

MINUTES

North Dakota State Water Commission Bismarck, North Dakota

April 16, 2004

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on April 16, 2004. Lt. Governor-Chairman, Jack Dalrymple, called the meeting to order at 1:30 PM, and requested State Engineer, and Chief Engineer-Secretary, Dale L. Frink, to call the roll. Lt. Governor Dalrymple announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:

Lt. Governor Jack Dalrymple, Chairman
Roger Johnson, Commissioner, Department of Agriculture, Bismarck
Elmer Hillesland, Member from Grand Forks
Curtis Hofstad, Member from Starkweather
Jack Olin, Member from Dickinson
Harley Swenson, Member from Bismarck
Dale L. Frink, State Engineer, and Chief Engineer-Secretary,
North Dakota State Water Commission, Bismarck

STATE WATER COMMISSION MEMBERS ABSENT:

Charles Halcrow, Member from Drayton
Larry Hanson, Member from Williston
Robert Thompson, Member from Page

OTHERS PRESENT:

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

announced the agenda approved as presented.

There being no additional items for the agenda, Lt. Governor Dalrymple an-

**CONSIDERATION OF FINAL DRAFT
MINUTES OF MARCH 11, 2004 STATE
WATER COMMISSION MEETING -
APPROVED**

The final draft minutes of the March 11, 2004 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Hofstad, seconded by Commissioner Olin, and unanimously carried, that the final draft minutes of the March 11, 2004 State Water Commission meeting be approved as prepared.

**2003-2005 BIENNIUM
AGENCY PROGRAM
BUDGET EXPENDITURES**

resources. David Laschkewitsch, State Water Commission accounting manager, presented and discussed the allocated program expenditures for the period ending February 29, 2004, reflecting 33 percent of the 2003-2005 biennium. All expenditures are within the authorized budget. **SEE APPENDIX "A"**

In the 2003-2005 biennium, the State Water Commission has two special line items - administrative and support services, and water and atmospheric

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 potential bond proceeds. The total approved for projects is \$85,264,836, leaving a balance of \$13,918,521 available to commit to projects.

Secretary Frink explained the State Water Commission's authority to issue bonds under North Dakota Century Code chapter 61-02.1, which was created by 1999 Senate Bill 2188 and 1999 House Bill 1495, for water management and development. To assist in financing the costs of the statewide water development program during the 2003-2005 biennium, Secretary Frink said it will be necessary to exercise the Commission's bonding authority, and that a recommendation would be presented for the Commission's consideration at a future meeting.

**2003-2005 BIENNIUM
RESOURCES TRUST FUND
AND WATER DEVELOPMENT
TRUST FUND REVENUES**

\$10,342,465, which includes payments received in April, 2004.

The oil extraction tax deposits into the Resources Trust Fund total \$3,057,566, and are \$205,374, or 6.3 percent behind the budgeted revenues. Deposits into the Water Development Trust Fund total

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**APPROVAL OF REQUEST
FROM PEMBINA COUNTY
WATER RESOURCE DISTRICT
FOR STATE COST PARTICIPATION
IN PEMBINA COUNTY DRAIN
NO. 16 IMPROVEMENT, RECON-
STRUCTION AND EXTENSION
(SWC Project No. 1142)**

A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation in the improvement, reconstruction and extension of Pembina County Drain No. 16. The purpose of the project is to reconstruct/construct a drain that will efficiently move water from the

confluence of the main drain and a lateral downstream to the Tongue River, and reduce sheetflooding and erosion in the area.

Pembina County Drain No. 16 was constructed through the guidance of the Natural Resources Conservation Service (NRCS) in 1950. The drain was established as an assessment drain and is located approximately 3.5 miles east of Hamilton, ND. The drain begins at the northern boundary of Section 33, Tier 162 North, Range 52 West and proceeds upstream to the south, crossing Sections 4, 9, 10, 15, 22, 27, 34, and 35 in Tier 161 North, Range 52 West. The lateral drain begins at the confluence with the main drain and proceeds upstream across Sections 3, 4 and 10 in Tier 161 North, Range 52 West.

The established drain follows the natural outlet of a large flat area, referred to as the "Big Slough Coulee", and serves an area of over 55,000 acres. The 1950 NRCS project was not functioning properly, therefore, the NRCS redesigned the area from N.D. State Highway 5 north to the Tongue River in 1963, but this extension was never constructed. The proposed project involves reconstructing one mile of the drain from the southern boundary of Section 33, Tier 162 North, Range 52 West, to the northern boundary, and constructing a 2.5-mile extension from the northern boundary through Sections 17, 20, 21 and 28, Tier 162 North, Range 52 West outletting into the Tongue River in Section 17. The channel will be excavated to a 24-foot bottom width and 3:1 side slopes. The project does not entail the installation or removal/relaying of culverts. A sediment analysis has been filed indicated 5,087 cubic yards of sediment would be removed.

The final engineering plans have been filed, and Drain Permit No. 2971 was approved by the State Engineer on November 12, 2002 authorizing the proposed project. Under the State Water Commission's policy, conditional approval of rural flood control drainage projects will be allowed, subject to a six-month limit for receiving a positive local assessment vote. Final approval will be granted upon notification of a positive local assessment vote, which will be held in May, 2004.

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The project engineer's cost estimate is \$117,512, of which \$106,899 is considered eligible for conditional state cost participation as a rural flood control project at 35 percent of the eligible costs (\$37,415). The request before the State Water Commission is for a 35 percent cost share in the amount of \$37,415.

