#### **MINUTES**

# North Dakota State Water Commission Bismarck, North Dakota

## July 6, 2016

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on July 6, 2016. Governor Jack Dalrymple, Chairman, called the meeting to order at 1:30 p.m., and requested Garland Erbele, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Dalrymple announced a quorum was present.

## STATE WATER COMMISSION MEMBERS PRESENT:

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

#### **OTHERS PRESENT:**

**Douglas Vosper** 

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

The attendance register is on file with the official minutes.

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

#### CONSIDERATION OF AGENDA

The agenda for the July 6, 2016 State Water Commission meeting was presented; there were no modifications.

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

CONSIDERATION OF DRAFT MINUTES OF MARCH 9, 2016 STATE WATER COMMISSION MEETING - APPROVED The draft final minutes of the March 9, 2016 State Water Commission meeting were approved by the following motion:

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

CONSIDERATION OF DRAFT MINUTES OF APRIL 27, 2016 STATE WATER COMMISSION TELEPHONE CONFER-ENCE CALL MEETING - APPROVED The draft final minutes of the April 27, 2016 State Water Commission telephone conference call meeting were approved by the following motion:

It was moved by Commissioner Foley, seconded by Commissioner Thompson, and unanimously carried, that the draft final minutes of the April 27, 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 ex-

penditures for the period ending May 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 \$690,051,949 with expenditures of \$206,611,927. A balance of \$334,956,176 remains available to commit to projects in the 2015-2017 biennium.

Project sponsors with approved funding of more than three years were contacted and asked to update the project's status. As a result, the feasibility study funding for the cities of Lidgerwood, Wahpeton, and Harwood have been withdrawn, as well as the Rush River Berlin township improvement project and the Sheyenne River snagging and clearing project. Approved funding in the amount of \$500,000 for the Harmon Lake project was released, and a verbal release in the amount of \$266,100 was received from the Hobart Lake project sponsor. These releases total approximately \$1,023,267.

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 \$115,597,905 through June, 2016, and are currently \$30,637,633 above originally-budgeted revenues. A revised forecast has been prepared that projects the oil extraction

revenue for the 2015-2017 biennium will be short by \$49,117,751 from the original projection of \$264,259,277.

Deposits into the Water Development Trust Fund (tobacco settlement) total \$9,119,900 through June, 2016, and are currently \$124,900, or 1.4 percent above budgeted revenues.

FARGO FLOOD CONTROL PROJECT -APPROVAL OF APPROPRIATION (2015 SENATE BILL 2020 - \$69,000,000) (SWC Project No. 1928) The 2015 North Dakota Legislature mandated legislative intent in Senate Bill 2020, Section 8. Fargo Flood Control Project Funding - Exemption, which states, "Of the funds appropriated in the

water and atmospheric resources line item in section 1 of this Act, \$69,000,000 is for Fargo flood control projects, for the biennium beginning July 1, 2015 and ending June 30, 2017. Any funds not spent by June 30, 2017, are not subject to section 54-44.1-11 and must be continued into the next or subsequent bienniums and may be expended only for Fargo flood control projects, including levees and dikes. Except as otherwise provided, these funds may be used for land purchases and construction, including right-of-way acquisition costs and may not be used for the purchase of dwellings. No more than ten percent of these funds may be used for engineering, legal, planning, or other similar purposes. The city of Fargo, Cass County, and the Cass County joint water resource district must approve any expenditures made under this section. Costs incurred by non-state entities for dwellings or other real property which are not paid by state funds are eligible for application by the non-state entity for cost-sharing with the state."

Based on the legislative guidelines, it was the recommendation of Secretary Erbele that the State Water Commission approve an allocation not to exceed \$69,000,000 from the funds appropriated to the State Water Commission in 2015 Senate Bill 2020 to the Metro Flood Diversion Authority to support the Fargo Flood Control project.

It was moved by Commissioner Thompson and seconded by Commissioner Berg that the State Water Commission approve a 50 percent grant allocation not to exceed \$69,000,000 from the funds appropriated to the State Water Commission in 2015 Senate Bill 2020 to the Metro Flood Diversion Authority to support the Fargo Flood Control project. This action is contingent upon the availability of funds.

CITY OF FARGO, WATER SYSTEM REGIONALIZATION IMPROVEMENTS -APPROVAL OF ADDITIONAL WATER TREATMENT PLANT IMPROVEMENTS AND ELECTRICAL UPGRADES (SWC Project No. 2050-FAR) On July 29, 2015, the State Water Commission adopted a motion approving a state cost participation grant not to exceed a total allocation of \$6,841,750 of the eligible costs (pre-construction engineering funded at 35 percent; construction engineering funded at 60

percent; and construction costs funded at 60 percent) from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Fargo to support their water system regionalization improvements project.

The proposed project involves the design and construction of infrastructure improvements allowing the city of Fargo to provide treated drinking water to the city of West Fargo and other communities. The major project components include the Fargo Sheyenne River pump station improvements, Fargo Red River pump station improvements, Fargo high service pump station improvements, Fargo distribution system improvements, and the booster station interconnection to serve the city of West Fargo. The project engineer's estimated cost is \$11,995,000, with \$11,830,000 determined eligible for state cost participation.

Project development shows additional reverse osmosis treatment capacity and electrical generator switchgear upgrades are required in the Fargo system to meet peak capacity demands. The cost of adding the two projects will be covered by a reduction in actual costs and reduction in the construction contingencies. A request from the city of Fargo was presented for the State Water Commission's consideration for approval to include the additional water treatment plant improvements and electrical upgrades, The State Water Commission's previously approved funding (\$6,841,750) would provide the funds required for the addition of these projects, therefore, no additional state cost participation was requested.

It was the recommendation of Secretary Erbele that the State Water Commission approve the request for the additional water treatment plant improvements and electrical upgrades towards the Fargo water system regionalization improvement project.

It was moved by Commissioner Goehring and seconded by Commissioner Berg that the State Water Commission approve the request from the city of Fargo for the additional water treatment plant improvements and electrical upgrades towards the Fargo water system regionalization improvement project.

TACOMA BITZ LEGAL DRAIN (BOTTINEAU COUNTY) -APPROVAL OF STATE COST PARTICIPATION GRANT (\$312,105) (SWC Project No. 1056)

A request from the Bottineau County Water Resource District was presented for the State Water Commission's consideration for state cost participation for their Tacoma Bitz Legal Drain project. The proposed project is located

south of Newburg, North Dakota, in central Tacoma Township of Bottineau County.

The drainage in Tacoma Township is poorly defined and the topography is very flat, thus, spring snowmelt and summer rains cause flooding of large areas of cropland. The project is designed to reduce the extent and duration of agricultural flooding on a 3,990-acre watershed. A drain permit application was received in the Office of the State Engineer on March 23, 2016 and is pending review.

The project engineer's cost estimate is \$696,900, of which \$681,900 is determined eligible for state cost participation at 45 percent as a rural flood control project (\$306,855), and \$15,000 is determined eligible for state cost participation at 35 percent for pre-construction engineering (\$5,250), for a total state cost participation of \$312,105.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant of 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 \$312,105 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Bottineau County Water Resource District to support the Tacoma Bitz Legal Drain project.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant of 45 percent of the eligible costs as a rural flood control project, and a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$312,105 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Bottineau County Water Resource District to support the Tacoma Bitz Legal Drain project. This action is contingent upon the availability of funds, and satisfaction of the required permits.

SARGENT COUNTY DRAIN NO. 7 CHANNEL IMPROVEMENTS -APPROVAL OF STATE COST PARTICIPATION GRANT (\$202,663) (SWC Project No. 1650) A request from the Sargent County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Sargent County Drain No. 7 channel improvements project located in Milnor Township in Sargent County.

Because of inadequate drainage within the watershed, the proposed project will improve the capacity of the existing legal drain and will allow water to enter the channel with greater efficiency. The project will provide for a deeper channel with an adequate gradient and flatter side slopes. In addition to channel and culvert improvements, utilities located within the drain footprint will be relocated. A drain permit was received in the Office of the State Engineer on March 4, 2016 and is pending review.

The project engineer's cost estimate is \$601,966, of which \$427,565 is determined eligible for cost share participation as a rural flood control project at 45 percent (\$192,404), and \$29,312 is determined eligible for pre-construction engineering at 35 percent (\$10,259), for a total state cost participation of \$202,663.

It was the recommendation of Secretary Erbele 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 a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$202,663 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 Sargent County Drain No. 7 channel improvements project.

It was moved by Commissioner Berg and seconded by Commissioner Hanson 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 a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$202,663 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 Sargent County Drain No. 7 channel improvements project. This action is contingent upon the availability of funds. and satisfaction of the required permits.

OSLO AREA AG LEVEE FEASIBILITY STUDY (WALSH COUNTY) - APPROVAL OF STATE COST PARTICIPATION GRANT (\$187,000) (SWC Project No. 2073) A request from the Walsh County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Oslo Area Ag Levee feasibility study.

The proposed study area is located near the townships of Turtle River, Walshville, and Pulaski in North Dakota, and Big Woods, Higdem, and Oak Park in Minnesota. The Red River had a floodplain width of approximately five miles during the 1997 flood event. The land in this area is susceptible to spring floods as well as flooding due to rainfall events. It has been proposed that a levee system be constructed to control the size of the floodplain and to keep floodwaters off structures and profitable agricultural land. This study will evaluate the feasibility of a levee system.

The proposed feasibility study will analyze the potential construction of flood control levees for both the North Dakota and Minnesota sides of the Red River for a reach of approximately 18 miles. The study would include field surveys, hydraulic model development for design and impact analysis, alternative development and preliminary design, and cost estimates for the alternatives.

The project engineer's cost estimate is \$374,000, of which Minnesota bill S.F. 2321 would allocate \$187,000 to the study with the stipulation that matching funds come from the State of North Dakota.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a feasibility study at 50 percent of the eligible costs not to exceed an allocation of \$187,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Oslo Area Ag Levee feasibility study.

Commissioner Swenson expressed concerns relative to possible downstream impacts as a result of the proposed levee system project. Representatives of the Walsh County Water Resource District representatives stated these concerns would be addressed in the feasibility study.

It was moved by Commissioner Vosper and seconded by Commissioner Foley that the State Water Commission approve a state cost participation grant as a feasibility study at 50 percent of the eligible costs not to exceed an allocation of \$187,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Oslo Area Ag Levee feasibility study. This action is contingent upon the availability of funds, and that matching funds in the amount of \$187,000 are allocated from the State of Minnesota.

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

THORESON DRAIN NO. 64 (TRAILL COUNTY) -APPROVAL OF STATE COST PARTICIATION GRANT (\$116,558) (SWC Project No. 2062) A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Thoreson Drain No. 64 project, located near the city of Hillsboro, North Dakota.

As a result of an inadequate outlet for excess runoff, significant cropland flooding has been experienced. The proposed project work involves a bottom width of 8 feet with side slopes of 4:1 on the field side and 5:1 on the road side. A drain permit application was received in the Office of the State Engineer on May 4, 2016 and is pending review.

The project engineer's cost estimate is \$369,973, of which \$251,239 is determined eligible as a rural flood control project at 45 percent (\$113,058), and \$10,000 is determined eligible for pre-construction engineering at 35 percent (\$3,500), for a total state cost participation of \$116,558.

It was the recommendation of Secretary Erbele 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 a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$116,558 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 Thoreson Drain No. 64 project.

It was moved by Commissioner Berg and seconded by 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 a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$116,558 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 Thoreson Drain No. 64 project. This action is contingent upon the availability of funds, and satisfaction of the required permits.

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

BIG COULEE DAM REPAIR PROJECT (TOWNER COUNTY) - APPROVAL OF ADDITIONAL STATE COST PARTICIPATION GRANT (\$153,765) (SWC Project No. 1418) On March 11, 2015, the State Water Commission approved a request from the city of Bisbee for state cost participation to support the design and repair of Big Coulee Dam as a dam safety project at a 75 percent grant of

the eligible costs, and a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$862,218 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020).

The Joint Bisbee Dam Operations Committee completed a feasibility study to identify potential solutions to the failing principal spillway and to ensure the dam safety criteria is satisfied. The study recommended a repair to the principal spillway, the low level drawdown and drainage system, and armor the exit slope of the emergency spillway to protect against erosive flows. Construction bids were opened on May 6, 2016, the low bid amount is in excess of the prior opinion of the probable cost which served as the basis for the grant approved by State Water Commission.

The project engineer's revised cost estimate is \$1,354,644, which is determined eligible for state cost participation as a dam safety project at 75 percent (\$1,015,983). A request from the city of Bisbee was presented for the State Water Commission's consideration for an additional state cost participation grant in the amount of \$153,765 (eligible costs of \$1,015,983 less \$862,218 approved on March 11, 2015).

It was the recommendation of Secretary

Erbele that the State Water Commission approve a state cost participation grant as a dam safety project at 75 percent of the eligible costs, not to exceed an additional allocation of \$153,765 ((eligible costs of \$1,015,983 less \$862,218 approved on March 11, 2015), from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Bisbee to support the Big Coulee Dam repair project. The Commission's affirmative action would increase the total state allocation to \$1.015.983.

It was moved by Commissioner Berg and seconded by Commissioner Vosper that the State Water Commission approve a state cost participation grant as a dam safety project at 75 percent of the eligible costs, not to exceed an additional allocation of \$153,765 (eligible costs of \$1,015,983 less \$862,218 approved on March 11, 2015), from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Bisbee to support the Big Coulee Dam repair project. This action is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, 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 \$1,015,983 for the Big Coulee Dam repair project.

CITY OF WAHPETON FLOOD RISK MANAGEMENT PROJECT -APPROVAL OF STATE COST **PARTICIPATION GRANTS:** (LEVEE CERTIFICATION-\$247,500) (TOE DRAIN/ENCROACHMENT-\$1,125,482) certification, toe drain and encroach-(BREAKOUT EASEMENTS-\$265,250) (SWC Project No. 2074)

A request from the city of Wahpeton was presented for the State Water Commission's consideration for state cost participation for their Flood Risk Management project including levee ment project, and breakout easements.

The city's request for state cost participation is associated with the U.S. Army Corps of Engineers to complete the Asbuilt drawings, the project information report (PIR), and the O&M manuals in order to complete the levee system certification by the Corps of Engineers and FEMA. The Corps has determined that a contribution of \$495,000 is required from the city of Wahpeton for the physical and fiscal completion of the flood risk management project no later than October 31, 2016. The request from the city of Wahpeton is for a 50 percent state cost participation of the levee certification (\$247,500).

In order for the levee to be certified by the U.S. Army Corps of Engineers and FEMA, all encroachments of the levee system within the zoo area will need to be removed. This stretch of levees was one of the first stretches built in the city after the 1997 flood. After Hurricane Katrina, the Corps of Engineers required a Vegetation Free Zone for a flood protection system. This project will remove encroachments from the levee including trees, fencing, and exhibits within the zoo as the space will no longer meet the American Zoo and Aquarium (AZA) requirements. The Corps of Engineers is also requiring that access manholes be installed on the toe drain system. The Corps of Engineers has determined the estimated cost of the toe drain and encroachment project is \$2,523,838, of which \$2,126,531 is determined eligible for state cost participation at 50 percent as a flood control project (\$1,063,266), and \$177,760 is determined eligible for state cost participation at 35 percent for pre-construction engineering (\$62,216), for a total state cost participation of \$1,125,482.

The Corps of Engineers has determined that breakout easements are needed south of the city of Wahpeton. The hydraulic model for the levee design took into account the natural breakout flows of the Bois de Sioux River during flooding, which then flow naturally to the Wild Rice River bypassing the Red River that travels through the city. The breakout was used in the hydraulic model which determined the top of the levee height. The easements will be in place to prevent the land in the breakout area from being altered to adversely affect the natural breakout flow. The Corps of Engineers has determined the estimated cost of the breakout easements is \$530,500.

The North Dakota State Water Commission Cost Share Policy, Procedure, and General Requirements identifies easement costs as ineligible. The policy identifies specific exceptions to that ineligibility for flood control projects including property acquisition within a project's footprint, but not specific to easements preserving a breakout corridor. The preservation of a breakout corridor's preservation was not envisioned at the time the cost share policy was written, therefore, the requested easement acquisitions are not eligible for state cost participation within the interpretation of the cost share policy.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant of 50 percent of the eligible costs as a flood control project for the City of Wahpeton Flood Risk Management project, levee certification (\$247,500) from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020); and a state cost participation grant of 50 percent of the eligible costs as a flood control project for the toe drain and encroachment project (\$1,063,266), and a 35 percent grant of the eligible costs for pre-construction engineering (\$62,216), not to exceed a total allocation of \$1,125,482 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) for the City of Wahpeton Flood Risk Management project.

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

- 1) approve a state cost participation grant of 50 percent of the eligible costs as a flood control project not to exceed an allocation of \$247,500 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), for the City of Wahpeton Flood Risk Management project, levee certification; and
- 2) approve a state cost participation grant of 50 percent of the eligible costs as a flood control project, and a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$1,125,482 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), for the City of Wahpeton Flood Risk Management project, toe drain and encroachment project.

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

The state cost participation request for the City of Wahpeton Flood Risk Management project, breakout easements, was deliberated at length. Because this is a unique project and a major component requirement of the Corps of Engineers for levee certification of the City of Wahpeton Flood Risk Management Project, the Commission members expressed a general consensus for a state cost participation. It was also requested that funding for easements be placed on the agenda for a future cost share policy meeting.

A substitute amendment to the original motion was offered by Commissioner Swenson and seconded by Commissioner Berg that the State Water Commission approve a 50 percent state cost participation grant of the eligible costs as a flood control project not to exceed an allocation of \$265,250 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to support the City of Wahpeton Flood Risk Management project, breakout easements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

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

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

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

LYNCHBURG-BUFFALO CHANNEL IMPROVEMENTS PROJECT (CASS COUNTY) - APPROVAL OF STATE COST PARTICIPATION GRANT (\$1,195,126) (SWC Project No. 1951) A request from the Maple River Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Lynchburg-Buffalo Channel Improvements project. The proposed project is

located in Everest and Durbin townships in Cass County and involves the reconstruction of approximately 5.2 miles of an existing legal assessment drain located near the city of Durbin.

The Lynchburg channel is part of a 1959 federal project with the Soil Conservation Service. The channel has incurred issues with sloughing and significant channel bottom erosion and sliding on the side slopes. The drain will be reconstructed with a stable 10-foot channel bottom profile, 8H:IV side slopes, and a consistent channel profile. Three section line bridges along the channel will be replaced with box culverts. In conjunction with this proposed project, the Red River Valley & Western Railroad Company is planning to improve the railroad bridge over the channel. The District expects to complete the project construction by the end of 2016. A construction permit application was received in the Office of the State Engineer on June 20, 2016 and is pending review.

The project engineer's cost estimate is \$3,603,000, of which \$2,514,084 is determined eligible as a rural flood control project at 45 percent (\$1,131,338), and \$182,250 is determined eligible for pre-construction engineering at 35 percent (\$63,788), for a total state cost participation of \$1,195,126.

It was the recommendation of Secretary Erbele 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 a 35 percent grant of

the eligible costs for pre-construction engineering, not to exceed a total allocation of \$1,195,126 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 Lynchburg-Buffalo Channel Improvements project.

It was moved by Commissioner Vosper and seconded by Commissioner Thompson 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 a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$1,195,126 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 Lynchburg-Buffalo Channel Improvements project. This action is contingent upon the availability of funds, and satisfaction of the required permits.

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

SECOND LARSON COULEE
DETENTION DAM AND POND PROJECT
(WARD COUNTY) - APPROVAL OF STATE
COST PARTICIPATION GRANT (\$602,307)
(SWC Project No. 2075)

A request from the Ward County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Second Larson Coulee Detention Dam and Pond project. The proposed project

is located near Minot, North Dakota in Ward County on 30th Street SW.

Frequent flooding along Second Larson Coulee and Puppy Dog Coulee causes road closures and infrastructure and property damages. The project is one component of a larger effort to reduce the risk of flooding along Second Larson and Puppy Dog coulees. The proposed project is intended to be designed as a roadway in accordance with Article 89-14 of the North Dakota Administrative Code. In accordance with the North Dakota State Water Commission cost share policy, the detention embankment will also meet dam design criteria since it is intended to attenuate the peak flow within Second Larson Coulee and provide flood risk reduction benefits. A construction permit was submitted to the Office of the State Engineer on June 20, 2016 and is pending review.

The project engineer's cost estimate is \$1,110,439, of which \$971,027 is determined eligible for state cost participation as a flood control project at 60 percent (\$582,616), and \$56,261 is determined eligible for pre-construction engineering at 35 percent (\$19,691), for a total state cost participation of \$602,307.

It was the recommendation of Secretary

Erbele that the State Water Commission approve a state cost participation grant as a flood control project at 60 percent of the eligible costs, and a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$602,307 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Ward County Water Resource District to support the Second Larson Coulee Detention Dam and Pond project.

It was the moved by Commissioner Foley and seconded by Commissioner Hanson that the State Water Commission approve a state cost participation grant as a flood control project at 60 percent of the eligible costs, and a 35 percent grant of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$602,307 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Ward County Water Resource District to support the Second Larson Coulee Detention Dam and Pond project. This action is contingent upon the availability of funds, and satisfaction of the required permits.

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

STEELE COUNTY DRAIN NO. 8 CHANNEL IMPROVEMENTS PROJECT -APPROVAL OF ADDITIONAL STATE COST PARTICIPATION GRANT (\$411,773) (SWC Project No. 1891) On September 29, 2015, the State Engineer approved a request from the Steele County Water Resource District for a state cost participation grant in an amount not to exceed \$17,500 to support the Steele County Drain No.

8 pre-construction engineering, which has been completed.

The proposed project consists of deepening the channel and replacing the culvert crossings and outlet structures for the drain in Sections 22, 28 and 29 of Primrose Township. Approximately two miles of the existing main drain along County Road 11 will be deepened with flatter side slopes. The County Road 11 culvert crossings from Lateral Drains A and B will be lowered and resized and the two outlet structures at the outlet of the drain will be replaced. The proposed channel and culvert crossings have been analyzed for a 10-year rainfall event except where required to meet higher standards. The assessment vote ended on June 15, 2016 and passed with a 70 percent approval. A drain permit application was submitted to the Office of the State Engineer on June 17, 2016 and is pending review.

The project engineer's cost estimate is \$1,135,000, of which \$820,939 is determined eligible for state cost participation as a rural flood control project at 45 percent (\$369,423), and \$171,000 is determined eligible for pre-construction engineering eligible costs at 35 percent (\$59,850), for a total state cost participation of \$429,273. The additional state cost participation grant is in the amount of \$411,773 (eligible costs of \$429,273 less \$17,500 approved on September 29, 2015).

It was the recommendation of Secretary Erbele 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 pre-construction engineering eligible costs at a 35 percent grant, not to exceed an additional allocation of \$411,773 (eligible costs of \$429,273 less \$17,500 approved on September 29, 2015), from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Steele County Water Resource District to support the Steele County Drain No. 8 Channel Improvements project.

