

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

March 11, 2010 - 7

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.

March 11, 2010 - 11

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.

March 11, 2010 - 13

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 under-sized 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