

# NORTH DAKOTA LEGISLATIVE MANAGEMENT

## Minutes of the

### WATER-RELATED TOPICS OVERVIEW COMMITTEE

Monday, October 10, 2011  
Roughrider Room, State Capitol  
Bismarck, North Dakota

Senator Tom Fischer, Chairman, called the meeting to order at 9:00 a.m.

**Members present:** Senators Tom Fischer, Randy Burckhard, Larry Luick, George L. Nodland, Connie Triplett; Representatives Chuck Damschen, Bill Devlin, Curt Hofstad, Curtiss Kreun, Jon Nelson, Kenton Onstad, Jim Schmidt

**Member absent:** Representative Lee Kaldor

**Others present:** Senators Ryan M. Taylor and Larry Robinson, members of the Legislative Management, were also in attendance.

See [Appendix A](#) for additional persons present.

**It was moved by Senator Nodland, seconded by Representative Kreun, and carried on a voice vote that the minutes of the August 30, 2011, meeting be approved as distributed.**

#### 2011 CITY AND COUNTY FLOOD DAMAGE

Chairman Fischer recognized Senator Robinson. Senator Robinson reviewed 2011 flood impacts to Valley City and other communities in the Sheyenne River Valley. He said due to the significant damage caused by 2011 flooding, communities are unable to finance the cost of flood protection alone and must have assistance. He said resources are required to conduct further engineering studies, buy out homes, and address erosion issues as well as a host of other issues. He said Sheyenne River Valley issues are compounded by the threat of additional water from Devils Lake and the Devils Lake Basin.

Chairman Fischer recognized Mr. Bob Werkhoven, Mayor, Valley City. Mr. Werkhoven discussed flooding on the Sheyenne River ([Appendix B](#)) and potential impacts of Devils Lake drainage and excess water issues on the Sheyenne River and Sheyenne River Valley.

Chairman Fischer recognized Mr. Matt Pedersen, Commissioner, Valley City. A copy of Mr. Pedersen's comments concerning 2011 flooding in Valley City and the impact of flooding on the city's infrastructure is attached as [Appendices C](#) and [D](#). A series of 2011 flood and erosion photographs and a map of proposed buyouts in Valley City are on file in the Legislative Council office.

Chairman Fischer recognized Mr. James Thernes, Mayor, Fort Ransom. Mr. Thernes discussed 2011 flooding in Fort Ransom and a copy of his prepared remarks is attached as [Appendix E](#).

Senator Triplett said that in order to make the information from the city of Fort Ransom complete, the city should provide information on the value of property protected to ensure there is a positive cost-benefit ratio for proposed expenditures to address flooding in Fort Ransom.

Chairman Fischer recognized Mr. Jerry Gemar, City Councilman, Lisbon. Mr. Gemar discussed flood damage and expenditures in the city of Lisbon and a copy of his comments is attached as [Appendix F](#).

In response to a question from Senator Triplett, Mr. Gemar said the population of the city of Lisbon is 1,950. In response to a further question from Senator Triplett, he said the city hopes to acquire funds for a permanent levee for the city and to address erosion issues.

Chairman Fischer recognized Mr. Chad Engels, Moore Engineering, Inc., Fargo, who discussed the impact of Devils Lake outflows to the Sheyenne River Diversion Project near West Fargo. A copy of the PowerPoint presentation used by Mr. Engels is attached as [Appendix G](#).

#### STATE WATER COMMISSION

Chairman Fischer recognized Mr. Todd Sando, State Engineer, State Water Commission. Mr. Sando discussed 2011 flood incidents in North Dakota and a copy of the charts used in his presentation is attached as [Appendix H](#). He said North Dakota is in the midst of a wet cycle, and the result is that there is a tremendous need for water infrastructure in the state. He said North Dakota's current water infrastructure is underdesigned for the current wet cycle, necessitating the need for additional flood protection throughout the state. He said the water events of 2011 were unprecedented as there is no corresponding historical event.

Concerning Devils Lake, Mr. Sando said, from 1950 through 1992 the average annual mean inflow into Devils Lake was 34,000 acre-feet, while the average annual mean inflow from 1993 through 2010 was 248,000 acre-feet. He said the estimated 2011 inflow is almost 600,000 acre-feet, and two of the largest historical inflows have occurred in the last three years. He said the State Water Commission recently approved \$17 million for a gravity outlet from West Stump Lake, and the commission is also building a control structure to protect downstream residents in the Sheyenne River Valley. He said the

State Water Commission is scheduled to spend \$107 million in the Devils Lake Basin. He said the State Water Commission is also scheduled to spend \$15 million for upgrades to West Fargo's water treatment plant to deal with increased sulfate levels.

