

North Dakota State Water Commission

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

**March 11, 2010
1:30 P.M., CST**

AGENDA

- A. Roll Call
- B. Consideration of *Agenda* - *Information pertaining to the agenda items is available on the State Water Commission's website at <http://www.swc.nd.gov> (select 'News and Information')*
- C. **Consideration of Draft Minutes of December 11, 2009 SWC Meeting** **
- D. State Water Commission Financial Updates:
 - 1) Agency Program Budget Expenditures
 - 2) 2009-2011 Biennium Resources Trust Fund and Water Development Trust Fund Revenues
- E. Consideration of Following Requests for Cost Share:
 - 1) Cost Share Policy Committee Report
 - 2) **City of Hazen Flood Control Levee Improvement Project** **
 - 3) **Richland County Drain No. 7 Improvement Reconstruction** **
 - 4) **Richland County Drain No. 14 Improvement Reconstruction** **
 - 5) **Pembina County Drain No. 11 Improvement Reconstruction** **
 - 6) **Pembina River Bank Stabilization** **
 - 7) **City of Pembina Engineering Analysis of Flood Control Levees** **
 - 8) **Enderlin Flood Control Levee Repairs** **
 - 9) **Grafton Flood Control Diversion Project** **
 - 10) **Sheyenne River Watershed Flood Water Detention Study** **
 - 11) **Sheyenne River Snag and Clear Project (Southeast Cass)** **
 - 12) **Sheyenne River Snag and Clear Project (Richland County)** **
 - 13) **Sheyenne River Diversion Low Flow Channel Improvements** **
 - 14) **Traill County Drain No. 27 Improvement Reconstruction** **
 - 15) **Ward County Aerial Photography and Lidar Elevation Mapping** **

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- F. Southwest Pipeline Project:
 - 1) Project Report
 - 2) ***City of Hazen Water Service Contract*** **
 - 3) ***Dodge Water Depot*** **
 - 4) ***Oil Industry Water Rates*** **
 - 5) ***Oil Industry Contracts*** **
 - 6) ***Seeding Contract S2010*** **

- G. Northwest Area Water Supply (NAWS) Project Report

- H. State Grants for Water Supply Projects:
 - 1) ***McKenzie County Regional Water Service from Williston*** **

- I. Devils Lake:
 - 1) Hydrologic Report
 - 2) North Dakota Devils Lake Outlet Project

- J. 2010 Spring Flood Outlook:
 - 1) Outlook Report
 - 2) ***Cost Share with USGS for Flood Measurements*** **

- K. *Sweetbriar Creek Dam*** **

- L. Garrison Diversion Conservancy District

- M. Missouri River Update

- N. State Water Management Plan Update

- O. Other Business

- P. Adjournment

**** BOLD, ITALICIZED ITEMS REQUIRE SWC ACTION**

To provide telephone accessibility to the State Water Commission meeting for those people who are deaf, hard of hearing, deaf and/or blind, and speech disabled, please contact Relay North Dakota, and reference ... TTY-Relay ND ... 1-800-366-6888, or 711.

MINUTES

North Dakota State Water Commission Bismarck, North Dakota

March 11, 2010

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on March 11, 2010. Governor John Hoeven, Chairman, called the meeting to order at 1:30 P.M., and requested Dale L. Frink, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Hoeven announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:

Governor John Hoeven, Chairman
Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck
Arne Berg, Member from Devils Lake
Maurice Foley, Member from Minot
Jack Olin, Member from Dickinson
Harley Swenson, Member from Bismarck
Robert Thompson, Member from Page

STATE WATER COMMISSION MEMBERS ABSENT:

Larry Hanson, Member from Williston
Douglas Vosper, Member from Neche

OTHERS PRESENT:

Dale L. Frink, State Engineer, and Chief Engineer-Secretary,
North Dakota State Water Commission, Bismarck
State Water Commission Staff
Approximately 50 people interested in agenda items

The attendance register is on file with the official minutes.

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

CONSIDERATION OF AGENDA

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

CONSIDERATION OF DRAFT MINUTES OF DECEMBER 11, 2009 STATE WATER COMMISSION MEETING - APPROVED

The draft minutes of the December 11, 2009 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Olin, seconded by Commissioner Goehring, and unanimously carried, that the draft minutes of the December 11, 2009 State Water Commission meeting be approved as prepared.

STATE WATER COMMISSION BUDGET EXPENDITURES, 2009-2011 BIENNIUM

In the 2009-2011 biennium, the State Water Commission has two line items - administrative and support services, and water and atmospheric resources expenditures. The allocated program expenditures for the period ending January 31, 2010, reflecting 29 percent of the 2009-2011 biennium, were presented and discussed by David Laschkewitsch, State Water Commission accounting manager. The expenditures, in total, are within the authorized budget amounts. **SEE APPENDIX "A"**

The Contract Fund spreadsheet, attached hereto as **APPENDIX "B"**, provides information on the committed and uncommitted funds from the Resources Trust Fund, the Water Development Trust Fund, and the general fund project dollars. The total approved for projects is \$174,120,404, leaving a balance of \$23,706,995 available to commit to projects.

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

Oil extraction tax deposits into the Resources Trust Fund total \$28,078,372 and are currently \$36,545, or 0.1 percent behind budgeted revenues.

Secretary Frink and Mr. Laschkewitsch responded to questions from Governor Hoeven relating to the Resources Trust Fund revenues.

There have been no deposits received in the Water Development Trust Fund in the 2009-2011 biennium. The first planned deposit is \$9,900,000 in April, 2010.

STATE WATER COMMISSION COST SHARE POLICY, PROCEDURE, AND GENERAL REQUIREMENTS - APPROVALS RELATING TO PARTIAL AND FINAL PAYMENTS; AND TIME FRAME FOR COST SHARE APPLICATION FUNDING SUBMITTAL (SWC Project No. 1753)

The State Water Commission's cost share policy committee and others met on March 11, 2010. Items of discussion included modifications to the cost share policy regarding one payment reimbursement for studies and/or other projects under that category, FEMA levee certification requirements, cost share assistance for culvert inventories and

studies, and 2009 Senate Bill 2316 (committee was informed that the State Water Commission is supporting water retention flood control projects and that a report will be provided for the 2011 Legislative Assembly).

It was the recommendation of Secretary Frink that the State Water Commission approve the cost share policy committee's proposed modifications to the cost share policy, procedure, and general requirements by deleting the last sentence of each paragraph (strikethrough), and replacing with the underlined language as follows, effective March 11, 2010:

Cost-Share Application and Approval Procedures:

X. Partial and Final Payments. The State Engineer may make partial payment of cost sharing funds as deemed appropriate. Upon notice by the applicant-project sponsor that all work or construction has been completed, the State Engineer may conduct a final field inspection. If the State Engineer is satisfied that construction has been completed in accordance with the designs, plans and specifications for the project, the final payment for cost sharing as approved by the State Water Commission shall be disbursed to the project sponsor, less any partial payment(s) previously made. ~~Engineering feasibility studies are only entitled to one payment.~~ The State Engineer shall determine the payment schedule and the interim progress report(s) requirements, effective March 11, 2010.

Projects Eligible for Cost Share:

VII. Studies, Reports, Analysis, Surveys, Models, Assessments, Mapping. The State Water Commission will provide cost sharing up to 50 percent of the eligible items of any cost sharing application approved for studies, reports, analysis, surveys, models, assessments, and mapping projects. The percentage of funds is limited by the maximum cost share limits of eligible project categories to which the purpose of the project corresponds. A paper and electronic copy of the study, report, analysis, survey, model, assessment, or mapping project must be provided to the State Water Commission upon completion. ~~One payment will be reimbursed to the project sponsor upon the copy receiving review and approval from the State Water Commission personnel.~~ The State Engineer shall determine the payment schedule and the interim progress report(s) requirements, effective March 11, 2010.

It was moved by Commissioner Swenson and seconded by Commissioner Olin that the cost share policy, procedure, and general requirements (Cost Share Application and Approval Procedures: Section X. Partial and Final Payments; and Projects Eligible for Cost Share: Section VII, Studies, Reports, Analysis, Surveys, Models, Assessments, Mapping) be modified as recommended, effective March 11, 2010.

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

The cost share policy committee recommended that the State Water Commission require that cost share applications for funding be submitted to the secretary to the Commission three weeks prior to a State Water Commission meeting. This would allow adequate time for the Commission staff to complete the application review process and provide the information/recommendation to the Commission members for their consideration in a proficient manner.

It was the recommendation of Secretary Frink that the State Water Commission approve the cost share policy committee's recommendation as presented.

It was moved by Commissioner Olin and seconded by Commissioner Berg that the State Water Commission require that cost share applications for funding be submitted to the secretary to the Commission three weeks prior to a State Water Commission meeting, effective March 11, 2010.

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

***CITY OF HAZEN FLOOD CONTROL
2010 IMPROVEMENT MODIFICATIONS,
AND FEMA LEVEE CERTIFICATION
AND ACCREDITATION PROJECT -
APPROVAL OF CONDITIONAL STATE
COST PARTICIPATION (\$567,700)
(SWC Project No. 1577)***

the levee into compliance with FEMA guidelines as outlined in the Code of Federal Regulations, Title 44 Part 65.10.

A request from the Mercer County Water Resource District was presented for the State Water Commission's consideration for state cost participation in those costs necessary for the City of Hazen to modify their flood control levee system with improvements. The improved modifications are essential to bring

Due to numerous flooding events by overflows from Antelope Creek in the 1940s, 1950s and 1960s, the Highway 200 levee system was designed and constructed in 1979 to meet the Soil Conservation Service standards and specifications for flood control levees and the North Dakota standards and specifications as a bypass roadway levee around the northern edge of the city of Hazen between the city and Antelope Creek. The levee extends from 8th Avenue NE to 600 feet west of the intersection of west Main Street and Highway 200. The roadway levee meets the design standards of the time and was built with a two (2) foot freeboard. Current FEMA guidelines and regulations require a minimum three (3) foot headboard along its entire length.

The District and the city were notified by FEMA in October of 2009 that the Highway 200 flood control levee system would be de-accredited on the Flood Insurance Rate Map (FIRM), due to a two (2) foot headboard, thereby forcing most residents to carry flood insurance. The city made the decision to modify the levee system with improvements to allow accreditation by FEMA that the system provides protection from flooding for FIRM purposes. The entire Antelope Creek model was thoroughly reviewed and updated with survey data and cross sections, and the proposed system modifications reflecting an increase in conveyance at 3rd Avenue NW and at the railroad dike extension on the west end of the levee system will provide freeboard in excess of the three (3) feet required by FEMA.

Antelope Creek has been subdivided into four reaches to plan the implementation of remedial actions: Reach 1 entails snagging and clearing of 6,800 feet of channel to increase conveyance and reduce ice jams; Reach 2 requires the removal of trees adjacent to the channel from 4th Avenue NE to 3rd Avenue NW. A box culvert will be installed just north of the 3rd Avenue NW bridge to increase the conveyance bringing the levee freeboard to the three (3) foot FEMA standard. The dike will be raised at the intersection of Highway 200 and 3rd Avenue NW, approach channels will be excavated, and walking paths relocated; Reach 3, 3rd Avenue NW to Antelope Drive, contains the major portion of the 1979 re-channelization of Antelope Creek, and also requires small tree removal; and Reach 4, Antelope Drive to 800 feet west of Main Street, is 8,300 in length and is the longest reach in this proposed project. This reach of the creek flows through native prairie and no improvements are planned for this reach. The earthen dike constructed adjacent to and north of Highway 200 (old railroad crossing) will be upgraded and extended 700 feet west in order to provide the three (3) foot freeboard.

The project engineer's total estimated cost of the project (improvement reconstruction, land acquisition to extend the dike at the old railroad crossing area (\$10,000), FEMA accreditation requirements, and all engineering) is \$1,146,000, of which \$949,000 is determined as eligible for state cost participation - \$17,000 at 50 percent of the eligible snag and clear items (\$8,500), and \$932,000 at 60 percent of the eligible flood control work to include FEMA certification

tasks (\$559,200), for a total state cost participation of \$567,700. The District intends to use the existing assessment operation and maintenance funds to subsidize the local share of \$578,300. The city may also contribute to the project and a special assessment may be utilized.

Secretary Frink explained that under the State Water Commission's cost share policy, FEMA's levee accreditation efforts are considered to be operations and maintenance activities as characterized by an "analysis of an existing structure/system to determine if operating as designed and/or to the current standards of the party requesting the analysis". He said although the Commission supports and significantly contributes toward the construction and improvement reconstructions of flood control projects, the Commission does not participate in the operations and maintenance activities, project administration and management, and project repairs. The Commission's practice of not cost sharing on these costs and activities are observed to help instill and preserve the integrity of the system by the owner and those who directly benefit. The operation and maintenance costs also have a funding mechanism in that local project assessment funds are established at the time of construction.

Because FEMA has discontinued its assistance in facilitating the levee certification process, all costs to certify the levees have been transferred to the system owners and/or states. The de-accreditation will require the affected city residents to purchase flood insurance. Secretary Frink stated that given the probability of the flood control improvements being constructed as proposed regardless of FEMA accreditation and the integral value of updated models now available for managing area water projects, he recommended that the State Water Commission approve state cost participation at 50 percent of the eligible snag and clear items (\$8,500), and 60 percent of the eligible flood control work to include FEMA certification tasks (\$559,200, includes land acquisition of \$10,000), for a total state cost participation of \$567,700.

It was moved by Commissioner Foley and seconded by Commissioner Goehring that the State Water Commission conditionally approve state cost participation at 50 percent of the eligible snag and clear costs (\$8,500), and 60 percent of the eligible flood control work to include FEMA certification tasks (\$559,200, includes land acquisition of \$10,000), not to exceed an allocation of \$567,700 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Mercer County Water Resource District to support the City of Hazen's flood control system 2010 improvement modifications and FEMA levee certification and accreditation project. This action is contingent upon the availability of funds, approval of final engineering plans, FEMA accreditation, and satisfaction of the required permits.

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

***RICHLAND COUNTY DRAIN NO. 7
2010 PARTIAL IMPROVEMENT
RECONSTRUCTION - CONDITIONAL
APPROVAL OF STATE COST
PARTICIPATION (\$130,681)
(SWC Project No. 1180)***

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation for reconstruction of a portion of Richland County Drain No. 7 to improve the stability of the channel, reduce erosion, and

maintenance to repair erosion and sloughing.

Richland County Drain No. 7 was originally constructed in the early 1900s and is approximately 10 miles in length. The 2010 two-mile partial improvements will occur in Sections 19 and 30, Township 134 North, Range 50 West, and Sections 24 and 25, Township 134 North, Range 51 West. The project will begin at an existing concrete drop structure on the west side of County Road No. 3 and proceed west one mile to existing culverts through a township road crossing which will remain in place. The reconstruction proceeds west for another mile until the next township road crossing is reached. As a result of the channel being constructed on both sides, the existing township road will be relocated to the south.

The proposed work includes widening of the channel bottom to 10 feet and side slopes flattening from 2:1 to 4:1. The channel depth will not be significantly deepened and the alignment will not change due to the remaining controlling road crossing culverts at each end of the area to be reconstructed with the improvements. To reduce the erosion, the grade of the channel will be reduced slightly to slow the speed of the flow. Existing rock plunge pools at the outlets of both township road crossings will be improved to establish and control the grade differential. The drop box will be modified by cutting it down to approximately 1 foot for a width of 10 feet.

The project engineer's cost estimate is \$371,000, of which \$290,403 is determined as eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$130,681). The local share will be financed with maintenance funds. A drain permit application has been submitted and is currently being reviewed. The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$130,681.

It was the recommendation of Secretary Frink that the State Water Commission conditionally approve state cost participation as

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a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$130,681 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Richland County Drain No. 7 2010 partial improvement reconstruction project.

It was moved by Commissioner Goehring and seconded by Commissioner Thompson that the State Water Commission conditionally approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$130,681 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Richland County Water Resource District to support the Richland County Drain No. 7 2010 partial improvement reconstruction project. This action is contingent upon the availability of funds, and satisfaction of the required drain permit.

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

***RICHLAND COUNTY DRAIN NO. 14
2010 PARTIAL IMPROVEMENT
RECONSTRUCTION - CONDITIONAL
APPROVAL OF STATE COST
PARTICIPATION (\$183,364)
(SWC Project No. 1331)***

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation to reconstruct a portion of Richland County Drain No. 14 to improve the stability of the channel, reduce erosion and

costly maintenance, and extend the life of the channel.

Richland County Drain No. 14 was originally constructed in the early 1900s and is approximately 12 miles in length. The 2.1 mile 2010 partial improvement reconstruction will begin approximately 400 feet north of the northeast corner of Section 23, Township 135 North, Range 51 West at the last channel improvement reconstruction project completed in 2005. A total of 4 miles of channel downstream of the project has been reconstructed since 1998. The project will proceed south to the southeast corner of Section 26, Township 135 North, Range 51 West. The existing bridge in Section 26 will be replaced with culverts as it is currently closed from damage.

The project engineer's cost estimate is \$485,000, of which \$407,476 is determined as eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$183,364). The local share will be financed with assessment maintenance funds. The anticipated bid date is April,

2010 with completion slated in the fall of 2010. A drain permit application has been submitted and is currently being reviewed. The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$183,364.