It was moved by Commissioner Goehring and seconded by Commissioner Hanson 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 pre-construction engineering eligible costs at a 35 percent grant, not to exceed an additional allocation of \$411,773 (eligible costs of \$429,273 less \$17,500 approved on September 29, 2015), from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Steele County Water Resource District to support the Steele County Drain No. 8 Channel Improvements project. This action is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, 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 \$429,273 for the Steele County Drain No. 8 Channel Improvements project.

SHEYENNE RIVER VALLEY
FLOOD CONTROL PROGRAM CITY OF LISBON FLOODWAY
PROPERTY ACQUISITION PROJECT APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION GRANT (\$198,750)
(SWC Project No. 1991-05)

On March 7, 2012, the State Water Commission approved a request from the city of Lisbon for a state cost participation grant at 75 percent of the eligible costs not to exceed an allocation of \$645,000 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371 to support the acquisition of 25 properties for the city's permanent flood protection project.

Previous state cost participation funding approvals include:

On February 27, 2013, the State Water Commission approved a request from the city of Lisbon for a state cost participation grant at 75 percent of the eligible costs not to exceed an additional allocation of \$243,750 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) to support the acquisition of 3 additional properties for the city's flood protection project.

In January, 2014, the State Engineer approved one additional property for the project, no additional funding was requested from the city for this property.

On March 11, 2015, the State Water Commission approved a request from the city of Lisbon for a state cost participation grant at 75 percent of the eligible costs not to exceed an additional allocation of \$110,250 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) to support the acquisition of 8 additional properties for the city's flood protection project.

On May 28, 2016, the State Engineer approved an additional allocation of \$74,515 for the acquisition of properties for the city's flood protection project.

Approvals to date total the state's cost participation allocation to \$1,073,515 for the City of Lisbon Floodway Property Acquisition.

Several properties consisting of seven parcels have been identified by the city of Lisbon for future acquisition or upon which to acquire easements for flood control. These properties are needed because they are located in the future footprint of Levee "E" of the Sheyenne River Flood Protection project. If these properties are not purchased, Levee "E" cannot be constructed without leaving gaps in the levee. The estimated purchase price for these properties is \$265,000, which is eligible for 75 percent state cost participation. A request from the city of Lisbon was presented for the State Water Commission's consideration for state cost participation for an additional \$198,750 for the acquisition of 7 additional properties

for the city's flood protection project. The city has provided the information required under the State Water Commission's floodway property acquisition cost share policy. The request before the State Water Commission is for a 75 percent state cost participation grant in the amount of \$198,750.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant at 75 percent of the eligible costs, not to exceed an additional allocation of \$198,750 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Lisbon to support the city's floodway property acquisition project. The Commission's affirmative action would increase the total state allocation grant to \$1,272,265.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission approve a state cost participation grant at 75 percent of the eligible costs, not to exceed an additional allocation of \$198,750 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Lisbon to support the city's floodway property acquisition project. This action is contingent upon the availability of funds, and the criteria stipulated in the State Water Commission's cost share policy, floodway property acquisition.

Commissioners Berg, 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 action increases the total state allocation grant to \$1,272,265 to the city of Lisbon to support the city's floodway property acquisition project.

SHEYENNE RIVER VALLEY FLOOD PROTECTION PROGRAM -CITY OF LISBON, LEVEES D AND F PRELIMINARY ENGINEERING AND LEGAL SERVICES - APPROVAL OF ADDTIONAL STATE COST PARTICIPATION GRANT (\$2,188,800); AND LOAN TO CITY OF LISBON (\$243,300) Valley Flood Protection Program to (SWC Project No. 1344)

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 assist the city of Lisbon with their preliminary engineering design and legal costs

associated with the development of a permanent flood control project, Phase I - Levee C. The basis for granting this exception to the Commission's cost share policy included multiple years of flooding that the city has experienced, their limited ability to pay due to recurring flood recovery efforts, and potential impacts from Devils Lake releases.

Previous state cost participation funding approvals include:

On May 29, 2014, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an allocation of \$1,238,698 (60 percent of the eligible costs as a flood control project - \$929,023; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - \$309,675), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of \$536,302 of the remaining costs to the city of Lisbon to support its permanent flood protection project, Phase I - Levee A floodwall. Project estimated cost of \$1,775,000.

On September 15, 2014, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an additional allocation of \$680,000 (60 percent of the eligible costs as a flood control project - \$510,000; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - \$170,000), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of \$170,000 to the city of Lisbon to support its permanent flood protection project, Phase I - Levee A floodwall.

On March 11, 2015, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an additional allocation of \$3,166,000 (60 percent of the eligible costs as a flood control project - \$2,374,500; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - \$791,500), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of \$886,500 of the remaining costs to the city of Lisbon to support its permanent flood protection project, Phase I, Levee C.

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 (90 percent of the eligible costs (\$842,850) less \$700,650 approved June 19, 2013 for Phase I - Levee C) from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), 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.

On March 9, 2016, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an additional allocation of \$2,098,000 (60 percent of the eligible costs as a flood control project - \$1,573,500; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - \$524,500), from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of \$527,000 of the remaining costs to the city of Lisbon to support its permanent flood protection project, Phase I - Levee E. Project estimated cost of \$2,625,000.

A request from the city of Lisbon was presented for the State Water Commission's consideration for state cost participation for the preliminary engineering and legal services for Levee D and Levee F, which will provide flood protection to homes and the city's infrastructure. The project engineer's estimated cost is \$2,432,000, which is eligible for state cost participation at 90 percent of the eligible costs (\$2,188,800). The city also requested a 30-year loan from the State Water Commission's Infrastructure Revolving Loan Fund be considered for the local cost share (\$243,200) with an interest rate of 1.5 percent.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant of 90 percent of the eligible costs for the preliminary engineering and legal services - Levee D and Levee F not to exceed an additional allocation of \$2,188,800 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Lisbon to support its permanent flood protection project; and a 30-year loan to the city of Lisbon from the State Water Commission's Infrastructure Revolving Loan Fund for a 10 percent local cost share (\$243,200), with an interest rate of 1.5 percent.

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

1) approve a state cost participation grant of 90 percent of the eligible costs not to exceed an additional allocation of \$2,188,800 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), for the Sheyenne River Valley Flood Protection Program, to the city of Lisbon to support its permanent flood protection project, preliminary engineering and legal services - Levee D and Levee F; and 2) approve a 30-year loan to the city of Lisbon from the State Water Commission's Infrastructure Revolving Loan Fund for the 10 percent local cost share (\$243,200), with an interest rate of 1.5 percent, for the Sheyenne River Valley Flood Protection Program, to the city of Lisbon to support its permanent flood protection project, preliminary engineering and legal services - Levee D and Levee F.

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

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

The total state cost participation for the Sheyenne River Valley Flood Protection Program, city of Lisbon, to date include:

## Levee C:

90 percent state cost participation grant for preliminary engineering design and legal services - \$700,650 (approved June 19, 2013)

#### Levee E:

90 percent state cost participation grant for preliminary engineering design and legal services - \$842,850 (approved May 20, 2015)

60 percent state cost participation grant for construction - \$1,573,500; 20 percent state cost participation grant to mitigate flood risk from the Devils Lake outlets; and loan of \$527,000 from State Water Commission's Infrastructure Revolving Loan Fund (approved March 9, 2016)

### Levee D and Levee F:

90 percent state cost participation for preliminary engineering design and legal services - \$2,188,800); and loan of \$243,200 from State Water Commission's Infrastructure Revolving Loan Fund (approved July 6, 2016) SHEYENNE RIVER VALLEY
FLOOD PROTECTION PROGRAM,
CITY OF VALLEY CITY FLOOD
PROTECTION PROJECT APPROVAL OF STATE COST
PARTICIPATION GRANTS
(PROPERTY ACQUISITION - \$3,750,000);
(AND PRE-CONSTRUCTION
ENGINEERING - \$807,500)
(SWC Project Nos. 1504-05 and 1504)

On December 9, 2011, the State Water Commission adopted a motion approving a request from the city of Valley City for a state cost participation grant at 75 percent of the eligible costs, not to exceed an allocation of \$3,000,000 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371, to support the acquisition of 32 properties in Phase I.

Previous state cost participation funding approvals include:

On June 19, 2013, the State Water Commission adopted a motion approving a request from the city of Valley City for a state cost participation grant at 85 percent of the eligible costs, not to exceed an allocation of \$350,625 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371, to support the pre-construction engineering, Phase I.

On July 23, 2013, the State Water Commission adopted a motion approving a request from the city of Valley City for a state cost participation grant at 75 percent of the eligible costs, not to exceed an additional allocation of \$1,165,830 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371, to support the acquisition of an additional 17 properties in Phase II.

On May 29, 2014, the State Water Commission adopted a motion approving a request from the city of Valley City for a state cost participation grant of 60 percent of the eligible costs as a flood control project not to exceed an allocation of \$6,509,760, and a 20 percent grant of the eligible costs to mitigate the flood risk from the Devils Lake outlets not to exceed an allocation of \$2,169,920 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020); and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund for the local cost share in the amount of \$3,860,614, to the city of Valley City to support its permanent flood protection project, Phase I. Project estimated cost of \$12,540,294.

On December 5, 2014, the State Water Commission adopted a motion approving a request from the city of Valley City for a state cost participation grant of 85 percent of the eligible costs, not to exceed an additional allocation of \$157,250 to support the pre-construction engineering, Phase I; and a state cost participation grant of 80 percent of the eligible costs not to exceed an additional allocation of \$1,477,357 (60 percent is for the flood control project, and 20 percent is to mitigate the flood risk from the Devils Lake outlets), to the city of Valley City to support their permanent flood protection project.

On March 11, 2015, the State Water Commission adopted a motion approving a request from the city of Valley City for the acquisition of 7 additional properties in Phase II (no additional funding was requested).

On May 20, 2015, the State Water Commission adopted a motion approving a request from the city of Valley City for a state cost participation grant of 85 percent of the eligible costs, not to exceed an additional allocation of \$340,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020) to support the flood control master plan and preconstruction engineering, Phase II.

Phase II of the permanent flood protection project involves the elements required to protect the downtown area including floodwalls, utility relocation, and storm water pumping stations. The time line for the design of Phase II is scheduled for the fall of 2016, bidding in the spring of 2017, and construction in 2017-2018. The project engineer's estimated cost is \$13,600,000. The pre-construction engineering is estimated at \$950,000, which is determined eligible for an 85 percent state cost participation (\$807,500). A request from the city of Valley City was presented for the State Water Commission's consideration for state cost participation at 85 percent for the pre-construction engineering, Phase II.

To accommodate the levees and floodwalls for Phase III, homes and businesses will need to be relocated, at an estimated buyout cost of \$5,000,000, which is determined eligible for state cost participation of 75 percent (\$3,750,000). A request from the city of Valley City was presented for the State Water Commission's consideration for state cost participation at 75 percent for the property acquisitions, Phase III.

The removable stop logs utilized for road closures and half walls require an indoor storage facility to protect the rubber components. The storage facility will consist of an unheated steel building with a concrete floor. The exterior of the building will include gravel access roads to facilitate truck traffic and a concrete loading pad. The proposed building will accommodate all of the proposed removable floodwalls with a size of approximately 5,000 square feet. The estimated cost of the building including engineering, land, and construction is \$492,700. The total estimated cost of the pre-construction engineering is \$32,300, which is determined eligible for an 85 percent state cost participation (\$27,455). Construction and land costs are estimated at \$460,400, which are determined eligible for an 80 percent state cost participation (\$368,320) (60 percent - flood control, and 20 percent - mitigate the flood risk from the Devils Lake outlets). A request from the city of Valley City was presented for the State Water Commission's consideration for state cost participation totalling \$395,775 for the stop logs storage facility.

The State Water Commission members discussed the request for state cost participation for the stop logs storage facility, and had a discussion relative to the flood risk from the Devils Lake outlet. Based on the Commission members discussion and information provided from the project engineers, no action was taken by the State Water Commission at this meeting.

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

- 1) approve a state cost participation grant of 85 percent of the eligible costs for pre-construction engineering, Phase II, not to exceed an additional allocation of \$807,500 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020); and
- 2) approve a state cost participation grant of 75 percent of the eligible costs for the acquisition of additional properties, Phase III, not to exceed an additional allocation of \$3,750,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020).

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

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

To date, the state cost participation approval grants of 75 percent of the eligible costs, total an allocation not to exceed \$7,915,000 for the Sheyenne River Valley Flood Protection Program, city of Valley City for the property acquisitions (Phase I - \$3,000,000 (approved December 9, 2011; Phase II - \$1,165,000 (approved July 23, 2013); and \$\$3,750,000 - Phase III (approved July 6, 2016).

To date, the state cost participation approval grants of 80 percent of the eligible costs total an allocation not to exceed \$10,157,037 (60 percent - flood control, and 20 percent - mitigate the flood risk from the Devils Lake outlets) (approved on May 29, 2014 and December 5, 2014); and a state cost participation grant of 85 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of \$1,655,375 (approved on June 19, 2013, December 5, 2014, May 20, 2015, and July 6, 2016);

and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund for the local cost share in the amount of \$3,860,614 (approved on May 29, 2014), for the Sheyenne River Valley Flood Protection Program, City of Valley City for their permanent flood protection project, Phases I, II, and III.

CITY OF GRAFTON FLOOD RISK REDUCTION PROJECT UPDATE (SWC Project No. 1771-02) On March 11, 2010, the State Water Commission adopted a motion approving a state cost participation grant as a flood control project at 70 percent of the

eligible non-federal costs not to exceed an allocation of \$7,175,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the city of Grafton to support the Grafton flood control 2010 diversion channel and flood system works construction project as a match to a federally-funded project. Since that time, the federal funding has changed and there are no federal funds available.

On December 5, 2015, the State Water Commission adopted a motion approving a state cost participation grant as a preconstruction engineering project at 35 percent of the eligible costs, not to exceed an additional allocation of \$1,750,000 from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), to the city of Grafton to support the pre-construction engineering for the Grafton Flood Risk Reduction project. To date, these approvals total the state cost participation allocation grant of \$8,925,000 for the Grafton Flood Risk Reduction project.

2015 Senate Bill 2020, the State Water Commission appropriation bill, 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 fund, and the line of credit available from the Bank of North Dakota, \$113,000,000 is for flood control projects,",,, of which \$25,000,000 was budgeted for the Grafton Flood Risk Reduction project.

Chris West, Mayor, city of Grafton, appeared before the State Water Commission to provide a project update and to inform the Commission members that it is the intent of the city to request state cost participation at the next meeting of the State Water Commission. The city has completed the hydrology and hydraulics, geotechnical exploration, cultural and wetland field review and reports, wetland mitigation plan, data book creation, title information, right-of-way plat preparation, and 65 percent of the design plans. The 404 permit application has been submitted to the Corps of Engineers, and meetings have been ongoing with the State Water Commission, FEMA, and the local floodplain administra-

tors on the conditional letter of map revision. The impact analysis, floodplain permits and construction permits are being developed as the project progresses, and utility and agency coordination has been ongoing. The city of Grafton passed a sales tax increase in 2014 and a special assessment district will be dedicated to the project. A summary outline of the city's presentation is included as **APPENDIX "C"**.

FARGO MOORHEAD AREA DIVERSION PROJECT UPDATE (SWC Project No. 1928) Keith Berndt, Fargo, representing Cass County, provided updates on the local, state and federal efforts currently underway on the Fargo Moorhead Area Diversion project.

The Minnesota Department of Natural Resources (DNR) released the final environmental impact statement (EIS) on May 16, 2016 for the proposed Fargo Moorhead Area Diversion project. The final EIS describes the potential environmental and social effects of the proposed flood diversion project for the Fargo-Moorhead area, and identified several significant concerns about the project that will need to be addressed prior to permitting decisions. The final EIS is not a decisional document but rather independently evaluates and discloses potential project impacts and proposed mitigations for those impacts. The final EIS was available for public comment on May 16, 2016 through May 31, 2016. The DNR will produce a Record of Decision that describes the agency's adequacy determination.

The cost estimate for the Fargo Moorhead Area Diversion Project, which will offer permanent protection to the Fargo-Moorhead area from serious flooding, has been updated to approximately \$2.1 billion dollars.

A Project Partnership Agreement (PPA) with the Corps of Engineers is required to be signed by August 31, 2016 for the Diversion Project to maintain its federal "new start" status in order for construction to begin. Six new starts were awarded in the United States in 2016 and eleven in the last six years. The PPA signing ceremony is scheduled for July 11, 2016 in Fargo, ND.

The Corps of Engineers construction on the Diversion Project is slated to begin in the fall of 2016, however, in order to secure the "new start" designation and federal funding commitment, the federal funding commitment was reduced by the Office of Management and Budget (OMB) to \$450 million. With the release of the updated cost estimate, a project-specific financial plan was completed, which is included as **APPENDIX "D"**.

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 June 16, 2016 and included as **APPENDIX "E"**.

SOUTHWEST PIPELINE PROJECT -CITY OF SOUTH HEART, APPROVAL OF AMENDMENT TO WATER SERVICE CONTRACT 1736-16, MAXIMUM FLOW RATE AMENDMENT (SWC Project No. 1736-99) On March 15, 1983, the State Water Commission approved water service contract 1736-16 between the city of South Heart, the Southwest Water Authority, and the State Water Commission.

A request from the city of South Heart was presented for the State Water Commission's consideration for an amendment to the city's water service agreement changing their current maximum flow rate. Section VI.B.2 is amended as follows:

"The maximum flow rate to be provided by the Commission to the City shall not exceed 15.5 gallons per minute" is changed to <u>"The maximum flow rate to be provided by the Commission to the City shall not exceed 80.0 gallons per minute."</u>

It was the recommendation of Secretary Erbele that the State Water Commission authorize the Secretary to the State Water Commission to execute the amendment to water service contract 1736-16 between the city of South Heart, the Southwest Water Authority, and the State Water Commission.

It was moved by Commissioner Swenson and seconded by Commissioner Nodland that the State Water Commission authorize the Secretary to the State Water Commission to execute the amendment to water service contract 1736-16 between the city of South Heart, the Southwest Water Authority, and the State Water Commission. SEE APPENDIX "F"

Commissioners Berg, 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 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 June 16, 2016, and included as **APPENDIX "G"**.

NORTHWEST AREA WATER
SUPPLY (NAWS) PROJECT CONTRACT 2-2A-1, PIPELINE
CASING INSTALLATION AUTHORIZE SECRETARY TO
STATE WATER COMMISSION TO
AWARD CONTRACT TO LOWEST
RESPONSIBLE BIDDER
(SWC Project No. 237-04)

The North Dakota Department of Transportation (DOT) is proposing multiple roadway improvements in 2017 in the vicinity of the Northwest Area Water Supply (NAWS) project pipeline near the U.S. 83 bypass. These improvements include widening the bypass to four lanes and rerouting 25th Street SW near the NAWS Iso-vault No. 4, in addition to changes to the frontage

road south of the Mouse River and north of U.S. Highway 2.

Because of the improvements proposed by the DOT, several reaches of the NAWS pipeline will need to be encased to address both overburden concerns and highway codes. This pipeline cannot be taken out of service without severely impacting water service to NAWS customers and the city of Minot. Houston Engineering has been working on the plans and specifications in coordination with the DOT to address the issue by encasing the affected NAWS pipeline with split casing attached to existing casing and the Iso-vault. The total length of the affected pipeline is approximately 305 linear feet.

The documents for Northwest Area Water Supply (NAWS) Contract 2-2A-1, pipeline casing installation, are currently in final review, and it is anticipated that the advertisement for bids could occur in August, 2016 in order that the work can be completed in the summer/fall of 2016.

It was the recommendation of Secretary Erbele that the State Water Commission authorize the Secretary to the State Water Commission to award Northwest Area Water Supply Project Contract 2-2A-1 to the lowest responsible bidder.

It was moved by Commissioner Foley and seconded by Commissioner Vosper that the State Water Commission authorize the Secretary to the State Water Commission to award Northwest Area Water Supply Project Contract 2-2A-1 to the lowest responsible bidder. 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.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT UPDATE (SWC Project No. 1974) The Mouse River Enhanced Flood Protection project status report was provided, which is detailed in the staff memorandum dated June 23, 2016, and included as **APPENDIX "H"**.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT, PERKETT DITCH IMPROVEMENTS PROJECT -APPROVAL OF STATE COST PARTICIPATION GRANT (\$2,188,592) (SWC Project No. 1974)

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 the Mouse River Enhanced Flood Protection Project, Perkett Ditch Improvements.

The proposed project is a portion of the interior drainage system for the Mouse River Enhanced Flood Protection project as it will convey storm runoff from the north along the U.S. Highway 83 bypass and drain all of the intervening area to the Perkett pump station which is a project component. The Perkett ditch improvement includes channels and detention ponds which, when completed, will provide a public use area. The proposed project is planned to go to construction in 2016 marking the beginning of implementation of the project. The project engineer's cost estimate is \$4,385,243. Because of lower than expected bids, the 60 percent state cost share participation request was reduced to \$2,188,592.

It was the recommendation of Secretary Erbele that the State Water Commission approve a 60 percent state cost participation grant as a flood control project not to exceed an allocation of \$2,188,592 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 Mouse River Enhanced Flood Protection Project, Perkett Ditch Improvements project.

It was moved by Commissioner Foley and seconded by Commissioner Hanson that the State Water Commission approve a 60 percent state cost participation grant as a flood control project not to exceed an allocation of \$2,188,592 from the funds appropriated to the State Water Commission in the 2015-2017 bien-

nium (S.B. 2020) to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Perkett Ditch Improvements project. This approval is contingent upon the availability of funds.

The city of Minot has and continues to fund regional efforts for flood mitigation and potable drinking water. Commissioner Foley alluded to the following history synopsis of the prior flood control efforts:

The Corps of Engineers Minot Channel Improvement project that began in 1971 and completed in 1978. The project included 15.8 miles of snagging and clearing and 10.6 miles of channel improvements. The federal costs totaled \$21,300,000 and the local costs totaled \$3,200,000.

In the late 1980s, a flood control project for the urban and rural reaches of the Souris River in North Dakota was planned and completed including flood control features in the United States and Canada. The federal government contributed \$41,100,000, the city of Minot contributed \$10,000,000, and the State of North Dakota contributed \$1,800,000.

The city of Minot committed to funding the local share of the Mouse River Enhanced Flood Protection project (MREFPP) in direct response to the 2011 flood in the Mouse River basin. This commitment includes funding the local share of the project identified in the Rural Alternatives Analysis Report (RAAR).

The current cost share for MREFPP pre-construction engineering work has been 60 percent state cost participation and 40 percent local cost share. The acquisition of properties has been cost shared at 75 percent state/25 percent local cost share. The estimated cost for the MREEFPP from the cities of Burlington to Velva is \$843,000,000. If the local share remains at 40 percent, the city of Minot will have contributed \$337,200,000. The rural features are estimated at \$180,000,000 of which Minot's share would be \$72,000,000 on a 60 percent state/40 percent local cost share.