It was the recommendation of the State Engineer that the State Water Commission conditionally approve a cost share of 35 percent of the eligible items, not to exceed \$37,415 from the funds appropriated to the State Water Commission in the 2003-2005 biennium, for state cost participation in the Pembina County Drain No. 16 improvement, reconstruction and extension project.

It was moved by Commissioner Hillesland and seconded by Commissioner Swenson that the State Water Commission conditionally approve a cost share of 35 percent of the eligible items, not to exceed \$37,415 from the funds appropriated to the State Water Commission in the 2003-2005 biennium, for state cost participation in the Pembina County Drain No. 16 improvement, reconstruction and extension project. This motion is contingent upon the availability of funds, and attainment of a positive local assessment vote within six months of the State Water Commission's funding approval.

Commissioners Hillesland, Hofstad, Johnson, Olin, Swenson, and Lt. Governor Dalrymple voted aye. There were no nay votes. Lt. Governor Dalrymple announced the motion unanimously carried.

**APPROVAL OF REQUEST
FROM PEMBINA COUNTY
WATER RESOURCE DISTRICT
FOR COST SHARE PARTICI-
PATION IN PEMBINA COUNTY
DRAIN NO. 66 EXTENSION
PROJECT
(SWC Project No. 1923)**

A request from the Pembina County Water Resource District was presented for the State Water Commission's consideration for state cost participation in the Pembina County Drain No. 66 extension project. The District received a petition from landowners requesting that the drain be extended on both the east and west ends. Excessive water from the west has caused a number of acres of land on both ends of the drain to be inundated with water and flooding causing acres of crop loss. The silt has filled the drop structures on the drain downstream from the washouts resulting in large cleanout expenses.

Pembina County Drain No. 66, also referred to as St. Thomas-Lodema Watershed, was established in the 1970s in conjunction with the Pembina County Soil Conservation District with assistance by the

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U.S. Department of Agriculture, Soil Conservation Service. The existing drain extends east from Tier 161 North, Range 54 West, Section 34 to Tier 160 North, Range 50 West, Section 18 where it follows approximately one mile of natural waterway to the Red River. The drain is approximately 22 miles long and is composed of previously constructed extensions, respectively referred to as Nos. 66-2, 66-1A, and 66-1. A lateral to the south, No. 66-3, merges with Drain No. 66 in Tier 160 North, Range 52 West, Section 7.

The proposed project involves construction of a 2.5-mile extension (66-2A) from the westerly edge of Drain No. 66 (66-2) as it crosses the section line between Sections 34 and 35, Tier 161 North, Range 54 West, across the south half of Sections 33 and 34, and to the Burlington Northern Railroad ditch in Section 32, Tier 161 North, Range 54 West. At the east end of the drain, an outlet extension (66-1B), approximately one mile in length, will be constructed through the natural waterway creating a channel outletting into the Red River in Section 17, Tier 160 North, Range 50 West. Pembina County Drain No. 43 will also empty into this outlet extension.

Extension 66-2A will be excavated to a depth ranging between 3.6-4.2 feet, a bottom width of 8-18 feet, and 4:1 side slopes. A dike will be constructed to the level of the top of the railroad, and four drop structures will be installed. Extension 66-1B will be excavated to a depth of 1.6 feet, a bottom width of 6 feet, and 2:1 side slopes. Sixty (60) feet of section line culvert and 70 feet of approach pipe will be installed. Twelve (12) acres will be seeded.

The preliminary engineering plans are complete and all applicable state permits will be applied for during the final design. A sediment analysis is not required for new construction projects. Under the State Water Commission's policy, conditional approval of rural flood control drainage projects will be allowed, subject to a six-month limit for receiving a positive local assessment vote, satisfaction of the permit requirements, and receipt/approval of the project's final design.

The project engineer's cost estimate is \$204,450, of which \$200,450 is considered eligible for conditional state cost participation as a rural flood control project at 35 percent of the eligible costs (\$70,158). The request before the State Water Commission is for a 35 percent cost share in the amount of \$70,158.

It was the recommendation of the State Engineer that the State Water Commission conditionally approve a cost share of 35 percent of the eligible items, not to exceed \$70,158 from the funds appropriated to the State Water Commission in the 2003-2005 biennium, for state cost participation in the Pembina County Drain No. 66 extension project.

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It was moved by Commissioner Hofstad and seconded by Commissioner Olin that the State Water Commission conditionally approve a cost share of 35 percent of the eligible items, not to exceed \$70,158 from the funds appropriated to the State Water Commission in the 2003-2005 biennium, for state cost participation in the Pembina County Drain No. 66 extension project. This motion is contingent upon the availability of funds, attainment of a positive local assessment vote within six months of the State Water Commission's funding approval, satisfaction of all permit requirements, and approval of the project's final design.

Commissioners Hillesland, Hofstad, Johnson, Olin, Swenson, and Lt. Governor Dalrymple voted aye. There were no nay votes. Lt. Governor Dalrymple announced the motion unanimously carried.

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

Todd Sando, Assistant State Engineer, provided the following Southwest Pipeline Project status report:

Contract 2-5B - Main Transmission Pipeline, Medora-Beach Phase: Contract 2-5B is for 46.4 miles of 12-inch through 6-inch diameter PVC pipe. The contract includes two booster pump stations and several pressure reducing valves, as well as meter vaults for Medora and Beach. The completion date for contract 2-5B is September 4, 2004. The contractor, Northern Improvement Company, Bismarck, ND, has mobilized to start work in the Medora area and has begun seedbed preparation in the Little Missouri National Grasslands. Last fall, the contractor completed installation of approximately 22.1 miles of pipeline before freeze up.

