial pay estimate. A pre-final inspection was conducted the week of September 8, 2014 and again on December 9, 2014, and a punch list of remaining items was forwarded to the contractor. The

contractor attempted to work on the punch list items, but the work has not been accepted. An updated punch list was again sent to the contractor on July 29, 2015 and some of them were completed by mid-September. An updated closeout letter and punch list was sent to the contractor on September 16, 2015 requesting all remaining items be completed by September 30, 2015. On December 21, 2015 a meeting was held to discuss the liquidated damages withheld on the contract. There is no justification for any reduction in the liquidated damages and that was relayed to the contractor. We are aware of a lawsuit between the contractor and the tank subcontractor.

Contract 4-5 Finished Water Pumping Station (FWPS):

This contract consists of the construction of a 60' by 85' reinforced concrete and precast concrete building and the installation of pumping, piping, mechanical, and electrical and instrumentation systems. On October 15, 2015 the milestone completion was achieved. The FWSP was able to serve the SWPP and the City of Dickinson on October 15, 2015. The contract specified August 15, 2015 as the milestone completion date. Initially a 21-day extension was granted to the contractor. Based on the additional documentation provided by the contractor additional 13-day and 2-day extensions were provided to the milestone completion date and substantial completion date respectively. Based on the extension provided, the milestone completion date for the contract was October 3, 2015 and substantial completion date was December 6, 2015. The contractor reached the milestone and substantial completion date on October 15, 2015 and December 10, 2015 respectively. Liquidated damages for 16-day delay will be deducted from the contract price. The contractor is working on punch list items and changes added through change orders.

Contract 1-2A Supplemental Raw Water Intake:

The first section of the intake pipe was lowered on July 15, 2015. Through August 6, 2015 the tunnel drive had progressed approximately 955 feet. After that, the contractor encountered multiple issues with the shaft seal and intermediate jacking stations. Through October 31, 2015 tunneling had proceeded to approximately 1786 feet.

In the early morning of November 1, 2015 the contractor's employees heard a loud pop noise and noticed uncontrolled flow of sand and water entering the pipe approximately 40-50 feet from the caisson end of the pipe. The water and sand flowed out from the pipe and into the caisson shaft, and the employees quickly evacuated the caisson shaft as the water and sand level began to rise. The contractor sent a letter on November 2, 2015 informing the engineer about the situation and indicated that sand and water had flooded the shaft to a depth of about 15 feet with the bottom 12 feet being fairly dense sand. The water was initially rising at the rate of 3 feet/day and is continuing to rise.

The contractor mobilized a drilling crew and drilled 8 holes on November 6, 2015. On November 9, 2015 the contractor injected a cement – sand grout to fill the voids. The drill holes took approximately 60 cubic yards of grout. Since the calculated volume of material in the pipe and the shaft exceeds the pumped in grout by several times, additional boreholes along the pipe alignment were suggested to the contractor. The contractor drilled additional 8 boreholes and pumped additional 50 cubic yards of grout.

A conference call was held with the contractor to discuss the possible options to move forward. The present location of the microtunnelling machine is beneath about 20' of water and about 67 feet of soil. Some of the options discussed for moving the project forward were horizontal directional drilling through the caisson shaft, tunneling with a new direction and at a higher elevation from the existing shaft, and installing a recovery shaft on the shoreline or near it to intercept the tunnel and then proceed in a new direction with another intake pipe.

A meeting was held on February 19, 2016 with the contractor to discuss the schedule and plan for completing the project. The contractor indicated that their plan is to seal the damaged intake pipe from the inflow of water by jet grouting, removing the sand and water inside the caisson and constructing a new floor at the bottom of the caisson. Then a new MTBM will be launched and a new intake pipe will be installed approximately 12' higher than the existing intake pipe's centerline. They originally planned to follow the existing intake pipe's alignment for the new intake. They were informed following a different alignment would be preferable. The contractor has also requested extension through November 30, 2017 for completion of this contract.

Contract 3-2D Six (6) MGD Water Treatment Plant at Dickinson:

The preconstruction conference for Contract 3-2D was held on January 13, 2016 with both the General contractor John T. Jones Construction Co., Inc. and the Mechanical contractor Williams Plumbing and Heating Inc. John T. Jones mobilized to the site the week of January 4, 2016 and is currently working on earthwork excavation.

Bids for Contract 3-2D Electrical Contract were opened on January 28, 2016 and the bid results are discussed in detail in a separate memo.