It was the recommendation of Secretary Frink that the State Water Commission conditionally approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$183,364 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Richland County Drain No. 14 2010 partial improvement reconstruction project.

It was moved by Commissioner Swenson and seconded by Commissioner Olin that the State Water Commission conditionally approve state cost participation as a rural flood control project at 45 percent of the eligible costs, not to exceed an allocation of \$183,364 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Richland County Water Resource District to support the Richland County Drain No. 14 2010 partial improvement reconstruction project. This action is contingent upon the availability of funds, and satisfaction of the required drain permit.

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

**PEMBINA COUNTY DRAIN NO. 11 2009
IMPROVEMENT RECONSTRUCTION
PROJECT - APPROVAL OF ADDITIONAL
STATE COST PARTICIPATION (\$70,846)
(SWC Project No. 1140)**

On December 8, 2006, the State Water Commission conditionally approved a request from the Pembina County Water Resource District for state cost participation in the Pembina County Drain No. 11 outlet improvement reconstruction

project as a rural flood control project at 35 percent of the eligible costs not to exceed an allocation of \$53,599 from the funds appropriated to the State Water Commission in the 2005-2007 biennium (H.B. 1021). This is a rural flood control project to provide for the efficient removal of runoff.

Approximately one-half mile of the drain upstream of the outlet and in Sections 15 and 10, Township 163 North, Range 52 West (Pembina Township), outletting into the Pembina River, has been reconstructed. The drain had been split into two due to the existence of an island in the middle of the outlet area. Due to project delays, the project was not finished until the summer of 2009. Drain Permit No. 3148 was executed on December 5, 2006. The sediment analysis indicated 949 cubic yards of sediment (maintenance).

The project engineer's revised cost estimate is \$208,935, of which \$202,416 is determined eligible for state cost participation as a rural flood control project at 35 percent of the eligible costs (\$70,846). The cost overage is a result of a two-year delay after the initial cost share approval due to the acceptance of a rebid resulting in increased material/labor costs, and modification of quantities necessary for riprap, seeding, and concrete to accommodate the site conditions. A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for an additional state cost participation in the amount of \$17,247 (eligible costs of \$70,846 less \$53,599 approved on December 8, 2006). The request before the State Water Commission is for a 35 percent state cost participation in the amount of \$17,247.

It was the recommendation of Secretary Frink that the State Water Commission approve state cost participation as a rural flood control project at 35 percent of the eligible costs, not to exceed an additional allocation of \$17,247 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to support the Pembina County Drain No. 11 2006-2009 improvement reconstruction project. The Commission's affirmative action would increase the total state cost participation to \$70,846.

It was moved by Commissioner Thompson and seconded by Commissioner Goehring that the State Water Commission approve state cost participation as a rural flood control project at 35 percent of the eligible costs, not to exceed an additional allocation of \$17,247 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Pembina County Water Resource District to support the Pembina County Drain No. 11 2006-2009 improvement reconstruction project. This action is contingent upon the availability of funds.

This action increases the total state cost participation to \$70,846 for the Pembina County Drain No. 11 2006-2009 improvement reconstruction project.

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

**PEMBINA RIVER AREA 2010
BANK STABILIZATION PROJECT
(PEMBINA COUNTY) -
CONDITIONAL APPROVAL OF STATE
COST PARTICIPATION (\$64,383)
(SWC Project No. 1461)**

A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation in the District's bank stabilization project on the Pembina River.

On December 5, 2008, the State Water Commission conditionally approved an allocation not to exceed \$24,307 for the Pembina River bank stabilization project. After the cost share approval, the District modified the quantities of rock and made other changes to the project. The Commission was notified in late 2009 to end the original project and that a revised 2010 project would be submitted. The conditionally approved state cost participation allocation (\$24,307) was de-obligated.

The proposed 2010 project consists of stabilizing an approximately 325-foot long section of the Pembina River in Felson Township. The project work will occur in Sections 34 and 35, Township 164 North, Range 54 West. Landowners, Pembina county commissioners, and the District are concerned that another high water event could wash out the road, isolate the bridge, and leave the area residents without road access. Sovereign Lands Permit No. 1451 will be addressed to reflect the increased quantities of rock placed and any other deviations.

The project work entails sloping the river banks to 2:1 and protected from the toe to a height of approximately 18 feet. When the water gets higher than 18 feet, it will overtop the township road at a location further east, and pressure on the bank is reduced once the water breaks out at the other location.

The project engineer's cost estimate is \$107,304, all of which is determined eligible for state cost participation as a bank stabilization project at 60 percent of the eligible costs (\$64,383). The request before the State Water Commission is for a 60 percent state cost participation in the amount of \$64,383.

It was the recommendation of Secretary Frink that the State Water Commission conditionally approve state cost participation as a bank stabilization project at 60 percent of the eligible costs, not to exceed an allocation of \$64,383 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Pembina River area 2010 bank stabilization project.

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It was moved by Commissioner Swenson and seconded by Commissioner Berg that the State Water Commission conditionally approve state cost participation as a bank stabilization project at 60 percent of the eligible costs, not to exceed an allocation of \$64,383 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Pembina County Water Resource District to support the Pembina River area 2010 bank stabilization project. This action is contingent upon the availability of funds, and satisfaction of modifications to Sovereign Lands Permit No. 1451.

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

CITY OF PEMBINA FLOOD CONTROL SYSTEM 2010 FEMA LEVEE CERTIFICATION AND ACCREDITATION PROJECT - APPROVAL OF STATE COST PARTICIPATION (\$27,156) (SWC Project No. 1444)

A request from the City of Pembina was presented for the State Water Commission's consideration for state cost participation in their costs to analyze the city's flood control levee system for compliance with FEMA guidelines as outlined in the Code of Federal Regulations

(CFR), Title 44 Part 65.10. The analysis is required for FEMA to accredit the levee system, flood insurance mapping purposes, operations are as designed and/or to the current standards, and provides protection from the 100-year flood. The analysis of the city's flood protection system will produce a statement from a registered professional engineer as to whether the elements of the system are designed in accordance with sound engineering practices to comply with the requirements in the CFR, Title 44 Part 65.10.

According to FEMA's current Flood Insurance Rate Map (FIRM), the City of Pembina is protected from the 1-percent-annual-chance flood (100-year flood). The city was officially notified by letter dated March 26, 2009 of FEMA's intent to require levee certification within two years. FEMA's accreditation will allow the city to maintain its status as a community removed and protected from the floodplain. If the analysis indicates that the flood control system does not meet CFR Title 44 Part 65.10 requirements, the city must address the deficiencies before FEMA will accredit the system. The levee and floodwall that were originally designed and constructed have been inspected by the Corps of Engineers for years. Through these inspections, the need for large-scale maintenance has been brought to the attention of the city. Although the Corps of Engineers no longer analyzes flood control systems for design and compliance, the previous inspection reports and certification should facilitate analyzing the system. Due to the Corps inspection reports

detailing the maintenance required of the system, applicable preliminary engineering plans would need to be developed for such rehabilitation upon completion of the analysis. Should the city decide to make the repairs or reconstruct the levee system with improvements for accreditation by FEMA, a separate request for state cost participation would be required at that time.

The total estimated cost of the analysis is \$91,000, of which \$45,260 is determined as eligible for state cost participation at 60 percent (\$27,156). The city intends to use the existing assessment operation and maintenance funds to pay for the local share of \$63,844, and a special assessment may be utilized.

Secretary Frink explained that under the State Water Commission's cost share policy, FEMA's levee accreditation efforts are considered to be operation and maintenance activities as characterized by an "analysis of an existing structure/system to determine if operating as designed and/or to the current standards of the party requesting the analysis". He said although the Commission supports and significantly contributes toward the construction and improvement reconstructions of flood control projects, the Commission does not participate in the operation and maintenance activities, project administration and management, and project repairs. The Commission's practice of not cost sharing on these costs and activities are observed to help instill and preserve the integrity of the system by the owner and those who directly benefit. The operation and maintenance costs also have a funding mechanism in that local project assessment funds are established at the time of construction.

Because FEMA has discontinued its assistance in facilitating the levee certification process, all costs to certify the levees have been transferred to the system owners and/or states. The de-accreditation will require the affected city residents to purchase flood insurance. Secretary Frink stated that given the probability of the flood control improvements being constructed as proposed regardless of FEMA accreditation and the integral value of updated models now available for managing area water projects, he recommended that the State Water Commission approve state cost participation at 60 percent of the eligible analysis costs not to exceed an allocation of \$27,156 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the City of Pembina flood control levee system 2010 FEMA levee certification and accreditation project.

It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve state cost participation at 60 percent of the eligible costs not to exceed an allocation of \$27,156 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the City of Pembina to support the City of Pembina flood control system 2010 FEMA levee certification and accreditation project. This action is contingent upon the availability of funds.

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

CITY OF ENDERLIN FLOOD CONTROL SYSTEM 2010 REPAIRS AND MAINTENANCE AND, FEMA LEVEE CERTIFICATION AND ACCREDITATION PROJECT - APPROVAL OF CONDITIONAL STATE COST PARTICIPATION (\$100,578) (SWC Project No. 1657)

A request from the City of Enderlin was presented for the State Water Commission's consideration for state cost participation in those costs necessary for the City of Enderlin to repair their flood control levee system. The repairs are necessary to bring the levee into compliance with FEMA guidelines as outlined

in the Code of Federal Regulations, Title 44 Part 65.10.

FEMA has been updating its Flood Insurance Rate Maps (FIRM) as part of the map modernization process. As part of its effort for the new Ransom County Flood Insurance Study (FIS), FEMA determined that the levee protecting the city of Enderlin, which was constructed by the Corps of Engineers, was accredited in the previous FIS based on the information available and the mapping standards at that time.

For FEMA to accredit the levee on the new FIRM, documentation must be provided by the city that shows the levee meets federal requirements for levees as outlined in the Code of Federal Regulations, Title 44 Part 65.10. The city was notified by FEMA in October of 2009 that their levee was eligible to be listed as a Provisionally Accredited Levee (PAL). The Corps of Engineers stated in their new policy that they will no longer certify levees even if they designed and constructed the levees. The city was able to obtain several Corps reports concerning the soils design of the levee, but the reports are not adequately detailed to certify. An engineering soils investigation will be completed, in addition to an emergency warning system, operations and manual updates, and repairs that will be certified by the project engineers and submitted to FEMA for accreditation.

The total estimated cost of the repairs and FEMA accreditation is \$250,000, of which \$176,380 is determined as eligible for state cost participation - \$52,500 at 50 percent of the eligible snag and clear items (\$26,250), and \$123,880 at 60 percent of the eligible flood control repairs and FEMA accreditation (\$74,328), for a total state cost participation of \$100,578. The city intends to use the existing assessment operation and maintenance funds to subsidize the local share of \$149,422 and a special assessment may be utilized.

Secretary Frink explained that under the State Water Commission's cost share policy, FEMA's levee accreditation efforts are considered to be operation and maintenance activities as characterized by an "analysis of an existing structure/system to determine if operating as designed and/or to the current standards of the party requesting the analysis". He said although the Commission supports and significantly contributes toward the construction and improvement reconstructions of flood control projects, the Commission does not participate in the operation and maintenance activities, project administration and management, and project repairs. The Commission's practice of not cost sharing on these costs and activities are observed to help instill and preserve the integrity of the system by the owner and those who directly benefit. The operation and maintenance costs also have a funding mechanism in that local project assessment funds are established at the time of construction.

Because FEMA has discontinued its assistance in facilitating with the levee certification process, all costs to certify the levees have been transferred to the system owners and/or states. The de-accreditation will require the affected city residents to purchase flood insurance. Secretary Frink stated that given the probability of the flood control improvements being constructed as proposed regardless of FEMA accreditation and the integral value of updated models now available for managing area water projects, he recommended that the State Water Commission approve state cost participation at 50 percent of the eligible snag and clear items (\$26,250), and 60 percent of the eligible flood control repair work and FEMA certification and accreditation (\$74,328), for a total state cost participation of \$100,578 for the City of Enderlin flood control levee system 2010 repairs and maintenance and FEMA levee certification and accreditation project.

It was moved by Commissioner Goehring and seconded by Commissioner Thompson that the State Water Commission conditionally approve state cost participation at 50 percent of the eligible snag and clear costs (\$26,250), and 60 percent of the eligible flood control repair work and FEMA levee certification and accreditation (\$74,328), not to exceed a total allocation of \$100,576 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the City of Enderlin for the City of Enderlin's flood control system 2010 repairs and maintenance and FEMA levee certification and accreditation project. This action is contingent upon the availability of funds, approval of final engineering plans, FEMA accreditation, and satisfaction of the required permits.

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

**CITY OF GRAFTON FLOOD CONTROL
2010 DIVERSION CHANNEL AND FLOOD
SYSTEM WORKS CONSTRUCTION -
CONDITIONAL APPROVAL OF STATE
COST PARTICIPATION (\$7,175,000)
(SWC Project No. 1771)**

A request from the City of Grafton was presented for the State Water Commission's consideration for state cost participation for the construction of their federal flood control system works. The city is located along the Park River, a tributary to the Red River of the North.

Recurrent flooding along the south branch and mainstem of the Park River has caused significant problems for the city. Nearly all of the Grafton city limits are within the 100-year floodplain. The city has been working with the Corps of Engineers for several years to develop a permanent flood control project. An assessed project was proposed in 2004, but the assessment failed resulting in a lack of local share funding available for the project.

The recommended 2010 flood control plan features provide for a 100-year level of protection and consist of a 2.8 mile bypass channel around the city, a 7.9 mile-long tieback levee, control structure, diversion structure and erosion control weir on the channel, interior drainage facilities including ditching, culverts and gatewells, new railroad bridges and a new Highway 81 bridge to cross the new channel, county road raises, and 434 acres of real estate or 27 tracts including permanent channel and levee easements.

The project cooperation agreement (PCA) will be executed in late 2010, the final engineering plans and specifications, permits, and agreements with the affected railroads are scheduled for 2011 and 2012, and land acquisition, and design/construction of the bridges are slated for 2013. Between 2014 and 2015, the flood control system will be constructed and certified, and the Flood Insurance Rate Maps revised to allow removal of the city from the 100-year floodplain. It is anticipated that construction will be completed by 2015.

The estimated total cost of the project is \$41,100,000, of which \$41,000,000 has been determined as eligible for state cost participation as a flood control project. Proposed sources of funding includes: Corps of Engineers - 75 percent of the total project cost (\$30,750,000); and funding for the non-federal share of 25 percent (\$10,250,000) is proposed to be contributed from the State Water Commission - 17.5 percent (\$7,175,000) and the City of Grafton - 7.5 percent (\$3,075,000).

The State Water Commission's cost share policy, procedure, and general requirements states that legal, land, and administrative expenses are not eligible for state cost share assistance. In recognizing the importance of constructing flood control projects, and as with all federally-constructed projects, the State Water Commission reviews exemptions to the policy.

Based upon the city's request and a review of the eligible and non-eligible costs, an exemption to allow state cost participation of 70 percent for the eligible non-federal costs was justified. The request before the State Water Commission is for a 70 percent state cost participation of the eligible non-federal costs in the amount not to exceed \$7,175,000.

It was the recommendation of Secretary Frink that the State Water Commission approve conditional state cost participation 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), for the City of Grafton flood control 2010 diversion channel and flood system works construction project.

It was moved by Commissioner Berg and seconded by Commissioner Foley that the State Water Commission approve conditional state cost participation 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. This action is contingent upon the availability of funds, approval of the final design and construction plans, and satisfaction of the required permits.

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

***SHEYENNE RIVER WATERSHED
FLOOD WATER DETENTION STUDY -
APPROVAL OF PAYMENT SCHEDULE
(SWC Project No. 1509)***

On June 23, 2009, the State Water Commission approved a request from the Sheyenne River Joint Water Resource District for state cost participation in the Sheyenne River watershed flood water detention study as an engineering feasibility study at 50 percent of the eligible costs not to exceed an allocation of \$75,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020). A request was received from the District to allow for quarterly payments for their ongoing watershed study.

On March 11, 2010, the State Water Commission modified its cost share policy, procedure, and general requirements (Cost-Share Application and Approval Procedures: X. Partial and Final Payments) to allow

the State Engineer to determine the payment schedule and the interim progress report(s) requirements, effective March 11, 2010. Partial payments for engineering feasibility studies were exempt prior to the Commission's modification. Therefore, upon the State Engineer's determination of the payment schedule request, the contract with the District will be amended.

SHEYENNE RIVER 2010 SNAG AND CLEAR PROJECT (CASS COUNTY) - APPROVAL OF STATE COST PARTICIPATION (\$175,473) (SWC Project No. 568)

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation in their project to snag and clear approximately 51 miles of the Sheyenne River.

The removal of trees will assist with the flow of the river and prevent damage to structures. The District's 2010 Sheyenne River snag and clear project is divided into three reaches: Reach 1 extends from the Red River to I-94, Reach 2 extends from I-94 to County Road 14, and Reach 3 is from County Road 14 to 51st Street east. A fourth reach is being completed under the District's 2009 Sheyenne River snag and clear project.

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

The project engineer's cost estimate is \$350,946, of which all is eligible for state cost participation as a snag and clear project at 50 percent of the eligible costs (\$175,473). The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$175,473.