Contracts 5-9, 5-10, and 5-11 - Belfield, Fryburg, and Beach Reservoirs:

The contractor for contracts 5-9, 5-10, and 5-11 is Advance Tank and Construction, Wellington, CO. The subcontractor for the foundation work, Industrial Contractors, Inc., Bismarck, ND, has completed work on the foundation for the Belfield reservoir, and has begun work on the foundation for the Fryburg reservoir. Foundation work on the Belfield reservoir will start following completion of the foundation work at Fryburg. Advance Tank has indicated its intention to mobilize to the Belfield tank site to begin construction of the tank floor and walls in early May, with the other tasks to follow. The following table provides details on the three reservoir contracts:

<u>Reservoir</u>	<u>Volume (gallons)</u>	<u>Dimensions (diameter x height)</u>	<u>Estimated Cost</u>	<u>Completion Date</u>
5-9, Belfield	750,000	52' x 48'	\$625,000	8/01/2004
5-10, Fryburg	507,000	37' x 64'	\$457,700	8/15/2004
5-11, Beach	382,000	28' x 83'	\$574,600	10/01/2004

Contract 7-8A - Fryburg Service Area, Phase I: Contract 7-8A is for approximately 42.7 miles of PVC pipe ranging in size from 6 inches to 1 1/2 inches in diameter in the general area from Belfield to west of Medora. The completion date for contract 7-8A is September 15, 2004. The preconstruction meeting for contract 7-8A was held on March 31, 2004 in Dickinson, ND. The contractor, Abbot, Arne & Schwindt, Moorhead, MN, has indicated its intention to start in the area south of Medora, and anticipates the completion of all pipe laying by the end of June, 2004.

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

Todd Sando provided the following Northwest Area Water Supply (NAWS) project status report:

Contract 2-1B - Pretreated Water Pipeline: On April 22, 2003, the State Water Commission authorized the award of contract 2-1B to Coughlin Construction, Minot, ND. The contract was executed by the Commission's Chief Engineer and Secretary on May 22, 2003. The contract is for approximately 9.5 miles of 30-inch and 36-inch ductile iron pipe extending from the end of contract 2-1A to a point across N.D. Highway 23. The contract includes an above ground pressure reducing valve vault located adjacent to U.S. Highway 83 just south of the bored and cased highway crossing. The contract completion date was October 31, 2003, but an extension was granted until November 14, 2003 because of delays in awarding the contract.

Approximately 65 percent of the pipe in contract 2-1B was installed in 2003. Coughlin Construction did not complete the contract by the contract completion date specified in the contract documents. The contract specifies that liquidated damages in the amount of \$1,500 per day can be assessed to the contractor for each day beyond the contract completion date.

Coughlin Construction has started stripping topsoil and getting machinery ready in anticipation of starting construction work. It is anticipated that pipe laying work could resume around the middle to end of April, 2004 pending the ground frost conditions. Work could begin before that time on preparations at the PRV vault and the U.S. Highway 83 culvert crossing just north of "radar hill".

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Contract 2-1C - Pretreated Water Pipeline Station 1600+00 to Max Pumping Station: Contract 2-1C consists of approximately 61,006 feet (about 11.6 miles) of 36-inch ductile iron pipe extending from N.D. Highway 23 to the south side of the city of Max. At its March 11, 2004 meeting, the State Water Commission authorized the award of contract 2-1C to Winter Brothers Underground, Sioux Falls, SD, contingent upon a legal review of the contract documents by the state, and written concurrence by the Bureau of Reclamation. The Bureau concurred in the award of the contract by letter received on April 1, 2004, the documents have been reviewed and completed, and contract 2-1C was executed by the State Engineer on April 6, 2004. A preconstruction conference is scheduled for May 11, 2004. The contractor has indicated its intentions to begin work in June, 2004 when pipe is shipped to the job site.

Manitoba Lawsuit: On November 14, 2003, the United States District Court for the District of Columbia, Judge Rosemary Collyer, denied motions made by the U.S. Department of the Interior and the State of North Dakota to dismiss the action that had been brought by the Province of Manitoba against the Department of the Interior. The motions to dismiss the case were based on jurisdictional and procedural issues.

The Manitoba suit, filed in October, 2002, against the Secretary of the Interior, Commissioner of Reclamation, Reclamation's Great Plains Regional Director, and Reclamation's Dakotas Area Manager, challenges the adequacy of the NAWS environmental assessment and the Finding of No Significant Impact (FONSI). Manitoba is seeking a declaratory judgment and an injunction requiring the defendants to conduct an Environmental Impact Statement (EIS) and enjoining the defendants from expending federal funds until they have fully complied with such requirements. North Dakota petitioned the court to intervene as a defendant and was unopposed.

The Bureau of Reclamation submitted the administrative record for the case. On March 8, 2004, the Province of Manitoba filed its motion for summary judgment and briefs supporting its position. Responding motions and briefs from the Department of the Interior and the state are due on April 16, 2004. Judge Collyer has scheduled oral arguments on the motions for July 29, 2004 in Washington, DC.

Fred Wagner of Beveridge & Diamond, P.C., a Washington, DC attorney, has been retained to complement the staff of the North Dakota Office of the Attorney General in the lawsuit.