The city of Minot contributes 35 percent of the cost of the Northwest Area Water Supply (NAWS) project designed to bring potable water from Lake Sakakawea to an area around Minot. In 1998, voters in Minot voted to levy a one percent sales tax to go towards the construction of NAWS. To date, the city of Minot has contributed over \$43,000,000 or 35.7 percent of the current total cost of the project.

Commissioner Foley summarized that these efforts demonstrates the city of Minot's efforts to a regional area commitment, and offered the following substitute amendment relating to the state cost share percentage for the Mouse River Enhanced Flood Protection Project:

A substitute amendment to the original motion was offered by Commissioner Foley and seconded by Commissioner Swenson that the State Water Commission approve a 75 percent state cost participation grant as a flood control project for the Mouse River Enhanced Flood Protection project.

In discussion of the substitute amendment to the original motion, Governor Dalrymple recommended this issue be referred to the State Water Commission's cost share policy meeting for further consideration, and asked that the substitute amendment to the original motion be withdrawn. Commissioners Foley and Swenson were receptive to Governor Dalrymple's recommendation, the substitute amendment to the original motion was withdrawn.

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

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

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT -APPROVAL OF STATE COST PARTICIPATION GRANT (\$350,000) TO SUPPORT NON-FEDERAL COSTS FOR CORPS OF ENGINEERS PROJECT FEASIBILITY STUDY (SWC Project No. 1974) On May 6, 2016, the Souris River Joint Board executed a feasibility study agreement with the St. Paul District Corps of Engineers, which initiated the Corps involvement in the Mouse River Enhanced Flood Protection project. The agreement sets forth the obligations of the Corps of Engineers and the Souris River Joint Board in pursuit of a

"study" to identify a coordinated and implementable solution for the Mouse River Enhanced Flood Protection project; and develop a project management plan that describes the scope, cost, and scheduled for the study. The feasibility study process is estimated for completion in three years at an estimated cost of \$3,000,000, which under the terms of the agreement would provide a 50 percent cost share each by the Corps of Engineers and the Souris River Joint Board over two biennia. The cost for the 2015-2017 biennium is \$1,400,000 (\$700,000 federal, and \$700,000 non-federal).

A request from the Souris River Joint Board was presented for the State Water Commission's consideration for a 50 percent state cost participation of the non-federal share (\$700,000) for an allocation of \$350,000 to support the Mouse River Enhanced Flood Protection project feasibility study.

It was the recommendation of Secretary

Erbele that the State Water Commission approve a 50 percent state cost participation grant not to exceed an allocation of \$350,000 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 non-federal cost share of the Mouse River Enhanced Flood Protection project feasibility study.

It was moved by Commissioner Foley and seconded by Commissioner Hanson that the State Water Commission approve a 50 percent state cost participation grant not to exceed an allocation of \$350,000 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 non-federal cost share of the Mouse River Enhanced Flood Protection project feasibility study. This approval is contingent upon the availability of funds.

Commissioners Berg, 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 -SOURIS VALLEY GOLF COURSE TEMPORARY IMPROVEMENTS (SWC Project No. 1974) The Napa Valley levees of the Mouse River Enhanced Flood Protection project are expected to have a three-year construction cycle. A vast majority of the Souris Valley golf course would be unuseable for that entire period which

could result in closure of the entire facility. In order to keep the facility in service and ensure public safety, a project is proposed that includes construction of five temporary holes for the golf course, at an estimated project cost is \$173,591. A request from the Souris River Joint Board was presented for the State Water Commission's consideration for a 60 percent state cost participation of the eligible costs (\$104,155). The project engineer provided detailed information relative to the project, noting that planned construction is anticipated in the summer/fall of 2016.

It was moved by Commissioner Swenson and seconded by Commissioner Foley that the State Water Commission approve a state cost participation grant at 50 percent of the eligible costs as a flood control project, not to exceed a total allocation of \$86,796 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 Souris Valley Golf Course Temporary Improvements project.

The Commission members deliberated the proposal at length and expressed concerns relative to the eligibility of funding the construction of temporary holes for a golf course.

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

INTERNATIONAL BOUNDARY
ROADWAY DIKE PROJECT APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION GRANT (\$400,000)
(SWC Project No. 1401)

On November 11, 2004, the State Water Commission adopted a motion to approve a state cost participation grant of 50 percent of the eligible costs, not to exceed an allocation of \$200,000 from the funds appropriated to the State

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

Previous state cost participation funding approvals include:

On March 22, 2006, the State Water Commission approved a request from the Pembina County Water Resource District for a 50 percent state cost participation grant, not to exceed an additional allocation of \$100,000 from the funds appropriated to the State Water Commission in the 2005-2007 biennium, for the plaintiff's legal and expert costs in the District's legal action to remove the international boundary roadway dike project. This approval increased the total state cost participation grant to \$300,000.

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

On September 17, 2012, the State Water Commission adopted a motion approving a state cost participation grant of 50 percent, not to exceed an additional allocation of \$200,000 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Pembina County Water Resource District for their legal action to remove the Canadian border dike and to recover damages to public property caused by the dike project. This approval increased the total state cost participation grant to \$500,000.

On December 11, 2015, the State Water Commission adopted a motion approving a state cost participation grant of 50 percent, not to exceed an additional allocation of \$125,000 from the funds appropriated to the State Water

Commission in the 2015-2017 biennium (S.B. 2020), to the Pembina County Water Resource District for their legal action to remove the Canadian border dike and to recover damages to public property caused by the dike project. This approval increased the total state cost participation grant to \$625,000.

The lawsuit trial began in April, 2016 with the Plaintiffs presenting first. The trial was planned to recess until fall after the Plaintiffs concluded. At the beginning of the trial, the Defendants submitted a motion claiming the Court did not have jurisdiction. Since the trial had begun, the judge allowed it to proceed so he could review the motion during the recess. During the recess he did that and concluded the Defendants were correct. The lawsuit was based on a claim of violations of an Act passed by the Canadian Parliament to implement the Boundary Waters Treaty of 1909. No parallel legislation exists in the United States, the Treaty is simply taken at face value. There is language in this Act which limits its provisions to waters moving from Canada into the United States, but not the reverse.

An appeal has been filed. Costs for preparation were higher than expected, therefore, additional funds are needed to ensure that adequate funds are available to pay the greater than anticipated legal fees. A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation of 50 percent not to exceed an additional allocation of \$400,000 in the District's legal action to remove the Canadian border dike and recover damages to public property caused by the dike project.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant of 50 percent, not to exceed an additional allocation of \$400,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Pembina County Water Resource District for their legal action to remove the Canadian border dike and to recover damages to public property caused by the dike project. The Commission's affirmative action would increase the total state cost participation grant to \$1,025,000. The Pembina County Water Resource District and the Red River Joint Water Resource District will each provide a cost share participation of 25 percent.

It was moved by Commissioner Goehring and seconded by Commissioner Hanson that the State Water Commission approve a state cost participation grant of 50 percent, not to exceed an additional allocation of \$400,000 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 District's legal action to remove the Canadian border dike and to recover damages to public property caused by the dike project. This approval is contingent upon the availability of funds.

To date, the state cost participation grants of 50 percent of the eligible items total an allocation of \$1,025,000 to the Pembina County Water Resource District for the international boundary roadway dike project.

WESTERN AREA WATER SUPPLY PROJECT UPDATE (SWC Project No. 1973-04) Jaret Wirtz, Western Area Water Supply (WAWS) executive director, provided update reports including project status, current water demands, industrial sales,

and the office building remodel project. A status report on the grants and loans for projects was discussed, and Mr. Wirtz indicated that the WAWS Authority intends to request \$60,000,000 for the 2017-2019 biennium for funding WAWS projects.

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 Red River Valley

Water Supply project, operations and maintenance efforts, and funding for the 2017-2019 biennium.

2015 NORTH DAKOTA STATE WATER MANAGEMENT PLAN UPDATE (SWC Project No. 322) By virtue of North Dakota Century Code, Section 61-02-14, Powers and Duties of the Commission; Section 61-02-26, Duties of State Agencies Concerned with Intrastate Use or Disposition of

Waters; and Section 61-02-01.3, Comprehensive Water Development Plan - the Commission is required to develop and maintain a comprehensive water development plan.

In preparation for the next budgeting process, the Commission's Planning and Education division has begun to develop an update to the 2015 State Water Plan focusing on the 2017-2019 biennium and beyond. Letters were sent in February, 2016 to potential project sponsors across the state asking them to identify their potential water development projects and programs, timing of implementation, and estimated costs. Approximately 290 project information forms were returned and approximately 270 may have portions that are eligible for cost share

assistance. The input gained from the local project sponsors and water managers will become the foundation of the State Water Commission's budget request to the Governor and the Legislature. The information provided will assist in the allocation of agency budget resources.

To promote and encourage local sponsor participation in water planning and in legislative and agency biennial budgeting efforts, the 2013 Legislative Assembly passed House Bill 1206 (NDCC 61-02-01.3) requiring the Commission to schedule commissioner-hosted meetings within the six major drainage basins of the state - Red River, James River, Mouse River, upper and lower Missouri River, and Devils Lake.

# STATE WATER COMMISSION-HOSTED MEETINGS - JULY 25-28, 2016 (SWC Project No. 322)

The 2017-2019 biennium State Water Commission-hosted meetings will be held throughout the state July 25-28, 2016 to facilitate local participation in

the water planning and budget development process, per North Dakota Century Code § 61-02-01.3. As required, the meetings will be located within the state's six major drainage basins including Red River, James River, Mouse River, upper and lower Missouri River, and Devils Lake.

Specific areas of focus for the meetings include presentation of an overview of the State Water Commission's current cost share and project prioritization policies; provide a summary of the 2017-2019 water project inventory effort; and encourage brief project summaries and updates from sponsors who submitted projects to the Commission as part of the 2017-2019 water planning and budgeting process.

## LEGISLATIVE WATER TOPICS OVERVIEW COMMITTEE UPPDATE

Representative James Schmidt, Legislative Water Topics Overview Committee chair, addressed the State Water

Commission with a summary of the committee's activities. Upcoming committee meetings include: August 24-25 - Committee meeting in Watford City; September 22 - Joint Water Topics Overview Committee and State Water Commission, Bismarck; and September 23 - Committee meeting, Bismarck.

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 June 20, 2016, and included as **APPENDIX "I"**.

# MISSOURI RIVER REPORT (SWC Project No. 1392)

The Missouri River report was provided, which is detailed in the staff memorandum dated June 17, 2016, and included as *APPENDIX "J"*.

#### STATE ENGINEER'S COMPENSATION

In compliance with North Dakota Century Code § 61-03-01 in that the State

Water Commission is setting the State Engineer's compensation, Governor Dalrymple requested Commission members Doug Goehring, Harley Swenson, Arne Berg, and Governor Dalrymple be appointed as a subcommittee of the State Water Commission to review the State Engineer's compensation.

#### ASSISTANT STATE ENGINEER, POSITION NO. 00006767 VACANCY

Position No. 00006767, Assistant State Engineer, currently remains vacant. Governor Dalrymple al-

luded to the process put in place for the vacant State Engineer's position in terms of applications and interviews and recommended a similar process be used to fill the Assistant State Engineer's position. Governor Dalrymple asked that the State Engineer's Search Committee be reinstated consisting of Governor Dalrymple and Commission members Doug Goehring, Arne Berg, George Nodland, Maurice Foley and Robert Thompson.

There being no further business to come before the State Water Commission, Governor Dalrymple adjourned the July 6, 2016 meeting at 5:30 p.m.

STATE WATER RESOURCES OF THE STATE OF THE ST

Jack Dalrymple, Governor

Chairman, State Water Commission

Garland Erbele, P.E.

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

#### ALLOCATED PROGRAM EXPENDITURES FOR THE PERIOD ENDED MAY 31, 2016 BIENNIUM COMPLETE: 46%

APPENDIX "A"
JULY 6, 2016

				JULI 0, 20
PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	23-Jun-16 PROGRAM TOTALS
ADMINISTRATION				
Allocated	2,729,489	2,806,129		5,535,618
Expended	1,212,120	766,317		1,978,437 36%
Percent	44%	27%		30%
			General Fund:	0
			Federal Fund:	35,033
			Special Fund:	1,943,404
PLANNING AND EDUCATION				
Allocated	1,472,573	352,990		1,825,563
Expended	670,091	85,106		755,197
Percent	46%	24%		41%
			General Fund:	. 0
			Federal Fund:	112,349
			Special Fund:	642,848
MATER ARRESTATION				
WATER APPROPRIATION Allocated	5,762,691	1,185,300	1,372,844	8,320,835
Expended	2,452,231	214,135	202,358	2,868,724
Percent	43%	18%	15%	34%
			General Fund:	0
			Federal Fund:	26,000
			Special Fund:	2,842,724
WATER DEVELOPMENT	4,713,717	10,742,500	1,562,500	17,018,717
Allocated Expended	1,976,944	3,593,620	427,544	5,998,108
Percent	42%	33%	27%	35%
			Occasion Sundi	0
			General Fund: Federal Fund:	100,937
			Special Fund:	5,897,171
			·	
STATEWIDE WATER PROJECTS			050 002 567	050 003 567
Allocated Expended			959,003,567 163,715,401	959,003,567 163,715,401
Percent			17%	17%
				_
			General Fund:	0
			Federal Fund: Special Fund:	163,715,401
			оробил гина.	100,7 10,10 7
REGULATORY DIVISION				
Allocated	2,828,565	2,947,500	15,000 0	5,791,065 1,364,917
Expended Percent	977,556 35%	387,361 13%	0%	1,304,917
reicent	0070	1070	•	
			General Fund:	0
			Federal Fund: Special Fund:	522,707 842,210
			opcolar rana.	0 12,2 10
ATMOSPHERIC RESOURCE				
Allocated	1,107,158	743,382		6,735,752
Expended Percent	449,327 41%	179,142 24%		1,183,581 18%
Percent	4170	2470	11.70	
			General Fund:	0
			Federal Fund: Special Fund:	0 1,183,581
			opecial rund.	1,100,001
SOUTHWEST PIPELINE				
Allocated	512,995	10,461,744		108,477,237
Expended	288,004	4,502,081 43%		31,606,646 29%
Percent	56%	4370	2070	2570
			General Fund:	0
			Federal Fund:	2,000,000 29,606,646
			Special Fund:	25,000,040
NORTHWEST AREA WATER SUPPL	.Υ			
Allocated	705,632	13,910,277		46,227,482
Expended	269,362	1,647,440		2,338,294 5%
Percent	38%	12%	1%	5%
			General Fund:	0
			Federal Fund:	0 229 204
			Special Fund:	2,338,294
PROGRAM TOTALS				
Allocated	19,832,820	43,149,822		1,158,935,836
Expended	8,295,635	11,375,201		211,809,303
Percent	42%	26%	18%	18%

#### STATE WATER COMMISSION PROJECT SUMMARY 2015-2017 BIENNIUM

					May-16
	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
FLOOD CONTROL					
FARGO	228,506,200	159,506,200	45,604,888	69,000,000	113,901,312
GRAFTON	33,925,000	8,925,000	1,131,383	25,000,000	7,793,617
MOUSE RIVER FLOOD CONTROL	46,513,397	16,082,847	4,794,309	30,430,550	11,288,538
VALLEY CITY	32,208,354	14,208,051	4,427,700	18,000,303	9,780,351
LISBON	15,733,437	5,905,952	3,155,468	9,827,485	2,750,484
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	5,989,148	0	17,890,168
WARD COUNTY	6,046,590	6,046,590	31,243	0	6,015,347
VALLEY CITY	267,403	267,403	142,606	0	124,797
BURLEIGH COUNTY	232,649	232,649	0	0	232,649
SAWYER	184,260	184,260	0	0	184,260
LISBON	120,000	120,000	0	0	120,000
BURLINGTON	43,350	43,350	0	0	43,350
STATE WATER SUPPLY					
REGIONAL & LOCAL WATER SYSTEMS	153,178,443	153,178,442	36,899,250	0	116,279,192
FARGO WATER TREATMENT PLANT	22,768,775	22,768,775	8,538,423	0	14,230,352
GRAND FORKS WATER TREATMENT PLANT	30,000,000			30,000,000	
SOUTHWEST PIPELINE PROJECT	104,940,447	104,940,447	29,606,646	0	75,333,801
NORTHWEST AREA WATER SUPPLY	15,754,482	5,754,482	1,163,543	10,000,000	4,590,938
WESTERN AREA WATER SUPPY AUTHORITY	82,201,384	82,201,384	32,719,633	0	49,481,751
RED RIVER VALLEY WATER SUPPLY	12,521,328	12,521,328	4,032,845	0	8,488,483
CENTRAL NORTH DAKOTA WATER SUPPLY	70,070,800	70,800	69,804	70,000,000	997
UNOBLIGATED STATE WATER SUPPLY	3,559,160	·		3,559,160	
GENERAL WATER MANAGEMENT					
OBLIGATED	32,316,946	32,316,946	12,010,897	0	20,306,049
UNOBLIGATED GENERAL WATER	40,609,060			40,609,060	
DEVILS LAKE					
OUTLET	870,802	870,802	0	0	870,802
OUTLET OPERATIONS	18,534,211	18,534,210	3,907,641	0	14,626,569
DL EAST END OUTLET	2,774,011	2,774,011	0	0	2,774,011
REVOLVING LOAN FUND					
GENERAL WATER PROJECTS	11,000,000	1,413,500	886,500	9,586,500	527,000
WATER SUPPLY	25,000,000	13,056,885	7,500,000	11,943,115	5,556,885
TOTALS	1,025,008,125	690,051,949	206,611,927	334,956,176	483,440,022