Contract 4-1F/4-2C Generator Upgrades:

The scope of this contract includes relocating the existing 1000 kW generator at the Dodge pump station to the Dickinson Finished Water Pump Station and installing a new standby engine generator at the Dodge pump station. This contract also includes relocating the existing 1,500 kW generator at the Richardton Pump Station to the intake booster pump station and installing a new generator at the Richardton Pump Station. Bids for this contract were opened on January 28, 2016 and the bid results are discussed in detail in a separate memo.

Contract 5-1A and 5-2A 2nd Dickinson and 2nd Richardton Reservoir:

Work on the design of the raw water reservoirs is progressing.

Raw Water Line Capacity Upgrade:

We received the draft alignment memo for the parallel piping from the intake to zap reservoirs from Bartlett & West/AECOM. Permission for survey along the alignment was obtained from the landowners and topographical survey needed for the design work is currently being performed.



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: NAWS – Project Update
DATE: February 17, 2016

Supplemental EIS

Reclamation issued the Record of Decision for the Final Supplemental Environmental Impact Statement (FSEIS) for the Northwest Area Water Supply on August 21, 2015. Reclamation received seven comment letters on the FSEIS, which along with point-by-point responses were included as an appendix to the Record of Decision. The Preferred Alternative includes a supply from the Missouri River (Lake Sakakawea) with an intake at Snake Creek Pumping Station along with a conventional treatment option for the Biota Water Treatment Plant near Max. This level of treatment includes five treatment processes versus two from the draft SEIS and the initial Environmental Assessment. Although all biota treatment options were considered sufficient by Reclamation, the conventional treatment option was chosen to address drinking water issues raised by the EPA.

Manitoba & Missouri Lawsuit

A Joint Motion for Entry of Case Management and Scheduling Order was submitted to the District of Columbia District Court December 22, 2015 and accepted with minor modifications December 23, 2015. The plaintiffs filed supplemental Complaints January 29, 2016 and the defendants lodged and served the Administrative Record February 5, 2016. A Motion to Modify Injunction *Pendente Lite* is to be filed by the State of North Dakota as intervenor defendant March 1, 2016 with oppositions by the plaintiffs due April 4, 2016 and replies by the defendants due April 25, 2016. Motions for Summary Judgment are to be filed by the defendants April 11, 2016 with combined cross-motions/opposition by the plaintiffs due May 13, 2016 and combined oppositions/replies by the defendants due June 17, 2016. This court typically takes four to six months to reach a verdict after the cases are fully briefed.

The court had previously been notified of maintenance activity necessary at the Minot Water Treatment Plant to ensure its continued operation focused primarily on the lime storage, handling, and softening facilities. A design concept meeting was held February 9, 2016 to update the State Water Commission and City of Minot staff on the progress of this design work.

NAWS High Service Pump Station

Contract 4-2A-1 includes furnishing and installing a 125 hp ‘Jockey’ pump to compliment the existing 350 hp pumps and maintenance work in the pump station. This contract was originally

JACK DALRYMPLE, GOVERNOR
CHAIRMAN

TODD SANDO, P.E.
CHIEF ENGINEER AND SECRETARY

NAWS – Project Update

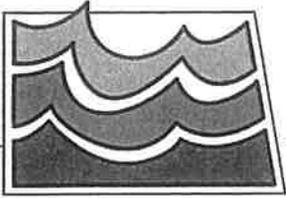
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intended to be complete by the end of 2015 but has been delayed by equipment delivery dates for the pump and drive.

TSS:TJF:pdh/237-04

March 9, 2016



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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: *TSS* Todd S. Sando, P.E., Chief Engineer - Secretary
SUBJECT: Mouse River Enhanced Flood Protection Project Status Report
DATE: February 22, 2016

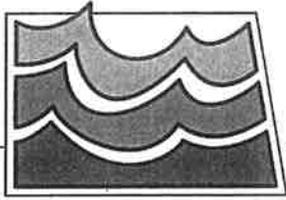
Design for Phase 1, the floodwall extending east from the Broadway Bridge on the north bank of the river, is being coordinated with the proposal to replace the Broadway Bridge in the near future. The 60 percent design report and plans will be submitted on March 24, with 90 percent submission scheduled for August, 2016 and 100 percent on November 20, 2016.

Design work also progresses on Phases 2 and 3, the levee system from the Highway 83 bypass to the CP Rail Bridge. These phases also include the EIS, which becomes the umbrella under which most of the coordination with federal agencies is undertaken. Phases 2 and 3 are scheduled to reach the 90 percent level in March of this year, with design and permitting scheduled for completion in January of 2017. Construction is scheduled for a 2017 start.