It was the recommendation of Secretary Frink that the State Water Commission approve state cost participation as a snag and clear project at 50 percent of the eligible costs, not to exceed an allocation of \$175,473 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Sheyenne River 2010 snag and clear project.

It was moved by Commissioner Swenson and seconded by Commissioner Olin that the State Water Commission approve state cost participation as a snag and clear project at 50 percent of the eligible costs, not to exceed an allocation of \$175,473 from the funds

appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the Sheyenne River 2010 snag and clear project. This action is contingent upon the availability of funds.

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

SHEYENNE RIVER 2010 SNAG AND CLEAR PROJECT (RICHLAND COUNTY) - APPROVAL OF STATE COST PARTICIPATION (\$47,500) (SWC Project No. 568)

A request from the Richland County Water Resource District was presented for the State Water Commission's consideration for state cost participation in their 2010 snag and clear project on the Sheyenne River. Maintenance funds will be used to finance the project.

The proposed project will consist of the removal of debris in Sections 11, 12, 14, 22, and 23, Barrie Township, Richland County. The snagging and clearing work includes the removal of all fallen trees, driftwood, snags, and loose stumps and trunks at the sites. All snagged material will be properly disposed. The district has hired an experienced contractor to complete the project in the spring of 2010.

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

It was the recommendation of Secretary Frink that the State Water Commission approve state cost participation as a snag and clear project at 50 percent of the eligible costs, not to exceed an allocation of \$47,500 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Richland County Water Resource District for the Sheyenne River 2010 snag and clear project.

It was moved by Commissioner Olin and seconded by Commissioner Thompson that the State Water Commission approve state cost participation as a snag and clear project at 50 percent of the eligible costs, not to exceed an allocation of \$47,500 from the funds appropriated to the State Water Commission in the 2009-2011 bien-

nium (H.B. 1020), to the Richland County Water Resource District to support the Sheyenne River 2010 snag and clear project. This action is contingent upon the availability of funds.

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

***SHEYENNE RIVER DIVERSION
LOW-FLOW CHANNEL REPAIRS
AND IMPROVEMENTS PROJECT
(CASS COUNTY) - CONDITIONAL
APPROVAL OF STATE COST
PARTICIPATION (\$1,557,600)
(SWC Project No. 1344)***

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation for the improvements to the Sheyenne River diversion low-flow channel. The diversion channel was originally constructed as earthen and is extremely

susceptible to erosion. Since the completion of the Sheyenne diversion in 1992, the channel has been utilized far more frequently than the original design intended and the duration of flows exceeds the stability of the low-flow channel resulting in significant erosion. The purpose of the repairs and improvements project is to improve the low-flow portion of the channel bottom by armoring with riprap and filter blanket. The proposed project identified four areas located in Mapleton and Barnes Townships of the existing diversion channel that requires repairs and improvements. Areas 1 and 2 are to be completed between 2010 and 2011, and Areas 3 and 4 between 2011 and 2012.

Area 1 consists of maintenance/repairs and improvements from the inlet weir near Highway 17 to the diversion convergence. The estimated cost of Area 1 is \$2,300,000, of which \$1,498,000 is determined as eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$898,800).

Area 2, consists of improvements from Interstate 94 to the BNSF railroad crossing, which will require a construction permit. The total estimated cost for Area 2 is \$1,100,000, of which \$1,098,000 is determined to be eligible for state cost participation as a flood control project at 60 percent of the eligible costs (\$658,800).

It was the recommendation of Secretary Frink that the State Water Commission approve conditional state cost participation as a flood control project at 60 percent of the eligible costs (Area 1 - \$898,800) and (Area 2 - \$658,800) not to exceed a total allocation of \$1,557,600 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the Sheyenne River diversion low-flow channel repairs and improvements to Areas 1 and 2.

It was moved by Commissioner Goehring and seconded by Commissioner Berg that the State Water Commission approve conditional state cost participation as a flood control project at 60 percent of the eligible costs (Area 1 - \$898,800) and (Area 2 - \$658,800) not to exceed a total allocation of \$1,557,600 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Southeast Cass Water Resource District to support the Sheyenne River diversion low-flow channel repairs and improvements to Areas 1 and 2. This action is contingent upon the availability of funds, receipt of the final engineering plans, and satisfaction of the permit requirements.

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

**TRAILL COUNTY DRAIN NO. 27
(MOEN DRAIN) 2010 IMPROVEMENT
RECONSTRUCTION AND EXTENSION
PROJECT -
CONDITIONAL APPROVAL OF STATE
COST PARTICIPATION (\$500,000)
(SWC Project No. 1244)**

A request from the Traill County Water Resource District was presented for the State Water Commission's consideration for state cost participation for their project to improve and extend Traill County Drain No. 27 (also referred to as Moen Drain). The channel is undersized and this project will increase the

hydraulic capacity of the drain while improving crossings. Since the project is located adjacent to the Red River, it will decrease flooding on the main stem of the river.

Traill County Drain No. 27 was constructed in 1919 and is approximately 7 miles in length with a bottom width ranging from 6-8 feet and 1:5 side slopes. The drain will be reconstructed in Sections 22, 25, and 26 of Ervin Township and in Sections 19, 26, 27, 28, and 29 of Bingham Township in Traill County, outletting into the Red River in Section 26 of Bingham Township through a 1/4 mile natural waterway. Traill County Drain No. 27 will be extended 1/4 mile to create a legal assessed drain. The improvements consist of reconstructing the bottom width to 10 feet and improved side slopes of 4:1 (field side) and 5:1 (road side). Public meetings were held with petitioners and landowners along the channel, which were part of the overall improvement design of the channel. The assessment district formed will pay for the local share of the reconstruction. The District has submitted a drain permit application describing the drainage area of 9,565 acres. The project will go to a public hearing in the spring of 2010 for a vote and it is anticipated that construction could be completed by the summer of 2011.

The project engineer's cost estimate is \$3,200,000, of which \$2,505,000 is determined as eligible for state cost participation as a rural flood control project at 45 percent of the eligible costs (\$1,127,250). Pursuant to the State Water Commission's cost participation policy for rural flood control projects, the funding limitation for individual rural flood control projects is \$500,000 per project for the 2009-2011 biennium. The request before the State Water Commission is for a 45 percent state cost participation in the amount of \$500,000.

It was the recommendation of Secretary Frink that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the Traill County Drain No. 27 (Moen Drain) improvement reconstruction and extension project.

It was moved by Commissioner Thompson and seconded by Commissioner Goehring that the State Water Commission approve conditional state cost participation as a rural flood control project at 45 percent of the eligible costs not to exceed an allocation of \$500,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Traill County Water Resource District to support the Traill County Drain No. 27 (Moen Drain) improvement reconstruction and extension project. This action is contingent upon the availability of funds, approval of the final engineering plans, a positive assessment vote, and satisfaction of the required permits.

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

**CITY OF MINOT/WARD COUNTY
AERIAL PHOTOGRAPHY AND
LIDAR ACQUISITION PROJECT -
APPROVAL OF STATE COST
PARTICIPATION (\$186,780)
(SWC Project No. 1313)**

A request from the City of Minot, Ward County, and the Ward County Water Resource District was presented for the State Water Commission's consideration for state cost participation in acquiring aerial photography and LiDAR elevation mapping for the entirety of Ward

County. The project will provide topographic information throughout Ward County which can be used during emergency operations, flood control analysis along the Souris and Des Lacs Rivers, hydraulic analysis, and planning during emergency flood situations. The information will also be beneficial for determining dike elevation data since several communities along the Des Lacs and Souris Rivers have little or no elevation data when flooding situations occur. The proposed project would provide FEMA standard mapping.

The total estimated cost of the aerial photography and LiDAR (\$373,560) and a server (\$8,400) is \$381,960, of which \$373,560 has been determined eligible for state cost participation as a mapping, photography, imagery project at 50 percent of the eligible costs (\$186,780). The request before the State Water Commission is for a 50 percent state cost participation in the amount of \$186,780.

It was the recommendation of Secretary Frink that the State Water Commission approve state cost participation as a mapping, photography, imagery project at 50 percent of the eligible costs, not to exceed an allocation of \$186,780 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the City of Minot/Ward County aerial photography and LiDAR acquisition project.

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve state cost participation as a mapping, photography, imagery project at 50 percent of the eligible costs, not to exceed an allocation of \$186,780 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), for the City of Minot/Ward County aerial photography and LiDAR acquisition project. This action is contingent upon the availability of funds.

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

The State Water Commission members questioned if representatives from Renville County and McHenry County/City of Velva had been contacted relative to encompassing the scope of the project into these counties. Pursuant to the State Water Commission's cost share policy for mapping, photography, and imagery projects, 50 percent of the eligible costs could be considered for state cost participation. Secretary Frink responded that he was not aware of communications to date relative to expanding the City of Minot/Ward County aerial photography and LiDAR acquisition project into McHenry and Renville counties.

It was moved by Commissioner Swenson and seconded by Commissioner Berg that the secretary to the State Water Commission be directed to contact representatives from Renville County and McHenry County/City of Velva to discuss the possibility of encompassing their counties within the scope of the City of Minot/Ward County aerial photography and LiDAR acquisition project; and, that the State Water Commission approve state cost participation at 50 percent of the eligible costs. This action is contingent upon the availability of funds.

Commissioners Berg, Foley, Goehring, Swenson, Thompson, and Governor Hoeven voted aye. Commissioner Olin voted nay. Recorded votes were 6 ayes; 1 nay. Governor Hoeven announced the motion carried.

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

The following Southwest Pipeline Project status report was provided:

Oliver-Mercer-North Dunn Regional Service Area:

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

Wigen Water Technologies will design, construct and deliver the membrane system including the skid containing the membrane module, related piping, valves, meters, and controls.

Toray Industries, Inc., which is a Japanese chemical company, will supply the membrane modules. Toray was involved with Wigen in preparing the bid, and will be part of the design process. The current plan is to bid the water treatment plant in May or June, 2010, which could allow the treatment of water in late 2011 or early 2012.

Future Contracts:

Design review meetings have been held regarding the next segment of main transmission line, contract 2-8B, and the potable water reservoir, contract 5-15A, to be built at the site of the Oliver-Mercer-North Dunn water treatment plant. Contract 2-8B will take pipeline from Hazen to Stanton and from near Beulah to the site of the Center elevated tank, which will be built under future contract 5-16. It is intended to get contracts 2-8B, 5-15A, and 5-16 under contract in 2010, and the last section of pipeline to Center under contract in 2011.

Oil Industry Water Use:

The oil activity in western North Dakota has significantly increased the demand for water from all sources. Meetings have recently been held with oil industry representatives, North Dakota Petroleum Council, North Dakota Industrial Commission Oil and Gas Division, and local water entity representatives. The

Southwest Water Authority is negotiating with two water service companies to buy raw water from the pipeline near Dodge. A site is also proposed near the city of Sentinel Butte.

January, 2010 Winter Storm:

The winter storm in late January, 2010 knocked out power service for thousands of people in southwest North Dakota and affected the operations of the Southwest Pipeline Project. Power was retained at the raw water pump stations, treatment plant, and high service pump station in Dickinson. Portable generators allowed booster pump stations south and west of Dickinson to continue operating. Power service at the Jung Lake pump station was intermittent during the storm period as the power generators are not able to supply power for this station. This pump station is currently the most critical facility without backup power.

***SOUTHWEST PIPELINE PROJECT -
APPROVAL OF WATER SERVICE
CONTRACT 1736-35, CITY OF HAZEN
(SWC Project No. 1736)***

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

The contract specifies a maximum flow rate of 550 gallons per minute for all connections and a minimum annual usage of 100,000 gallons per year for the entire term of the contract.

It was the recommendation of Secretary Frink that the State Water Commission approve Southwest Pipeline Project Water Service Contract 1736-35 with the City of Hazen.

It was moved by Commissioner Olin and seconded by Commissioner Foley that the State Water Commission approve Southwest Pipeline Project Water Service Contract 1736-35 with the City of Hazen. SEE APPENDIX "C"

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

**SOUTHWEST PIPELINE PROJECT -
APPROVAL OF DODGE WATER DEPOT
(SWC Project No. 1736)**

A raw water depot has been proposed adjacent to the Dodge pump station with the intent to tap into the bypass line at the Dodge pump station and run a line

underneath the road to the north. From there an oil field service company, at this time a partnership between Missouri Basin Well Service and Power Fuels, Inc., will be responsible for securing the land and building all required infrastructure to set up and operate a filling station. The State and the Southwest Water Authority will remain wholesale water distributors.

The State Water Commission has the responsibility to tap the bypass line, install a vault, or use an existing building on site with a control valve to maintain adequate suction pressure for the pumps in the Dodge pump station, and run a line to a meter vault. The preliminary estimate for the infrastructure to get the water across the road is approximately \$150,000. Funds would be provided from the State Water Commission's allocation to the Southwest Pipeline Project. The water service company will be responsible for all costs associated beyond the property line for the Dodge pump station.

It was the recommendation of Secretary Frink that the State Water Commission authorize the secretary to the Commission to design and construct the facilities required to sell water to a private water depot adjacent to the Dodge raw water pump station, and execute a contract with an entity that will construct and operate the depot.

It was moved by Commissioner Foley and seconded by Commissioner Goehring that the State Water Commission authorize the secretary to the Commission to design and construct the facilities required to sell water to a private water depot adjacent to the Dodge raw water pump station, and to execute a contract with an entity that will construct and operate the depot.

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

**SOUTHWEST PIPELINE PROJECT -
OIL INDUSTRY WATER RATES
(SWC Project No. 1736)**

North Dakota Century Code 61-24.3-07 authorizes industrial use for the Southwest Pipeline Project and allows the State Water Commission to determine

the rates and charges for the delivery of water to the industrial users.

The proposed water depot adjacent to the Dodge raw water pump station is expected to increase the system operation costs as equipment upgrades will be necessary. The following proposed oil industry rates were presented for the State Water Commission's consideration. The Southwest Water Authority has requested these additional charges because of the capital improvements that will be needed and the effect the oil industry will have on the increased use of the system operations:

	<u>Current Contract Rate</u>	<u>Oil Industry Rate</u>	<u>Difference</u>
Treatment	\$ 0.65	\$ 0.65	\$ -
Transmission O&M	\$ 1.06	\$ 1.50	\$ 0.44
Transmission REM	\$ 0.35	\$ 0.85	\$ 0.50
Capital Repayment	\$ 1.04	\$ 5.04	\$ 4.00
Transmission Reserve	<u>\$ 0.07</u>	<u>\$ 0.07</u>	<u>\$ -</u>
Total	\$ 3.17	\$ 8.11	\$ 4.94

It was recommended by Secretary Frink that the State Water Commission approve a water rate of \$8.11 per thousand gallons for oil industry users, which includes a capital repayment rate of \$5.04 per thousand gallons and a reserve for replacement and extraordinary maintenance rate of \$0.85 per thousand gallons.

It was moved by Commissioner Goehring and seconded by Commissioner Berg that the State Water Commission approve a water rate of \$8.11 per thousand gallons for oil industry users, which includes a capital repayment rate of \$5.04 per thousand gallons and a reserve for replacement and extraordinary maintenance rate of \$0.85 per thousand gallons.

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

**SOUTHWEST PIPELINE PROJECT -
AUTHORIZE SECRETARY TO STATE
WATER COMMISSION TO EXECUTE
WATER SERVICE CONTRACTS
FOR OIL INDUSTRY
(SWC Project No. 1736)**

Increased oil activity in western North Dakota has placed a significant demand on the water supplies in the region, particularly ground water reserves. Numerous meetings have been held to resolve the issues, resulting in several oil field service companies requesting

contracts to purchase water from the Southwest Pipeline Project.

The proposed contract for the oil industry will be similar to the existing water service contract with the following exceptions: 1) no flow will be allocated to the oil contracts as there is no long-term commitment; and 2) the oil industry water rates, which the State Water Commission approved on March 11, 2010.

It was the recommendation of Secretary Frink that the State Water Commission authorize the secretary to the Commission to execute the contracts to the oil industry for water service.

It was moved by Commissioner Swenson and seconded by Commissioner Olin that the State Water Commission authorize the secretary to the Commission to execute the contracts to the oil industry for water service.

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

**SOUTHWEST PIPELINE PROJECT -
AUTHORIZE AWARD OF CONTRACT
S2010, SEEDING OF DISTURBED
AREAS ASSOCIATED WITH
CONTRACTS 7-8G, 7-9B, AND
PORTIONS OF 2-8A
(SWC Project No. 1736)**

Southwest Pipeline Project contract S2010 includes seeding and seedbed maintenance of approximately 670 acres of reclaimed areas associated with pipeline construction for contracts 7-8G, Grassy Butte service area, 7-9B, Killdeer Mountain service area, and the portions of contract 2-8A, main

transmission pipeline from Oliver-Mercer-North Dunn water treatment plant to Hazen, that are ready to be seeded. Bids will be opened for contract S2010 on March 31, 2010. The project engineer's estimated cost is \$150,000 to \$200,000.

It was the recommendation of Secretary Frink that the State Water Commission authorize the secretary to the Commission to award Southwest Pipeline Project contract S2010 for seeding the disturbed areas associated with contracts 7-8G, 7-9B, and portions of 2-8A that are ready to be seeded to the lowest responsive and responsible bidder based upon review of the bids received March 31, 2010.