#### STATE WATER COMMISSION PROJECT SUMMARY 2015-2017 Biennium

PROGRAM OBLIGATION

pproved	swc				Initial Approved	Total	Total	May-16
	No	Dept	Sponsor	Project	Date	Approved	Payments	Balance
				Flood Controls				
B 2020	1928-01	5000		Flood Control: Fargo Flood Control Project	6/23/2009	99,506,200	31,277,410	68,228,7
	1928-02	5000	City of Fargo	Interior Flood Control Project	12/11/2015	30,000,000	2,249,253	27,750,7
	1928-03 1771-01	5000 5000		Interior Disaster Relief Fund Grafton Flood Control Project	12/11/2015 3/11/2010	30,000,000 7,175,000	12,078,225 0	17,921,7 7,175,0
	1771-01	5000		Grafton Flood Risk Reduction Project	12/5/2014	1,750,000	1,131,383	618,6
	1974-06	5000	Souris River Joint WRD	Development of 2011 Flood inundation Maps	12/18/2015	5,600	0	5,6
B 2371	1974-08 1974-09	5000 5000	Souris River Joint WRD Souris River Joint WRD	Mouse River Reconnaissance Study to Meet Fed Guide 4th Ave NE & Napa Valley/Forest Rd Flood Improveme	2/15/2013 10/7/2013	809 5,877,512	0 3,974,566	1,902,9
	1974-09	5000		Broadway Pump Station	12/11/2015	1,440,000	3,374,300	1,440,0
	1974-14	5000	Souris River Joint WRD	StARR Program (Structure Acquisition, Relocation,	3/9/2016	7,200,000	o	7,200,0
	1758 1974-11	5000 5000		International Joint Commission Study Board Funding of 214 agreement between SRJB & USACE	5/29/2014 12/5/2014	302,500 0	0	302,5
	1993-01	5000		Downtown Infrastructure Improvements	9/15/2014	1,256,426	819,743	436,6
	1344-01	5000	Valley City	Sheyenne River Valley Flood Control Project	12/5/2015	156,993	156,993	
	1344	5000		Sheyenne River Valley Flood Control Project PHII	5/20/2015	340,000	4 270 707	340,0 5,579,7
	1504-01 1504-02	5000 5000		Permanent Flood Protection Project Permanent Flood Protection Project (LOAN)	12/5/2014 12/5/2014	9,850,444 3,860,614	4,270,707 0	3,860,6
3 2371	1344-02	5000		Sheyenne River Valley Flood Control Project	6/19/2013	92,81	92,810	
	1991-01	5000		Permanent Flood Protection Project	5/29/2014	561,702 3,153,440	414,733	146,9 505,5
	1991-03 1991-06	5000 5000		Permanent Flood Protection - Levee C Project Permanent Flood Protection - Levee E Project	3/11/2015 3/9/2016	2,098,000	2,647,925 0	2,098,0
3 2371	1344-03	5000	Fort Ranson	Sheyenne River Valley Flood Control Project	6/19/2013	225,000	0	225,0
	849 1992-02	5000 5000	Pembina Co. WRD	Renwick Dam Rehabilitation Missouri River Correctional Center	6/26/2014 9/21/2015	23,320 1,200,000	0 1,200,000	23,3
3 2020	1992-02	5000		Fox Island Flood Control Funding Update	9/21/2015	2,800,000	2,800,000	
			-	Subtotal Flood Control		208,876,370	63,113,748	145,762,6
				Finodway Property Acquisitions:				
	1993-05	5000		Minot Phase 2 - Floodway Acquisitions	10/7/2013	23,879,316 6,046,590	5,989,148	17,890,1
	1523-05 1504-05	5000 5000		Ward County Phase 1, 2 & 3 - Floodway Acquisitions Valley City Phase 1 - Floodway Acquisitions	1/27/2012 7/23/2013	6,046,590 267,403	31,243 142,606	6,015, 124,
2371	1992-05	5000	Burleigh Co. WRD	Burleigh Co. Phase 1 - Floodway Acquisitions	3/7/2012	232,649	0	232,
	2000-05 1991-05	5000		Sawyer Phase 1 - Floodway Acquisitions	6/13/2012	184,260	0	184. 120,
	1991-05 1987-05		City of Lisbon City of Burlington	Lisbon - Floodway Acquisition Mouse River Enhanced Flood Plan Property Acquistion	5/18/2016 12/29/2015	120,000 43,350	0	43,
			on, or parmyron			30,773,568	6,162,997	24.610.
				Subtotal Floodway Property Acquisitions		30,773,300	0,102,997	24,010,
				State Water Supply Grants:				
	2373-35	5000	Grand Forks - Traill RWD	Grand Forks - Traill County WRD	6/13/2012	303,715	221,943	81,
	2373-36	5000	Stutsman Rural RWD	Stutsman Rural Water System - Phase IIB, III	2/27/2013	4,443,172	4,156,803	286,
	2373-38 2373-39	5000 5000	Stutsman Rural RWD North Central Rural Water Consortium	Kidder Co & Carrington Area Expansion	7/23/2013 5/29/2014	991,361 2,970,141	294,679 521,027	696, 2,449,
	2373-41	5000	North Central Rural Water Consortium		3/11/2015	5,594,102	1,914,785	3,679,
	2050-01	5000	Missouri West Water System	South Mandan	3/17/2014	205,711	148,457	57,
	2050-02 2050-03	5000 5000	Grand Forks Traill RWD Northeast Regional WD	Improvements Langdon RWD - ABM Pipeline Phase 1	3/11/2015 10/7/2013	4,369,058 540,526	2,089,219 540,437	2,279,
	2050-04	5000	Northeast Regional WD	Langdon RWD - North Valley Nekoma	3/11/2015	859,341	820,949	38,
	2050-05	5000	Northeast Regional WD	North Valley WD - ABM Pipeline Phase 1	3/11/2015	292,958	229,392	63,
	2050-06 2050-07	5000 5000	Northeast Regional WD Northeast Regional WD	North Valley WD - 93 Street North Valley WD - Rural Expansion	3/11/2015 5/29/2014	937,870 1,481,717	788,193 503,168	149 978
	2050-07	5000	Waish RWD	Ground Storage	10/7/2013	169,977	169,977	0.0,
	2050-09	5000	City of Park River	Water Tower	3/11/2015	571,225	571,225	
	2050-10 2050-11	5000 5000		Water Supply Improvements Phase 2 Plant Improvements	10/7/2013 10/7/2013	1,117,800 3,951,363	906,399 2,064,052	211 1.887
	2050-11	5000	City of Mandan	New Raw Water Intake	10/7/2013	1,567,676	48,441	1,519
	2050-14	5000	City of Mandan	Water Treatment Plant Improvements	10/7/2013	226,762	226,762	
	2050-15	5000	City of Washburn	New Raw Water Intake	10/7/2013 10/7/2013	2,334,250 845,000	0 107,250	2,334 737
	2050-16 2050-17	5000 5000	Tri-County RWD Barnes Rural RWD	Improvements Improvements	3/11/2015	6,512,662	3,445,416	3,067
	2050-18	5000	City of Grafton	Water Treatment Plant Phase 3	10/7/2013	3,381,148	1,318,693	2,062
	2050-19 2050-20	5000 5000	City of Grand Forks	Water Treatment Plant Improvements Capital Infrastructure	10/7/2013 10/6/2015	3,849,151 9,695,778	1,919,916 4,889,792	1,929 4,805
	2050-20	5000	City of Dickinson Watford City	Capital Infrastructure	2/27/2014	1.897.040	1.175.870	721
	2050-22	5000	City of Williston	Capital Infrastructure	2/27/2014	4,119,610	1,461,203	2,658
	2050-23	5000	Greater Ramsey WRD	SW Nelson County Expansion	3/17/2014	4,199,547	2,251,835	1,947
	2050-24 2050-25	5000 5000	All Seasons Water District All Seasons Water District	System 1 Well Field Expansion Bottineau County Extension, Phase I	9/15/2014 7/29/2015	292,500 896,000	0 152,467	292 743
	2050-26	5000	City of Fargo	Fargo Water System Regionalization Improvements	7/29/2015	6,841,750	570,929	6,270
	2050-27	5000	City of Tioga	Tioga Water Supply Improvement Project	7/29/2015	2,190,000	1,114,913	1,075
	2050-28 2050-29	5000 5000	City of Mandan City of Minot	Water Systems Improvement Project Water Systems Improvement Project	10/6/2015 10/6/2015	2,290,175 3,634,000	0	2,290 3,634
	2050-29	5000	Watford City	Water Systems Improvement Project	10/6/2015	5,435,087	ŏ	5,435
	2050-31	5000	City of West Fargo	Water Systems Improvement Project	10/6/2015	3,426,210	0	3,426
	2050-32	5000	City of Williston	Water Systems Improvement Project	10/6/2015 10/6/2015	10,890,472 4,170,100	2,106,920 0	8,783 4,170
	2050-33 2050-34	5000 5000	Stutsman RWD North Prairie RWD	Phase V Storage & Pipeline Expansion Project Storage and Water Main	10/6/2015	3,459,837	ŏ	3,459
	2050-35	5000	Southeast Water Users Dist	System Wide Expansion Feasibility Study	10/6/2015	11,826,000	39,246	11,786
	2050-36 2050-37	5000 5000	City of Dickinson City of Dickinson	Water Systems Improvement Project Dickinson State Avenue South Water Main	10/6/2015 12/11/2015	1,042,500 965,000	0	1,042 965
	2050-37	5000	Dakota Rural Water District	Reservoir C Expansion	12/11/2015	901,500	51,928	849
	2050-39	5000	Missouri West Water System	Crown Butte Service Area Expansion Phase II	12/11/2015	308,000	0	308
	2050-41	5000	Northeast Regional WD	City of Devils Lake Water Supply Project Phase 1 & 2 System Expansion	12/11/2015 12/11/2015	15,543,750 2,093,350	27,525 49,438	15,516 2,043
	2050-42 2050-43	5000 5000	Walsh RWD All Seasons Water District	System 4 Connection to System 1	12/11/2015	4,900,000	49,436	4,900
	2050-44	5000	City of Beulah	Water Treatment Plant	3/9/2016	2,640,000	Ō	2,640
	2050-45	5000	Garrison Rural Water District	System Expansion Project	3/9/2016	2,003,550	0 36 800 250	2,003 116,279
	1084 02	EDAR	City of Forms	Subtotal State Water Supply	3/17/2014	153,178,442 22,768,775	36,899,250 8,538,423	14,230
	1984-02 1736-05	5000 8000	City of Fargo SWPP	Fargo Water Treatment Plant Southwest Pipeline Project	3/17/2014 7/1/2013	22,768,775 104,940,447	8,538,423 29,606,646	75,333
	2374	8000	NAWS	Northwest Area Water Supply	7/1/2013	5,754,482	1,163,543	4,590
	1973-02	5000	WAWSA	WAWSA- (GRANT)	10/6/2015	12,061,806	11,160,912	900
	1973-05 1973-03	5000 5000	WAWSA Bank of North Dakota	WAWSA- (GRANT) WAWSA - (LOAN)	10/6/2015 10/6/2015	60,000,000 10,139,578	11,419,142 10,139,578	48,580
	325-102	5000	RRVWSP	Red River Valley Water Supply - Intake Design Study	5/29/2014	162,328	32,845	129
2020	325-104	5000	Garrison Diversion	Red River Valley Water Supply Project	7/29/2015	12,359,000	4,000,000	8,359
2020	2051-101	5000	Central ND Water Supply	Black and Veatch investigation	1/27/2015	70,800	69,804	
2020	2031-101						76,130,894	152,126,

#### STATE WATER COMMISSION PROJECT SUMMARY 2015-2017 Biennium

#### PROGRAM OBLIGATION

Approv	ed SWC			PROGRAWIOBLIGATION	Initial Approved	Total	Total	May-16
Ву	No	Dept	Sponsor	Project	Date	Approved	Payments	Balance
				General Water Management				
				Hydrologic Investigations:		1,125,267		
				1,000	01010010	500.075	470.050	250 747
	2041	3000	US Geological Survey	USGS Stream Gage Joint Funding Agreement	3/9/2016	529,075	176,358	352,717
				Hydrologic Investigations Obligations Subtotal Remaining Hydrologic Investigations Authority Hydrologic Investigations Authority Less Payments		529,075 596,192	176,358	352,717
	.,			General Projects Obligated General Projects Completed Subtotal General Water Management		27,480,354 3,711,325 , 32,316,946	8,898,166 2,936,373 12,010,897	18,582,188 774,952 20,306,049
swc	416-07	5000	Multiple	Devils Lake Basin Development: Devils Lake Outlet	7/1/2013	870.802	0	870.802
SWC	416-10	4700	Operations	Devils Lake Outlet Operations	3/9/2016	18,534,210	3.907.641	14,626,569
SWC	416-15	5000	Multiple	DL East End Outlet	7/1/2013	2,774,011	0	2,774,011
				Devils Lake Subtotal		22,179,023	3,907,641	18,271,382
				Revolving Loan Fund:				
	1991-04	1050	City of Lisbon	Permanent Flood Protection - Levee C (LOAN)	3/11/2015	886,500	886,500	0
	1973-04	1050	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,000,000	7,500,000	2,500,000
	2050-40	1050	North Prairie Rural Water District	Storage & Water Mains (LOAN)	12/11/2015	239,475	0	239,475
	2050-46	1050	City of Beulah	Water Treatment Plant (LOAN)	3/9/2016	880,000	0	880,000
	2050-47	1050	Northeast Regional WD	City of Devils Lake Water Supply Project (LOAN)	3/9/2016	1,686,920	0	1,686,920
	2050-48	1050	Walsh Rural WD	Phase 1, 2, & 3 System Expansion Project (LOAN)	3/9/2016	250,490	0	250,490
	1991-07	1050	City of Lisbon	Sheyenne River Flood Protection - Levee E (LOAN)	3/9/2016	527,000	0	527,000
				Revolving Loan Fund Subtotal		14,470,385	8,386,500	6,083,885
				TOTAL		690,051,949	206,611,927	483,440,022