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**DEVILS LAKE HYDROLOGIC UPDATE
(SWC Project No. 416-01)**

The current elevation of Devils Lake is 1447.7 feet msl, which is up one foot since late March, 2004. At this elevation,

the lake has a surface area of 126,000 acres and storage of 2.46 million acre-feet of water. At this time last year, the lake was at an elevation of 1447.10. The tributary runoff into Devils Lake is below the 1997 levels, but it is still significant. All of the tributaries have peaked, but the larger upper lakes have not peaked.

On April 16, 2004, the National Weather Service released its forecast for Devils Lake with a 90 percent chance that Devils Lake will rise to a record level this summer, and a 50 percent chance that the lake will exceed the record by half a foot. The record level is 1448.04 feet msl set in August, 2001. If an elevation of 1448.5 feet msl is reached, there would be 277,100 acre-feet more water in the lake than on January 1, 2004, which would be the fourth largest spring volume increase in recorded history. If an elevation of 1449.0 feet msl is reached, the 2004 runoff would be the third largest spring volume increase on record.

The current elevation of Stump Lake is 1417.22 feet msl, which is an increase of approximately 2.3 feet since late March, 2004. This elevation equates to 166,229 acre-feet of water in storage and a surface area of 8,358 acres. The Jerusalem channel is flowing at 35 cubic feet per second but, as the ice cover melts and inflows continue into Devils Lake, the flow through the channel will increase.

Joe Belford, manager, Devils Lake Downstream Acceptance Program/Ramsey County Commission member, stated the basin received up to five inches of rainfall in late March, 2004, causing water from the northern portion of the basin to flow into Devils Lake. Considerable damage was experienced during this event including washout of roads and culvert damage. Based on the current Devils Lake situation, Mr. Belford said 40 homes may need to be relocated, Grahams Island road and Woods Rutten road could be lost due to wave action, the relocation of N.D. Highway 281 will need to be pursued, and an additional three-foot raise to the city of Devils Lake levee may be required.

**CORPS OF ENGINEERS DEVILS
LAKE OUTLET PROJECT STATUS
(SWC Project No. 416-07)**

On February 26, 2003, the Corps of Engineers announced that a 300 cubic feet per second (cfs) outlet from Pelican Lake to the Sheyenne River had been

identified as the preferred alternative to alleviate flood damages at Devils Lake if the lake continues to rise. The Corps released the final Environmental Impact Statement (EIS) for public review in April, 2003, and comments were accepted until June 19, 2003.

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On October 14, 2003, the Corps of Engineers signed a Record of Decision (ROD) recommending that an outlet be constructed from Devils Lake to reduce flood damages and to reduce the risk of a natural overflow from Devils Lake.

The Corps continues to address the conditions that were outlined in the ROD, which included a determination by the U.S. State Department on whether or not the outlet project would violate the Boundary Waters Treaty Act of 1909. On January 20, 2004, U.S. Secretary of State, Colin Powell, provided a letter to the Corps of Engineers which detailed his review of the project plans for the federal outlet and provided assurances that the project does not violate the Boundary Waters Treaty Act of 1909 as currently designed since the plans assume no biota of concern exists in Devils Lake that are not already present in the Red River system.

***NORTH DAKOTA DEVILS LAKE
OUTLET PROJECT STATUS
(SWC Project No. 416-07)***

The State of North Dakota is pursuing a temporary emergency phased outlet project from West Bay to the Sheyenne River. The project is based on a two-year construction timeline, with construction commencing in the fall of 2003 and operational in 2005.

The State of North Dakota is pursuing a temporary emergency phased outlet project from West Bay to the Sheyenne River. The project is based on a two-

On March 5, 2003, the State Water Commission approved the continued construction of the North Dakota Devils Lake outlet project, and allocated the expenditure of \$7.5 million from the funds appropriated to the State Water Commission in the 2001-2003 biennium, for Phases 1(a) and 1(b).

On August 6, 2003, the State Water Commission approved the award of the Devils Lake Emergency Outlet, Initial Canal Segments, Contract 2, to Park Construction, Inc., Minneapolis, MN, in the amount of \$766,614. The contract is for 3.2 miles of 300 cubic feet per second (cfs) open channel. Park Construction commenced construction on October 21, 2003, and construction was shutdown on November 4, 2003 due to frost. The contractor anticipates a 16-week construction period for this contract, and will complete the remaining portions of the contract in the spring of 2004.

The state received the 402 Water Quality Discharge Permit from the North Dakota Department of Health on August 22, 2003. The Department received several requests to reconsider the permit, therefore, the comment period was extended until October 20, 2003. In letters to those individuals questioning the issuance of the permit, the Department stated that no new information had been provided. Therefore, the Department's original decision to issue the permit remains intact. Appeals to the discharge permit have been filed in District Court by The

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People to Save the Sheyenne and the Province of Manitoba, and by the Peterson Coulee Association. Both complaints seek the District Court to rescind the discharge permit, but neither complaint asked for an injunction to stop project construction. The District Court has not taken any action to date on the appeals.

At its meeting on December 5, 2003, the State Water Commission approved the funding necessary to bid and construct the final phases of the state's outlet project in the amount of an additional \$19 million from the funds appropriated to the State Water Commission in the 2003-2005 biennium.