It was moved by Commissioner Goehring and seconded by Commissioner Foley that the State Water Commission authorize the secretary to the Commission to award Southwest Pipeline Project contract S2010 for seeding the disturbed areas associated with contracts 7-8G, 7-9B, and portions of 2-8A that are ready to be seeded to the lowest responsive and responsible bidder based upon review of the bids received March 31, 2010. This action is contingent upon completion of the contract documents, and a legal review.

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

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

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

Manitoba and Missouri Lawsuit: The final federal and state filings requesting a summary judgment were submitted on November 13, 2009. The court requested additional information from the federal government on an issue if the injunction had been followed. Filings were completed to address that issue. The State filed an unopposed motion on February 24, 2010 to modify the injunction to allow design work inside the Minot water treatment plant that is needed for current operation as well as design for connection to NAWS; awaiting the court to address the unopposed motion.

On March 5, 2010, U.S. District Judge Rosemary Collyer issued a decision to continue the injunction on the NAWS project. Judge Collyer had previously allowed construction of the pipeline, but not the treatment facilities. The NAWS project is opposed by officials in the Canadian Province of Manitoba, who filed suit in 2002, over the potential of the transfer of aquatic life between the basins. The State of Missouri is also part of the lawsuit, claiming that the NAWS project would adversely affect water flow to their state. Judge Collyer has asked the Bureau of Reclamation to further address two issues, the depletion analysis of the Missouri River and the consequences of biota transfer to the Hudson Bay

including Canada. The additional environmental studies will significantly delay providing Missouri River water to the Minot region. The Bureau of Reclamation has 60 days to file an appeal on the decision.

Design and Construction Contracts:

Contract 4-2A: Contract 4-2A involves the construction of a new 2 million gallon reservoir and an 18 million gallon high service pump station adjacent to the Minot water treatment plant. On April 23, 2008, the State Water Commission authorized the award of contract 4-2A, in the amount of \$12,435,793.58, to John T. Jones Construction, Fargo, ND. The contract substantial completion date was December 14, 2009, and the final completion date was February 1, 2010. These dates were not met. The pump station and back wash pumps have been commissioned, and the pump station has been operational since December, 2009. Substantial completion has not been provided as there are outstanding issues. A punch list has been generated and provided to the contractor. The first mediation concluded unresolved; a second mediation involving the lack of valve actuators delaying commissioning has been requested by the contractor and will be scheduled for late April/May, 2010.

Contract 2-2A: The State Water Commission authorized the award of contract 2-2A to ERS Constructors, Centennial, CO, on April 19, 2007. Contract 2-2A includes 9 bores, approximately 4 miles of 36"-24" pipe, and associated facilities within the city of Minot. This contract was closed out on December 10, 2009.

Contract 2-2C: The contract work covers 52 miles of 10"-12" inch pipeline for the Kenmare-Upper Souris pipeline. The State Water Commission authorized the award of contract 2-2C to Northern Improvement Company, Fargo, ND, on September 30, 2008. Water service to Kenmare was started on December 7, 2009, and water service to the Upper Souris Water District at the Donnybrook turnout started on December 22, 2009. The final punch list has been generated, and the contract closeout is anticipated in the spring of 2010 following seeding.

Contract 2-2D: The contract work includes 62 miles of pipeline for the Mohall/Sherwood/All Seasons pipeline. On August 18, 2009, the State Water Commission authorized the secretary to the Commission to award contract 2-2D to American Infrastructure from Colorado. Bids were opened for contract 2-2D on July 14, 2009, the contract was awarded to American Infrastructure from Colorado. The substantial completion date is October 15, 2010, with final completion on November 15, 2010.

Contract 5-2C: The contract work includes a 1 million gallon storage reservoir near Kenmare. The concrete pedestal was completed, and the tank was lifted into place on November 18, 2009. Coating will be completed in the spring of 2010. The substantial completion is July 1, 2010, with final completion on or before August 1, 2010.

Contract 2008-1: The NAWS portion of the All Seasons contract includes 13 miles of 6" and 10" pipeline between the All Seasons water treatment plant and Gardena, ND. The contract was awarded to Swanberg Construction, Grand Forks, ND; the engineering related work for this project is estimated at \$112,500. The NAWS portion of this line has been in service since September of 2009. The punch list of items for final completion is being finalized, and spring of 2010 contract closeout is anticipated following seeding.

Contract 2-2E: This contract involves the connection of the community of Burlington and the West River Water and Sewer District to the NAWS pipeline. The contract was awarded to Steen Construction & Associates, Inc., Stanley, ND, on November 13, 2009, in the amount of \$471,782.

Contract 2-3A: This project will include 32 miles of pipeline north of Minot connecting the Minot north hill, Minot Air Force Base, and the Upper Souris Water District which will serve the cities of Glenburn and Lansford. The 30 percent design review was completed in July, 2009. The Bureau of Reclamation may have additional stimulus funding that will be requested for this project. The bid opening is anticipated in the summer of 2010.

***MCKENZIE COUNTY REGIONAL
WATER SERVICE FROM WILLISTON -
APPROVAL OF 2009-2011 BIENNIUM
STATE FUNDS (\$3,500,000)
(SWC Project No. 237-03)***

McKenzie county is experiencing tremendous growth countywide as a result of expanded energy-related ventures. While growth in the energy industry has brought great opportunity to the area, there have also been significant

challenges in meeting the water needs of the region. In an effort to address the issue, the need for rural water in the area has become apparent. The McKenzie County Water Resource District and the McKenzie County Commission are developing three projects to bring and expand rural water service to portions of eastern, central, and western McKenzie county.

McKenzie County has been working in cooperation with the City of Williston on a study sponsored by the Garrison Diversion Conservancy District to evaluate the feasibility of bringing water from the Williston regional water treatment facility into McKenzie county. The initial evaluation considered a solution to deliver 3 million gallons per day (mgd) of water to serve the northern tier of the county including: Watford City, System I (Watford City service area); System IV (Alexander service area); and a supplemental water service to System II (Keene service area). A subsequent alternative evaluated a 4 mgd option to provide additional water to meet the needs of the oil industry to develop the Bakken and other oil bearing formations in McKenzie county. The total estimated project cost is \$24,300,000.

The first segment of this project will bring water from the Williston regional water treatment plant to McKenzie county to supply water depots that will be used for bulk water sales to the oil industry to generate revenues in the development of the overall regional system that serves industrial and domestic needs. This segment of the overall project has an estimated cost of \$7,000,000. A request from the McKenzie County Water Resource District was presented for the State Water Commission's consideration for a 50 percent grant in the amount of \$3,500,000.

It was the recommendation of Secretary Frink that the State Water Commission approve a 50 percent grant, not to exceed an allocation of \$3,500,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the McKenzie County Water Resource District to support McKenzie County regional water service from the Williston regional water treatment facility.

It was moved by Commissioner Olin and seconded by Commissioner Berg that the State Water Commission approve a 50 percent grant, not to exceed an allocation of \$3,500,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the McKenzie County Water Resource District to support McKenzie County regional water service from the Williston regional water treatment facility. This action is contingent upon the availability of funds, satisfaction of the federal Municipal, Rural and Industrial (MR&I) Water Supply program requirements, and subject to future revisions.

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

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

As of March 1, 2010, the current water surface elevation for Devils Lake was 1450.10 feet msl and Stump Lake was 1450.15 feet msl. The combined storage of Devils Lake and Stump Lake for March 1, 2010 was 3.39 million acre-feet of water with a total surface area on both lakes of 163,800 acres.

The National Weather Service has provided the following long-range probabilistic forecast for Devils Lake and Stump Lake. The estimated values are valid for the time period of March 9, 2010 to September 30, 2010. The volume of water required to raise the lake to each level is also provided. The volume increase from January 1, 2009 to the record level set on June 27, 1009 was 556,300 acre-feet of water. The record stage of 1450.73 from June, 2009 will be exceeded in the spring of 2010:

Chances of Devils Lake and Stump Lake
Rising Above the Given Lake Levels

	<u>90%</u>	<u>50%</u>	<u>10%</u>
Elevation, feet msl	1452.1	1452.8	1454.2
Volume, acre-feet	345,700	478,400	755,200

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

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

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

The emergency rule allowing Devils Lake releases to the Sheyenne River with sulfate concentrations of 750 mg/L has expired. Considerable knowledge has been acquired from the extensive sulfate data gathered in the upper Sheyenne River due to the outlet operations. This has enabled the North Dakota Department of Health to propose a change to the water quality standards on the Sheyenne River to 750 mg/L above Baldhill Dam, and a limit of 450 mg/L below Baldhill Dam. This change would allow greater releases from Devils Lake since the sulfate concentrations were approximately 580 mg/L in 2009. It would also effectively move the compliance point below Baldhill Dam, which would indicate that the outlet would have to be operated to meet the standard below Baldhill Dam rather than at a point just downstream of the outlet.

A hearing was held by the Department in February, 2010, and the period of public comment ended on March 1, 2010 regarding the change. Concerns were expressed regarding the possible effects of the 250 cubic feet per second flow on the mussel population in the Sheyenne River. A work group has

been comprised to address the mussel study. For other organisms, an Environmental Protection Agency (EPA) environment and assessment program for the western states will be completed on the Sheyenne River.

The U.S. Geological Survey is creating a model for the Sheyenne River and Lake Ashtabula for monitoring and management of the sulfate concentrations. The models will assist the State Water Commission staff in adjusting the discharge to comply with the water quality standards set forth by the Department of Health.

On August 18, 2009, the State Water Commission approved an allocation not to exceed \$16,500,000 for the expansion of the Devils Lake outlet to 250 cubic feet per second (cfs) using the Round Lake alternative. Because of the critical construction time frame, on November 12, 2009, the State Water Commission authorized the secretary to the Commission to execute the Devils Lake outlet expansion contracts, with bid contingencies of 20 percent, and contingent upon a legal review of the contract documents.

The upgrading of the state outlet to 250 cubic feet per second is currently underway, and it is anticipated to have the work completed by May 1, 2010 to allow the existing (two 50 cfs) pumps to operate, although it is expected that high flows on the Sheyenne River will restrain discharge until May, 2010. It is also planned to have the new pumps operable by June 1, 2010.

**2010 SPRING FLOOD REPORT
(SWC Project No. 1431-08)**

Water Commission staff memorandum dated March 3, 2010, and attached hereto as **APPENDIX "D"**.

The 2010 potential spring flood outlook and hydrologic conditions were discussed, which are summarized in a State

**STATEWIDE SUPPLEMENTAL
FLOOD INFORMATION -
APPROVAL OF STATE COST
PARTICIPATION WITH U.S.
GEOLOGICAL SURVEY (\$25,000)
(SWC Project No. 1431-11)**

mitigation efforts. The effort is extensive involving not only the USGS in-state staff but crews from out-of-state are often mobilized.

The U.S. Geological Survey has been the primary source of stream flow and other flooding information throughout the state during catastrophic flooding. This information has been vital not only in emergency responses but also in recovery and planning for future flood

Cooperative cost support for these activities is necessary since they are not included in the U.S. Geological Survey's budget. To prepare for potential flooding in 2010, a request from the U.S. Geological Survey was presented for the State Water Commission's consideration for state cost participation of \$25,000 for statewide supplemental flood information.

It was the recommendation of Secretary Frink that the State Water Commission approve state cost participation not to exceed an allocation of \$25,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the U.S. Geological Survey to support the collection of statewide supplemental flood information.

It was moved by Commissioner Foley and seconded by Commissioner Goehring that the State Water Commission approve state cost participation not to exceed an allocation of \$25,000 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the U.S. Geological Survey to support the collection of statewide supplemental flood information. This action is contingent upon the availability of funds.

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

**SWEETBRIAR CREEK
DAM (MORTON COUNTY) -
APPROVAL OF ADDITIONAL STATE
COST PARTICIPATION (\$122,600)
(SWC Project No. 642-05)**

Sweetbriar Creek Dam is located in Morton county approximately 17 miles west of Mandan, ND. The Department of Transportation (DOT) built the dam in 1960, and Morton county, the North Dakota Game and Fish Department,

and the State Water Commission are responsible for maintenance of the dam. Sweetbriar Lake, which was created by the damming of Sweetbriar Creek, has a surface area of 250 acres, is approximately 40 feet deep, and has a volume of 2,000 - 3,000 acre-feet of water. The lake was drawn down several feet in 2005 to alleviate pressure on the dam.

In the spring of 2002, a major crack in the upstream face of the concrete drop inlet spillway was discovered by personnel from the DOT. The concrete wall was repaired in 2003. In 2004, excessive seepage through the dam forced engineers to draw down the reservoir to alleviate pressure on the dam.

Extensive research, analysis and discussions have taken place over the past several years about the dam's safety issues including uncontrolled seepage, structural concerns with the spillway stilling basin walls, and inadequate spillway capacity.

In November, 2007, the State Water Commission staff completed a report which included updated hydrology, dam break analysis, and reclassifying the dam to a Class V (over 40 feet in height) high hazard dam from a Class IV medium hazard dam. This change in classification was a result of

updated hydrology (increased inflows and volumes from the original design hydrology) and the residential development downstream of the structure. With the change in hazard classification, the design criteria for the spillway capacity, velocity limits and freeboard requirements will also change. Increasing the spillway capacity will result in greater damage potential (both lives and economic losses) due to larger and more frequent non-failure flows. Although flood control is not the purpose of the dam, it does provide some unintended flood protection to downstream residences.

Previous State Water Commission approvals include: March 5, 2003, an allocation of \$43,333, of which \$25,333 was from the funds appropriated to the State Water Commission in the 2001-2003 biennium, and \$18,000 was for in-kind services provided by the Commission; May 11, 2005, an additional allocation of \$4,010.33, from the funds appropriated to the State Water Commission in the 2003-2005 biennium; and November 1, 2005, an additional allocation of \$20,000 to proceed with the engineering process from the funds appropriated to the State Water Commission in the 2005-2007 biennium. (The allocated \$20,000 to proceed with the engineering process was not expended.) On December 9, 2005, the State Water Commission approved an allocation of \$80,000 for consultant services with Bartlett and West Engineers, Inc./Boyle Engineering Corporation.

On March 23, 2009, the State Water Commission authorized Bartlett and West Engineers, Inc./Boyle Engineering Corporation to develop Specific Authorization No. 5 for seepage mitigation, conduit and stilling basin repairs on Sweetbriar Creek Dam. The project engineer's total cost estimate was \$1,381,800. The proposed cost share arrangements included the entities of: Morton County - \$15,000, and the State Water Commission and the North Dakota Game and Fish Department would each provide 50 percent of the remaining balance (\$1,366,800) of \$683,400 each. The Commission approved state cost participation on March 23, 2009 at 50 percent of the eligible costs not to exceed an allocation of \$683,400 from the funds appropriated to the State Water Commission in the 2007-2009 biennium (S. B. 2020).

On March 4, 2010, seven bid proposals were received and opened for the Sweetbriar Creek Dam rehabilitation and seepage control project. The scope of work for seepage mitigation includes the installation of toe drains to lower the phreatic surface below the dam and outlet culvert, and an outlet culvert and filter-protected drain to reduce seepage impacts to the culvert and stilling basin structure. Repair work to the stilling basin, wing walls and culvert are also included in the project. The revised project engineer's cost estimate is \$1,048,550. Project timeline is for substantial completion on or before October 1, 2010, and completion and ready for final payment in accordance with the contract documents on November 1, 2010.

The apparent low bidder was Veit & Company, Inc., Rogers, Minnesota, with a total construction cost of \$1,144,890. The contract documents specify that the State Water Commission has 90 days to award the contract after the bid opening, and allow the State Water Commission to select the most advantageous bid. Based on the project engineer's review, the bid received from Veit & Company, Inc. appears to be in accordance with the advertisement for construction bid and the bid documents, and is considered to be a responsible and responsive bid. Because of unknown conditions beneath the spillway conduit, additional construction repairs and consulting services costs are necessary, which includes a 10 percent adjustment for change orders. The increased costs would require an additional allocation of \$122,600, thereby, increasing the State Water Commission's state cost participation from \$683,400 to \$806,000.

It was the recommendation of Secretary Frink that the State Water Commission authorize the secretary to the Commission to award the Sweetbriar Creek Dam rehabilitation and seepage control project 642-05 to Veit & Company, Inc., Rogers, Minnesota, in the amount of \$1,144,890; and that the State Water Commission approve state cost participation of an additional allocation not to exceed \$122,600 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Morton County Park Board to support the Sweetbriar Creek Dam rehabilitation and seepage control project. The award of the contract and notice to proceed are dependent on the completion of the contract documents, and a legal review.

It was moved by Commissioner Olin and seconded by Commissioner Berg that the State Water Commission authorize the secretary to the Commission to award the Sweetbriar Creek Dam rehabilitation and seepage control project 642-05 to Veit & Company, Inc., Rogers, Minnesota, in the amount of \$1,144,890; and, that the State Water Commission approve an additional allocation of \$122,600 from the funds appropriated to the State Water Commission in the 2009-2011 biennium (H.B. 1020), to the Morton County Park Board to support the Sweetbriar Creek Dam rehabilitation and seepage control project. This action is contingent upon the availability of funds, the award of the contract and notice to proceed are dependent on the completion of the contract documents, and a legal review.