#### STATE WATER COMMISSION PROJECT SUMMARY 2015-2017 Biennium Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved   Dopp						OLIVLET ROJECT OBLIGATIONS	Initial			May-16
SWC   232   600   2008-11   NO Weller Edwardson Foundatible NO Weller A Cheelury of Challenge   2222010   38,503   100			Dept			Project	Approved		Total Payments	Balance
SWC   222   5000   2003-11   NO Weller Edwarden Foundard NO Weller A Coefulty of Challenge   2222010   38,503   1020011   121,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   1020011   122,003   10	SE	274	5000	2015-17	City of Neche	Neche Levee Certification Project	3/21/2016	54,000	0	54,000
SVC         346         5000         2016-17         William County WRD         Expiring Dain Spithwij Recultivention Lever System Certification         3902/2016         718,045           SVC         340         5000         2016-17         Charles Well William County WRD         Expirity Provided Provided Free International Provided Spithwish Pro					•				0	36,800
Section									12,874	8,459
SE   390   500   2015-17   Login County WRD   Resident Lake Dam Resubsitisation Feesibility Study   91/2014   21,229   91/2014   91/201					-	,, ,			0	719,045
SE   999   900   2015-15   Tongs Co WRD   Calmyn Dam Fearbilling Flastly Study   9190014   21,250   0   0   0   0   0   0   0   0   0						·		•	69,503 0	32,497 0
SE								_	0	21,250
SE									0	21,230
SE								=	Ö	ō
Section								0	0	0
SE   688   5000   2013-15   Bames Co WRD   Shieywore River Biogging & Clearing Project   47172015   49,000   49,000   5975   5000   2013-15   Clearing Project   49,000   5975   5000   2013-15   Clearing Project   49,000   5975   5000   2013-17   Majeb Co WRD   Shieywore River Biogging & Clearing Project   49,000   2013-17   Majeb Co WRD   Park Fiver Singging & Clearing Project   49,000   2013-17   Majeb River WRD   19,000   2013-17   Majeb River WRD	SWC	568	5000	2013-15	Southeast Cass WRD	Sheyenne River Reaches Snagging & Clearing Projec	12/5/2014	94,238	62,958	31,280
Sect					Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I, II, &		294,000	0	294,000
SEC   571   5000   2015-15   0ak Creek WRD   Oak Creek Staging's & Clearing Project   309/2015   3,572   2									0	49,500
SWC   620   5000   207-09   Lower Heart WRD   Mandari Flood Control Protective Works (aveve)   62/87/09   52/86   5000   2015-17   Walaho C. WRD   Park Fer Snaging A. Glearing   1/12/2015   22/364   5000   2015-17   Maple River WRD   Upper Swan Cheek Charteni Improvement Project   106/2015   71/36   22/364   5000   2015-17   Maple River WRD   Upper Swan Cheek Charteni Improvement Project   106/2015   71/36   22/364   5000   2015-17   Maple River WRD   Swan Buffallo Detention Dam #15(Jankslan Bum)   127/17/2015   155,473   22/36   5000   2015-17   Sangrin Co WRD   Tevaukon WS-1-14 (Immorth-Likely)   127/17/2015   120,000									0	49,000
SE									2,565 0	1,107 125,396
SWC   641   5000   2015-17   Maple River WRD   Upper Swan Crise Channel Improvement Project   109/2015   40,163   5000   2015-17   Maple River WRD   Swan Buttalo Detention Dam RicClarating Dam   1211/2015   40,163   162,473   21   162,473   162						, ,			0	29,264
Section									ő	171,763
SWC   841   5000   2015-17   Maple River WRD   Swen Buffalo Detention Dam #3 (Clarateig Dam)   12/11/2015   109,022   109,023   109,02					•	• • • • • • • • • • • • • • • • • • • •			Ō	40,163
SE		841							21,502	103,971
SE   646   5000   2015-17   Surgient Co WRD   Tewakkor WS-T-7 (Nelson) Dam EAP   12/18/2015   20,000   35   58   649   5000   2015-17   Permitina Co, WRD   Remwick Dam Emergency Action Plan   9/28/2015   63,860   5000   2015-17   Class Co, Joint WRD   Remwick Dam Emergency Action Plan   9/28/2015   63,860   5000   2015-17   Class Co, Joint WRD   Swan Creek Watershed Detention Study PHII   20,700   34   58   58   58   58   58   58   58   5	SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #12(Absaraka Dam)	12/11/2015	109,032	0	109,032
SE   644   5000   2015-17   Pembina Co, WRD   Remwick Dam Garle Repair   94/2015   53,700   34/2015   5000   2015-17   Pembina Co, WRD   Remwick Dam Emergency Action Plan   98/2015   3,800   3000   2015-17   Class Co, Joint WRD   Rush River Watershed Determined Study   11/7/2016   154,000   3000   2015-17   Class Co, Joint WRD   Swan Crose Nation Plan   14/7/2015   12/7/2017   12/7/201		848				Tewaukon WS-T-1-A (Brummond-Lubke) Dam EAP			0	20,000
SEC   646   5000   2015-17   Pembina Co, WRD   Reswick Cham Emergency Action Plan   97280715   63,860   5000   2013-15   Class Co, Jorit WRD   Swan Creek Watershed Detention Study PH   17/2016   154,000   5000   2013-15   Class Co, Jorit WRD   Swan Creek Watershed Detention Study PH   17/2016   154,000   5000   2013-15   Class Co, Jorit WRD   Swan Creek Watershed Detention Study PH   17/2016   154,000   5000   2013-15   Class Co, Jorit WRD   Swan Creek Watershed Detention Study PH   17/2016   154,000   5000   2013-15   Class Co, Jorit WRD   Swan Creek Watershed Detention Study PH   17/2016   154,000   5000   2015-17   Maple River WRD   Class State Physics   17/2016   154,000								•	0	20,000
SWC   980   5000   2015-17   Casa Co. Joint WRD   Rush New Watershied Detention Study   117/2016   154,000   177/2015						•		•	34,528	19,172
SWC         880         5000         2013-15         Case Co. Joint WRD         Swn Greek Watershed Detention Study PHII         3/11/2015         120,750           SWC         1084         5000         2013-15         Rush River WRD         Case County Drain No. 2 Channel Improvements Property         3/11/2015         108,989         50           SWC         1088         5000         2013-17         Maple River WRD         Case Drain \$70 Channel Improvements         3/11/2015         108,990         55           SWC         1010         5000         2013-17         Maple River WRD         Case Sourity Drain RSS Channel Improvements         3/11/2015         118,950           SWC         1101         5000         2013-17         Maple River WRD         Case Sourity Drain RSS Channel Improvements         3/11/2016         221,871           SWC         1101         5000         2013-17         Maple River WRD         Case County Drain RS Channel Improvements         3/11/2016         221,871           SWC         1174         5000         2013-17         Richand Co. WRD         Legal Drain R31 Improvements Project         3/19/2016         118,522           SWC         1179         5000         2013-15         Richand Co. WRD         Drain 11 Culled Edissation Co. Self County Project         3/19/2016									0	63,680
SWC   1964   5000   2015-17   Cass Co. John WRD   Upper Maple River Watershed Detention Study   1/11/2016   154,000   5000   2015-17   Maple River WRD   Cass County Drain No. 2 Channel Improvements   3/14/2015   230,328   5000   2015-17   Maple River WRD   Cass County Drain No. 2 Channel Improvements   3/14/2015   230,328   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Maple River WRD   Cass County Drain #36 Channel Improvements   3/14/2015   798,562   5000   2015-17   Richland Co. WRD   Legal Drain #36 Lateral Project   3/14/2016   538,000   50						•		•	0	154,000
SWC   1094   5000   2019-15   Rush River WRD   Cass County Drain No. 2 Channel Improvements   3/11/2015   106/889   55						· · · · · · · · · · · · · · · · · · ·		·	0	120,750 154,000
SWC         1088         5000         2015-17         Maple River WRD         Cass County Drain #37 Channel Improvements         3/9/2016         230,328           SWC         1101         5000         2011-13         Dickey Co. WRD         Yorktown-Maple Drainage Improvement Dist No. 3         12/11/2015         788,562           SWC         1101         5000         2011-13         Dickey Sargent Co WRD         Riverdato Township Improvement Dist No. 3         12/11/2015         788,562           SWC         1071         5000         2011-17         Maple River WRD         Cass County Drain #15 Charnel Improvements         3/9/2016         289,562           SWC         1176         5000         2011-17         Richland Co. WRD         Logal Drain #2 Reconstruction Project         3/9/2016         335,500           SWC         1179         5000         2011-17         Richland Co. WRD         Logal Drain #2 Reconstruction Project         3/9/2016         535,500           SWC         1179         5000         2011-17         Richland Co. WRD         Logal Drain #2 Reconstruction Project         3/10/2016         531,000           SWC         1219         5000         2011-13         Time County WRD         Ti-County Wrath         Ti-County Drain Reconstruction         3/9/2016         531,000 <td></td> <td></td> <td></td> <td></td> <td></td> <td>••</td> <td></td> <td></td> <td>53,274</td> <td>53,715</td>						••			53,274	53,715
SWC   1098   5000   2015-17   Majbe River WRD   Cass County Drain #39 Chaineal Improvements   3,872016   221,871   5000   2011-13   Dickey-Surgent Co WRD   Vondouw-Majbe Drainage Improvement District #2 - Dickey   5,900   2015-17   Majbe River WRD   Cass County Drain #15 Channeal Improvements   3,972016   296,562   297,000   2015-17   Peribina Co. WRD   Cass County Drain #15 Channeal Improvements   3,972016   296,562   297,000   2015-17   Peribina Co. WRD   Cass County Drain #15 Channeal Improvements   3,972016   598,562   297,000   2015-17   Richtand Co. WRD   Cass County Drain #15 Channeal Improvements   3,972016   598,562   297,000   2015-17   Richtand Co. WRD   Cass County Drain #15 Channeal Froject   3,972016   598,560   297,000   2015-17   Richtand Co. WRD   Cass County Drain #15 Channeal Froject   3,972016   598,560   297,000   2015-17   Richtand Co. WRD   Cass County Drain #2 Reconstruction Extension Project   3,972016   535,560   297,000   2								•	00,274	230,326
SWC   1101   5000   2011-13   Dickey Co. WRD   70rktown-Maple Drainage (improvement Diatri A)   5000   2015-17   5000   2015-17   Maple River WRD   Cass County Drain #15 Chennel Improvements   50200   2015-17   Fernibara Co. WRD   Drain #15 Chennel Improvements   70rktown-Maple Drain #15 Chennel   7					•	•			ō	221,871
SWC   1714   5000   2015-17   Pembina Go. WRD   Drain 11 Outlet Extension Cost Overnut Project   7772015   5,088   SWC   1174   5000   2015-17   Reinband Co. WRD   Drain 11 Outlet Extension Cost Overnut Project   7772015   5,088   SWC   1176   5000   2015-17   Richland Co. WRD   Legal Drain #31 Improvements Project   3972016   535,500   SWC   1179   5000   2015-15   Richland Co. WRD   Legal Drain #32 Reconstruction Project   3972016   535,500   SWC   1179   5000   2015-17   Richland Co. WRD   Legal Drain #32 Reconstruction Project   3972016   531,000   SWC   1179   5000   2015-17   Richland Co. WRD   Legal Drain #35 (27) Reconstruction Project   3972016   531,000   SWC   1179   5000   2015-17   Richland Co. WRD   Legal Drain #35 (27) Reconstruction Project   3972016   531,000   SWC   1217   5000   2015-15   Tri-County WRD   Drain #32 Channel Improvements   3972016   531,000   SWC   1217   5000   2015-15   Tri-County WRD   Tri-County Drain Reconstruction Project   3972016   317,1215   911,881   312,300   312,3				-	•	·			0	798,562
SE	SWC	1101			•	• • •	9/21/2011	500,000	0	500,000
SWC         1174         5000         2015-17         Richland Co. WRD         Legal Drain #31 Improvements Project         39/2016         555,500           SE         1179         5000         2013-15         Richland Co. WRD         Legal Drain #32 Reconstruction Project         39/2016         555,500           SWC         1179         5000         2013-15         Richland Co. WRD         Legal Drain #5 (Lateral 27) Reconstruction Project         39/2016         513,500           SWC         1179         5000         2013-15         Thi County WRD         Legal Drain #5 (Lateral 27) Reconstruction         39/2016         513,100           SWC         1217         5000         2013-15         Thi County WRD         Thi County WRD         171,100         39/12015         911,881         31           SWC         1224         5000         2013-15         3711 Co. WRD         Palesco Drain Improvements         39/2016         181,882         22           SWC         1224         5000         2013-15         3711 Co. WRD         Palescore Drain Improvement District No. 80         52/20215         148,822         22           SWC         1224         5000         2013-15         Barnes Co. WRD         Rust Park Statement District No. 80         96/15/2014         18,522	SWC	1071	5000	2015-17	Maple River WRD	Cass County Drain #15 Channel Improvements	3/9/2016		0	296,562
SWC   1179   5000   2015-17   Richland Co. WRD   Legal Drain #2 Reconstruction Evalentics   39/2016   535,500   SWC   1179   5000   2015-17   Richland Co. WRD   Drain #3 (27) Reconstruction   79/2016   531,000   SWC   1179   5000   2015-17   Richland Co. WRD   Drain #3 (27) Reconstruction   39/2016   531,000   SWC   1179   5000   2015-17   Richland Co. WRD   Drain #3 (Lateral 27) Reconstruction   39/2016   531,000   SWC   1217   5000   2015-15   Thi-County WRD   Drain #3 (Lateral 27) Reconstruction   39/2015   131,813   SWC   1219   5000   2011-13   Sargent Co WRD   City of Forman Floodwarder Outlet   29/21/2011   31,472   SWC   1224   5000   2011-15   Traill Co. WRD   Mergenthal Drain No. 5   Reconstruction   91/52014   18,502   26/2015   18,602   27/2015   18						·			0	5,088
SE						•			0	161,852
SWC   1179   5000   2015-17   Richarland Co. WRD   Legal Drain #5 (Lateral 27) Reconstruction   309/2016   531,000   2015-17   SWC   1219   5000   2015-15   Tri-County WRD   Tri-County Drain Reconstruction Project   3/11/2015   911,881   312						•		•	0	535,500
SWC         1179         5000         2015-17         North Cass Co. WRD         Drain #22 Channel Improvements         3/9/2016         137,181           SWC         1219         5000         2013-15         Sargent Co WRD         City of Forman Floodwater Outlet         9/1/2011         31,472           SWC         1224         5000         2013-15         Traill Co. WRD         Clity of Forman Floodwater Outlet         9/21/2011         31,472           SWC         1224         5000         2013-15         Traill Co. WRD         Palase Drain Improvement District No. 80         570/2015         148,828         127           SWC         1227         5000         2013-15         Brames Co WRD         Mergenthal Drain No. 5 Reconstruction         9/15/2014         18,802         25,152         25           SE         1274         5000         2013-15         Barnes Co WRD         Little Dan Repurposing Feasibility Study         6/17/2015         16,100         107/2013         65,180         61,180         61,172/2015         61,100         107/2013         65,180         61,172/2015         65,180         61,172/2015         16,100         107/2013         65,180         61,172/2015         16,100         107/2013         65,000         2013-15         16,100         107/2013									0	13,543
SWC   1219   5000   2011-13   517-County WRD   Tri-County Drain Reconstruction Project   3/11/2015   911,881   312   312   314   312   314   312   314   3						•			0	531,000 137,181
SWC         1219         5000         2011-13         Sargent Co WRD         City of Forman Floodwater Outlet         9/21/2011         314.72           SWC         124         5000         2013-15         Traill Co. WRD         Palaeo Drain Improvement District No. 80         5/20/2015         149.828         12/2           SWC         1224         5000         2013-15         Traill Co. WRD         Mergenthal Drain No. 5 Reconstruction         9/15/2014         18.02         6           SWC         1242         5000         2013-15         Barnes Co WRD         Little Dam Repurposing Feasibility Study         6/17/2015         16,100           SWC         1270         5000         2013-15         Burleigh Co. WRD         Apple Creek Industrial Park Levee Feasibility Study         6/17/2015         16,100           SWC         1273         5000         2013-15         City of Oakes         James River Bank Stabilization         10/17/2013         35,707           SWC         1289         5000         2013-15         McKenzice Co. WRD         Souris River Bank Stabilization         12/11/2015         26/25/2015         35,000           SE         1289         5000         2013-15         McKenzice Co. WRD         Souris River Bank Stabilization         11/12015         23/2015									312,762	599,119
SWC   1224   5000   2013-15   Traill Co , WRD   Palace Drain Improvement District No. 80   5/20/2015   149,828   127   5000   2013-15   Traill Co , WRD   Rust Drain No. 5 Reconstruction   9/15/2014   18,502   6   5   5   5   5   5   5   5   5   5						·			0	31,472
SWC         1227         5000         2011-13         Traill Co. WRD         Mergenthal Drain No. 5 Reconstruction         9/15/2014         18,500         2013-15         18,502         2           SE         1244         5000         2013-15         Traill Co. WRD         Little Dam Repurposing Feasibility Study         6/17/2015         18,100           SE         1270         5000         2015-17         City of Wilton         Wilton Pond Dredging Recreation Project         12/29/2015         35,707           SWC         1273         5000         2015-17         City of Valkes         James River Bank Stabilization         12/29/2015         35,707           SWC         1285         5000         2013-15         Laffour Co. WRD         Swell Memorial Park Streambank Restoration         9/13/2014         91,042           SE         1289         5000         2013-15         McKenzie Co. Weed Control Control of Noxious Weeds on Sovereign Lands         9/30/2015         12,514           SE         1289         5000         2015-17         McKenzie Co. Weed Control Control of Noxious Weeds on Sovereign Lands         9/30/2015         12,514           SE         1289         5000         2015-17         McKenzie Co. Weed Control Control of Noxious Weeds on Sovereign Lands         9/30/2015         12,514								•	121,787	28,041
SE         1264         5000         2013-15         Barnes Co WRD         Little Dam Repurposing Feasibility Study         6/17/2015         16,100           SWC         1270         5000         2013-15         Burleigh Co. WRD         Apple Creek Industrial Part Lever Feasibility Study         10/7/2013         56,180           SE         1270         5000         2015-17         City of Wilton         Wilton Pond Dredging Recreation Project         12/11/2015         35,707           SWC         1223         5000         2015-15         City of Volkes         James River Bank Stabilization         12/11/2015         252,500           SWC         1285         5000         2011-13         McKenzie Co. WRD         2018-14         2018-14         15,000           SE         1289         5000         2011-13         McKenzie Co. WRD         2018-14         2019-14         15,000           SE         1289         5000         2013-15         Nelson Co. Co. Park Board         2011-15         McLean Co. WRD         2011-14         15,000           SWC         1294         5000         2013-15         Nelson Co. Co. Park Board         2011-15         15,000         2015-17         15,000           SWC         1301         5000         2013-15						•	9/15/2014	18,502	6,277	12,225
SWC   1270   5000   2015-17   City of Willino   Apple Creek industrial Park Levee Feasibility Study   107/2013   55,180	SWC	1242	5000	2013-15	Traill Co. WRD	Rust Drain No. 24 Project	12/13/2013	25,152	3,002	22,150
SE         1270         5000         2015-17         City of Wilton         Wilton Pond Dredging Recreation Project         12/28/2015         35,707           SWC         1273         500         2013-15         Clay of Oakes         James River Bank Stabilization         12/11/2015         262,500           SWC         1285         5000         2013-15         LaMoure County         LaMoure Co Memorial Park Streambank Restoration         9/15/2014         91,042           SE         1289         5000         2013-15         McKenz Co. Weed Control E Control of Noxious Weeding Bands         93/02/015         15,000         4           SE         1289         5000         2015-17         McLean Co. WRD         Painted Woods Lake Flood Mitigation Broject         3/11/2015         53,000         20           SWC         1294         5000         2013-15         Nelson Co. Park Board         Stump Lake Park Bank Bilization Project         3/11/2015         15,436           SW         289         5000         2013-15         Pembina Co. WRD         Battingate-Hamilton & Carlisle Watershed Study         10/17/2013         45,226         38           SWC         1301         5000         2015-17         Richland Co. WRD         Abstingate-Hamilton & Carlisle Watershed Study         10/17/2013         45,			5000		Barnes Co WRD				0	16,100
SWC         1273         5000         2015-17         City of Oakes         James River Bank Stabilization         12/11/2015         282,500           SWC         1285         5000         2013-15         LaMoure County         LaMoure Co Memorial Park Streambank Restoration         9/15/2014         91,042           SE         1287         5000         2011-13         McKenzie Co. WRD         Souris River Snagging & Clearing Project         2/3/2015         15,000           SE         1289         5000         2015-17         McLean Co. WRD         Painted Woods Lake Flood Mitigation Study         4/12016         53,200         20           SWC         1294         5000         2013-15         Nelson Co. Park Board         Stump Lake Park Bank Stabilization Project         3/11/2015         115,436           SE         1286         5000         2013-15         Pembina Co. WRD         Tongue River NRCS Watershed Plan         3/9/2016         114,703           SWC         1301         5000         2013-17         Richland Co. WRD         Tongue River NRCS Watershed Plan         3/9/2016         114,700           SWC         1303         5000         2013-17         Richland Co. WRD         North Branch Antelope Creek NRCS Small Watershed         3/9/2016         114,700           S					_	* *			0	65,180
SWC   1285   5000   2013-15   LaMoure Country   LaMoure Co Memorial Park Streambank Restoration   9/15/2014   91,042   SE   1289   5000   2011-13   McKenzie Co. Weed Control F Control of Noxious Weeds on Sovereign Lands   9/30/2015   12,514   SE   1290   5000   2011-13   McKenzie Co. Weed Control F Control of Noxious Weeds on Sovereign Lands   9/30/2015   12,514   SE   1290   5000   2013-15   Nelson Co. Park Board   Sturp Lake Place Mightagino Study   4/1/2016   53,200   32,500   32									0	35,707
SE         1287         5000         2013-15         McHenry Co. WRD         Sourts River Snagging & Clearing Project         22/2/2015         15,000         4           SE         1289         5000         2011-13         McKenzie Co. Weed Control E Control of Noxious Weeds on Sovereign Lands         9/30/2015         12,514         SE         1280         5000         2013-15         McKenzie Co. WRD         Painted Woods Lake Flood Mitigation Study         4/1/2016         53,200         22           SWC         1294         5000         2013-15         Nelson Co. Park Board         Stump Lake Park Bank Stabilization Project         3/11/2015         115,436           SWC         849-01         5000         2013-15         Pembina Co. WRD         Bathgate-Hamilton & Cerce NRCS Small Watershee         3/9/2016         104,703         45,226         38           SWC         1303         5000         2013-15         Sargent Co WRD         Gwinner Dam Improvement Feasibility Study Program         4/17/2015         42,844           SWC         1303         5000         2013-15         Trailic Co-WRD         Buxton Township Improvement District No. 88         3/9/2016         104,703         3/9/2016         104,703         3/9/2016         104,703         3/9/2016         104,703         3/9/2016         104,703									0	262,500 91,042
SE         1289         5000         2011-13         McKenzie Co. Weed Control of Noxious Weeds on Sovereign Lands         9/30/2015         12,514           SE         1290         5000         2015-17         McLean Co. WRD         Painted Woods Lake Flood Mitigation Study         4/1/2016         53,200         26           SWC         1294         5000         2013-15         Nelson Co. Park Board         Stump Lake Park Bank Stabilization Project         3/11/2015         115,438           SE         1296         5000         2013-15         Nelson Co. WRD         Battgate-Hamilton & Carlisle Watershed Study         10/17/2013         45,226         38           SWC         1301         5000         2015-17         Richland Co. WRD         North Branch Antelope Creek NRCS Small Watershed         3/9/2016         113,400           SE         1303         5000         2015-17         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         113,400           SWC         1301         5000         2015-17         Traill Co. WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         154,000           SWC         1311         5000         2015-17         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         151,300 <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>4,500</td> <td>10,500</td>					•				4,500	10,500
SE         1290         5000         2013-15         McLean Co. WRD         Painted Woods Lake Flood Mitigation Study         4/1/2016         53,200         22           SWC         1294         5000         2013-15         Nelson Co. Park Board         Sturp Lake Park Bank Stabilization Project         3/1/12015         115,436           SW         298         5000         2015-17         Pembina Co. WRD         Bathgate-Hamilton & Carlisle Watershed Study         10/17/2013         45,226         38           SWC         849-01         5000         2015-17         Pembina Co. WRD         North Branch Antheope Creek NRCS Small Watershed         3/9/2016         104,703           SWC         1303         5000         2015-17         Sargent Co WRD         Gwinner Dam Improvement Feasibility Study Program         4/17/2015         42,844           SWC         1311         5000         2015-17         Traill Co. WRD         Buxton Township Improvement District No. 68         3/9/2016         512,090           SE         1314         5000         2013-15         Wells Co. WRD         Hurdsfield Area Drain Preliminary Engineering Project         6/11/2015         35,000           SE         1398-01         5000         2013-15         Bank of ND         BND AgPace Program         11/17/2015         35									4,555	12,514
SWC         1294         5000         2013-15         Nelson Co. Park Board         Stump Lake Park Bank Stabilization Project         3/11/2015         115,436           SE         1296         5000         2013-15         Pembina Co. WRD         Bathgate-Hamilton & Carlisle Watershed Study         10/17/2013         45,226         36           SWC         849-01         5000         2015-17         Pembina Co. WRD         North Branch Antelope Creek NRCS Small Watershed         3/9/2016         104,703           SWC         1301         5000         2015-17         Richland Co. WRD         North Branch Antelope Creek NRCS Small Watershed         3/9/2016         113,400           SWC         1303         5000         2015-17         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         154,000           SWC         1311         5000         2013-15         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         154,000           SE         1328         5000         2013-15         North Cass Co. WRD         Drain No. 23 Channel Improvement District No. 88         3/9/2016         51,775           SWC         1401         5000         2013-15         Troul, Raley, Montano, Wilwet Missouri River Recovery Program         12/11/2015         38,000									24,500	28,700
SWC         849-01         5000         2015-17         Pembina Co. WRD         Tongue River NRCS Watershed Plan         3/9/2016         104,703           SWC         1301         5000         2015-17         Richland Co. WRD         North Branch Antelope Creek NRCS Small Watershed         3/9/2016         113,400           SWC         1303         5000         2015-17         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         4/17/2015         42,844           SWC         1311         5000         2015-17         Traill Co. WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         154,000           SE         1314         5000         2013-15         VRC         WRD         Hurdsfield Area Drain Preliminary Engineering Project         6/11/2015         35,000           SE         1328         5000         2013-15         Bank of ND         Drain No. 23 Channel Improv Preliminary Engineering         9/30/2015         5,775           SWC         1389         5000         2013-15         Brown Kall Area Drain No. 23 Channel Improv Preliminary Engineering         9/30/2015         5,775           SWC         1401         5000         2013-15         Brown Kall Kall Kall Kall Kall Kall Kall Kal									0	115,436
SWC   1301   5000   2015-17   Richland Co, WRD   North Branch Antelope Creek NRCS Small Watershec   349/2016   113,400   42,844   417/2015   42,844   42,844   417/2015   42,844   42,844   417/2015   42,844   417/2015   42,844   417/2015   42,844   417/2015   42,844   417/2015   42,844   417/2015   42,844   417/2015   42,844   417/2015   42,844   42,845   42,844   417/2015   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,844   42,845   42,84	SE	1296	5000	2013-15	Pembina Co. WRD	Bathgate-Hamilton & Carlisle Watershed Study	10/17/2013	45,226	38,500	6,726
SE         1303         5000         2013-15         Sargent Co WRD         Gwinner Dam Improvement Feasibility Study Program         4/17/2015         42,844           SWC         1303         5000         2015-17         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         154,000           SWC         1311         5000         2013-15         Wells Co. WRD         Buxton Township Improvement District No. 68         3/9/2016         512,090           SE         1328         5000         2013-15         North Cass Co. WRD         Hurdsfield Area Drain Preliminary Engineering Project         6/11/2015         35,000           SWC         1389         5000         2013-15         Bank of ND         BND AgPace Program         12/13/2013         180,316         22           SWC         1401         5000         2013-15         Trout, Raley, Montano, Wilwel Missouri River Recovery Program         11/17/2015         75,000         14           SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         12/11/2015         386,032         26           SE         1444         5000         2015-17         Hettinger County WRD         Karey Dam Reabibilitition Feasibility Study         5/29/2014         10,963 <td>SWC</td> <td>849-01</td> <td>5000</td> <td>2015-17</td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>104,703</td>	SWC	849-01	5000	2015-17					0	104,703
SWC         1303         5000         2015-17         Sargent Co WRD         Shortfoot Creek Watershed Planning Program         3/9/2016         154,000           SWC         1311         5000         2015-17         Traill Co. WRD         Buxton Township Improvement District No. 68         3/9/2016         512,090           SE         1314         5000         2013-15         Wells Co. WRD         Hurdsfield Area Drain Preliminary Engineering Project         6/11/2015         35,000           SE         1328         5000         2013-15         North Cass Co. WRD         Drain No. 23 Channel Improv Preliminary Engineering Project         9/30/2015         5,775           SWC         1389         5000         2013-15         Trout, Raley, Montano, Witwei Missouri River Recovery Program         12/13/2013         180,316         22           SWC         1401         5000         2015-17         Pembina Co. WRD         International Boundary Roadway Dike Pembina         12/11/2015         386,032         26           SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,983           SE         1444         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016									0	113,400
SWC         1311         5000         2015-17         Traill Co. WRD         Buxton Township Improvement District No. 68         3/9/2016         512,090           SE         1314         5000         2013-15         Wells Co. WRD         Hurdsfield Area Drain Preliminary Engineering Project         6/11/2015         35,000           SE         1328         5000         2013-15         Bank of ND         Drain No. 23 Channel Improv Preliminary Engineering         9/30/2015         5,775           SWC         1389         5000         2013-15         Bank of ND         BND AgPace Program         12/13/2013         180,316         24           SE         1396-01         5000         2013-15         Trout, Raley, Montano, Witwel Missouri River Recovery Program         11/17/2015         75,000         14           SWC         1401         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,963           SWC         1418         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1444         5000         2015-17         Griggs Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         62/218         44					_				0	42,844
SE   1314   5000   2013-15   Wells Co. WRD   Hurdsfield Area Drain Preliminary Engineering Project   6/11/2015   35,000					-			•	0	154,000 512,090
SE         1328         5000         2015-17         North Cass Co. WRD         Drain No. 23 Channel Improv Preliminary Engineering         9/30/2015         5,775           SWC         1389         5000         2013-15         Bank of ND         BND AgPace Program         12/13/2013         180,316         24           SE         1396-01         5000         2013-15         Trout, Raley, Montano, Witwel Missouri River Recovery Program         11/17/2015         75,000         14           SWC         1401         5000         2015-17         Pembina Co. WRD         International Boundary Roadway Dike Pembina         12/11/2015         386,032         26           SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,963           SWC         1418         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1444         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SWC         1486         5000         2015-17         Griggs Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         621,661						· · ·			0	35,000
SWC         1389         5000         2013-15         Bank of ND         BND AgPace Program         12/13/2013         180,316         24           SE         1396-01         5000         2013-15         Trout, Raley, Montano, Witwel Missouri River Recovery Program         11/17/2015         75,000         14           SWC         1401         5000         2015-17         Pembina Co. WRD         International Boundary Roadway Dike Pembina         12/11/2015         386,032         26           SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,963           SWC         1418         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1444         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SWC         1486         5000         2015-17         Griggs Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         621,661           SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449           SWC								·	ő	5,775
SE         1386-01         5000         2013-15         Trout, Raley, Montano, Witwei Missouri River Recovery Program         11/17/2015         75,000         14           SWC         1401         5000         2015-17         Pembina Co. WRD         International Boundary Roadway Dike Pembina         12/11/2015         386,032         26           SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,963           SWC         1418         5000         2015-17         City of Pembina         Plood Protection System Certification         3/11/2015         862,218         48           SE         1444         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1453         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016         13,550           SWC         1486         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         621,661           SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449						• • • • •			24,737	155,578
SWC         1401         5000         2015-17         Pembina Co. WRD         International Boundary Roadway Dike Pembina         12/11/2015         386,032         26           SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,963         26           SWC         1418         5000         2015-17         City of Bisbee         Design & Repair of Big Coulee Dam         3/11/2015         862,218         48           SE         1444         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1453         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016         13,550           SWC         1486         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016         13,550           SWC         1523         5000         2015-17         Ward Co         Ward Co         Ward Co         Ward Co         Ward Co         10/6/2015         256,449           SWC         1524         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project									14,765	60,235
SWC         1418         5000         2013-15         City of Bisbee         Big Coulee Dam Feasibility Study         5/29/2014         10,963           SWC         1418         5000         2013-15         City of Bisbee         Design & Repair of Big Coulee Dam         3/11/2015         862,218         48           SE         1444         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1453         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016         13,550           SWC         1486         5000         2015-17         Ward Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         621,661           SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449           SWC         1523         5000         2015-17         Ward Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         325,208         233           SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,004								386,032	26,155	359,877
SE         1444         5000         2015-17         City of Pembina         Flood Protection System Certification         4/19/2016         75,000           SE         1453         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016         13,550           SWC         1486         5000         2015-17         Griggs Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         621,661           SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449           SWC         1523         5000         2015-17         Ward Co         Flood Control County Road 18         5/29/2015         325,208         23/2015           SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,004           SWC         1613         5000         2013-15         North Cass Co. WRD         Cass County Drain No. 55 Channel Improvements Pro         9/15/2014         99,923         43           SE         1625         5000         2015-17         Ross Engineering, Inc         Dakota Access PipeLine Missouri River crossings         2/9/2016		1418	5000	2013-15	City of Bisbee	Big Coulee Dam Feasibility Study	5/29/2014	10,963	0	10,963
SE         1453         5000         2015-17         Hettinger County WRD         Karey Dam Rehabilitation Feasibility Study         5/23/2016         13,550           SWC         1486         5000         2015-17         Griggs Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         621,661           SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449           SWC         1523         5000         2015-17         Ward Co         Flood Control County Road 18         5/29/2015         325,208         233           SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,004           SWC         1613         5000         2013-15         McLean Co. WRD         Cass County Drain No. 55 Channel Improvements Prc         9/15/2014         99,923         44           SE         1625         5000         2015-17         HDR Engineering, Inc         Dakota Access PipeLine Missouri River crossing sour         2/9/2016         25,000         2/9/2016         25,000         2/9/2016         25,000         2/9/2016         25,000         2/9/2016         25,000         2/9/2016	SWC	1418	5000	2013-15	City of Bisbee	Design & Repair of Big Coulee Dam			48,134	814,084
SWC         1486         5000         2015-17         Griggs Co. WRD         Thompson Bridge Outlet No. 4 Project         10/6/2015         621,681           SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449           SWC         1523         5000         2015-17         Ward Co         Flood Control County Road 18         5/29/2015         325,208         233           SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,004           SWC         1613         5000         2013-15         North Cass Co. WRD         Cass County Drain No. 55 Channel Improvements Prc         9/15/2014         99,923         44           SE         1625         5000         2015-17         Ross Engineering, Inc         Dakota Access PipeLine Missouri River crossing sour         2/9/2016         25,000         25,000         25,000         25,000         25,000         27/2016         25,000         27/2016         25,000         27/2016         25,000         27/2016         25,000         27/2016         25,000         27/2016         25,000         27/2016         25,000         27/2016         25/2					•	•			0	75,000
SWC         1523         5000         2015-17         Ward Co. WRD         Robinwood Bank Stabilization Project         10/6/2015         256,449           SWC         1523         5000         2015-17         Ward Co         Flood Control County Road 18         5/29/2015         325,208         23           SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,004           SWC         1613         5000         2013-15         North Cass Co. WRD         Cass County Drain No. 55 Channel Improvements Program         9/15/2014         99,923         42           SE         1625         5000         2015-17         HDR Engineering, Inc         Dakota Access PipeLine Missouri River crossing sour         2/9/2016         25,000           SWC         1638         5000         2015-17         Ross Engineering, LLC         Gather infor regarding pipeline waterway crossings         2/9/2016         25,000           SWC         1638         5000         2013-15         Multiple         Red River Basin Non-NRCS Rural/Farmstead Ring Dil         6/23/2009         177,864           SE         1640         5000         2013-15         Sargent Co WRD         Drain #7 Channel Improvements Study						•			0	13,550
SWC         1523         5000         2015-17         Ward Co         Flood Control County Road 18         5/29/2015         325,208         233           SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,000           SWC         1613         5000         2013-15         North Cass Co. WRD         Cass County Drain No. 55 Channel Improvements Program of Program o									0	621,661
SWC         1554         5000         2013-15         McLean Co. WRD         City of Underwood Floodwater Outlet Project         12/13/2013         1,483,268         1,004           SWC         1613         5000         2013-15         North Cass Co. WRD         Cass County Drain No. 55 Channel Improvements Prc         9/15/2014         99,923         42           SE         1625         5000         2015-17         HDR Engineering, Inc         Dakota Access PipeLine Missouri River crossing sour         2/9/2016         25,000         2*           SE         1625         5000         2015-17         Ross Engineering, LLC         Gather infor regarding pipeline waterway crossings         2/9/2016         25,000         2*           SWC         1638         5000         2009-11         Multiple         Red River Basin Non-NRCS Rural/Farmstead Ring Dil         6/23/2009         177,864           SE         1640         5000         2015-17         Sargent Co WRD         U.S. Geological Survey         (USGS) Maintenance of gaging station on Missouri Riv         9/25/2013         8,710           SE         1650         5000         2015-17         Sargent Co WRD         Drain #7 Channel Improvements Study         1/17/2016         6,214           SWC         1705         5000         2011-13         Red									232,538	256,449 92,670
SWC         1613         5000         2013-15         North Cass Co. WRD         Cass County Drain No. 55 Channel Improvements Prc         9/15/2014         99,923         4/2           SE         1625         5000         2015-17         HDR Engineering, Inc         Dakota Access PipeLine Missouri River crossing sour         2/9/2016         25,000         2**           SE         1625         5000         2015-17         Ross Engineering, LLC         Gather infor regarding pipeline waterway crossings         2/9/2016         25,000         25,000           SWC         1638         5000         2009-11         Multiple         Red River Basin Non-NRCS Rural/Farmstead Ring Dil         6/23/2009         177,864           SE         1640         5000         2015-15         Secological Survey         (USGS) Maintenance of gaging station on Missouri Riv         9/25/2013         8,710           SE         1650         5000         2015-17         Sargent Co WRD         Drain #7 Channel Improvements Study         1/17/2016         6,214           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Joint WRD Watershed Feasibility Study - Pl         9/21/2011         60,000           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Basin Distribut									1,004,376	478,892
SE         1625         5000         2015-17         HDR Engineering, Inc         Dakota Access PipeLine Missouri River crossing sour         2/9/2016         25,000         2'           SE         1625         5000         2015-17         Ross Engineering, LLC         Gather infor regarding pipeline waterway crossings         2/9/2016         25,000         25,000         25,000         25,000         25,000         27,0									42,152	57,771
SE         1625         5000         2015-17         Ross Engineering, LLC         Gather infor regarding pipeline waterway crossings         2/9/2016         25,000           SWC         1638         5000         2009-11         Multiple         Red River Basin Non-NRCS Rural/Farmstead Ring Dii         6/23/2009         177,864           SE         1640         5000         2013-15         U.S. Geological Survey         (USGS) Maintenance of gaging station on Missouri Rin         9/25/2013         8,710           SE         1650         5000         2015-17         Sargent Co WRD         Drain #7 Channel Improvements Study         1/17/2016         6,214           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Joint Water Resour Red River Basin Distributed Plan Study         9/21/2011         560,000           SW         1705         5000         2011-13         Red River Joint Water Resour Red River Basin Distributed Plan Study         12/7/2012         560,000           SE         1808         5000         2015-17         Steele Co WRD         Beaver Creek Dam Safety Inspection         5/23/2016         2,625									21,315	3,685
SWC         1638         5000         2009-11         Mutiple         Red River Basin Non-NRCS Rural/Farmstead Ring Dil         6/23/2009         177,864           SE         1640         5000         2013-15         U.S. Geological Survey         (USGS) Maintenance of gaging station on Missouri Rin         9/25/2013         8,710           SE         1650         5000         2015-17         Sargent Co WRD         Drain #7 Channel Improvements Study         1/17/2016         6,214           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Joint WRD Watershed Feasibility Study - Pl         9/21/2011         60,000           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Basin Distributed Plan Study         12/7/2012         560,000           SE         1808         5000         2015-17         Steele Co WRD         Beaver Creek Dam Safety Inspection         5/23/2016         2,625						· · · · · · · · · · · · · · · · · · ·			0	25,000
SE         1640         5000         2013-15         U.S. Geological Survey         (USGS) Maintenance of gaging station on Missouri Riv         9/25/2013         8,710           SE         1650         5000         2015-17         Sargent Co WRD         Drain #7 Channel Improvements Study         1/17/2016         6,214           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Joint WRD Watershed Feasibility Study - PI         9/21/2011         60,000           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Basin Distributed Plan Study         12/7/2012         560,000           SE         1808         5000         2015-17         Steele Co WRD         Beaver Creek Dam Safety Inspection         5/23/2016         2,625					<b>-</b>				0	177,864
SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Joint WRD Watershed Feasibility Study - PI         9/21/2011         60,000           SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Basin Distributed Plan Study         12/7/2012         560,000           SE         1808         5000         2015-17         Steele Co WRD         Beaver Creek Dam Safety Inspection         5/23/2016         2,625									0	8,710
SWC         1705         5000         2011-13         Red River Joint Water Resour Red River Basin Distributed Plan Study         12/7/2012         560,000           SE         1808         5000         2015-17         Steele Co WRD         Beaver Creek Dam Safety Inspection         5/23/2016         2,625									0	6,214
SE 1808 5000 2015-17 Steele Co WRD Beaver Creek Dam Safety Inspection 5/23/2016 2,625									0	60,000
· · ·						•			0	560,000
SE 1042 5000 2013-15 Southeast Cass WKD Wild Rice River Snagging & Cleaning 10/2//2015 57,000 30						• •			0 35 344	2,625
	SE.	1842	5000	2013-15	Southeast Cass WRD	vviid Rice River Snagging & Clearing	10/2//2015	57,000	35,244	21,756