Both the Corps of Engineers and FEMA are fully engaged now. A meeting was held with both agencies on January 21, and progress was made in determining the steps needed and requirements to be met. The possibility of Corps of Engineers participation in the project is now a possibility which is being explored. Discussions are under way with the Corps on the subject of a Feasibility Study.

TSS:JTF:pdh/1974

March 9, 2016



North Dakota State Water Commission

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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission

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

SUBJECT: Devils Lake Outlet & Hydrologic Update
Devils Lake Outlet Operations Funding Appropriation

DATE: February 24, 2016

The current water surface elevation of Devils Lake is 1450.0 ft. This is approximately 1.6 feet below the water surface elevation from a year ago.

For Devils Lake the total precipitation for 2015 was 20.4 inches, which was about 0.8 inches less than the average since 1991. Snowpack and SWE in the Devils Lake Basin are near normal. The threat for significant, impactful, snowmelt flooding is low throughout the Red River Basin, although, the National Weather Service does indicate a slightly above historical average risk of snowmelt flooding for the Devils Lake Basin.

The National Weather Service Probabilities for exceeding listed lake levels for the period of February 14, 2016 to September 30, 2016 are shown in the table below. Also shown below is the increase in volume and area from current level to probable level.

Lake	90%	50%	10%
Devils Lake Elev.	1450.9 ft.	1451.3 ft.	1452.4 ft.
Lakes Vol. Increase	90,000 ac.-ft.	175,000 ac.-ft.	390,000 ac.-ft.
Lakes Area Increase	7,400 ac.	12,300 ac.	23,600 ac.

Tolna Coulee Control Structure:

The operating plan for the structure requires that, prior to a natural overflow, the stop log elevation remain between 1 and 2 feet below the water surface of the lake. The current top elevation of the stop logs is 1449 feet. Two rows of stop logs were removed in 2015 as the lake receded to elevation 1450 feet.

Devils Lake Outlet Operations, SWC Contract Fund 416-10

Devils Lake Outlet Operations (project number 416-10) had \$11,000,000 allocated in the State Water Commission's budget included in SB 2020 for the 2015-2017 Biennium.

I recommend the State Water Commission approve the amount of \$11,000,000 for the Devils Lake Outlet Operations, from the funds appropriated by SB 2020 to the State Water Commission for the 2015-2017 biennium.

TS:JK:ph/416-10

JACK DALRYMPLE, GOVERNOR
CHAIRMAN

TODD SANDO, P.E.
CHIEF ENGINEER AND SECRETARY



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MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: Todd Sando, P.E., Chief Engineer/Secretary
SUBJECT: 2016 Spring Flood Outlook
DATE: February 25, 2016

On February 18, 2016, the National Weather Service (NWS) predicted a below average probability of widespread flooding occurring within the Red River, Mouse River, and Missouri River drainage systems for the Spring of 2016. The NWS also expects inflows into Devils Lake will be slightly higher than average; however, extreme volumes are unlikely.

Although the probabilities of widespread flooding are lower than average, it is early in the year and many variables can change. Heavy spring rains can cause major flooding, and spring snowstorms can also increase the flood risk. High water caused by ice jams are very difficult to predict and localized flooding caused by ice will remain a possibility for the remainder of the spring thaw.

The climate continues to be influenced by El Nino with a much greater than average chance of above average temperatures and a good chance of typical precipitation patterns covering all of North Dakota and the upper Missouri River basin for the 1-month, 2-month, and 3-month forecasts.

Red River Basin

The Red River and its tributaries will likely experience average spring flows that include minor to moderate flooding; however, major flooding is not predicted. Typical minor to moderate flooding is expected on the Red River, and minor flood stages on the Red River tributaries are not expected.

Mouse River Basin

The likelihood of widespread flooding within the Mouse River basin is well below normal risk. Reservoir levels are within their seasonal range, and it is probable that not all reservoirs will reach their desired levels without spring rains. However, Willow Creek near Willow City, which typically does not experience flooding, is an exception having an above average chance to experience minor flooding during the spring thaw.

Missouri River Tributaries and James River Basins

Spring runoff within the Missouri River tributaries and the James River is expected to be near normal, and the rivers are not expected to reach flood stages.

Missouri River

Widespread flooding from spring runoff along the Missouri River is not expected. According to the United States Army Corps of Engineers, total system reservoir volume is near average for this time of year, although Fort Peck, Garrison, and Lake Oahe reservoirs are higher than average for this time of year.

Plains snowpack is below average, and much of it has melted because of warmer than average temperatures. Mountain snowpack is 75 percent of average above Garrison for this time of year. Historically, mountain snow pack peaks near mid-April, with about 70 percent of the accumulation occurring by mid-February.