Commissioners Berg, Foley, Goehring, Olin, Swenson, and Governor Hoeven voted aye. Commissioner Thompson voted nay. Recorded votes were 6 ayes; 1 nay. Governor Hoeven announced the motion carried.

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

The Dakota Water Resources Act of 2000 authorized the Secretary of the Interior to conduct a comprehensive study of the water quantity and quality needs of the Red River valley in North

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

The draft EIS was released in December, 2005, public hearings were held in February and March, 2006, and all studies have been completed. The final EIS was available to the public on December 28, 2007. The Record of Decision was scheduled to be issued 30 to 90 days from the date that the final EIS was available to the public, however, the U.S. State Department requested that the Bureau of Reclamation delay signing the Record of Decision until discussions with Canada have been concluded.

A supplemental draft EIS was completed with the comment period ending on April 25, 2007. Additional study efforts included biota plant failure analysis by the United States Geological Survey (USGS), water quality monitoring by the USGS, impact analysis of Missouri River depletions under drought conditions by the Corps of Engineers, and a cumulative impact analysis of ground-water depletions in Minnesota by the USGS.

The March, 2010, status report relating to the specific efforts of the Red River Valley Water Supply project, was provided by Dave Koland, Garrison Diversion Conservancy District general manager, which is attached hereto as **APPENDIX "E"**.

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

On March 1, 2010, the system storage in the six mainstem reservoirs was 54.9 million acre-feet (MAF), 1.9 MAF above

the average system storage for the end of February and 9.2 MAF more than in 2009. The record minimum system storage for the end of February was 34.3 MAF in 2007, and the maximum system storage for the end of February was 61.4 MAF in 1976. The Corps of Engineers' runoff forecast above Sioux City for 2010 is 28.6 MAF, 115 percent of normal. This results in a forecast that the system storage will peak at 61.6 MAF at the end of June. The record low end of June system storage was 38.4 MAF in 2005; the record high end of June system storage was 71.2 MAF in 1997.

Lake Sakakawea was at an elevation of 1837.4 feet msl on March 1, 2010, 14.0 feet higher than in 2009 and 7.0 feet above its average end of February elevation. The record minimum end of February elevation was 1806.9 feet msl in 2007, and the record maximum end of February elevation was 1842.8 feet msl in 1973. Lake Sakakawea is forecast to peak at elevation of 1844.1 feet msl at the end of April.

The elevation of Lake Oahe was 1608.0 feet msl on March 1, 2010, which is 11.8 feet higher than in 2009 and 8.0 feet higher than its average end of February elevation. Lake Oahe is forecast to peak at elevation 1616.0 feet msl at the end of April. The record minimum end of February elevation for Lake Oahe was 1572.3 feet msl in 2007, and the record maximum end of February elevation for Lake Oahe was 1611.1 feet msl in 1996.

Fort Peck Lake was at an elevation of 2222.4 feet msl on March 1, 2010, which is 11.9 feet higher than in 2009 and 4.9 feet below its average end of February elevation. The forecast calls for Fort Peck to peak at elevation of 2228.1 feet msl at the end of June.

The mountain snowpack content above Fort Peck on March 1, 2010 was 73 percent of normal, and between Fort Peck and Garrison was 69 percent of normal. Normally, 79 percent of the peak snow accumulation has occurred by March 1.

The Corps of Engineers' basic forecast, 18.6 MAF of runoff, shows that the navigation season will not be shortened. The actual length of the navigation season will be determined by the amount of water in storage on July 1, 2010. The spring rise requirement of 40.0 MAF on March 1, 2010, was met, and 40.0 MAF on May 1, 2010 is forecasted to be met. Accordingly, there will be two spring pulses released from Gavins Point Dam in 2010, one in March and one in May.

Title I, Section 108 of the Omnibus Appropriations Bill, signed into law on March 11, 2009, authorizes the Corps of Engineers to conduct a study of the Missouri River projects located within the Missouri River basin, at a total cost of \$25,000,000, to review the original project purposes based on the Flood Control Act of 1944 to determine if changes to the authorized project purposes and existing federal water resource infrastructure may be warranted. The Missouri River Authorized Purposes Study (MRAPS) will be undertaken at the full federal expense. Kick-off meetings were held in Pierre, SD, and Kansas City, MO on October 1 and 8, 2009, respectively, for the purpose of an introduction to the study and solicitation for public input. The Corps sponsored a public meeting on March 10, 2010 for the MRAPS study to present findings from the focus groups, tribal events, interviews, and surveys, and information regarding the formal scoping meeting schedule and the next phase of the study.

**2011 STATE WATER MANAGEMENT
PLAN - NORTH DAKOTA 2011-2013
WATER DEVELOPMENT REPORT
(SWC Project No. 322)**

tion collected for the report will be used in the State Water Commission's budgeting process. The plan will be presented to the 62nd Legislative Assembly in 2011 to document the state's water development needs.

The Planning and Education division of the State Water Commission initiated the process of developing an update to the State Water Management Plan last published in 2009. Project informa-

Water projects can take several years to move from concept, design, and final implementation, therefore, it is essential to become more aware of potential projects as early as possible. The new plan will address the immediate needs expected in the 2011-2013 timeframe as well as potential developments expected or desired in the next 10-15 years. It is intended to be a realistic vision of water management with emphasis on regional and local projects that are consistent with the plan's goals and objectives. Plan update components include identifying water development needs and funding requirements for future water development projects and programs, and progress reports on water development efforts from current and previous bienniums.

Because a comprehensive overview of the state's current and future water needs and issues is critical, part of this effort includes survey forms that were provided to potential water project sponsors including cities, county water resource districts, joint water resource districts, and regional water system managers. The project information data will be used to comprehensively identify North Dakota's potential water projects that will be pursued to construction in the near future, the time frame of expected implementation, and estimated funding requirements.

There being no further business to come before the State Water Commission, Governor Hoeven adjourned the meeting at 6:15 P.M.



John Hoeven, Governor
Chairman, State Water Commission

Dale L. Frink
North Dakota State Engineer,
and Chief Engineer-Secretary
to the State Water Commission

STATE WATER COMMISSION
ALLOCATED PROGRAM EXPENDITURES
FOR THE PERIOD ENDED JANUARY 31, 2010
BIENNIUM COMPLETE: 29%

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	2-Mar-10 PROGRAM TOTALS
ADMINISTRATION				
Allocated	1,812,056	1,212,732		3,024,788
Expended	504,547	245,920		750,467
	28%	20%		25%
			Funding Source:	
			General Fund:	715,784
			Federal Fund:	34,683
			Special Fund:	0
PLANNING AND EDUCATION				
Allocated	1,192,175	208,511	99,000	1,499,686
Expended	334,389	49,712	27,602	411,703
Percent	28%	24%	28%	27%
			Funding Source:	
			General Fund:	323,304
			Federal Fund:	58,509
			Special Fund:	29,890
WATER APPROPRIATION				
Allocated	3,633,879	483,162	1,078,935	5,195,976
Expended	1,016,908	126,007	136,228	1,279,143
Percent	28%	26%	13%	25%
			Funding Source:	
			General Fund:	1,142,915
			Federal Fund:	0
			Special Fund:	136,228
WATER DEVELOPMENT				
Allocated	5,041,486	4,837,457	225,000	10,103,943
Expended	1,388,264	1,399,458	182,577	2,970,299
Percent	28%	29%	81%	29%
			Funding Source:	
			General Fund:	1,284,063
			Federal Fund:	774,065
			Special Fund:	912,171
STATEWIDE WATER PROJECTS				
Allocated			203,185,070	203,185,070
Expended			20,653,569	20,653,569
Percent			10%	10%
			Funding Source:	
			General Fund:	0
			Federal Fund:	0
			Special Fund:	20,653,569
ATMOSPHERIC RESOURCE				
Allocated	854,950	712,830	4,694,692	6,262,472
Expended	254,171	53,111	431,127	738,409
Percent	30%	7%	9%	12%
			Funding Source:	
			General Fund:	208,947
			Federal Fund:	0
			Special Fund:	529,463
SOUTHWEST PIPELINE				
Allocated	400,498	1,665,314	37,556,958	39,622,770
Expended	111,383	529,563	2,711,284	3,352,229
Percent	28%	32%	7%	8%
			Funding Source:	
			General Fund:	0
			Federal Fund:	9,116
			Special Fund:	3,343,113
NORTHWEST AREA WATER SUPPLY				
Allocated	530,958	6,229,700	50,289,114	57,049,772
Expended	125,412	1,183,379	10,959,561	12,268,353
Percent	24%	19%	22%	22%
			Funding Source:	
			General Fund:	0
			Federal Fund:	7,517,718
			Special Fund:	4,750,634
PROGRAM TOTALS				
Allocated	13,466,002	15,349,706	297,128,769	325,944,477
Expended	3,735,074	3,587,149	35,101,949	42,424,173
Percent	28%	23%	12%	13%
FUNDING SOURCE:	ALLOCATION	EXPENDITURES	REVENUE	
GENERAL FUND	14,124,223	3,675,013	GENERAL FUND:	148,612
FEDERAL FUND	67,070,358	8,394,092	FEDERAL FUND:	8,359,130
SPECIAL FUND	244,749,896	30,355,068	SPECIAL FUND:	28,458,930
TOTAL	325,944,477	42,424,173	TOTAL:	36,966,672

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

	<i>Jan-10</i>				
	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
CITY FLOOD CONTROL					
FARGO/RIDGEWOOD	2,084,750	2,084,750	2,033,809	0	50,941
FARGO	45,000,000	45,000,000	0	0	45,000,000
MRI	37,505,101	33,920,657	4,568,196	3,584,444	29,352,461
IRRIGATION DEVELOPMENT	1,294,439	294,439	51,411	1,000,000	243,028
GENERAL WATER MANAGEMENT					
OBLIGATED	16,151,505	16,151,505	2,492,786	0	13,658,719
UNOBLIGATED	18,922,551			18,922,551	0
MISSOURI RIVER MANAGEMENT	372,000	372,000	0	0	372,000
FLOOD CONTROL					
BALDHILL DAM	92,832	92,832	0	0	92,832
RENWICK DAM	1,478,190	1,478,190	0	0	1,478,190
UPPER MAPLE RIVER DAM	112,500	112,500	0	0	112,500
RED RIVER WATER SUPPLY	3,000,000	3,000,000	1,007,546	0	1,992,454
DEVILS LAKE					
BASIN DEVELOPMENT	102,000	102,000	9,200	0	92,800
DIKE	25,350,000	25,350,000	2,630,000	0	22,720,000
OUTLET	16,661,325	16,661,325	475,008	0	16,186,317
OUTLET OPERATIONS	3,000,000	3,000,000	887,917	0	2,112,083
NELSON COUNTY	636,064	636,064	0	0	636,064
US GS MODEL STUDY	223,750	23,750	0	200,000	23,750
WEATHER MODIFICATIONS	225,000	225,000	0	0	225,000
SOUTHWEST PIPELINE PROJECT	14,782,474	14,782,474	3,273,140	0	11,509,334
NORTHWEST AREA WATER SUPPLY	10,832,918	10,832,918	(204,327)	0	11,037,245
TOTALS	197,827,399	174,120,404	17,224,686	23,706,995	156,895,718

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

PROGRAM OBLIGATION

Approve SWC By	No	Dept		Initial Approved Date	Total Approved	Total Payments	Jan-10 Balance
City Flood Control:							
SWC	1927	5000	Fargo/Ridgewood Flood Control Project	6/22/2005	2,084,750	2,033,809	50,941
SWC	1928	5000	Fargo Flood Control Project	6/23/2009	45,000,000	0	45,000,000
Subtotal City Flood Control					47,084,750	2,033,809	45,050,941
MRI Advances:							
SWC	2373-04	5000	Lakota WS (Tri-Co WD)	7/17/2007	118,135	0	118,135
	2373-09	5000	South Central RWD (Phase II)	6/23/2008	2,350,000	0	2,350,000
	2373-13	5000	All Seasons Rural Water - (Upham)	7/17/2007	128,000	0	128,000
	2373-15	5000	North Central Rural Water Consortium (S. Benson Cou)	12/7/2007	916,000	0	916,000
	2373-15	5000	North Central Rural Water Consortium (Anamoose/Ber)	6/23/2008	3,295,000	0	3,295,000
	2373-27	5000	Trail Regional Rural Water (Phase I)	1/25/2008	3,167,000	2,206,307	960,693
	2373-16	5000	Trail Regional Rural Water (Phase II)	6/23/2008	2,137,748	1,173,202	964,546
	2373-24	5000	Trail Regional Rural Water (Phase III)	8/18/2009	1,300,000	239,297	1,060,703
MRI Grants:							
	2373-19	5000	City of Washburn Water Supply	4/28/2009	1,500,000	155,175	1,344,825
	2373-17	5000	City of Parshall	6/23/2008	1,666,774	201,916	1,464,858
	2373-18	5000	Ray-Tioga Water Supply	12/17/2008	4,200,000	459,909	3,740,091
	2373-25	5000	McKenzie Phase II	6/23/2009	1,500,000	0	1,500,000
	2373-26	5000	Valley City Water Treatment Plant	8/18/2009	9,200,000	0	9,200,000
HB No. 1305 Permanent Oil Tax Trust Fund							
	2373-21	5000	Burke, Divide, Williams Water District	6/23/2009	985,000	0	985,000
	2373-22	5000	Ray & Tioga Water Supply Association	6/23/2009	864,000	98,552	765,448
	2373-23	5000	City of Wildrose	6/23/2009	593,000	33,838	559,162
Subtotal MRI					33,920,657	4,568,196	29,352,461
Irrigation Development:							
SWC	1389	5000	BND AgPace Program	10/23/2001	194,439	26,411	168,028
SWC	AOC/IRA	5000	ND Irrigation Association	7/20/2009	100,000	25,000	75,000
Subtotal Irrigation Development					294,439	51,411	243,028
General Water Management							
Hydrologic Investigations:							
					880,000		
SWC	862	3000	Arletta Herman	4/7/2008	1,100	1,100	0
	1400/7	3000	Houston Engineering Water Permit Application Review	4/2/2009	1,584	800	784
	1400/8	3000	Houston Engineering Water Permit Application Review	6/2/2009	7,500	7,473	27
	1400/9	3000	Houston Engineering Water Permit Application Review	1/1/2010	6,500	0	6,500
	1690	3000	Mary Lou McDaniel	5/6/2009	1,444	1,733	(289)
	1703	3000	Neil Flaten	4/7/2008	1,789	2,087	(298)
	1707	3000	Neil Flaten	4/7/2008	1,385	1,615	(231)
	1714	3000	David Robbins	5/7/2009	593	593	0
	1761	3000	Gloria Roth	5/6/2009	525	525	0
	1761	3000	Fran Dobits	4/7/2008	837	837	0
	1393	3000	US Geological Survey, US Dept. Of Interior StreamSta	7/16/2009	39,008	8,670	30,338
	1395A	3000	US Geological Survey, US Dept. Of Interior Stream Ga	11/12/2009	381,980	95,495	286,485
	1395	3000	US Geological Survey, US Dept. Of Interior Water Qua	10/21/2009	13,205	0	13,205
	1395D	3000	US Geological Survey, US Dept. Of Interior Eaton Irri	10/1/2009	15,300	15,300	0
					62,265	25,433	36,832
					817,736		
Hydrologic Investigations Authority							
Hydrologic Investigations Authority Less Payments							
General Projects Obligated					14,982,032	2,067,085	12,914,947
General Projects Completed					289,473	289,473	0
Subtotal General Water Management					16,151,505	2,492,786	13,658,719

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

PROGRAM OBLIGATION

Approve SWC By	No	Dept		Initial Approved Date	Total Approved	Total Payments	Jan-10 Balance
Missour River Management:							
SWC	1943	5000	Missouri River Siltation Assessment Study	10/12/2006	30,000	0	30,000
SWC	1963	5000	Beaver Bay Embankment Feasibility Study	8/10/2009	342,000	0	342,000
Subtotal					372,000	0	372,000
Flood Control:							
SWC	300	5000	Baldhill Dam Flood Pool Raise	4/30/1998	92,832	0	92,832
SWC	849	5000	Renwick Dam Rehabilitation	6/23/2008	1,478,190	0	1,478,190
SWC	1878-02	5000	Upper Maple River Dam Project Dev & Preliminary Eng	9/29/2008	112,500	0	112,500
Subtotal Flood Control					1,683,522	0	1,683,522
SWC	1912	5000	Red River Valley Water Supply Project - GDCD	3/17/2008	3,000,000	1,007,546	1,992,454
Subtotal					3,000,000	1,007,546	1,992,454
Devils Lake Basin Development:							
SWC	416-01	5000	2009-11 Devils Lake Basin Joint Water Resource Man:	6/23/2009	60,000	0	60,000
SWC	416-02	5000	City of Devils Lake Levee System Extension & Raise	12/6/2002	25,350,000	2,630,000	22,720,000
SWC	416-05	2000	2009-11 Devils Lake Outlet Awareness Manager	6/23/2009	42,000	9,200	32,800
SWC	416-07	5000	Devils Lake Outlet	2/20/2002	16,661,325	475,008	16,186,317
SWC	416-10	4700	Devils Lake Outlet Operations	8/18/2009	3,000,000	887,917	2,112,083
SWC	416-11	4700	US Dept of Interior - DL Outlet alternative pumping opt	8/13/2009	10,000	0	10,000
SWC	416-11	4700	US Dept of Interior - Lake Ashtabula Monitoring	8/13/2009	13,750	0	13,750
SWC	1932**	5000	Michigan Spillway Rural Flood Assessment Drain	8/30/2005	620,711	0	620,711
SWC	1131*	5000	Nelson County Central Hamlin Rural Flood Control	9/17/2009	8,940	0	8,940
SWC	1131	5000	Nelson County Channel Maintenance & Misc	9/17/2009	6,413	0	6,413
Devils Lake Subtotal					45,773,139	4,002,125	41,771,014
SWC		7600	Weather Modification	7/1/2009	225,000	0	225,000
SWC	1736	8000	Southwest Pipeline Project	7/1/2009	14,782,474	3,273,140	11,509,334
SWC	2374	9000	Northwest Area Water Supply	7/1/2009	10,832,918	(204,327)	11,037,245
TOTAL					174,120,404	17,224,686	156,895,718