#### STATE WATER COMMISSION PROJECT SUMMARY 2015-2017 Biennium Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

						Initial			May-16
Approved			Approved			Approved	Total	Total	D.1
y	No	Dept	Biennum	Sponsor	Project	Date	Approved	Payments	Balance
WC	1859	5000	2015-17	ND Dept of Health	NPS Pollution Project	7/29/2015	200,000	0	200,000
E	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement Preliminary Engine	9/29/2015	17,500	0	17,500
WC	1921	5000	2007-09	Morton Co. WRD	Square Butte Dam No. 6/(Harmon Lake) Recreation F	3/23/2009	231,002	38,651	192,351
WC	1932	5000	2015-17	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	3/9/2016	1,214,256	832,207	382,049
Ε	1946	5000		Walsh Co. WRD	Improvement of Walsh Co Drain #22 Preliminary Engil	4/19/2016	10,500	0	10,500
WC	1960	5000		Ward Co. WRD	Puppy Dog Coulee Flood Control Diversion Ditch Cons	8/18/2009	796,976	0	796,976
	1963	5000	2009-11	Emmons County WRD	Beaver Bay Embankment Feasibilitly Study	8/10/2009	18,078	0	18,078
WC	1968	5000	2013-15	Garrison Diversion	McClusky Canal Mile Marker 10 & 49 Irrigation Project	3/17/2014	256,321	204,707	51,614
WC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	5/20/2015	1,601,325	148,246	1,453,079
WC	1978	5000	2011-13		Richland & Sargent WRD RS Legal Drain No. 1 Exten	7/23/2015	245,250	145,910	99,340
WC	1989	5000	2011-13	Barnes Co WRD	Hobart Lake Outlet Project	3/7/2012	266,100	0	266,100
WC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diverstion Project	3/7/2012	43,821	0	43,821
wc	1991	5000		City of Lisbon	Sheyenne Riverbank Stabilization Project	9/15/2014	163,720	114,152	49,568
WC	1992	5000	2011-13	Burleigh Co. WRD	Burnt Creek Flood Restoration Project	7/29/2015	179,890	0	179,890
E	1974	5000	2015-17		USGS Web-Based Mouse River Information Page	1/19/2016	24,700	0	24,700
WC	2008	5000		City of Mapleton	Recertification of Flood Control Levee System Project	3/17/2014	101,100	0	101,100
WC	2022	5000	2011-13	Pembina Co. WRD	Drain #73 Project	6/19/2013	350,400	0	350,400
wc	2042	5000	2013-15	Bottineau Co. WRD	Haas Coulee Drain Project	9/15/2014	500,000	455,818	44,182
wc	2043	5000	2013-15	Pembina Co. WRD	District's Drain 78 Outlet Extension Project	12/13/2013	287,778	270,149	17,629
WC	2045	5000		Mercer Co. WRD	LiDAR Collection Project	5/29/2014	10,425	0	10,42
wc	2045	5000		McKenzie Co. Commission	LiDAR Collection Project	9/15/2014	262,308	0	262,30
E	2045	5000	2013-15		Stark County LiDAR Collection Project (FEMA)	7/17/2015	33,584	0	33,58
E	2055	5000	2015-17		Lower Red Basin Regional Detention Study	7/17/2015	45,500	0	45,500
E	2058	5000	2015-17	City of Grafton	Grafton Debris Removal Plan	9/17/2015	3,900	0	3,90
WC	2059	5000	2015-17	Park River Joint WRD	North Branch Park River NRCS Watershed Study	10/6/2015	81,200	0	81,20
WC	2060	5000		Walsch Co. WRD	Forest River Watershed Study	10/6/2015	114,100	0	114,10
WC	2063	5000	2015-17		Swan Buffalo Detention Dam #8(Embden Dam)	12/11/2015	113,500	0	113,500
WC	2065	5000	2015-17	Cass Co. Joint WRD	Lake Bertha Flood Control Project No. 75	3/9/2016	201,350	0	201,350
WC	2066	5000	2015-17		Sheyenne-Maple Flood Control Dist #1 Mitigation Impr	3/9/2016	198,023	0	198,02
E	2068	5000		Traill Co. WRD	Stavanger-Belmont Drain No. 52 Channel Impr Feasib	4/1/2016	18,589	0	18,58
E	2069	5000	2015-17		Wild Rice River Bank Stabilization	4/19/2016	43,036	0	43,03
E	2070	5000	2015-17		Mile Marker 42 Irrigation Project	5/20/2016	0	0	
E	2071	5000	2015-17		Alkali Lake High Water Feasibilitly Study	4/19/2016	5,250	0	5,25
Ε	2072	5000	2015-17	Barnes Co WRD	Ten Mile Lake Flood Risk Reduction Project	6/8/2016	37,800	0	37,80
WC	1878-02	5000	2011-13	Maple-Steele Joint WRD	Upper Maple River Dam Construction Phase	12/13/2013	4,702,936	4,296,368	406,56
E	1878-02	5000	2015-17		Upper Maple River Dam EAP	5/20/2016	12,800	0	12,80
B2020	1928-04	5000	2015-17		Fargo Moorhead Diversion Agricultural Impact (Study)	1/20/2016	80,000	10,893	69,10
WC	AOC/ASS	5000	2015-17		Assiniboine River Basin Initiative Funding	7/29/2015	100,000	25,000	75,00
wc	AOC/IRA	5000	2015-17	ND Irrigation Association (ND		10/6/2015	100,000	25,000	75,00
WC	AOC/RRBC	5000	2015-17		Red River Basin Commission Contractor	5/20/2015	200,000	50,000	150,00
WC	AOC/WEF	5000	2015-17	ND Water Education Foundat		5/20/2015	36,000	9,000	27,00
E	AOC/WUA	5000	2011-13	ND Water Users Association	Dave Koland Term as WUA President	3/23/2015	9,672	4,170	5,50
Ε	ASNDS	5000	2015-17		Oaks Irrigation Research Site - New Linear Irrigation §		25,636	23,464	2,17
E	PSWRDBUR	5000	2015-17	Burleigh Co. WRD	Pebble Creek Golf Course - Hay Creek Bank Stabiliza	10/15/2015	22,782	0	22,78
WC	PS/WRD/DEV	5000	2015-17	Devils Lake Joint WRB	DL Manager	5/20/2015	60,000	0	60,00
WC	PS/WRD/ELM	5000	2013-15	Elm River Joint WRD	Dam #3 Safety Improvements Project	9/15/2014	7,297	1,625	5,67
WC	PS/WRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board, (MRJWB) Start up	5/20/2015	20,000	0	20,00
wc	PS/WRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board (MRRIC) T. FLECK	5/20/2015	45,000	9,528	35,47
WC	PS/WRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Coordinator	10/7/2013	37,094	14,327	22,76
WC	PS/WRD/UPP	5000	2015-17	Upper Sheyenne River Joint \	' Upper Sheyenne River WRB Administration (USRJWF	5/20/2015	12,000	1,003	10,99
E	PSIRRBUF	5000	2015-17	Buford Trenton Irrigation Distr		4/19/2016	32,770	0	32,77
					TOTAL		27 480 354	8.898.166	18.582.18

TOTAL 27,480,354 8,898,166 18,582,188

#### STATE WATER COMMISSION PROJECT SUMMARY 2015-2017 Biennium Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approved	1 SIMC		Approved			Initial Approved	Total	Total	May-16
Зу		Dept	Biennum		Project	Date	Approved	Payments	Balance
SWC	228	5000	2013-15	U.S. Geological Survey	(USGS) Operation & Maint of Gaging Station on the Missouri R	12/8/2014	8,970	8,970	
WC	240			•	Warwick Dam Repair Project	12/7/2012	110,150	110,150	
E	274				FEMA Levee Certification Feasibility Study	10/17/2014	37,500	37,500	
WC	281				Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,50
WC	346	5000	2011-13	Williams County WRD	Epping Dam Evaluation Project	2/27/2013	66,200	60,840	5,36
E	391	5000	2011-13	Sargent Co WRD	Sargent Co WRD, Silver Lake Dam Emergency Repairs	10/12/2011	2,800	0	2,80
WC	645				Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	44,280	
WC	646				Christine Dam Recreation Retrofit Project	10/26/2010	184,950	139,034	45,91
WC .	829				Rush River WRD Berlin's Township Improvement District No. 7	10/19/2011	101,317	0	101,31
SWC	980				Maple River Watershed Flood Water Retention Study/ Maple R	2/19/2015	3,687	3,687	22.05
SE SWC	1069				Drain #13 Channel Improvements Project	9/29/2015 3/17/2014	46,150 5,976	12,293 5,970	33,85
SWC	1082 1135				Cass Co. Drain No. 30 Channel Improvement Project Drain #4 Reconstruction Project	6/19/2013	2,673	0,570	2,67
WC SWC	1161				Drain 55 Improvement Reconstruction	3/28/2011	13,846	Ö	13,84
WC SWC	1183				Drain No. 15 Reconstruction Project	9/15/2014	60,300	49,055	11,24
E .	1219				Drain No. 8 Channel Improvement Preliminary Engineering Pro	5/7/2015	6,650	6,650	,
E	1301				City of Lidgerwood Engineering & Feasibility Study for Flood Co	2/4/2011	15,850	0	15,85
E	1301				City of Wahpeton Water Reuse Feasibility Study/Richland Co	9/8/2011	2,500	0	2,50
SE	1303				Upper Wild Rice Watershed Study	6/24/2015	73,500	73,485	1
E	1311				Buxton Township Improvement District No. 68	6/17/2015	15,745	15,745	
E	1312				Skyrud Dam 2011 EAP	12/15/2011	10,000	8,073	1,92
Ε	1312	5000	2011-13	Walsh Co. WRD	Union Dam 2011 EAP	12/15/2011	10,000	8,350	1,65
WC	1314	5000	2013-15	Wells Co. WRD	Oak Creek Drain Lateral E Reconstruction Project	9/15/2014	73,057	73,057	
E	1314	5000	2015-17	Wells Co. WRD	Oak Creek Lateral E Reconstruction	12/29/2015	20,173	20,173	
WC	1396	5000	2011-13	U.S. Geological Survey	(USGS) Missouri River Geomorphic Assessment	3/7/2012	10,000	10,000	
Ε	1403	5000	2015-17		(NDWRRI) Student Fellowship Program	12/23/2015	18,850	18,850	
wc	1438	5000	2011-13	•	Mulberry Creek Phase IV Reconstruction Project	6/19/2013	102,019	2,250	99,76
WC	1444				2014 Flood Protection System Modification Project	5/29/2014	61,331	61,331	
SWC	1577			•	Floodplain Mapping Project	5/29/2014	55,000	55,000	
E	1607				Flood Inundation Mapping of Areas Along Souris & Des Lacs R	6/15/2011	13,011	0	13,01
SWC	1625				(OHWM) Ordinary High Water Mark Delineations	8/20/2014	4,560	0	4,56
SE.	1667				Goose River Snagging & Clearing	12/18/2015	47,500 47,505	47,500	
SE.	1701				Red River of the North Unsteady Flow Model	11/25/2015	17,825	17,825	
SWC	1758				(USGS) Stochastic Model for the Mouse River Basin	12/13/2013 1/29/2015	40,000 32,252	40,000 32,252	
SWC	1792				SE Cass Wild Rice River Dam Study Phase II	5/28/2015	16,000	16,000	
SE SE	1814				Wild Rice River Snagging & Clearing - Bridge #121-2 Sheyenne River Snagging & Clearing - Fort Ransom Reach	6/11/2015	6,350	6,350	
SE SE	1815 1842				Wild Rice River Snagging & Clearing - Fort Ranson Reach	2/3/2015	11,063	0,000	11,06
E	1967				Grand Forks County Legal Drain No. 55 2010 Contruction	11/30/2010	9,652	9,652	11,00
SWC	1970				Walsh Co. Construction of Legal Assessment Drain # 72	3/28/2011	39,115	39,115	
SWC	1975				Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	37,742	37,742	
WC	1983				City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,50
E	1991			•	Sheyenne River Snagging & Clearing Project	2/12/2013	5,000	5,000	•
E	1998				Upper Turtle River Dam #1 2012 EAP	6/28/2012	10,000	9,365	63
Ē	2002				Trutle River Dam #4 2012 EAP	6/29/2012	10,000	8,656	1,34
wc	2004				Drain No. 57 Project	10/7/2013	413,576	413,576	
E	2005				Turtle River Dam #8 2012 EAP	6/29/2012	10,000	9,069	93
wc	2007	5000	2011-13		Pontiac Township Improvement District No. 73 Project	5/11/2015	747,093	594,183	152,91
SWC	2013	5000			Wild Rice River Watershed Retention Plan	6/8/2015	45,905	45,905	
WC	2019	5000	2011-13	Valley City	Sheyenee River Snagging & Clearing Project	12/7/2012	75,000	0	75,00
SWC	2040	5000	2013-15		Drain #74 Project	10/7/2013	197,604	197,604	
WC	2046				North Branch Park River Comprehensive Flood Damage Redu	12/13/2013	134,400	108,772	25,62
SWC	2048				Marion Flood Mitigation & Lagoon Drainage Project	5/29/2014	116,659	116,599	6
B2009	1986-03			USDA-APHIS,ND Dept A		9/9/2015	250,000	250,000	
SWC	2003-02				Re-Certification of the West Fargo Diversion Levee System	7/23/2015	52,564	32,813	19,75
SWC	2009-02				Recertification of the Horace to West Fargo Diversion Levee S	9/17/2012	25,504	25,504	0.70
E	CON/CAR				Will and Carlson Consulting Services	1/12/2016	17,500	10,795	6,70
SWC	CON/WIL/CAF				Will and Carlson Consulting Contract	12/13/2013	26,451	1,828	24,62
SE	NDAWN		2015-17		NDAWN CENTER	2/11/2016	1,500	1,500	
SE	PSWRDCAS	5000	2015-17	Cass Co. Joint WRD	Red River Watershed Comprehensive Detention Plan Updates	11/19/2015	34,025	34,025	1

TOTAL

774,952

3,711,325 2,936,373

### GRAFION FLOOD RISK REDUCTION

PROJECT NUMBER: 6012107







# Grafton Council Update #6 GRAFTON FLOOD RISK REDUCTION

Phase I & II - Environmental Document & Design Reporting Period: March 1, 2016 to July 1, 2016

#### **SUMMARY OF ACTIVITIES:**

#### General

- Held meetings with NDSWC, BNSF, Landowners, Utilities, Agencies
- Continue plan development (65% plan review complete, working towards 95% review)

#### Environmental

- Submitted 404 Permit and mitigation plan to USACE April 2016
- 404 Permit put out for public comment, held meetings with agencies

#### **Public Involvement**

- Held Flood Committee meetings
- Landowner meetings
- Township meeting
- CAG meeting

#### Hydrology & Hydraulics

- Existing Conditions hydraulic model complete
- Proposed Conditions hydraulic model complete
- Hydraulic model has been updated to incorporate the McLeod Drain project model, coordination ongoing
- Interior Hydraulic Model has been developed, working on design elements for interior drainage
- Bridge scour reports have been developed for agencies

#### **Agency Coordination**

- Held meeting with BNSF and JLL to discuss project schedule, permits and easements
- Held on site meeting with NDDOT, BNSF and DNRR to look at RR crossings the project will affect
- Had TS&L (Type, Size & Location) meeting with NDDOT on site, continue coordination with NDDOT
- Held meetings with NDSWC, FEMA and local floodplain administrators on the CLOMR

#### **Utility Coordination**

Held meetings with some utilities, working on relocation plans

#### Survey

Continue to gather data as required

#### Right-Of-Way

Developed data book for the project area

## GRAFTON FLOOD RISK REDUCTION

PROJECT NUMBER 6415107



- Pulled title certificates along the channel and levee
- Developed project documents and plats



#### Geotechnical

- Geotechnical field data collection is complete for now
- Analyzing slope stability in localized areas
- Continue analysis of cross sections, EMP sites and utility crossings as required.

#### Design

- 65% plans complete
- Working on 95% plans & specifications
- Draft Design Report complete
- Draft cost estimate complete

#### **Funding**

Continue to attended NDSWC, Water Coalition and Water Topics Committee meetings

#### PROJECTED ACTIVITY:

#### General

- Look into options for phasing construction
- Complete 95% plans
- Submit CLOMR
- Submit Impact Analysis to NDSWC
- Determine BNSF and NDDOT requirements for future maintenance of structures

#### **Environmental**

- Coordinate with USACE on 404 permit
- Determine structure removal requirements for truss bridges on south levee

#### **Public Involvement**

- Meet with Flood Committee, Citizen Advisory Group and Public as required
- Develop model of project for city website
- Meet with landowners adjacent to project as required to provide updates and discuss right of way

#### Hydrology & Hydraulics

- Continue coordination with McLeod Drain
- Complete stage impact analysis
- Continue to analyze interior drainage

#### **Agency Coordination**

Continue coordination with USACE / FEMA / RR / NDDOT / Utilities / NRCS / Others

#### **Utility coordination**

- · Stay in contact with utilities
- Finalize utility relocation plan

## GRAFTON FLOOD RISK REDUCTION

PROJECT NUMBER: 6413107







#### Survey

• Gather additional data as required

#### Right-of-Way

Begin of right of way acquisition

#### Geotechnical

Complete geotechnical report and recommendations

#### Design

- Continue with design
  - o Bypass Channel
  - o Tieback Levee
  - o Inlet Structure
  - o Outlet Structure
  - o Control Structure
  - o 3 BNSF Railroad Bridges
  - o 1 US Highway 81 Bridge
  - o County Road 10 & 71st Street Improvements

#### **Funding**

- 7-6-16 SWC meeting provide project update
- Next SWC meeting request cost share funds for construction

# GRAFTON FLOOD RISK REDUCTION PROJECT NUMBER: 6478107







## Permits/Approvals

LEVEL	AGENCY	PERMIT/APPROVAL	LEAD FIRM	STATUS UPDATE
Federal	FEMA	Letter of Map Revision, levee certification	Moore	Have met with FEMA, SWC, City and County. Coordination on-going.
Federal	US Army Corps of Engineers	Section 404 Permit (Individual Permit expected)	Barr	Submitted: April 2016 Public notice from COE posted: 5-11- 16
Federal	US Fish and Wildlife Service	Section 7 Concurrence (needed for 404 Permit)	Barr	Submitted as part of Section 404 Permit Application
State	State Historic Preservation Office	Section 106 Concurrence (needed for 404 Permit)	Barr	Submitted as part of Section 404 Permit Application
State	ND State Water Commission	Sorvereign Land Permit	KLI	
State	ND State Water Commission	Drain Permit	KLJ	
State	ND State Water Commission	Construction Permit		
State	ND State Water Commission	. Temporary Water permit	Barr	Not needed per Bob White @ SWC on 5-17-2016.
State	ND Department of Health	401 Water Quality Certification	Barr	Received 5-31-16
State	ND Department of Health	ND Pollutant Discharge Elimination System Permit Construction Stormwater Permit	Contractor	
State	ND Department of Transportation	Approval for US Highway 81 bridge	KU	Held TS&L meeting with NDDOT, working on plans and permits
Local	Floodplain Permit	Walsh County	KU	Held meeting with SWC and Walsh County Floodplain administrator, went over CLOMR process.
Local	Construction Permit	Walsh County Water Resource District	KLJ	Have held meetings with WCWRD, continue coordination.
Local	BNSF	Railroad bridge design approval	KLJ	Most recently discussed permits at 5-25-2016 meeting. Working with JLL.