The power supply will require contracting with the local Rural Electric Cooperative (REC) for the electrical power supply to the two pump stations that would consist of 115 kV lines and a substation. Completion of the surveying, mapping, and design work of the power facilities would allow for construction to be completed in 2004. The total cost for the power supply portion of Phase 1(b) is approximately \$2.5 million. A meeting was held on February 4, 2004 with representatives of Northern Plains Electric Cooperative and Central Power Electric Cooperative to discuss the issues relating to providing electrical power to the state's outlet pump site locations. The choice of non-interruptible power at \$9.20 per kW per month versus interruptible power at \$2.00 per kW per month is being considered. Contract reviews are currently ongoing by the parties involved.

On March 11, 2004, the State Water Commission approved the awards of Devils Lake Emergency Outlet Contract 4, Final Canal Segments, in the amount of \$2,371,134, to Park Construction Company, Minneapolis, MN; and the Devils Lake Emergency Outlet Contract 5, Canal Structures, in the amount of \$5,041,000, to Industrial Builders, Inc., Fargo, ND.

***NORTH DAKOTA DEVILS LAKE
OUTLET PROJECT - AWARDS OF
CONTRACT 2A/2B, ROUND LAKE
AND JOSEPHINE PUMP STATIONS,
TO EXCEL CONSTRUCTION, INC.,
SHERIDAN, WY; AND CONTRACT 3,
ROUND LAKE AND JOSEPHINE PIPE-
LINES, TO S.J. LOUIS CONSTRUCTION,
INC., WAITE PARK, MN
(SWC Project No. 416-07)***

On March 24, 2004, bids were opened for Devils Lake Emergency Outlet Contract 2A/2B, Round Lake and Josephine Pump Stations. In compliance with North Dakota Century Code, four schedules were bid: Schedule 1 - general (four bids received); Schedule 2 - mechanical construction (four bids received); Schedule 3 - electrical construction (four bids received); and Schedule 4 - single combined bid for all

work (three bids received). No bids were rejected for non-compliance with the bidding documents. Based on the bids received, the apparent low bidder for contract 2A/2B was received from Excel Construction, Inc., Sheridan, WY, with a combined single bid of

\$5,879,700, which was below (\$78,500, or 1.3 percent) the revised project engineer's estimate of \$5,958,200. The project engineer reviewed the bids received and recom-

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mended the award of contract 2A/2B to Excel Construction, Inc., Sheridan, WY. The award of the contract and notice to proceed are dependent on the completion of the contract documents, all permits and easements for the project are in place, and concurrence from legal counsel.

On March 24, 2004, bids were opened for Devils Lake Emergency Outlet Contract 3, Round Lake and Josephine Pipelines. Seven bids were received for the contract and no bids were rejected for non-compliance with the bidding documents. Based on the bids received, the apparent low bidder for contract 3 was S. J. Louis Construction, Inc., Waite Park, MN, with a bid of \$3,682,120, which was below (\$1,114,830, or 23 percent) the revised project engineer's estimate of \$4,796,950. The project engineer reviewed the bids received and recommended the award of contract 3 to S. J. Louis Construction, Inc., Waite Park, MN. The award of the contract and notice to proceed are dependent on the completion of the contract documents, all permits and easements for the project are in place, and concurrence from legal counsel.

The State Water Commission members discussed the pending appeals by outlet opponents of the 402 Water Quality Discharge permit from the North Dakota Department of Health. Secretary Frink explained that the appeals seek the District Court to rescind the discharge permit, but neither appeal asked for an injunction to stop construction. Therefore, the project construction can continue, but Secretary Frink explained that the project could not be operated without a discharge permit. Although reservations were expressed relative to awarding the construction contracts, Lt. Governor Dalrymple emphasized the importance of moving forward with the state's outlet project.

It was the recommendation of the State Engineer that the State Water Commission approve the awards of Devils Lake Emergency Outlet Contract 2A/2B, Round Lake and Josephine Pump Stations, in the amount of \$5,879,700, to Excel Construction, Inc., Sheridan, WY; and the Devils Lake Emergency Outlet Contract 3, Round Lake and Josephine Pipelines, in the amount of \$3,682,120, to S. J. Louis Construction, Inc., Waite Park, MN. Funding for contracts 2A/2B and 3 will be provided from the funds appropriated to the State Water Commission in the 2003-2005 biennium.

It was moved by Commissioner Hofstad and seconded by Commissioner Hillesland that the State Water Commission approve the awards of Devils Lake Emergency Outlet Contract 2A/2B, Round Lake and Josephine Pump Stations, in the amount of \$5,879,700, to Excel Construction, Inc., Sheridan, WY; and the Devils Lake Emergency Outlet Contract 3, Round Lake and Josephine Pipelines, in the amount of \$3,682,120, to S. J. Louis Construction, Inc., Waite

Park, MN. Funding for Contracts 2A/2B and 3 will be provided from the funds appropriated to the State Water Commission in the 2003-2005 biennium.

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Commissioners Hillesland, Hofstad, Johnson, Olin, Swenson, and Lt. Governor Dalrymple voted aye. There were no nay votes. Lt. Governor Dalrymple announced the motion unanimously carried.

2004 SPRING FLOOD OUTLOOK/UPDATE (SWC Project No. 1431-08)

Todd Sando reported that on March 27 and 28, 2004, eastern North Dakota experienced a significant rainfall event. In areas with frozen ground and snow pack. Because of the frozen ground, an unusually high portion of the rainfall and resultant snowmelt contributed directly to runoff. Many of the drains and culverts were ineffective due to ice resulting in significant overland flooding in Pembina, Walsh and Grand Forks counties. The Pembina River at Walhalla reported a peak stage of 13.55 feet and a peak discharge of 9,090 cubic feet per second (cfs). The Pembina River at Neche had a peak stage of 21.13 feet and the peak discharge was 6,860 cfs. Neither of these were in the top ten floods of record.