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

GENERAL PROJECT OBLIGATIONS

Approved SWC By	No	Dept		Initial Approved Date	Total Approved	Total Payments	Jan-10 Balance
SWC	249	5000	2009 Mott Dam Emergency Action Plan	6/23/2009	25,000	0	25,000
SWC	281	5000	2007-09 Three Affiliated Tribes/Fort Berthold Irrigation Study	3/23/2009	80,000	0	80,000
SWC	322	5000	2009-11 Red River Basin Mapping Initiative/Tri-College LiDAR	6/23/2009	700,000	200,000	500,000
SWC	322	5000	2009-11 Long-Term Red River Flood Control Solutions Study	6/23/2009	500,000	0	500,000
SWC	322	5000	ND Water: A Century of Challenge	12/10/2004	34,300	0	34,300
SWC	327	5000	2009-11 White Earth Dam EAP	8/18/2009	25,000	0	25,000
SE	353	5000	2009-11 Cedar Lake Dam, Emergency Action Plan	7/15/2009	9,600	0	9,600
SE	394	5000	2007-09 Odland Dam Spillway Rehabilitation	8/25/2008	16,700	0	16,700
SE	420	5000	Mirror Lake One-Foot Pool Raise	9/17/2009	18,282	0	18,282
SWC	528	5000	2009 McGregor Dam Emergency Action Plan	6/23/2009	25,000	0	25,000
SE	560	5000	2009 Blacktail Dam Emergency Action Plan	5/28/2009	9,600	0	9,600
SE	568	5000	2008 Sheyenne River Snagging & Clearing Project	4/11/2008	5,000	0	5,000
SWC	571	5000	2009-11 Oak Creek Bank Stabilization Project	8/18/2009	33,250	0	33,250
SE	586	5000	2009 Short Creek Dam Emergency Action Plan	5/28/2009	9,600	0	9,600
SWC	568	5000	2009-11 Southeast Cass WRD Sheyenne River Snagging & Clearing Project	12/11/2009	165,000	0	165,000
SWC	568	5000	2009-11 Richland Co. Sheyenne River Snagging & Clearing Project	12/11/2009	47,500	0	47,500
SWC	576	5000	2009-11 City of Mandan - Missouri River Emergency Bank Stabilization	12/11/2009	33,429	0	33,429
SWC	620	5000	2008 Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SWC	642-05	5000	2007-09 Sweetbriar Creek Dam Project	3/6/2009	683,400	83,620	599,780
SWC	660	5000	2009-11 City of Manan - Lower Heart River Bank Stabilization	12/11/2009	63,808	0	63,808
SE	662	5000	2009 WCWRD'S Park River Snagging & Clearing Project	6/30/2009	1,948	0	1,948
SWC	847	5000	Maple River - Retention Study Rush River Joint WRD	8/15/2002	25,000	0	25,000
SWC	847	5000	2007-09 Swan Creek FC Diversion Ditch	6/23/2008	1,640,992	965,239	675,753
SE	847	5000	2009-11 Swan Buffalo Detention Dam No. 5 Emergency Action Plan	7/20/2009	20,000	0	20,000
SE	847	5000	2009-11 Swan Buffalo Detention Dam No. 8 Emergency Action Plan	8/7/2009	20,000	0	20,000
SE	847	5000	2009-11 Swan-Buffero Detention Dam No. 12 Emergency Action Plan	10/18/2009	20,000	0	20,000
SE	847	5000	2009-11 Absaraka Dam Safety Analysis	8/31/2009	5,719	0	5,719
SWC	847	5000	2009-11 Swan Creek Diversion Channel Improvement Reconstruction	12/11/2009	76,528	0	76,528
SE	870	5000	2009-11 Crown Butte Dam Emergency Action Plan	7/10/2009	9,600	0	9,600
SWC	928/988/1	5000	2008 Southeast Cass WRD Bols, Wild Rice, & Antelope	6/23/2008	60,000	0	60,000
SE	985	5000	2009 Kolding Dam Emergency Action Plan	5/29/2009	9,600	0	9,600
SWC	1068	5000	2009-11 Cass County Drain No. 12 Improvement Reconstruction	8/18/2009	500,000	0	500,000
SWC	1069	5000	2009-11 Cass County Drain No. 13 Improvement Reconstruction	8/18/2009	145,472	0	145,472
SWC	1070	5000	2009-11 Cass County Drain No. 14 Improvement Recon	8/18/2009	500,000	0	500,000
SWC	1080	5000	2007-09 Cass County Drain No. 27 Improvement Recon	10/24/2007	94,197	0	94,197
SWC	1088	5000	2009-11 Cass County Drain No. 37 Improvement Recon	8/18/2009	158,535	0	158,535
SWC	1093	5000	2008 Cass Co. Drain No. 45 Extension Project	3/17/2008	150,800	0	150,800
SWC	1140	5000	Pembina County Drain No 11 Outlet Improvement	9/21/2009	53,599	0	53,599
SWC	1155	5000	2008 Pembina Co. Drain No. 42 Partial Impr.Recon.	3/17/2008	4,679	0	4,679
SWC	1176	5000	2008 Richland Co. Drain No. 2 Partial Improvement Recon.	3/17/2008	5,791	0	5,791
SWC	1232	5000	2009-11 Traill County Drain No. 13 Channel Extension Project	8/18/2009	23,575	0	23,575
SWC	1249	5000	2008 Traill Co. Drain No. 34 Partial Improvement Recon	3/17/2008	255,629	107,601	148,028
SWC	1289	5000	2007-09 Noxious Weed McKenzie County -Sovereign	10/24/2007	7,247	0	7,247
SWC	1328	5000	2007 Cass County Drain No. 23 Area Improvement	7/17/2007	35,980	0	35,980
SWC	1378	5000	2007-11 Barnes Co. Clausen Springs Dam Construction Repair	12/11/2009	1,300,000	0	1,300,000
SE	1382	5000	2009-11 Camel Butte Dam Emergency Action Plan	7/24/2009	9,600	0	9,600
SWC	1401	5000	International Boundary Roadway Dike Pembina	9/21/2009	260,238	0	260,238
SWC	1413	5000	2009 TCWRD Buffalo Coulee Snagging & Clearing Project	6/23/2009	49,000	4,281	44,719
SWC	1431	5000	2009-11 US Geological Survey, DOI Report Describing Peak Discharge Periods	8/5/2009	20,000	0	20,000
SWC	1438	5000	2008 Mulberry Creek Drain Partial Improv Phase II	3/17/2008	46,816	0	46,816
SE	1471	5000	2009-11 Erie Dam Emergency Action Plan	7/24/2009	20,000	0	20,000
SWC	1509	5000	2009-11 Sheyenne River Watershed Flood Water Detention Study	7/20/2009	75,000	0	75,000
SE	1515	5000	2009-11 US Geological Survey - monitoring gages Cottonwood Creek Dam	10/18/2009	8,260	0	8,260
SWC	1523	5000	2008 Souris River Golf Course Area Bank Stabilization	9/29/2008	31,612	0	31,612
SE	1556	5000	2009 Indian Creek Dam Emergency Action Plan	5/28/2009	9,600	0	9,600
SWC	1572	5000	Bumt Creek Floodway Diversion Channel	4/30/2008	121,091	0	121,091
SWC	1591	5000	Revision of Handbook ND Water Managers Proj	4/12/2007	14,750	0	14,750
SE	1625	5000	High Water Mark Delineation Methods & Guidelines	10/24/2007	54,048	0	54,048
SWC	1625	5000	OHWM Delineations MT/ND Border Yellowstone & Missouri	10/29/2008	75,000	0	75,000
SE	1625	5000	2009-11 Missouri River Contract - Environmental Service Bartlett & West	9/21/2009	5,900	0	5,900
SWC	1638	5000	2009-11 Red River Basin Non-NRCS Rural/Farmstead Ring Dike Program	6/23/2009	800,000	201,007	598,993
SWC	1667	5000	2009-11 Traill County Goose River Snagging & Clearing Project	12/11/2009	46,500	0	46,500
SWC	1705	5000	2009-11 Red River Basin Flood Control Coordinator Position	7/24/2009	36,000	0	36,000
SWC	1751-06	5000	2009-11 Southeast Cass WRD/Flood Imagery Project	1/18/2010	30,014	0	30,014
SWC	1785	5000	2009-11 Maple River Dam EAP	8/18/2009	25,000	0	25,000
SE	1785	5000	2009-11 Sweetbriar Dam EAP	2/17/2010	15,200	0	15,200
SWC	1792	5000	2009-11 SE Cass Wild Rice River Dam Study Phase II	12/11/2009	130,000	0	130,000
SE	1808	5000	2009-11 Beaver Creek Dam Emergency Action Plan	7/14/2009	20,000	0	20,000
SE	1842	5000	2009-11 SCWRD Wild Rice River Snagging & Clearing	5/28/2009	20,000	15,669	4,331
SWC	1842	5000	2009-10 SCWRD Wild Rice River Snagging & Clearing	12/11/2009	115,000	0	115,000
SWC	1842	5000	2009 Richland Co. Sheyenne River & Wild Rice River Snagging & Clearing	12/11/2009	39,500	0	39,500
SWC	1859	5000	2009-11 Section NPS 319 ND Health Dept	8/18/2009	200,000	0	200,000
SWC	1869	5000	2008 McDowell Dam Emergency Action Plan	9/29/2008	25,000	0	25,000

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

GENERAL PROJECT OBLIGATIONS

Approved SWC By	No	Dept		Initial Approved Date	Total Approved	Total Payments	Jan-10 Balance
SWC	18502	5000	(2008) Drought Disaster Livestock Water Supply	5/14/2008	571,747	153,634	418,113
SWC	1921	5000	Square Butte Dam No. 6/Recreational Facility	3/23/2009	882,030	0	882,030
SWC	1934	5000	2007-08 Traill County WRD Elm River Snagging	12/7/2007	24,500	0	24,500
SWC	1934	5000	2009 Elm River Snagging & Clearing Project Trial	12/5/2008	3,266	0	3,266
SWC	1941	5000	Walsh County Assessment Drain 4A Construction	9/21/2009	81,594	0	81,594
SWC	1942	5000	Walsh County Assessment Drain 10, 10-1, 10-2	9/21/2009	273,056	0	273,056
SE	1943	5000	2009-11 Missouri River/Oahe Delta Flood Hazard Mitigation Evaluation Project	8/10/2009	12,000	0	12,000
SWC	1948	5000	2008 Cass Co. Drain No. 67 Construction Project	3/25/2008	334,250	180,100	154,150
SWC	1950	5000	2008 Cypress Creek Drain No. 2 Construction	6/23/2008	22,400	21,559	841
SWC	1951	5000	2007-09 Lynchburg-Buffalo Drain Improvement	8/31/2009	1,000,000	11,474	988,526
SWC	1953	5000	2009-11 Walsh County Drain No. 73 Construction Project	8/18/2009	96,990	0	96,990
SWC	1960	5000	2009-11 Puppy Dog Flood Control Drain Construction	8/18/2009	796,976	0	796,976
SE	1961	5000	2009-11 Pembina County Drain No. 69 Extension Construction Project	8/10/2009	7,793	0	7,793
SWC	1964	5000	2009-11 Hydraulic Effects of Rock Wedges Study- UND	11/12/2009	50,000	0	50,000
SWC	1965	5000	2009-11 ND Silver Jackets Team Charter & Action Plan	11/12/2009	75,000	0	75,000
SWC	1131*	5000	Nelson County Central-Hamlin Rural Flood	9/17/2009	47,020	37,541	9,479
SWC	1932**	5000	Michigan Spillway Rural Flood Assessment	8/30/2005	311,696	8,492	303,204
SE	PBS	5000	2009-11 PBS Documentary on Soil Salinity/Lake Agassiz RC & D	1/29/2010	1,000	0	1,000
SWC	AOC/RRB	5000	2009-11 Red River Basin Commission Contractor	7/1/2009	200,000	50,000	150,000
SWC	AOC/WEF	5000	2009-11 North Dakota Water Magazine	7/20/2009	36,000	9,000	27,000
SWC	CON/WILI	5000	2009-11 Will & Carlson Consulting Contract	8/24/2009	70,000	11,227	58,773
SE	PS/WRD/1	5000	Missouri River Joint Water Board, Start up	12/5/2008	14,829	0	14,829
SE	PS/WRD/1	5000	Missouri River Joint Water Board (MRRIC) T. FLECK	6/30/2009	20,000	6,141	13,859
SE	PS/WRD/1	5000	2009-11 Upper Sheyenne River WRB Administration	7/10/2009	12,000	500	11,500
TOTAL					14,982,032	2,067,085	12,914,947

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

COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept		Initial Approved Date	Total Approved	Total Payments	Jan-10 Balance
SE	420	5000	2009 Mirror Lake Dam Safety Repair	10/14/2009	12,220	11,887	333
SE	450	5000	2007-09 Sykeston Dam 2008 Emergency Action Plan	11/25/2008	7,840	7,839	1
SWC	568	5000	2009 Sheyenne River Snagging & Clearing Project	12/5/2008	135,000	75,085	59,915
SE	671	5000	2007-09 Harvey Dam 2008 Emergency Action Plan	11/25/2008	7,840	7,837	3
SWC	988	5000	Southeast Cass WRD Antelope Creek Eng Feas	10/12/2006	40,000	40,000	0
SWC	1084	5000	2008 Cass Co. Drain No. 32 Partial Improvement Recon	3/17/2008	68,538	13,150	55,388
SWC	1238	5000	2009-11 Traill County Drain No. 19 Legal/Ext Outlet	8/18/2009	46,187	46,187	0
SWC	1334	5000	Traill County Drain No. 38 Reconstruction	6/30/2009	57,631	0	57,631
SE	1378	5000	2009-11 Clausen Springs Dam Incremental Risk Assessr	12/22/2009	9,179	9,179	0
SE	1378	5000	2009-11 Clausen Springs Dam Feasibility Study of Improv	12/10/2009	7,921	7,921	0
SE	1378	5000	2009-11 Clausen Springs Dam Emergency Watershed &	8/31/2009	9,418	9,418	0
SWC	1403	5000	2009-11 ND Water Resources Research Institute Fellows	12/11/2009	13,850	13,850	0
SWC	1461	5000	2008 Pembina River Area Bank Stabilization Project	12/5/2008	24,307	0	24,307
SE	1849	5000	2008 Tongue River Diversion Channel Rock Project	11/25/2008	19,087	17,994	1,093
SE	1921	5000	2009 Square Butte Dam No. 6/Emergency Action Plan	3/9/2009	16,000	11,040	4,960
SWC	1936	5000	Nash Drain Extension Construction Proj	10/12/2006	19,913	14,399	5,514
SWC	1947	5000	Cass County Drain No. 62, Maple River WRD	4/30/2008	39,787	3,687	36,100
TOTAL					534,718	289,473	245,245

SOUTHWEST PIPELINE PROJECT WATER SERVICE CONTRACT

Contract No.: 1736-35
Customer Entity: City of Hazen

I. PARTIES

This contract is between the Southwest Water Authority (the "Authority"), the North Dakota State Water Commission (the "Commission"), and the City of Hazen (the "Customer").

II. INTRODUCTION

1. The Commission is developing a water pipeline, water supply, and water distribution project known as the Southwest Pipeline Project (the "Project").
2. The Authority, created under North Dakota Century Code § 61-24.5, provides operation, maintenance, and management of the Project.
3. In 1995, the Commission entered into an agreement with the Authority transferring to the Authority the completed portions of the Project for operation, maintenance, and management (the "1995 Agreement").
4. Under North Dakota Century Code § 61-24.5-09 the Authority may enter into water service contracts to deliver and distribute water, and to collect charges for such delivery.
5. The Customer desires to enter into a water service contract, pursuant to the laws of the state of North Dakota, for a water supply from the Project for use by the Customer, for which the Customer will make payment to the Authority as set forth in this contract.

III. DEFINITIONS

The following definitions apply to this contract:

1. "Additional water" means water purchased by the Customer at a flow rate greater than the maximum flow rate specified in this contract.
2. "Base consumer price index" means the consumer price index, as defined herein, as of January 1, 1995.
3. "Capital costs" means all the costs incurred by the Commission related to construction of the Project, including the costs of surveys, engineering studies, exploratory work, designs, preparations of construction plans and specifications, acquisitions, acquisitions

of lands, easements and rights-of-way, relocation work, and related essential legal, administrative and financial work. "Capital costs" shall not include the Customer distribution system costs.