# FM Metro Flood Protection Financial Plan

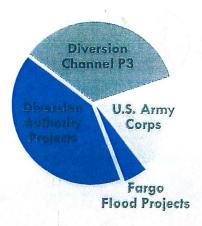
## May 2016

## Main points of financial plan

- Multi-generational funding approach
- Includes Diversion Authority and Fargo Flood Projects
- Based on extension of current sales tax
- No increases in taxes needed
- No special assessments needed

## Total capital cost for project estimated at \$2.2 Billion

Diversion Authority Projects
(Land, mitigation, legal,
financial, technical, construction)
Diversion Channel P3
U.S. Army Corps
Southern Embankment
Fargo Flood Projects



# Paying for the Project

**Existing Sales Taxes** 

Financial Plan



Passed in 2009 Dedicated to the Diversion



Passed in 2012 Dedicated to Flood Control

Currently expires in 2032



Passed in 2006 as Fargo Infrastructure Tax

1/4 for flood protection

expires in 2028 Infrastructure Water









Passed in 2010

Dedicated to the Diversion (and other county projects)







FM Metro Flood Protection Projects



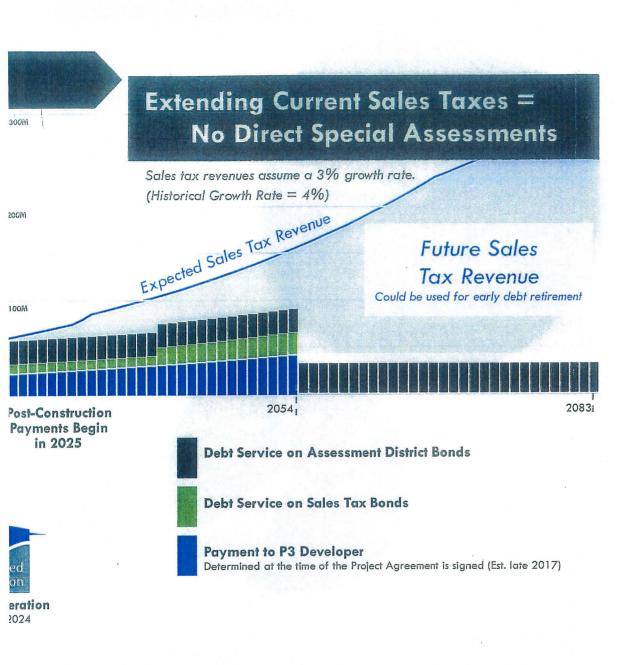


Construction Fargo Flood Projects Diversion Project



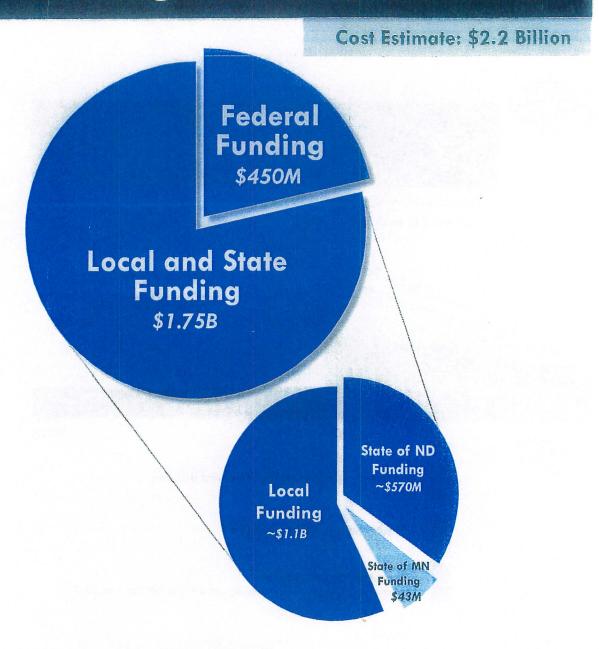
"There is no solution other than the Dive

- Mark Bittner, Fargo C



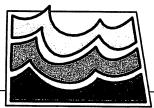


# Funding Breakdown



### **Local Funding Sources**

- Cass County and City of Fargo Sales Taxes
- Sales Tax used to secure short- and long-term financing for construction
- No special assessment funds needed for construction
- Assessment District utilized to improve credit ratings and access sales tax growth



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#### MEMORANDUM

TO:

Governor Jack Dalrymple

Members of the State Water Commission

FROM: Garland Erbele, P.E., Chief Engineer - Secretary

**SUBJECT:** SWPP Project Update

**DATE:** June 16, 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 contract has an intermediate completion date of September 29, 2015 for the original 341 users. The contractor completed the 355 users on December 7, 2015. Contractor has currently completed installation of 245 miles of pipeline and 371 users. Twelve change orders have been signed by all parties to date, which added 53 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. Twelve change orders have been signed by all parties to date, which added 50 additional users and 18 more miles of pipeline to the contract. The change orders changed the original intermediate completion date of July 15, 2015 to July 18, 2015 because of weather delays. The original substantial completion date of November 15, 2015 for 255 users was changed to another milestone completion date of May 15, 2016 for 287 users. The addition of users is because of removal of the intermediate completion date for Contract 7-9G Bid Schedule 1 for 32 users which was awarded to the same contractor. The intermediate competition date was extended because of weather delays and delays due to easement problems. The contractor reached the May 15, 2016 completion date on May 18, 2016. The substantial completion date including modifications through Change Order No. 12 is July 1, 2016. The contractor has currently turned over all users on this contract.

#### **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.

SWPP Project Update Page 2 June 16, 2016

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 %'' 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. Seven change orders have been signed by all parties to date, which added 39 additional users and 15 more miles of pipeline to the contract. The contractor has currently installed 43 miles of pipeline and 4 users. The substantial completion date including modifications through Change Order No. 7 is September 27, 2017.

Bid Schedule 2 consists of furnishing and installing approximately 164 miles of  $6'' - 1 \frac{1}{2}$ " 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.

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. The contractor has currently completed 163 miles of pipeline and installed 244 users. 122 users have been turned over for service.

#### 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 pump 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. 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.

SWPP Project Update Page 3 June 16, 2016

Cleanup and final inspection remain before the Contracts 2-8E and 2-8F can be closed out.

#### **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. A meeting with the contractor is currently being scheduled to discuss the liquidated damages.

#### 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 1<sup>st</sup> Zap Potable Reservoir:**

The contractor repaired the settlement damage to the floor by replacing the floor panels. The coating repairs are complete and the tank has been turned over for service.

#### **Other Contracts**

#### **Contract 8-1A New Hradec Reservoir:**

This contract involves furnishing and installing a 296,000-gallon fusion powder coated bolted steel reservoir. Olander Contracting Company is the contractor. 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. 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. There is still an outstanding punch list item on the contract.

On December 21, 2015 and May 12, 2016 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 received a letter from the Contractor's attorney on May 25, 2016 regarding the liquidated damages withheld. The letter included a pay application reducing the liquidated damages from \$207,750 to \$66,750 without any justification. The letter requested that SWC take one of two actions before May 31, 2016: 1) Resolve the payment issue with Olander Contracting Company so they can proceed to resolve their lawsuit against their sub

SWPP Project Update Page 4 June 16, 2016

contractor Tank Connection, LLC or 2) Participate on a settlement conference with Olander Contracting Company's subcontractor Tank Connection. The letter also indicated that if SWC does not choose one of the two actions, Olander will be forced to join SWC in the lawsuit against their subcontractor Tank Connections LLC which is in a Federal District Court. Our legal counsel responded to the letter indicating that SWC hopes to resolve the Liquidated Damages issue without the need for litigation, however if litigation is necessary lawsuit shall be brought in the District Court of Burleigh County as per the Contract Documents, and the SWC does not waive any defenses of sovereign immunity.

#### **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 FWPS 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. Contractor is working on punch list items and administrative items. Liquidated Damages withheld are currently negotiated.

#### **Contract 1-2A Supplemental Raw Water Intake:**

The first section of the intake pipe was lowered on July 15, 2015. 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 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 contractors current plan to remedy the problem include stabilizing the existing pipe to stop the inflow of sand and water with jet grouting. Jet grouting will also be done at the microtunnelling launch zone. Once the inflow of sand and water is stopped a new secondary floor will be installed and a new intake pipe will be launched from a higher elevation. The new intake pipe is expected to be 12 feet above the center line of the existing installed intake pipe. The intake alignment is expected to change slightly. The new alignment will be rotated 7 degrees to the east from the installed intake alignment. This would result in the intake screen center line to be at 1785' compared to 1782' originally specified in the Bid Documents. For comparison the permanent pool elevation for Lake Sakakwea is 1776.3'.

SWPP Project Update Page 5 June 16, 2016

The contractor has currently completed geotechnical investigation of the existing subsurface conditions and is working on providing submittal information to proceed with jet grouting. The contractor has partially filled the shaft with sand and water to protect the caisson from external eccentric loading that can result from jet grouting. The contractor's current schedule indicates most of 2016 will be spent on stabilizing the pipe, constructing the launch zone and installing the jacking frame. Microtunelling of the new intake pipe is expected to start in early spring with project completion expected in summer/fall 2017. The contractor has asked for a contract time extension through November 2017.

The SWC has submitted a claim of \$835,000 for the additional engineering expense to the Contract's Builder's Risk Policy.

#### 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. Bids for Contract 3-2D Electrical Contract were opened on January 28, 2016 and the contract was awarded to Edling Electric, Inc. at the March 3, 2016 meeting.

The General contractor, John T. Jones is working on earthwork excavation and foundation for various basins and reactors. The contractor has poured the slab for the reactor, buffer basin, ozone basin and the footing for the clarifier. Wall pours for the buffer basin are complete. Wall pours for the ozone basin, softening basin and basement exterior walls are ongoing. Site piping work is ongoing. Flood drain pipe installation is complete. The contractor is working on sludge outlet pipes and overflow pipelines.

The Electrical contractor, Edling Electric, Inc., is onsite and installing the grounding ring and PVC conduit in the basement slab. The Mechanical contractor, Williams Plumbing and Heating Inc., is onsite and is installing the plumbing piping and associated floor drains in the basement slab.

#### **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 contract was awarded to Edling Electric, Inc. at the March 3, 2016 meeting. The preconstruction conference for this contract was held on May 19, 2016. The schedule provided by the contractor indicates them working on the concrete pads at Dickinson, Dodge, Richardton and the Intake site, in that order, starting the week of June 6<sup>th</sup>.

SWPP Project Update Page 6 June 16, 2016

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

Work on the design of the raw water reservoirs is progressing. We have received the submittal set of plans and specifications for Contract 5-2A, 2<sup>nd</sup> Dickinson Reservoir and expect advertising this contract for bids in late July.

#### **Raw Water Line Capacity Upgrade:**

Design on the 4-mile parallel piping segment between the intake and the OMND Water Treatment plan in ongoing.

#### **Condemnation:**

Vietz Family Trust, a landowner on Contract 7-9E, was condemned for easement in June 2015. However, the paperwork was not claimed by the landowner until early January 2016 when it was physically served by the Idaho Sheriff's office. They appealed the condemnation in March 2016. Our legal counsel submitted a motion to dismiss as they missed the 30-day appeal deadline. Reply and response briefing by both parties is complete, and a hearing is scheduled for July 25, 2016.

#### **Transfer of Service Agreements:**

At the December 12, 2015 SWC meeting, the Commission approved the Transfer of Service agreement between City of Killdeer, Southwest Water Authority (SWA) and SWC. This was the first annexation agreement negotiated between a City served by Southwest Pipeline Project and SWA. In early January 2016, SWA mailed similar agreements to 33 communities within the SWPP service area except for City of Dickinson using the same template as used for City of Killdeer. SWA has been negotiating different terms with the City of Dickinson. Some communities executed the agreement, while many communities expressed concerns about terms of the annexation agreement that was mailed to them. SWA continues to meet with the communities to negotiate the terms.

TSS:SSP:TJF:pdh/1736-99

# AMENDMENT NUMBER FIVE (5) TO THE CONTRACT (NUMBER SWC-1736-16) FOR WATER SERVICE FROM THE SOUTHWEST PIPELINE PROJECT, NORTH DAKOTA

The above titled contract, entered into by and between the State of North Dakota, acting through the State Water Commission, referred to herein as the Commission, the Southwest Water Authority, a political subdivision created pursuant to North Dakota Century Code (NDCC) 61-24.5, referred to herein as the Authority, and the City of South Heart, referred to herein as the City, approved and entered into by resolution of the State Water Commission on the 15<sup>th</sup> day of March, 1983, is amended by the parties as follows:

Section VI.B.2. is hereby amended and agreed to as follows:

The sentence "The maximum flow rate to be provided by the Commission to the City shall not exceed 15.5 gallons per minute." is changed to "The maximum flow rate to be provided by the Commission to the City shall not exceed 80.0 gallons per minute."

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

900 East Boulevard Avenue Bismarck, ND 58505	SOUTHWEST WATER AUTHORITY 4665 2 <sup>nd</sup> St SW Dickinson, ND 58601-7231
By: Colad Chal Todd Sando, Chief Engineer and Secretary	By:  Larry Baros, Chairman
CITY OF SOUTH HEART Box 249 South Heart, ND 58655	Date April 4, 2016  CITY OF SOUTH HEART
By: Hayd R. Hend Title: Mayor	By: Ronge Praces  City Auditor
Date 3-14-16	Date 3-14-16

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#### MEMORANDUM

TO:

Governor Jack Dalrymple

Members of the State Water Commission

FROM: Y Garland Erbele, P.E., Chief Engineer-Secretary

**SUBJECT:** NAWS – Project Update

**DATE:** June 16, 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* was filed by the State of North Dakota as intervenor defendant March 1, 2016. Oppositions by the plaintiffs were filed April 4, 2016 and a reply was filed April 25, 2016 by the State. The Plaintiffs filed a Motion for Leave to sur-reply May 18<sup>th</sup> and an opposition to that motion was filed May 20<sup>th</sup> by the State of North Dakota. The Plaintiffs then filed a response to our opposition May 25<sup>th</sup> and the Motion for Leave was accepted by the Court May 27<sup>th</sup>. The Motion for Modification to the Injunction was denied by the Court June 14, 2016. We are currently reviewing an appeal of this decision.

Motions for Summary Judgment were originally 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. However, the briefing schedule was delayed once due to a desire by the federal defendants for additional time for review and a medical issue for the plaintiff's legal counsel and then again for the same medical issue for the

NAWS – Project Update Page 2 June 16, 2016

plaintiffs' legal counsel. We consented on both requests to delay the briefing but filed a joinder on the second request to ask the court to expedite the judgment on the injunctive relief motion. The current briefing schedule has the Motions for Summary Judgment filed June 3, 2016 with combined Opposition/Cross-Motion by the plaintiffs to be filed July 8, 2016 and combined Reply/Opposition by the defendants to be filed August 9, 2016, at which point the case will be fully briefed. This court typically takes four to six months to reach a verdict after the cases are fully briefed.

#### **NAWS High Service Pump Station**

Contract 4-2A-1 included furnishing and installing a 125 hp 'Jockey' pump to compliment the existing 350 hp pumps and maintenance work in the pump station. This contract is substantially complete but has not been closed out.

TF:ph/237-04



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#### <u>MEMORANDUM</u>

TO:

Governor Jack Dalrymple

Members of the State Water Commission

FROM: Garland Erbele, P.E., Chief Engineer - Secretary

SUBJECT: Mouse River Enhanced Flood Protection Project Update

DATE: June 23, 2016

The Environmental Impact Statement has been submitted to the Corps of Engineers for their comments. When those have been addressed, the Corps will release it for public comment. That phase will involve additional public meetings. The hope is that the Corps will be able to make the release this fall, so that public comments can be addressed over the winter. This would allow construction on Phase II and III (levees north of the river from the Highway 83 bypass to near the water treatment plant) to begin next spring as planned.

The need for this EIS is to allow the Corps to issue 408 (modify existing federal works) and 404 (fill in wet lands) permits for the project. For this purpose, the project is defined as Burlington to the downstream side of Minot. Beyond this point, there is no need for 408 permits and little or no need for 404 permits.

The 408 permit will be handled by the St. Paul District. The 404 permit will be handled by the Omaha district through their Bismarck Regulatory Office. The 404 application has been submitted, and conversations are ongoing.

A Feasibility agreement between the Souris River Joint Water Resources Board and the St. Paul district was signed on May 6. Preliminary work has begun. The feasibility study will address the whole basin-wide project and will, in itself, be another EIS.

One element of Phase II has been found by the Corps not to require permits. It does not affect any existing federal features and it has stand-alone benefits ("independent utility"). This feature is known as the Perkett Ditch. It is a revision of the City's storm water system which will be required for the interior drainage systems of the project. Also, modifications will need to be made to the Souris Valley Golf Course in this same area as a condition of the land rights for the project. This feature requires no federal action and, therefore, falls outside the EIS requirement. Both of these features have been bid and the Joint Board has submitted cost-share requests, which will be addressed separately.

GGE:JTF:pdh/1974



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#### **MEMORANDUM**

TO:

Governor Jack Dalrymple

Members of the State Water Commission

FROM: Garland Erbele, P.E., Chief Engineer – Secretary SUBJECT: Devils Lake Hydrologic and Outlet Update

DATE:

June 20, 2016

The June 20<sup>th</sup> water surface elevation of Devils Lake is 1450.0 feet, 4.3 feet lower than the maximum elevation of 1454.3 and 1.9 feet lower than a year ago at this time. The total lake rise from spring runoff was approximately 0.4 feet and peaked in late April at 1450.3 feet.

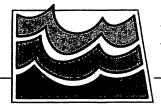
Spring precipitation has been above average throughout the Devils Lake and Upper Sheyenne River Basins with the majority of the rainfall coming from 3 separate storm events. During these events, outlet operation has been reduced in an effort to allow the Sheyenne greater capacity for storm flows. Flow at Cooperstown did reach 800 cfs on June 19<sup>th</sup>. No mitigation requests have been received related to 2016 outlet operations at this time.

Favorable conditions allowed pumping to begin on April 18<sup>th</sup> at the West Outlet and on May 2<sup>nd</sup> at the East Outlet. Total outlet flows have ranged from 125 to 500 cfs, and the East Outlet has not yet operated at full capacity because of quality and channel capacity limitations in the Upper Sheyenne River. Since the start of pumping in 2016, the lake level is down 0.3 feet and 39,466 acre-feet have been discharged as of June 15th.

Devils Lake Outlets Management Advisory Committee Meeting was held on May 3, 2016. Lake level target for the year was discussed and the committee reached a consensus of 1448 feet. This elevation goal for 2016 was voted on and received unanimous support, Manitoba and Minnesota abstained from the vote. If Devils Lake hits 1448 feet in 2016 the committee will meet again to discuss operations.

The Upper Sheyenne River Joint Water Resource Board had a meeting in Devils Lake on June 14<sup>th</sup> and a tour of the area on June 15<sup>th</sup> 2016. Many citizens of the region were present and provided input on their opinion of outlet operations. Citizens along the Sheyenne River noted that they are still experiencing erosion issues but were generally accepting of the situation and mitigation efforts. Farmers with inundated land and the Devils Lake Basin Joint Water Resource Board expressed their support for continued pumping while resort owners and other recreational interests would prefer to maintain the current lake level.

GE:JK:TD:ph/416-10



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#### **MEMORANDUM**

TO:

Governor Jack Dalrymple

Members of the State Water Commission

FROM: Garland Erbele, P.E., Chief Engineer/Secretary

**SUBJECT:** Missouri River Update

DATE:

June 17, 2016

#### System/Reservoir Status

System volume on June 17 in the six mainstem reservoirs was 60.0 million acre-feet (MAF), 3.9 MAF above the base of flood control. This is 1.4 MAF above the average system volume for the end of June and 0.4 MAF less than last year.

On June 17, Lake Sakakawea was at an elevation of 1841.5 feet msl, 4.0 feet above the base of flood control. This is 1.1 feet lower than a year ago and 2.7 feet above its average end of June elevation. The minimum end of June elevation was 1814.9 feet msl in 2005, and the maximum end of June elevation was 1854.5 feet msl in 2011.

On June 17, the elevation of Lake Oahe was 1612.4 feet msl, 4.9 feet above the base of flood control. This is 1.3 feet higher than a year ago and 6.9 feet higher than the average end of June elevation. The minimum end of June elevation was 1575.8 feet msl in 2006, and the maximum end of June elevation was 1619.6 feet msl in 2011.

On June 17, the elevation of Fort Peck was 2236.2 feet msl, which is 2.2 feet above the base of flood control. This is 1.0 feet lower than a year ago and 3.4 feet higher than the average end of June elevation. The minimum end of June elevation was 2203.0 feet msl in 2005, and the maximum end of June elevation was 2250.7 feet msl in 2011.

#### **Runoff and Reservoir Forecasts**

The June runoff forecast predicts runoff above Sioux City for this year to be 25.3 MAF or 100 percent of normal. On June 15, mountain snowpack was nearly gone. In the "Above Fort Peck" reach it was 4 percent of this year's peak. In the "Fort Peck to Garrison" reach it was 1 percent of this year's peak. Mountain snowpack peaked in early April at 95 percent and 89 percent of average for the "Above Fort Peck" and "Fort Peck to Garrison" reaches, respectively.

The June reservoir forecast predicts for the basic condition that the elevation of Lake Sakakawea will peak near 1843.0 feet in June or July. Releases from Garrison Dam are currently about 21,000 cfs and are predicted to remain near that level throughout the summer.