The Missouri River near Bismarck stage rose because of an ice jam occurring near the Grant Marsh Bridge (Interstate Bridge) from February 13 through February 18. The stage at Bismarck peaked at 12.8 ft. on February 14, slightly above the action stage of 12.5 ft. Flood stage at Bismarck is 14.5 ft. The Missouri River is mostly ice free, and it is likely that a substantial ice pack will not form again until next winter.

Devils Lake

Devils Lake will likely have higher than average inflows this year. The forecast states there is a 50 percent chance it will rise 1.3 ft to elevation 1451.3 ft NGVD29. The peak elevation is expected to occur early-summer, which is typical.

TSS:MSW



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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: February 18, 2016

System/Reservoir Status

System volume on February 18 in the six mainstem reservoirs was 56.4 million acre-feet (MAF), 0.3 MAF above the base of flood control. This is 3.5 MAF above the average system volume for the end of February and 0.5 MAF less than last year.

On February 18, Lake Sakakawea was at an elevation of 1838.2 feet msl, 0.7 feet above the base of flood control. This is 0.9 feet lower than a year ago and 7.2 feet above its average end of February elevation. The minimum end of February elevation was 1806.9 feet msl in 2007 and the maximum end of February elevation was 1842.8 feet msl in 1973.

On February 18, the elevation of Lake Oahe was 1607.7 feet msl, 0.2 feet above the base of flood control. This is the same elevation as last year and 7.1 feet higher than the average end of February elevation. The minimum end of February elevation was 1572.3 feet msl in 2007, and the maximum end of February elevation was 1611.1 feet msl in 1996.

On February 18, the elevation of Fort Peck was 2234.0 feet msl, which is at the base of flood control. This is 1.0 feet lower than a year ago and 7.2 feet higher than the average end of February elevation. The minimum end of February elevation was 2196.3 feet msl in 2007, and the maximum end of February elevation was 2243.5 feet msl in 1976.

Plains snowpack this winter has been below normal, and most of it has melted due to above normal temperatures. On February 17, mountain snowpack in the "Above Fort Peck" reach and "Fort Peck to Garrison" reach was 93 percent and 76 percent of normal, respectively. Typically, 70 percent of the peak mountain snowpack has accumulated by February 15, and it normally peaks on April 15.

Ice-Affected Flow on Missouri River

On February 13, accumulation of ice on the Missouri River caused an increase in stage at the Bismarck gage. River stage at the Bismarck gage peaked briefly at 12.8 feet on February 14 and then hovered around 12.0 feet for about two days. Most of the ice accumulated between the Interstate Bridge and Memorial Bridge. The greatest stage increase occurred upstream of the Interstate Bridge, which was not reflected in the stage at the Bismarck gage. Warm temperatures melted the ice and the stage at the Bismarck gage decreased to pre-ice jam levels by February 18.

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.

The Corps is currently engaged in the process of preparing the Missouri River Recovery Management Plan and Environmental Impact Statement (MRRMP and EIS). This process involves the development of a range of alternatives for the purposes of assisting the recovery of species on the Missouri River protected under the Endangered Species Act, specifically the threatened piping plover and endangered least tern and pallid sturgeon. One of the goals of the MRRMP and EIS is to incorporate Adaptive Management into the Corps' Missouri River Recovery Program. The Corps is developing the MRRMP and EIS in collaboration with the U.S. Fish and Wildlife Service and the MRRIC.

The MRRIC will meet in Kansas City on February 22 to 25 where discussion will continue on the MRRMP and EIS. The Corps will be evaluating six alternatives in their draft EIS. Four of the six proposed alternatives include actions outside the constraints of the current Master Manual. Actions outside the Master Manual include fall or spring pulses for the creation of emergent sandbar habitat, low nesting season flows, and a couple variations of the pallid sturgeon spawning cue pulse.

As part of the MRRMP and EIS, the U.S. Fish and Wildlife Service (USFWS) has changed the non-jeopardy goals for the least terns and piping plovers. The goal is to maintain a 95 percent probability that a population of at least 50 individuals (birds) will persist for at least 50 years on the Missouri River. Emergent Sandbar Habitat (ESH) targets have been developed to support this goal. When questioned about the basis of their new non-jeopardy goal, the USFWS indicated they are still in the process of determining the basis.

Emergent Sandbar Habitat Plans for Garrison Reach

Similar to last year, the Corps plans to spray vegetation on sandbars for the purpose of maintaining ESH in the Garrison Reach for the least terns and piping plovers. No other ESH-creating actions are planned for the Garrison Reach this year.

TSS:LCA:pdh/1392