4. "Consumer price index" hereinafter referred to as "CPI" means the consumer price index for all urban consumers, which is a monthly statistical measure of the average change in prices in a fixed market basket of goods and services. The CPI is based on the prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living.
5. "Customer" means the city of Hazen.
6. "Customers" means those persons, municipalities, rural water cooperatives, corporations, and other entities which have entered into and executed water service contracts with the Authority for the purchase of water from the Project.
7. "Customer distribution system" means all infrastructure from the point of delivery that extends onto the Customer's property, including any storage, clearwell, pump, service line, distribution line, appurtenances and all related items intended for the distribution of water for domestic, business, industrial and public use.
8. "Customer distribution system costs" means all costs for and related to the Customer distribution system.
9. "Domestic use" means the use of water by an individual, or by a family unit or household, for personal needs and for drinking, washing, sanitary, and culinary uses.
10. "Estimated water rate for operation, maintenance, and replacement" means the estimated rate per each one thousand (1,000) gallons of water for operation, maintenance and replacement costs, for establishing and maintaining operating reserves of the Project and for the accumulation and maintenance of a reserve fund for replacement purposes. This rate is determined by dividing total costs the Authority estimates it will incur during a year for operation, maintenance, and replacement by the total number of one thousand (1,000) gallon units of water which the Authority estimates it will sell to its customers during the same year.
11. "Manager" means the person employed by the Authority to be in charge of and supervise the Authority and its powers and duties.
12. "Maximum flow rate" means the maximum number of gallons of water that the Authority may deliver to the Customer during any one minute time period.
13. "Minimum annual water purchase" means the minimum gallons of water which the Customer must purchase and pay for during a year.

14. "Operation, maintenance, and replacement costs" means the cost for operation and maintenance, for establishing and maintaining operating reserves of the Project and for the accumulation and maintenance of a reserve fund for replacement purposes. Operation, maintenance, and replacement costs shall be referred to in this contract as OM&R costs.
15. "Point of delivery" means the location where the Project delivers water to the Customer, from which point the Customer is responsible for conveyance of the water for its intended use.
16. "Potable water" means water fit for human consumption.
17. "Unallocated capacity" means the capacity of the Project which is not allocated and contractually committed to customers by virtue of raw and/or potable water service contracts.
18. "Water rate for capital costs" means the rate per each one thousand (1,000) gallons of water to be paid by the customers for capital costs of the Project.
19. "Year" means the period from January 1 through December 31, both dates inclusive.

IV. TERM OF CONTRACT

1. This contract shall remain in effect for forty (40) years after the date of the first water delivery to the Customer, unless terminated sooner by mutual agreement of the parties.
2. Under terms and conditions mutually agreeable to the parties to this contract, renewals of this contract may be made for successive periods not to exceed forty (40) years from the date of renewal.

V. WATER SERVICE: DELIVERY OF WATER

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

1. All water supplied to the Customer shall be potable treated water that meets water quality standards of the North Dakota Department of Health.
2. The Customer hereby agrees to purchase and make payment for not less than 100,000 gallons per year (minimum annual water purchase) during the entire term of this contract.
3. The maximum flow rate is 550 gallons per minute total for all connections to the Customer.
4. The Authority will deliver to the Customer any water which the Customer desires to purchase, at a flow rate not to exceed the maximum flow rate specified in this contract.

The Authority is not obligated to supply water at a greater flow rate than the maximum flow rate specified in this contract. If there is unallocated capacity in the Project to the Customer's point of delivery, the Authority may allow delivery of additional water at a flow rate greater than the maximum flow rate specified in this contract. If the Customer desires to secure a contractual right to a greater maximum flow rate than specified in this contract, this contract must be amended in writing to provide for such a greater maximum flow rate. At such time the Authority may or may not require an increase in the minimum annual water amount.

5. The flow rate set forth is provided to meet the Customer's needs on a constant flow basis. Should the Customer request or require demand flow service, the Customer may request such service from the Authority. As consideration for receiving this type of service, the Customer agrees to pay, as the water rate for capital costs, an amount equal to two (2) times the water rate for capital costs paid for constant flow service. If the Customer desires to secure a contractual right to demand flow service, this contract must be amended to provide for demand flow service.
6. The Authority will supply water to the Customer at the point of delivery at a pressure range of 20 psi to 35 psi. If the Customer requests that the Authority supply pressure outside the range of 20 psi to 35 psi, and the Authority determines that it can provide the requested pressure, the Customer shall pay the Authority the cost incurred by the Authority in providing the requested pressure.
7. The Customer is responsible for and shall pay all Customer distribution system costs.
8. No liability shall accrue and the Customer agrees it shall be fully responsible and shall not be entitled to any remedy arising from any water shortages or other interruptions in water deliveries resulting from accident to or failure of the Project. The Customer's duties under this contract shall not be reduced or altered by reason of such shortages or interruptions.
9. The Authority has the right during times of water shortage, from any cause, to interrupt water service to the Customer.
10. The Authority may temporarily discontinue or reduce the amount of water supplied to the Customer for the purpose of maintaining, repairing, replacing, investigating or inspecting any of the facilities and works necessary for supplying water. To the extent possible, the Authority will give reasonable advance notice of any temporary discontinuance or reduction. No advance notice is required in case of an emergency. In no event shall any liability accrue against the Authority, the Commission, or any of their officers, agents, or employees for any damage or inconvenience direct or indirect, arising from such temporary discontinuance or reduction for maintenance and repair purposes.
11. The Commission will pay for and install, at the point of delivery, a meter and any other equipment necessary to measure the quantity of water supplied to the Customer ("metering equipment"). The Commission will provide an underground prefabricated

steel meter vault ("vault") for purposes of controlling flow and measuring the quantity of water supplied to the Customer. The vault shall include an access hatch and steel vent pipes that terminate three to five feet above ground. The Customer shall dedicate an area for the installation, operation, maintenance, and repairs of the vault and shall provide vehicular access to the vault. Upon installation, the Authority shall operate and maintain the metering equipment. If the Customer believes the measurement of water delivered to be in error, it shall present a written claim to the Authority, either in person or by certified mail. A claim presented after a payment has become delinquent does not prevent the Authority from discontinuing service to the Customer. The Customer shall continue to make payments for water service after a claim has been presented; however, the payment will be under protest and will not prejudice the Customer's claim. After the Customer presents its claim and advances the cost of calibration, the Authority will calibrate the meter. If the meter is found to over-register by more than two percent (2%) of the correct volume, the Authority will refund the Customer's advance for the cost of calibration and the readings for that meter shall be corrected for the twelve (12) months preceding the calibration by the percentage of inaccuracy determined by the calibration. The amount of any overpayment as a result of over-registration shall be applied first to any delinquent payments for water service, and at the option of the Customer, the Authority shall refund or credit the Customer upon future payments for water service. If any meter fails to register for any period, the amount of water delivered during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless the Authority and the Customer agree upon a different amount. The Customer and the Authority shall have access to the meter at all reasonable times for the purpose of verifying its readings.

12. The Customer shall be responsible for the control and use of all water in the Customer distribution system and shall pay all costs related to service, maintenance, and repair of the Customer distribution system. The Customer is responsible for the control, distribution, and use of water delivered under this contract, and the operation, maintenance and replacement of the Customer distribution system.
13. The point of delivery under this contract is a single connection adjacent to the Customer's Hilltop Reservoir located in the SW ¼ of the NW ¼ of Section 7 in Township 144 North, Range 86 West. Any connection other than the single connection adjacent to the Customer's Hilltop Reservoir must be approved, in writing, by the Authority and by the Commission and all costs related to any other connection, including all appurtenant piping, valves and controls shall be paid by the Customer.

VI. WATER SERVICE: WATER RATES AND PAYMENT FOR WATER

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

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

ninety (90) day notice, or beginning at such time when water is available to the Customer, whichever is later in time.

2. The Customer's monthly water service payment is the sum of the following:
 - a. The Customer's proportionate share of the OM&R costs, as determined by the Authority; plus
 - b. The Customer's payment for capital costs, as determined by the Authority.
3. The Customer agrees to use water from no other source than the Project in the Customer distribution system during the term of this contract except if water from other sources is needed for emergencies such as significant fire events or interrupted or reduced service from the Project.
4. The Customer's proportionate share of the Project OM&R costs (for calculating the Customer's monthly payment) will be determined as follows:
 - a. Prior to February 1 of each year, the Authority shall adopt a budget for OM&R for the Project for the immediate ensuing year. The Authority may include in such budget an amount to be accumulated and maintained in a reserve fund for the purpose of replacing Project works and for extraordinary maintenance of Project works. The amount of the reserve fund shall be contingent upon approval by the Commission. The Authority shall deposit and maintain the reserve fund in a separate account in accordance with the laws of the state of North Dakota.
 - b. The Authority will then estimate the total annual water sales for the immediate ensuing year, and calculate the "estimated water rate for operation, maintenance, and replacement" for the Project by dividing the amount of the estimated budget for OM&R for the immediate ensuing year by the estimated total annual water sales for such ensuing year.
 - c. The monthly payment to be made by the Customer to the Authority for OM&R shall be determined by multiplying the amount of water actually delivered to the Customer for each month times the estimated water rate for OM&R.
 - d. At the end of each year, the Authority shall prepare a statement of the year's actual OM&R costs.
 - e. The Authority will then determine the adjustment to be applied to the Customer's OM&R payment for the previous year. The adjustment will be calculated by dividing the amount of water delivered to the Customer by the Authority during the previous year by that year's total annual water sales to determine the Customer's proportionate share of the OM&R costs. This fraction will then be multiplied by the actual total cost for OM&R for the previous year, which shall be the amount of the Customer's proportionate share of OM&R costs

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

5. The Customer's share of the Project's capital costs (for calculating the Customer's monthly payment) will be determined as provided below.
 - a. The base rate for capital costs for constant flow shall be seventy-two cents (\$0.72) per each one thousand (1,000) gallons of water.
 - b. The Commission shall have the authority to adjust the base water rate for capital costs annually in accordance with the increase or the decrease in the consumer price index CPI. The formula for determining the adjustment to the water rate for capital costs for each year is as follows: The CPI for September 1 of each year shall be divided by the base CPI of January 1, 1995, which is 448.4 (1967=100). The result of this calculation shall be reduced by one (1), and then multiplied by the base water rate for capital costs. The product of this formula is the adjustment to the water rate for capital costs and shall be used to add to the base water rate for capital costs for the next year. Notwithstanding the foregoing basis for adjusting the water rate for capital costs, the Commission shall have the authority to decrease the adjustment to the water rate for capital costs, as it deems appropriate and necessary, after considering data on changes to the median incomes of Project water customers, substantial increases in operation, maintenance and replacement costs, or other factors.
 - c. The amount of the Customer's monthly payment to the Authority for capital costs shall be calculated by multiplying the water rate for capital costs times the amount of water actually delivered to the Customer each month.
6. The Authority shall read the metering equipment at the point of delivery and, not later than the first (1st) day of each month, shall send to the Customer, at the address shown on the signature page of this contract, an itemized statement of the payment due from the Customer for water service for the preceding month.

7. The Customer shall pay the Authority for water service under this contract, for OM&R, and for capital costs, by sending payment to the Authority, at the address shown on the signature page, not later than the fifteenth (15th) day of each month. Payments sent after the fifteenth (15th) day of each month shall result in the Customer being in default. If the Customer is in default, the Authority, at its sole discretion, may suspend delivery of water through the Project during the period of default. During any period of default, the Customer remains obligated to make all payments required under this contract. Any action of the Authority shall not limit or waive any remedy provided by this contract or by law for the recovery of money due or which may become due under this contract.
8. A penalty of one percent (1%) per month will be imposed upon all payment amounts that are in default.
9. The Customer's failure or refusal to accept delivery of water from the Authority does not relieve the Customer from its obligation to make payments in accordance with this contract.

VII. GENERAL PROVISIONS

1. The Authority, contingent upon the approval of the Commission, may adopt such rules and regulations as it deems appropriate to carry out and to govern the administration of this contract. Such rules and regulations shall not be inconsistent with this contract. The Customer shall comply with such rules and regulations.
2. The use of any remedy specified herein to enforce this contract is not exclusive and does not prohibit the use of, or limit the application of, any other remedy available by law.
3. This contract may be amended any time by mutual agreement of the parties in writing, except insofar as any proposed amendments are in any way contrary to applicable law.
4. Any waiver by any party of its rights with respect to a default or any other matter arising in connection with this contract does not waive any other default or matter.
5. The Customer may not assign or otherwise transfer or delegate any right or duty without the express written consent of both the Commission and the Authority.
6. The Customer understands and agrees that the Authority and the Commission will give preference to potable water for municipal, domestic, and rural water needs before executing water service contracts or allowing additional water purchases.
7. This contract is governed by and construed in accordance with the laws of the state of North Dakota. Any action to enforce this contract must be brought in the District Court of Burleigh County, North Dakota, and the Customer consents to jurisdiction of state courts.

VIII. TERMINATION

1. This contract may be terminated only by mutual written agreement of the parties.
2. The Authority and the Commission may terminate this contract if the Customer fails to use water delivered consistent with the terms of this contract. Upon such termination the Authority and the Commission are relieved of all obligations under this contract, and the Customer must immediately disconnect the Customer distribution system from the point of delivery.

IX. MERGER

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

STATE WATER COMMISSION
900 East Boulevard Avenue
Bismarck, ND 58505

By:



Dale Frink, Chief Engineer and Secretary

Date 4-12-2010

CITY OF HAZEN
146 East Main Street
PO Box 717
Hazen, ND 58545-0717

By:

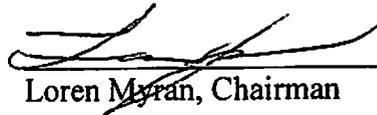


Title: Pres.

Date 3-25-2010

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

By:

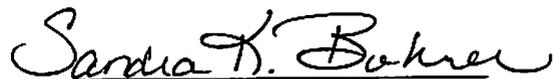


Loren Myran, Chairman

Date 4-5-10

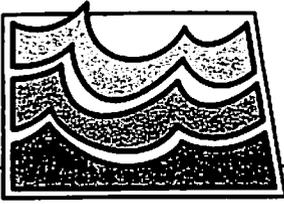
CITY OF HAZEN

By:



City Auditor

Date 3/26/2010



APPENDIX "D"
March 11, 2010

North Dakota State Water Commission

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

MEMORANDUM

TO: Governor John Hoeven
Members of the State Water Commission
FROM:  Dale L. Frink, State Engineer
SUBJECT: Spring Flood Outlook
DATE: March 3, 2010

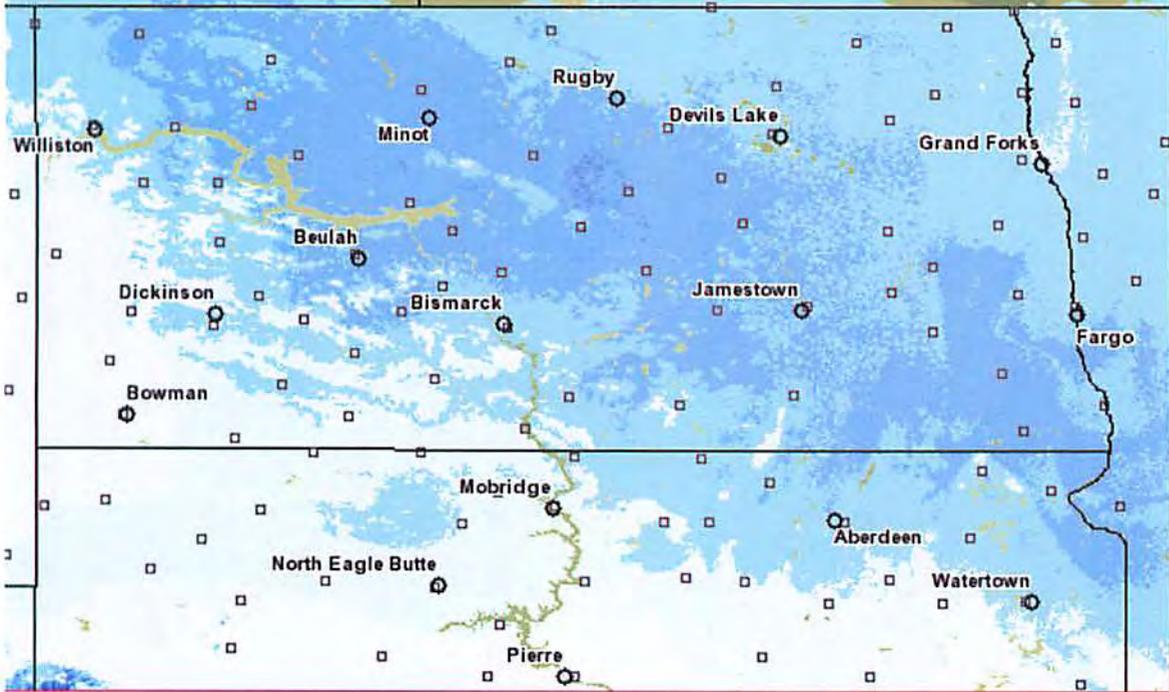
Snow Pack

Much of the state is still in the process of recovering from the statewide flooding that occurred last spring, but, once again, there is the potential of widespread major flooding this spring. Snow Water Equivalent Maps taken The National Operational Hydrologic Remote Sensing Center (NOHRSC) show the snow water equivalent on March 2, 2009, compared to March 2, 2010. The NOHRSC maps show that there is more moisture on the ground this year, state wide. However, there are a multitude of variables that influence the chances of flooding, ie, how rapid the temperatures warm up, precipitation between now and any flooding, ice jams, frost depth, etc.