The stage and discharge of the Park River at Grafton (16.04 feet, 5,290 cfs) is the fourth highest discharge on record. The third highest stage and fourth highest discharge (9.24 feet, 3,640 cfs) was reported in Minto on the Forest River, which also exceeded the 1997 levels. The fifth worst flood on the Goose River (14.42 feet, 7,210 cfs) was reported at Hillsboro in 78 years of record resulting in closure of U.S. Interstate 29. The Red River exceeded flood stage in all areas north of Halstad, MN, with minor flooding in Grand Forks and Pembina, and moderate flooding in Oslo, MN, and Drayton.

The Warwick and Cooperstown gages on the Sheyenne River reported the sixth and eighth highest flows on the period of record, 3,470 cfs and 4,200 cfs, respectively. The Corps of Engineers responded by increasing the discharges from Baldhill Dam to 3,500 cfs.

Mr. Sando stated that due to the significant rainfall events and recent warm temperatures, the majority of the snow in the state has melted, thus, reducing the potential for future flooding.

The Missouri River basin within North Dakota has little potential for flooding as signified by record low lake levels on Lake Sakakawea. Mr. Sando said it is likely that in 2004, Devils Lake will reach a record high level, while Lake Sakakawea will reach a record low level.

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

Todd Sando reported that the drought conditions continue to persist in the Missouri River basin. As of April 6,

2004, system storage in the six mainstem reservoirs was 39.8 million acre-feet (MAF), 17.2 MAF below the average system storage for the end of March, 2004, and 4.1 MAF less than last year. System storage reached a record low of 38.0 MAF in mid-February, 2004. Lake Sakakawea was at an elevation of 1815.7 feet msl, 6.7 feet lower than a year ago, and 19.4 feet below its average end of March elevation.

The Corps of Engineers is predicting runoff above Sioux City for 2004 to be 19.5 MAF, 78 percent of normal. Under the April 1 most likely runoff simulation, the Corps is estimating that Lake Sakakawea will reach elevation 1817.3 feet msl by the end of June, 2004, and then fall to an elevation of 1812.0 feet msl by the end of February, 2005. Under the April 1 lower decile simulation, the Corps is estimating that Lake Sakakawea is near its peak for the year and will fall to an elevation of 1804.2 feet msl by the end of February, 2005.

The elevation of Lake Oahe was 1582.0 feet msl on April 6, 2004, 6.0 feet lower than last year and 23.8 feet lower than its average end of March elevation. Under the April 1 most likely runoff simulation, the Corps is estimating that Lake Oahe will reach 1582.7 feet msl by the end of April, and then fall to an elevation of 1581.0 feet msl by the end of February, 2005. Under the April 1 lower decile simulation, the Corps is estimating that Lake Oahe is near its peak for the year and will fall to an elevation of 1571.1 feet msl by the end of October and then rebound to 1572.4 feet msl by the end of February, 2005.

The elevation of Fort Peck Lake was 2205.5 feet msl on April 6, 2004, 7.3 feet lower than last year and 26.3 feet lower than its average end of March elevation. Under the April 1 most likely runoff simulation, the Corps is estimating that Fort Peck Lake will reach 2206.9 feet msl by the end of April and then fall to an elevation of 2203.1 feet msl by the end of February, 2005. Under the April 1 lower decile simulation, the Corps is estimating that Fort Peck Lake is near its peak for the year and will fall to an elevation of 2193.7 feet msl by the end of February, 2005.

On April 1, 2004, the mountain snow pack was 82 percent of normal in the reach above Fort Peck, and 72 percent of normal in the reach between Fort Peck and Garrison. Normally, 96 percent of the peak snow pack in the mountains has accumulated by April 1.

On February 26, 2004, the Corps of Engineers released a draft revised Master Manual for the Missouri River, a final

Environmental Impact Statement on the proposed Master Manual, and a draft Annual Operating Plan for 2004. Comments relating to the documents, representing the com-

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combined efforts of several state agencies and individuals, were provided to the Corps of Engineers, and are attached hereto as **APPENDIX "C"**. The Record of Decision was executed by the Corps of Engineers on March 19, 2004, adopting the plan recommended in the Environmental Impact Statement and implementing the new Master Manual for the Missouri River.

The Corps of Engineers issued the final 2004 Annual Operating Plan (AOP) on March 19, 2004. A positive feature of the AOP is because there are no plans by the navigation industry to have barges above the Platte River, the Corps does not intend to meet the navigation targets at Omaha and Sioux City prior to the tern and plover nesting season. Once the birds begin to nest, flows will be raised to 28,000 cfs to keep the birds from nesting at lower elevations.

**MOUNT CARMEL DAM
REHABILITATION PROJECT
(CAVALIER COUNTY)
(SWC Project No. 1346)**

A contract was executed on January 9, 2004 with GEI Consultants, Inc. to investigate the causes of the March, 2003, partial failure of Mount Carmel Dam in Cavalier county, and to develop

a design to repair the structure. The estimated construction and engineering inspection costs of the repair are \$3.0 million. The State Water Commission approved funding on April 22, 2003 in the amount of \$320,000 for the initial costs associated with the emergency repairs and consulting engineering services; on February 11, 2004 in the amount of \$30,000 for the final project design costs; and on March 11, 2004 in the amount of \$2,500,000 (with an additional \$400,000 of contingency funding only if no other funding is obtained) for the costs associated with the replacement of the spillway and general repairs to Mount Carmel Dam.