Missouri River Update Memo Page 2 June 17, 2016

#### **Annual Operating Plan**

The U.S. Army Corps of Engineers (Corps) hosted public meetings in April to present their 2015-2016 Final Annual Operating Plan. The meeting in Bismarck was held on April 13 at the Bismarck Event Center. The State Water Commission provided comments, which are attached to this memo.

#### **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 of the Missouri River Recovery Program (MRRP). MRRIC has nearly 70 members representing local, state, tribal, and federal interests throughout the Missouri River Basin.

The Corps is currently in the process of preparing the Missouri River Recovery Management Plan and Environmental Impact Statement (MRRMP & 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.

MRRIC met in Omaha, NE on June 1 to 3. The Corps has formulated six alternatives, four of which would require operational changes to the Master Manual. Actions outside the current 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. The Draft EIS is scheduled to be released for public comment in December 2016.

The State Engineer sent a letter to the Corps on April 13, 2016 expressing concerns over changing the Master Manual, the state's ability to adequately engage in the NEPA process, and the Corps' lack of providing information to review alternatives. The letter is attached to this memo.

#### Draft Revised Recovery Plan for the Northern Great Plains (NGP) Piping Plover

The U.S. Fish and Wildlife Service recently released for public comment their *Draft Revised Recovery Plan for the NGP Piping Plover*. The State Water Commission submitted comments, which are attached to this memo.

GGE:LCA:pdh/1392



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#### **Missouri River AOP Meeting**

Laura Ackerman, Water Resource Engineer, Water Development Division North Dakota State Water Commission

#### April 13, 2016, 6pm Bismarck Event Center

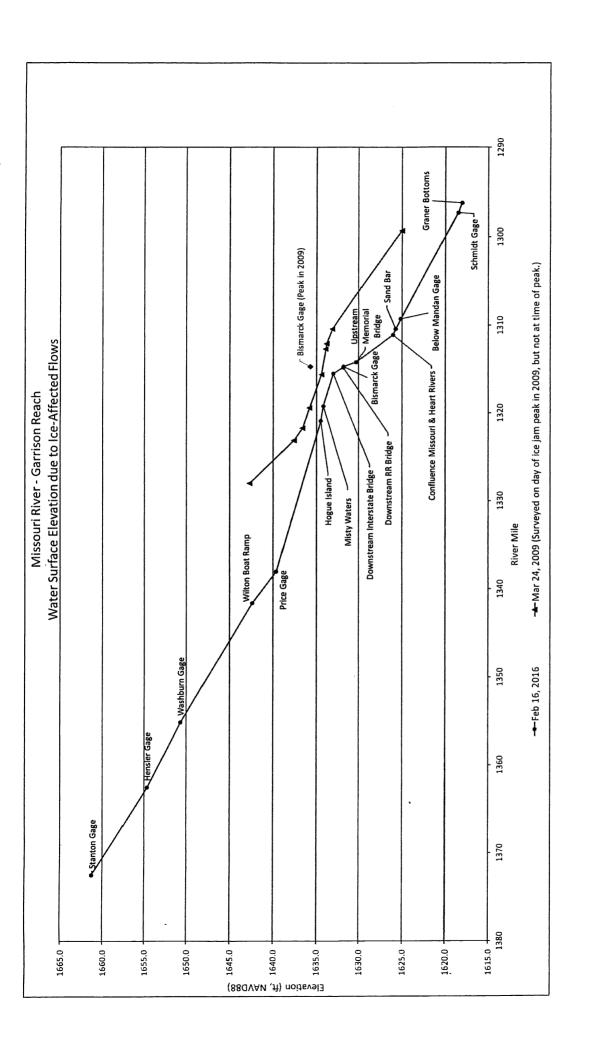
Good evening, my name is Laura Ackerman. I am a water resource engineer in the Water Development Division of the State Water Commission. On behalf of the State Water Commission, welcome to North Dakota.

On February 13<sup>th</sup>, 2016, accumulation of ice on the Garrison Reach caused an increase in stage of the river. River stage at the Bismarck gage peaked briefly at 12.8 feet on February 14<sup>th</sup>, 1.7 feet below flood stage, and then stayed 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 (reference attached figure). In the Misty Waters and Hogue Island area, river stage was a few feet less than the stage that occurred during the 2009 ice jam. High releases out of Garrison Dam contributed to this increase in river stage and elevated risk of flooding in the Garrison Reach. These high flows were occurring despite the Corps' statement in their February press release that all flood waters had been evacuated from the reservoir system at the end of January. Although the system had been evacuated at the end of January, Lake Sakakawea was not at the base of flood control and flood waters were still being evacuated. This information, the fact that flows were going to remain high in the Garrison Reach, and the Corps' evaluation of the ice-affected stage were not

listed species. These efforts have resulted in six alternatives to be evaluated in an EIS, four of which include actions outside the current Master Manual. At the last MRRIC meeting in February, the procedure for changing the Master Manual was discussed. The Corps stated that one public meeting is all that would be necessary to hear comments on a Master Manual change with no additional NEPA requirements if the changes had been considered in the EIS. The Corps also asserted that an AOP meeting would fulfill that "one public meeting" requirement. Using an AOP meeting as the public venue to hear comments on a significant Master Manual change is unacceptable. An AOP meeting is meant to inform the public on the potential range of operations expected for a given year within the constraints of the Master Manual.

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

LCA/1392





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April 13, 2016

Brigadier General Scott A. Spellmon U.S. Army Corps of Engineers Northwestern Division P.O. Box 2870 Portland, OR 97208-2870

Dear Brigadier General Spellmon:

At the February 2016 MRRIC plenary meeting, U.S. Army Corps of Engineers' (Corps) representatives indicated that MRRIC would not have an opportunity to review the results of the alternatives evaluation prior to the draft EIS being released for public comment in December 2016. It is imperative that the Missouri River Recovery Implementation Committee (MRRIC) has the opportunity to review and understand the results of the alternatives evaluation for the Missouri River Recovery Management Plan and Environmental Impact Statement (Plan and EIS). Keeping MRRIC in the dark on the results of the alternatives evaluation until the draft EIS is released to the public does not constitute collaboration with MRRIC, may be counterproductive to staying on schedule if material concerns with the analysis are identified following issuance of the formal draft EIS, and is contrary to the prevalent interdisciplinary approach for implementation of the National Environmental Policy Act (NEPA).

One of the purposes of MRRIC is for the lead federal agencies to understand the broad range of interests in the basin when implementing actions within the Missouri River Recovery Program (MRRP). The MRRIC charter specifies that MRRIC is supposed to provide guidance with respect to the MRRP. Guidance implies a much greater involvement than simply providing after-the-fact comments. MRRIC was specifically created by Congress for this purpose. The general public has an important role in this process in accordance with NEPA; however, MRRIC has a specifically defined role and is qualified to collaborate with the federal agencies on the Plan and EIS.

Furthermore, the state representatives on MRRIC represent sovereign entities. States have authorities and responsibilities that must be accounted for when actions are occurring within state boundaries. Through their various agencies, states have special expertise that can be utilized to improve the outcome of the Plan and EIS and are therefore akin to cooperating agencies in this process.

Brigadier General Scott A. Spellmon Page 2 April 13, 2016

Reviewing and understanding the results of the alternatives evaluation, including the economic, hydrologic, and hydraulics modeling results, will take considerable time and effort. Limited review time for MRRIC has been a common theme throughout the Plan and EIS process. During Round 1 and Round 2 consequences and tradeoffs discussions in May and August last year, respectively, MRRIC received the human considerations proxy results a couple weeks before the plenary meetings. At those plenary meetings, MRRIC was expected to provide comments on the alternatives based on their review of the proxy results. The lead federal agencies have since asserted that the alternatives were developed with input from MRRIC. Thus far, the collaboration process has consisted of the lead federal agencies providing information to MRRIC followed by MRRIC having very little time to review and comment. This impairs our ability to provide meaningful input to the process.

The state representatives on MRRIC have the responsibility of reviewing the effects to not just one, but all human considerations interest areas, which will require significant time and resources. Understanding the results of the alternatives evaluation is all the more critical because many of those alternatives are outside the current Missouri River Basin Mainstem Reservoir System Master Water Control Manual (Master Manual). MRRIC had compiled its Human Considerations Objectives and Metrics with the understanding that the alternatives would be within the sideboards of the current Master Manual. During the November 2015 plenary meeting, MRRIC learned that the draft EIS alternatives included four alternatives with actions outside the current Master Manual. At the subsequent February 2016 MRRIC meeting, the procedure for changing the Master Manual was discussed. The Corps stated that one public meeting is all that would be necessary to hear comments on the Master Manual change with no additional NEPA requirements if the changes had been considered in this EIS. The Corps also asserted that an Annual Operating Plan (AOP) meeting would fulfill that "one public meeting" requirement. Using an AOP meeting as the public venue to hear comments on a Master Manual change is unacceptable. An AOP meeting is meant to inform the public on the potential range of operations expected for a given year within the constraints of the Master Manual. Considering that the draft EIS will evaluate alternatives outside the current Master Manual and the process described to MRRIC for changing the Master Manual is ambiguous and concerning, it is paramount MRRIC understand the results of the evaluation, as changes to the Master Manual must have adequate NEPA coverage and public involvement.

The state representatives on MRRIC need to be able to understand and explain the results of the alternatives evaluation to the state's leadership, including the governor. This will require the lead federal agencies to provide the results to MRRIC prior to the release of the draft EIS. In the interest of time, sections of the draft EIS could be shared with MRRIC for review and comment. Output from economic, hydrologic, hydraulic, and other models should also be made available upon request to MRRIC members so that those individuals have the opportunity to quantify effects to their interests . Results should be made available such that a MRRIC member would have sufficient time to review and provide

Brigadier General Scott A. Spellmon Page 3 April 13, 2016

comments prior to the release of the draft EIS, which would assist in identifying material concerns and lessen the risk of triggering the need for a supplemental EIS.

I insist the lead federal agencies provide the results of the alternatives evaluation as soon as possible. It is understood that the models and results are in draft form and subject to change. The State of North Dakota accepts the risk of expending resources on reviewing draft information that may change and agrees to not voluntarily disclose the information to the general public within limits of the state's laws. I also request that the Corps meet with the State of North Dakota, and other interested basin states, to discuss the above issues and to agree on a plan of action that addresses everyone's concerns in this matter.

Sincerely,

Todd Sando, P.E. State Engineer

TSS:LCA:BE:CO:js/1396

cc: David Ponganis, Director of Programs, USACE, Northwestern Division

Colonel John W. Henderson, Commander and District Engineer, USACE, Omaha District

Senator John Hoeven

Senator Heidi Heitkamp

Representative Kevin Cramer Governor Jack Dalrymple

Shawn Shouse, Iowa State University Extension and Outreach

Chuck Gipp, Iowa Department of Natural Resources

Steve Adams, Kansas Department of Wildlife, Parks, and Tourism

Tracy Streeter, Kansas Water Office

Karen Rouse, Missouri Department of Natural Resources

Sara Parker Pauley, Missouri Department of Natural Resources

Don Skaar, Montana Department of Fish, Wildlife, and Parks

John Tubbs, Montana Department of Natural Resources and Conservation

Shuhai Zheng, Nebraska Department of Natural Resources

Gordon Fassett, Nebraska Department of Natural Resources

John Lott, South Dakota Department of Game, Fish, and Parks

Steven Pirner, South Dakota Department of Environment and Natural Resources

Sue Lowry, Wyoming State Engineer's Office

Pat Tyrrell, Wyoming State Engineer's Office

Reno Red Cloud, Chairman, Great Plains Tribal Water Alliance

Doug Crow Ghost, Standing Rock Sioux Tribe

Toni Fettig-Smith, Three Affiliated Tribes



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May 12, 2016

Mr. Kirsten Brennan U.S. Fish and Wildlife Service 8315 Highway 8 Kenmare, ND 58746

Dear Ms. Brennan:

The ND State Water Commission has reviewed the *Draft Revised Recovery Plan for the Northern Great Plains Piping Plover* and submits the attached comments. Thank you for the opportunity to review and provide input into the draft recovery plan.

Sincerely,

Todd Sando, P.E. State Engineer

TSS:LCA:BE:ph/1396

It is important to have consistent and understandable goals and recovery criteria. In the absence of this, it will be impossible to determine if the piping plover has recovered enough to be delisted. The discrepancies between the Recovery Plan and MRRMP must be remedied.

### 2. Page 29 - Effect of reservoirs, channelization of rivers, and modification of river flows

The Recovery Plan states that the Missouri River mainstem dams have modified river flows to the detriment of the piping plover by reducing the availability of sandbar habitat. Before the dams were constructed, flows would decline over the summer as tributary flows decreased. Presently, the dams regulate flow by maintaining it at a higher level throughout the summer for downstream human needs. The Recovery Plan concludes that there is less sandbar habitat over the course of the summer because the flows are kept high.

This conclusion completely disregards the dams' influence on the historical hydrograph that is a benefit to the piping plover. The dams have greatly reduced the once-normal floods that occurred due to plains and mountain snowpack runoff. The Recovery Plan states that piping plovers arrive on the Missouri River around mid-April every year, hatching occurs within late May to early July, and they begin to leave the breeding grounds as early as mid-July. The plains snowpack normally melts around March and April and mountain snowpack typically melts between May and July. Before the dams, runoff from these two snowmelt events caused an increase in flow on the Missouri River during the same critical breeding time period for the piping plover. Arguably, the dams help reduce the flood risk to the piping plovers nesting on the river.

#### 3. Page 34, fourth paragraph – Oil and gas development

This section describes the effects of oil and gas development, particularly in North Dakota and Montana, and states that oil pads are generally located at least every 320 or 640 acres (every half to full section). According to the ND Department of Trust Lands, typically well pads are located every 1,280 acres (every two sections). Further questions related to oil and gas development should be directed to the Oil and Gas Division of the ND Industrial Commission.

#### 4. Page 53 – Habitat creation and enhancement

This section describes efforts currently being taken to create and enhance piping plover habitat, specifically sandbar habitat. On the Missouri River, there is only mention of the work being conducted in South Dakota and Nebraska to mechanically create sandbars. Vegetation control on the Garrison Reach of the Missouri River in North Dakota has been occurring for at least a decade. This information should be included in the Recovery Plan.

#### 5. Page 54 - Research

This section makes note of the various population models that have been developed for the Northern Great Plains population. There is no mention of the ongoing population modeling work being conducted for the MRRMP. This information should be included in the Recovery Plan.

#### 6. Page 56, third paragraph - Piping plover metapopluation study

The Recovery Plan states that banding data shows there is minimal movement between the four regions of the Northern Great Plains population (Southern Rivers, Northern Rivers, U.S. Alkaline Lakes, and Prairie Canada). There is also mention of the ongoing USGS metapopulation study, which is evaluating the degree of connection between certain breeding regions, mainly the connection between Lake Sakakawea, Lake Oahe, Garrison Reach, and the U.S. Alkaline Lakes in Montana, North Dakota, and South Dakota. Understanding the degree of connection between the breeding areas is critical because bird abundance in one area may be substantially affected by movement between areas. The SWC strongly supports this study as it will improve future population modeling efforts and provide a better understanding on actions to implement for the recovery of the piping plover.

### 7. Page 61, second paragraph – Restoring natural riverine processes

The Recovery Plan states that the actions most likely to succeed in recovering the piping plover are those actions that increase the dynamic function and capacity of river systems where breeding habitat is created and maintained by natural riverine processes. First of all, restoring the natural pre-dam hydrograph will increase the chance of flooding piping plovers while they are breeding. Secondly, the ability of the Missouri River to maintain natural riverine processes is unknown because the river is not natural. Sediment load in the Missouri River is drastically less than during the pre-dam time period when the river was able to erode and deposit sediment with no net change in riverbanks, riverbed, sandbars, and floodplain. This decreases the ability of the river to create sandbar habitat with flows in a sustainable manner. The current riverine environment is still capable of creating sandbars, but the cumulative effects over time are unknown.

The geomorphology of the Garrison Reach on the Missouri River is predominantly controlled by the interaction of Garrison Dam on the upstream end and Lake Oahe on the downstream end (Skalak *et al.* 2013). Garrison Dam acts as a sediment trap and releases are essentially free of sediment. These releases have a high sediment carrying capacity and primarily erode the riverbanks and riverbed on the upstream end of the Garrison Reach. Further downstream, the sediment load of the flows increase. In

addition, as flows move downstream control of the geomorphology of the river channel transitions from Garrison Dam to Lake Oahe. The reservoir and its backwater effects decrease the sediment carrying capacity of the flows and causes aggradation.

The Recovery Plan references numerous times the importance of restoring the natural hydrograph and natural river processes as being the most sustainable option for creating sandbar habitat. The ability of the Garrison Reach, and the river in general, to continuously create sandbar habitat with flows over the long term is questionable. Since construction of the dams, the geomorphic trend of the Garrison Reach is erosion at the upstream end and aggradation on the downstream end. The continued growth of the Oahe Delta increases the risk of flooding on the Garrison Reach. In regards to the recovery goals for the Missouri River, the USFWS should not confine their efforts to the mainstem river only, but also consider other habitat alternatives (i.e. off-channel habitat) to assist in achieving the recovery goals. If science confirms that there is a significant connection between the Missouri River and Alkaline Lakes, consider implementing actions in the Alkaline Lakes region to help achieve the Missouri River recovery goals.

#### 8. Page 63, Item 1.1.3B – Understand piping plover movement

This section recommends using existing data to understand piping plover movement between the regions of the Northern Great Plains population. It also recommends working with partners to fill in information gaps if data is lacking. The USGS metapopulation study is focused on understanding the connectivity of the breeding regions. The SWC appreciates the USFWS' efforts to increase this area of uncertainty for the piping plover.

#### 9. Page 64 and 72, Item 1.2.3B – Removing riprap and hard points

The Recovery Plan recommends that bankline protection such as riprap and hard points be removed to help restore natural riverine processes. Approximately 30 percent of the Garrison Reach is riprapped. The effectiveness of removing this riprap is questionable because it is unknown what percentage of sediment actually comes from the Missouri River banks, bed, or from tributaries. The last study (USACE 2008) that attempted to quantify the cumulative impacts of bank stabilization on the Garrison Reach was inconclusive. The study did not find any consistent correlation between bank stabilization and riverbank and riverbed erosion rates.

On page 72, there is further discussion on the effect of removing hard structures. It states, "Removing hard structures (to allow overland flow in areas without human infrastructure) will reduce the impact of high flows on human structures downstream, allowing planned high flow events that can create and maintain sandbar habitat." It is not understood how removing hard structures would reduce downstream impacts and

create ESH to the elevation desired. This would need hydraulic analysis prior to being implemented.

#### 10. Page 66 & 67, Item 2.1.4B - Close off habitat to public access

The Recovery Plan recommends implementing seasonal or partial area closures to protect breeding piping plovers from human disturbance. These measures are already implemented in the Garrison Reach. It is recommended that recovery actions not be implemented in areas where there is high human use. This will decrease the risk of conflict between humans and piping plovers.

# 11. Page 79, Item 1.6.2B – Work with state and federal officials and the industry on oil and gas infrastructure

This section emphasizes the need to work with state and federal officials and the industry to locate wells and associated infrastructure (i.e. pipelines) to avoid piping plover habitat and to decrease the risk of spills impacting habitat. Currently, the SWC is aware of several companies that are proposing to cross Lake Sakakawea/Missouri River through shallow trenches. A spill from pipelines could have disastrous and widespread consequences for Lake Sakakawea and downstream. How has the USFWS been involved in those projects and other oil pipelines?

# 12. Appendix 1B – Background information for development of habitat quantity and frequency of availability

The analysis performed to determine frequency of availability of sandbar habitat on the Missouri River used proxy measures to estimate how often habitat would have been historically available. Not only is this analysis impossible because there is no way of knowing the historical geomorphic configuration of the river, but it is unnecessary because whether or not the piping plover historically used the pre-dam river is irrelevant. A listed species is protected under the Endangered Species Act wherever it is located, regardless of where it was historically. Piping plovers are using the Missouri River in its current state, so there is no basis for justifying recovery goals with an analysis on how the river functioned before the dams. The Missouri River in its current state should be the focus.

The analysis included ranking precipitation data for the period of record (1901-2012) to determine what years were in the upper decile (top ten percent). It was assumed that during the upper decile years, there was enough flow in the river to scour existing sandbars and create new ones. For the remaining 90 percent of years, it was assumed that sandbar habitat was available for breeding. There is no hydrologic basis for these assumptions. The flow in the river and available habitat for breeding is dependent upon

the geomorphic configuration of the river, sediment load, volume and timing of runoff from all sources (not just precipitation), and antecedent soil moisture.

#### 13. Appendix 3B – Monitoring Recommendations

This appendix discusses the need for improved monitoring of the piping plovers. There is acknowledgement of the USGS study (Shaffer *et al.* 2013) that evaluated the USACE's tern and plover monitoring program. This study determined that adult numbers were substantially underestimated and the detection rate varied from area to area. The Recovery Plan also acknowledges that monitoring has historically been done separately for each management area with different approaches and resources. As a result, data from these various monitoring programs can not be combined to assess overall population characteristics. The Recovery Plan has identified as a priority the need to remedy the limitations of the current state of piping plover monitoring. The SWC emphatically agrees that this is necessary so that resources (i.e. money, water, etc) are used more efficiently in implementing recovery actions.

#### **Literature Cited**

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- USACE. 2008. Bank Stabilization Cumulative Impact Analysis Final Technical Report Fort Peck, Garrison, Fort Randall, and Gavins Point Study Reaches.

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#### **Annual Operating Plan**

The Corps will host public meetings in October to present their 2016-2017 Draft Annual Operating Plan. The meeting in Bismarck will be held on October 6 at Bismarck State College.

#### **Missouri River Recovery Implementation Committee (MRRIC)**

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

The Corps is currently in the process of preparing the Missouri River Recovery Management Plan and Environmental Impact Statement (MRRMP & EIS). This process involves the development of a range of alternatives for the purposes of avoiding jeopardy on species on the Missouri River protected under the Endangered Species Act, specifically the threatened piping plover and endangered least tern and pallid sturgeon.

MRRIC met in La Vista, NE on August 8 to 11. At the meeting, the Corps announced their tentative Preferred Alternative (PA) for the upcoming Draft EIS. The tentative PA includes mechanical construction of habitat for the piping plover, least tern, and pallid sturgeon. In North Dakota, this would include the construction of new or maintenance of existing emergent sandbar habitat on the Garrison Reach. The tentative PA also includes a flow test for the pallid sturgeon spawning cue if naturally high flow does not occur on the Missouri River within about the next ten years. Further specifics on the flow test are unknown at this time.

The tentative schedule for compliance with the National Environmental Policy Act (NEPA) is as follows:

- December 28, 2016: Release Draft EIS for 60-day public comment period
- January to June 2017: Tribal government-to-government consultation
- February 2017: Corps will host public meetings throughout basin. Public meeting in Bismarck tentatively scheduled for week of February 6<sup>th</sup>.
- January 2018: Issue Final EIS
- March 2018: Issue Record of Decision