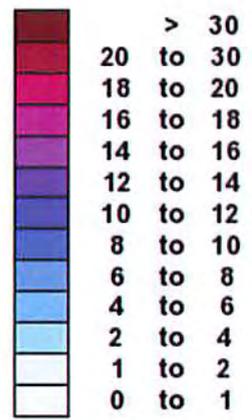
JOHN HOEVEN, GOVERNOR
CHAIRMAN

DALE L. FRINK
SECRETARY AND STATE ENGINEER

NOHRSC Modeled Snow Water Equivalent
March 2, 2009 – Figure 1

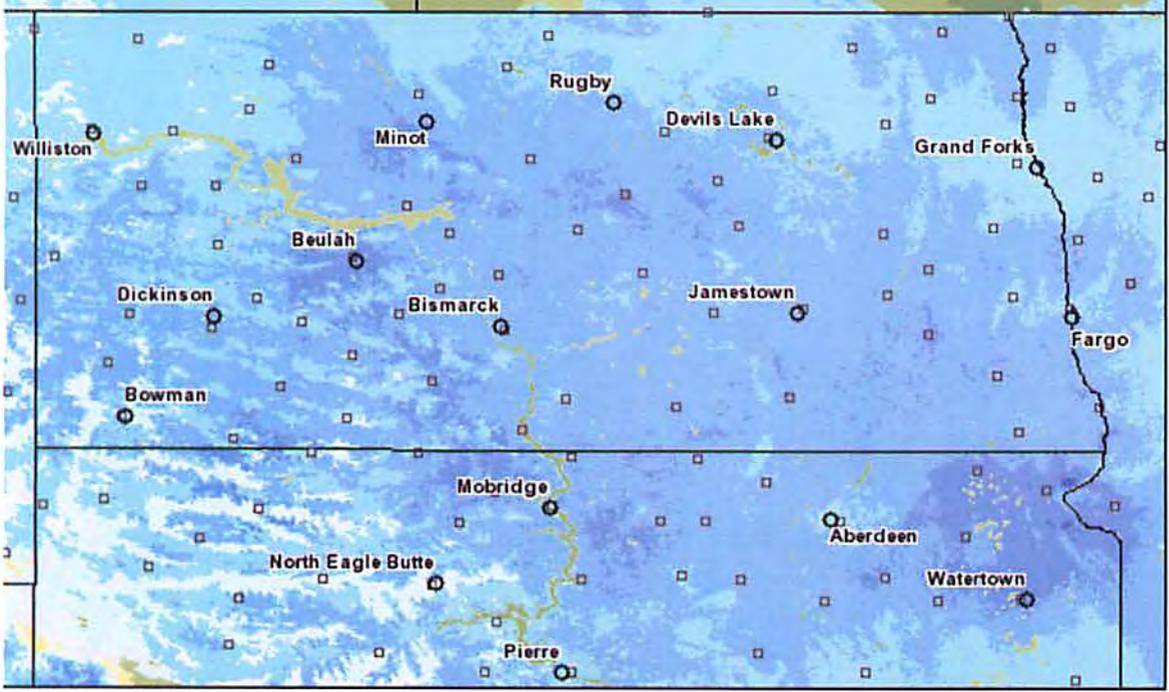


Inches of water equivalent

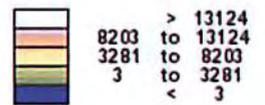


Not Estimated

NOHRSC Modeled Snow Water Equivalent
March 2, 2010 – Figure 1



Elevation in feet
(Not estimated)



Flood Conditions

Red River

According to the National Weather Service Forecast, significant spring flooding is expected across the Red River Valley. Probabilities indicate that a majority of the river forecast sites are expected to experience major flooding. The Red River at Fargo has a 96% chance of reaching major flood stage, and 10% chance of reaching a stage of 43.7 feet, the record, which was set last spring, is 40.65 feet. The Red River at Wahpeton has a 86% chance of reaching moderate flood stage, and a 55% chance of reaching major flood stage. The Red River at Grand Forks has a 96% chance of reaching moderate flood stage, and a 73% chance of reaching major flood stage. The forecasts for 90%, 50%, and 10% probability of stage exceedance for the Red River at Wahpeton, Fargo, Halstad, East Grand Forks, Oslo, Drayton, Pembina forecast sites are shown in Table-1.

Table-1

Forecast Sites	Probability of Exceedance			Stage Height (ft)			Flood Stage (ft)	Flood Stage of Record (ft)	Year
	Minor Flooding	Moderate Flooding	Major Flooding	90%	50%	10%			
Wahpeton	>98 %	86%	55%	11.3	14.4	17.5	10	19.42	1997
Fargo	>98%	>98%	96%	32.7	38.6	43.7	18	40.65	2009
Halstad	>98%	96%	73%	34.3	39.2	40.6	26	40.74	1997
Grand Forks	>98%	96%	73%	44.6	47.4	52.1	28	54.35	1997
Oslo	>98%	>98%	72%	35.4	36.6	38.5	26	38.17	2009
Drayton	>98%	>98%	88%	41.9	43.1	45.4	32	45.55	1997
Pembina	>98%	>98%	55%	50.4	52.3	54.3	42	54.94	1997

Red River Tributaries

Flooding is expected on the Red River Tributaries. The forecast for 90%, 50%, and 10% probability of stage exceedance for the Valley City, Lisbon, Kindred, West Fargo Diversion, and Harwood forecast sites are shown in Table-2.

Table-2

River	Forecast Site	Probability of Exceedance			Stage Height (ft)			Flood Stage (ft)	Flood Stage of Record (ft)	Year
		Minor Flooding	Moderate Flooding	Major Flooding	90%	50%	10%			
Sheyenne River	Valley City	60%	54%	49%	12.5	17	24	15	20	1882
	Lisbon	>98%	>98%	95%	20	23	27.2	11	19.29	1997
	Kindred	>98%	>98%	<1%	21.2	21.2	21.2	16	22.33	1997
	West Fargo Diversion	>98%	>98%	91%	23.1	23.1	23.2	18	28.77	1996
	Harwood	>98%	>98%	>98%	891.2	892.1	892.4	884	892.02	1997
Wild Rice River	Abercrombie	>98%	>98%	>98%	23.1	27.3	29.4	10	27.69	2009
Maple River	Enderlin	96%	42%	16%	10.3	11.8	16.3	9.5	15.41	1975
	Mapleton	>98%	93%	34%	908.1	909.6	911.1	905	909.86	2006
Goose River	Hillsboro	83%	75%	27%	8	14.8	18	10	16.76	1979
Forest River	Minto	82%	29%	<1%	5.7	7.4	9	6	11.8	1948
Park River	Grafton	>98%	91%	86%	14.1	18	21.7	12	20.13	1950
Pembina River	Wallhalla	62%	<1%	<1%	7.6	12.2	15.1	11	19.2	1950
	Neché	63%	60%	23%	13.7	19.3	21.4	18	24.51	1997

Mouse River

Flooding is expected on the Mouse River, but major flooding is less likely. The forecast for 90%, 50%, and 10% probability of stage exceedance for the Sherwood, Foxholm, Minot, Minot-Broadway Bridge, Logan, Sawyer, Velva, Towner, Bantry, and Westhope forecast sites are shown in Table-3.

Table-3

River	Forecast Site	Probability of Exceedance			Stage Height (ft)			Flood Stage (ft)	Flood Stage of Record (ft)	Year
		Minor Flooding	Moderate Flooding	Major Flooding	90%	50%	10%			
Mouse River	Sherwood	37%	26%	-	7.3	15.5	23.1	18	25.8	1904
	Foxholm	68%	55%	6%	8.3	13.5	14.4	10	17.17	1976
	Minot	59%	19%	3%	9.7	14.5	19.3	14	26.0	1881
	Minot Broadway Bridge	13%	6%	3%	1543.2	1545.8	1549.8	1549	1558	1881
	Logan	75%	44%	-	30.4	35.9	37.4	36	38.28	1976
	Sawyer	72%	44%	8%	18	23.2	25.6	22	26.17	1976
	Velva	73%	6%	-	1501.9	1506.4	1508.9	1505	1509.9	1976
	Towner	>98%	96%	24%	54.5	55.6	56.4	52	56.7	1976
	Bantry	>98%	96%	18%	12.6	13.4	14.5	11	14.59	1976
	Westhope	>98%	70%	42%	11.9	15.4	19.3	10	19.16	1976
De Lacs River	Foxholm	8%	4%	3%	9.3	12.1	15.9	16	21.23	1979
Willow Creek	Willow City	>98%	65%	16%	11.6	14.7	16.6	10	16.76	1969
Wintering River	Karlsruhe	>98%	8%	1%	7.5	8.3	8.9	7	13.37	1995

Missouri River

Widespread flooding is not a concern for the main stem of the Missouri River in North Dakota this year with reservoir levels providing large amount of flood storage. However, there is a risk of localized flooding resulting from ice jams. The National Weather Service (NWS) does not forecast flooding on the Missouri River since ice jams cannot be

predicted. It does appear that the ice is not as thick as last year, which should reduce the risk of ice jams.

Missouri River Tributaries

Some flooding is expected for tributaries to the Missouri River in North Dakota. The forecast for 90%, 50%, and 10% probability of stage exceedance for the Little Missouri River, Knife River, Heart River, Cannonball River, Cedar Creek, Apple Creek and the Little Muddy River are shown in Table-4.

Table-4

River	Forecast Site	Probability of Exceedance			Stage Height (ft)			Flood Stage (Ft)	Flood Stage of Record (ft)	Year
		Major Flooding	Moderate Flooding	Major Flooding	90%	50%	10%			
Little Missouri	Marmath	21%	-	-	13.3	16.1	19.2	18	16.9	1978
	Medora	94%	35%	5%	15.2	17.5	19.2	15	23.4	1952
	Watford City	3%	-	-	13.2	15.8	17.9	20	20.5	1947
Knife River	Manning	91%	4%	-	15.2	16.1	16.8	15	17.63	2003
	Hazen	>98%	>98%	92%	25.1	26.2	27.5	21	27.01	1966
Heart River	Mandan	86%	10%	-	16.6	19.5	23	17	25.75	1952
Cannonball River	Regent	8%	5%	4%	14.1	16.7	21.8	22	26.1	1950
	Breien	>98%	77%	15%	18.3	21.3	23.3	10	22.3	1950
Cedar Creek	Raleigh	78%	52%	28%	11.3	14	18.1	12	18	1950
Apple Creek	Menoken	>98%	94%	61%	16.2	17.1	18.2	15	17.46	1979
Little Muddy River	Williston	80%	41%	6%	8.1	11.5	13.4	10	13.5	1960
Spring Creek	Zap	>98%	96%	68%	18.50	20.7	24.5	14	20.7	1972
James River	Grace City	92%	84%	69%	12.1	15.6	18.2	12	17.45	2009
	Lamoure	95%	87%	26%	15.4	17.2	18.8	14	16.2	1969
	Ludden	>98%	>98%	71%	16.6	17.3	18.7	12	17.86	1997
Pipestem Creek	Pingree	97%	55%	-	10	11.1	12	9	11.86	2009
Beaver Creek	Linton	98%	91%	79%	11.3	15.2	20.6	9	17.28	2009

Dams

During last springs flood event the integrity of dams and water control structures was tested around the State. Cottonwood Creek Dam, and Claussen Springs Dam both experienced difficulty with their emergency spillways. Last summer, Cottonwood Creek Dam's spillway was repaired, however, the grass lining has yet to be established. Claussen Springs Spillway is still damaged. With the potential for high inflows into both dams the inflows, outflows and the emergency spillways will be closely monitored.

Summary

Due to the current snowpack there is presently adequate moisture to create flood conditions in most watersheds. Overland flooding and flooding on rivers and sites not discussed in this memorandum is likely to occur, especially if the snowpack melts rapidly. The State Water Commission Staff has been working with the Department of Emergency Services (DES), The National Weather Service (NWS), the Corps of Engineers and others to prepare for flooding, as well as increasing public awareness of the flood risks. The staff is prepared to support the State's flood response efforts as necessary.

DLF:BE:KC:mmb/1431-11



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

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

Environmental Impact Statement

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

Lake Agassiz Water Authority

- A joint meeting of the LAWA Board and operational plan work group met on December 8. The board provided input on the operational plan and approved the proposed 2010 work plan, which consists of the following main efforts:
 - Complete the prefinal design effort
 - Conduct a value engineering review of the project
 - Continue efforts to get a Record of Decision and initiate follow-up efforts if issued
 - Support the delegation's efforts to obtain authorization
 - Prepare for the 2011 North Dakota legislative session
- The next meeting of the LAWA Board and the operational plan work group is scheduled for March 9.

Pre-final Design Effort

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

Right-of-Way: Approximately 269 parcels with 173 landowners will need to be negotiated on the proposed right-of-way. To date, 127 landowners have signed option agreements. In Sheridan County, 27 of 32 landowners have signed; Wells County 20 of 49 landowners have signed; Foster County 50 of 59 landowners have signed; and Griggs County 30 of 33 landowners have signed.

Garrison Diversion has wrapped up the effort to obtain options for right-of-way. The process resulted in quality input from the landowners. The next steps to acquire the right-of-way will occur when the decision is made to exercise the options.

There are 26 landowners that have not signed access agreements. These agreements are needed to get permission to complete the environmental surveys, geotechnical investigations and collect other physical information for the prefinal design and permitting efforts. Garrison Diversion has petitioned the court to gain access to complete this work as weather permits this spring and summer.

Permitting and Environmental Services: Notice on the determination of wetlands under the jurisdiction of the Corps of Engineers has been provided to Garrison Diversion. These wetlands will be field verified in the spring when weather permits. The wetlands under easement by the US Fish and Wildlife Service have been field verified.

On February 5, Garrison Diversion and the engineering team met with the US Fish and Wildlife Service and Reclamation to discuss the conditions that will be required when the pipeline crosses their wetland easements. On February 25, Garrison Diversion and the engineering team met with the Corps of Engineers and Reclamation to discuss the permit process and conditions that would be required for crossing the jurisdictional wetlands.

On February 2, the team met with Foster and Sheridan Counties and with Wells County on March 2 to explain the road crossing and the design standards that are being proposed. In addition, they proposed a process to keep them informed and to gather information to ensure that restoration of the road crossings occurs and that haul roads are identified and repaired to their satisfaction.

The team is currently drafting permit applications for all of the permits required for the project.

Operational Plan: On December 4, a meeting was held to brief Reclamation on the draft operational plan, which was then presented at the workshop held on December 8. The final draft is scheduled to be presented to the work group on March 9.

On January 6, Garrison Diversion and the engineering team met with the USGS to discuss the modeling effort that was completed on the water quality for the project. They also met with the ND Health Department to discuss the water quality in Lake Audubon, the McClusky Canal and start up conditions for the project. The modeling results showed that given an effective freshening program to keep Lake Audubon and the first 36 miles of the canal freshened, the project could be started in a manner not to exceed water quality standards in the Sheyenne River, and the delivered quality of water to the systems would be acceptable.

Preliminary Design: Work on engineering evaluations regarding the preliminary design is approximately 85% complete, and the team issued a draft of the preliminary engineering report. Garrison Diversion attended a design team meeting which was held in Denver on January 19 and 20 to review the report and make comments. The next design team workshop has been scheduled for March 16 and 17.

o Design team activities:

- All of the Technical Memorandums (TM) that have been issued as final draft:
 - o TM1 - Trenchless crossings methods & schedule
 - o TM2 - Pipe hydraulic model & pipe diameter selection
 - o TM3 - Location of bedding materials study
 - o TM4 - Pipeline scour studies (at three river/creek crossings)
 - o TM5 - Pipe material, lining & wall thickness
 - o TM6 - Pipe minimum cover depth
 - o TM7 - Leak detection & monitoring
 - o TM8 - SCADA system
 - o TM9 - Discharge structure location & configurations
 - o TM10 - Pressure control stations
 - o TM11 - Line valves & turnouts
 - o TM12 - Corrosion Control Plan
 - o TM13 - Air/vacuum controls & blowoffs
 - o TM14 - Trenchless Crossing Methods
 - o TM15 - Owner pre-purchase alternatives evaluation
 - o TM15A - Pipe Manufacturer Preselection
 - o TM16 - Construction Phasing Alternatives Evaluation
 - o TM17 - Preliminary Transient/Surge Model
 - o TM18 - Realignment Feasibility Evaluation for Crossing Sections Diagonally

- TM19 - Specifications for Reclaiming Ag Lands
- Refining the pipeline alignment is completed
- Utility potholing is approximately 70% complete and has been discontinued for the season and will be completed next spring
- GIS based data management system has been developed and is in use
- Preliminary water quality investigation has been completed

State Agencies

- Garrison Diversion continues to coordinate with the State Water Commission, ND Department of Health, and the ND Game and Fish on the upcoming efforts to develop the operational plan.

Schedule

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



Dave Koland, General Manager