The Commission staff has reviewed the plans and specifications for the project, which involves the demolition of the existing concrete chute spillway, construction of a new principal spillway, and the installation of a relief well system at the dam. Other Commission staff efforts include assistance to the Cavalier County Water Resource District, the owner of the dam, in obtaining the required easements and permits for the project; and to the city of Langdon in applying for an Emergency Community Water Assistance grant from the USDA, Rural Development.

The project bid opening is scheduled on May 25, 2004, and it is anticipated construction could begin on June 21, 2004. The project will be substantially complete on November 1, 2004, with final acceptance on July 1, 2005.

The Mount Carmel Dam watershed received significant precipitation in late March, 2004, ranging in amounts from two to three inches of rainfall over much of the watershed. The rainfall occurred when the ground was frozen resulting in almost 100 percent of the rainfall to enter the reservoir.

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The runoff caused the reservoir to rise approximately 13 feet from an elevation of 1521 feet msl to an elevation of 1534 feet msl. The sheetpile cofferdam constructed in response to the partial failure of the spillway in the spring of 2003 prevented any further undermining of the concrete chute spillway by not allowing flow beneath the spillway.

Secretary Frink explained that there are other dams in the state with similar designed spillways. The Commission members discussed maintenance procedures, local responsibilities, and expressed concerns relating to liability issues. Because it is the responsibility of the local entities for the maintenance of dams, the State Engineer and staff were directed to draft an operations and maintenance manual that could provide assistance to the local entities in satisfying their responsibilities relating to the maintenance of dams.

**ATMOSPHERIC RESOURCE BOARD
(SWC Files ACT/RES & AS/SWC/ARB)**

Darin Langerud, Atmospheric Resource Board division director, provided a briefing on the activities of the Atmospheric

Resource Board (ARB), a division of the State Water Commission.

The North Dakota Cloud Modification Project (NDCMP) is an operational summertime cloud seeding program designed to decrease hail damage and increase growing season rainfall. The counties presently participating in the program include Bowman, McKenzie, Mountrail, Ward, Williams, and part of Slope. Many of these counties have participated in the program for more than 40 years. Program Interest has also been expressed in Burleigh, Morton, Mercer, McLean, and Oliver counties. The 2004 NDCMP ground school is scheduled for May 24-26, and the project begins on June 1.

Local funds for the program are generated through county tax levies, which are currently capped at seven mills. Counties are expected to commit more than \$850,000 to the program in the 2003-2005 biennium. The biennial costs are expected to total approximately \$1.3 million, or about 9.5 cents per acre per year.

In considering the funding needs for North Dakota water projects, the 2003 Legislature identified \$224,358 in the 2003-2005 biennium to meet the state's cost share of the NDCMP. The state has provided cost share to participating program counties since 1976. At its meeting on November 3,

2003, the State Water Commission approved biennial funding in the amount of \$225,000 for the NDCMP.

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The ARB owns and operates two weather radars, one each in Bowman and Stanley. The radar data are available on the State Water Commission's website at www.swc.state.nd.us/arb, with the images updated in five-minute intervals during June, July and August when the cloud seeding program is operational. Mr. Langerud explained the website radar data is especially beneficial in the southwestern portion of the state where the National Weather Service radar coverage is marginal.

The ARB Cooperative Observer Network (ARBCON) is a statewide network of volunteers that record rainfall and hail data daily during April through September. This network was initiated in 1977 and, from its inception, there have been more than 3,000 volunteer observers that have collected and provided rainfall and hail data - currently, there are 758 active observers statewide. The precipitation data is available on the State Water Commission's website and contains over 3 million daily rainfall records and in excess of 10,000 hail reports. A comparative analysis was recently completed of the ARBCON with the National Weather Service (NWS) rain gauge network (23-year reporting period from 1977 through 1999). The study results indicated that ARBCON volunteers, on average, reported approximately five percent more rainfall than those of the NWS with an overall ratio of 1.048. The correlation coefficient is better than 0.99 for monthly and annual comparisons. Based on the study results, it was concluded that the ARBCON compares favorably to the NWS standard and should be viewed as a reliable dataset.

Mr. Langerud stated that the Commission staff is exploring the possibility of observer online reporting of the rainfall and hail data, which would expedite the process of receiving the data. It is anticipated that a trial program could be implemented for the 2005 reporting season.

**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 which need to be completed: 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 is the sole preparer of the Needs and Options report, while the State of North Dakota and the Bureau are jointly preparing

the EIS. Governor Hoeven designated the Garrison Diversion Conservancy District to represent the state in this endeavor.

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The Red River Valley Water Supply Study will result in the completion of the Needs and Options report and a draft EIS. These reports will consider the study needs assessment, hydrology, engineering, environmental, financial analysis, and biota transfer issues. The preparation of these reports essentially began in January, 2003, and the reports are scheduled for completion in December, 2005.

Dave Koland, manager, Garrison Diversion Conservancy District, provided a status report on the efforts of the Red River Valley Water Supply Study, which is attached hereto as **APPENDIX "D"**. Mr. Koland presented the Fiscal Year 2005 federal budget appropriation request of \$77.3 million for the Garrison Diversion Unit.

**APPROVAL OF FUNDING FROM
THE WATER DEVELOPMENT AND
RESEARCH FUND FOR ALL SEASONS
WATER USERS DISTRICT SYSTEM 4
EXPANSION - FUTURE CAPACITY
FOR CITY OF ROLETTE
(SWC Project No. 237-04)**

A request was presented for the State Water Commission's consideration for the expenditure of \$32,000 from the Water Development and Research Fund (Garrison Diversion Conservancy District) for the All Seasons Water Users District System 4 Expansion project to include future capacity for service to the city of Rolette.

The All Seasons Rural Water System 4 Expansion project is being constructed in two phases. Phase I is completed and serves 22 rural users and the city of Bisbee at a cost of \$2 million. Phase II expands the system to western Towner county, with the addition of 87 rural users and the capacity to serve the city of Rock Lake. This phase includes 82.5 miles of pipeline, expansion of the well field, increased water treatment plant capacity and reservoir storage, and a new booster station. The estimated Phase II project cost is \$3.3 million (total project cost is \$5.3 million). The project is approved for a federal MR&I grant of up to \$3.95 million, not to exceed 70 percent of the eligible project costs.

The city of Rolette is currently not signed up for water service from the All Seasons Water Users System 4 Expansion project, Phase II. Additional capacity to serve the city would involve upsizing a 4-inch pipeline to an 8-inch pipeline, one-half mile of pipeline installation, and a master meter.

The estimated cost to include future capacity for the city Rolette during the current expansion project is \$106,000. All Seasons Water Users District requested a 30 percent grant to cover the non-federal share, not to exceed an additional \$32,000, for capacity to serve the city of Rolette.

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It was the recommendation of the State Engineer that the State Water Commission approve a 30 percent grant, not to exceed \$32,000 from the Water Development and Research Fund, for the All Seasons Water System 4 Expansion project, Phase II, to include capacity for service to the city of Rolette. Affirmative action is contingent upon the availability of funds, subject to future revisions, and that the project repay \$32,000 (30 percent) after the city of Rolette receives service. As is the current practice, the State Water Commission and the Garrison Diversion Conservancy District must approve expenditures from the Water Development and Research Fund. The District's executive committee will consider the request at its June 7, 2004 meeting.

It was moved by Commissioner Johnson and seconded by Commissioner Hofstad that the State Water Commission approve a 30 percent grant, not to exceed \$32,000 from the Water Development and Research Fund, for the All Seasons Water Users District System 4 Expansion project, Phase II, for capacity to serve the city of Rolette. This motion is contingent upon the availability of funds, subject to future revisions, and that the project repay \$32,000 (30 percent) after the city of Rolette receives service.

Commissioners Hillesland, Hofstad, Johnson, Olin, Swenson, and Lt. Governor Dalrymple voted aye. There were no nay votes. Lt. Governor Dalrymple announced the motion unanimously carried.

**APPROVAL OF FUNDING FROM
THE WATER DEVELOPMENT AND
RESEARCH FUND FOR ALL SEASONS
WATER USERS DISTRICT SYSTEM 5
(PIERCE COUNTY) - FUTURE
CAPACITY FOR CITY OF LEEDS
(SWC Project No. 237-04)**

A request was presented for the State Water Commission's consideration for the expenditure of \$40,000 from the Water Development and Research Fund (Garrison Diversion Conservancy District) for the All Seasons Water Users District System 5 (Pierce County) to include future capacity for service to the city of Leeds.

The new rural water system proposes to serve 370 rural water users and the city of Willow City. The city of Rugby intends to supply System 5 with a bulk water supply. Construction is anticipated to be completed this summer. The estimated project cost is \$8,651,000. The project is approved for a

federal MR&I grant of up to \$6,055,700, not to exceed 70 percent of the eligible project costs.

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The city of Leeds is currently not signed up for water service from the All Seasons Water Users District System 5 project. Additional capacity to serve the city would involve upsizing an 8-inch pipeline to a 10-inch pipeline, 300 feet of pipeline installation, and a master meter. The estimated cost to include future capacity for the city Leeds during the current expansion project is \$133,000. All Seasons Water Users District requested a 30 percent grant to cover the non-federal share, not to exceed an additional \$40,000, for capacity to serve the city of Leeds.

It was the recommendation of the State Engineer that the State Water Commission approve a 30 percent grant, not to exceed \$40,000 from the Water Development and Research Fund, for the All Seasons Water Users District System 5 (Pierce County) project to include capacity for the city of Leeds. Affirmative action is contingent upon the availability of funds, subject to future revisions, and that the project repay \$40,000 (30 percent) after the city of Leeds receives service. As is the current practice, the State Water Commission and the Garrison Diversion Conservancy District must approve expenditures from the Water Development and Research Fund. The District's executive committee will consider the request at its June 7, 2004 meeting.

It was moved by Commissioner Johnson and seconded by Commissioner Hofstad that the State Water Commission approve a 30 percent grant, not to exceed \$40,000 from the Water Development and Research Fund, for the All Seasons Water Users District System 5 project (Pierce County) for capacity for service to the city of Leeds. This motion is contingent upon the availability of funds, subject to future revisions, and that the project repay \$40,000 (30 percent) after the city of Leeds receives service.

Commissioners Hillesland, Hofstad, Johnson, Olin, Swenson, and Lt. Governor Dalrymple voted aye. There were no nay votes. Lt. Governor Dalrymple announced the motion unanimously carried.

There being no further business to come before the State Water Commission, Lt. Governor Dalrymple adjourned the meeting at 3:50 PM.

John Hoeven, Governor
Chairman, State Water Commission

SEAL

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

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