Concerning the Red River, Mr. Sando said, 9 of the top 10 Red River flood events have occurred since 1969. He said this is indicative of the current wet cycle the state is experiencing.

Concerning the Missouri River, Mr. Sando said, the record flood during 2011 exceeded the previous record flood by 60 percent. He said 13 million acre-feet of water passed through Bismarck this year, more than any previous year in recorded history. He said three of the five highest Missouri River runoff events at Bismarck occurred during 2011. As a result of the 2011 flood, he said, there will be a push to increase storage in the five main stem reservoirs, and the Corps of Engineers has been releasing water from the reservoirs to prepare for next year.

Concerning the Souris River, Mr. Sando said, the flood of 2011 also was unprecedented. He said the 2011 flow was 1,600,000 acre-feet, while the second highest was 600,000 acre-feet. He said the flood of 2011 was 250 times greater than the next largest flood. He said North Dakota and Minot were prepared for a 100-year flood but experienced a 500-year flood. He said the largest issue for Minot is making a determination of which homes can be saved and which will be outside the new protection zone. He said a setback levee system, similar to the one constructed in Grand Forks, will probably be needed for Minot. He said the land acquisition cost of a greenway or floodway in Minot could amount to as much as \$100 million.

In response to a question from Representative Onstad, Mr. Sando said storage alone may not solve Minot's problem. He said storage will be one aspect of a flood control plan, but the floodplain must be widened in Minot to accommodate a 500-year flood.

In response to a further question from Representative Onstad concerning a diversion from Sherwood to Westhope, Mr. Sando said this is one alternative being studied. However, he said, preliminary information indicates that this proposal does not seem realistic.

In response to a question from Senator Robinson, Mr. Sando said all projects at Devils Lake are on schedule, and the State Water Commission is moving forward to remove water from Devils Lake. He said the agency is on schedule to remove an additional 350,000 cubic feet per second out of Devils Lake to the Sheyenne River by June 2012. He said the control structure on the Tolna Coulee is a \$10 million project being constructed by the Corps of Engineers. He said the goal is to have the control structure in place for the 2012 season. He said the State Water Commission is attempting to move an additional 250 cubic feet per second out of the west end of Devils Lake.

## CORPS OF ENGINEERS

Chairman Fischer recognized Ms. Judy DesHarnais, Deputy for Programs and Project Management and Chief, Planning, Programs and Project Management Division, St. Paul District, Corps of Engineers, St. Paul, Minnesota. Ms. DesHarnais discussed 2011 flooding on the Mouse, Sheyenne, and Red Rivers and Devils Lake in North Dakota and distributed a map ([Appendix I](#)) showing the projects in North Dakota within the boundary of the St. Paul District. She said the Fargo flood control report is on schedule for completion yet this year, which would allow authorization of the project to move forward in 2012.

Chairman Fischer recognized Mr. Ted H. Streckfuss, Deputy, Project Management and Chief, Programs and Project Management Division, Omaha District, Corps of Engineers, Omaha, Nebraska. Mr. Streckfuss discussed 2011 Missouri River flooding in North Dakota and a copy of his PowerPoint presentation is attached as [Appendix J](#). He said the 2011 forecast for the Missouri River system is a runoff of 60.4 million acre-feet. He said this is the highest runoff since 1898, and the previous record was 49 million acre-feet in 1997.

Concerning postflood recovery, Mr. Streckfuss said, the Corps of Engineers will evacuate flood storage as fast as possible, assess dam and reservoir infrastructure for damages, repair damages and prepare for the 2012 runoff season, and develop an annual operating plan. Concerning levees and other flood infrastructure, he said, the corps will assess the infrastructure as soon as floodwaters recede, work with levee sponsors to develop repair plans, and reconstruct damaged facilities prior to the 2012 runoff season. Concerning postflood evaluations, he said, the corps intends to conduct a flood fight review and after-action report of the flood event and flood fight activities. He said the agency intends to conduct a water management review and reservoir operations independent review as well as an infrastructure damage assessment. Finally, he said, the agency intends to compile all economic, social, and environmental impacts of the flood and develop a comprehensive restoration plan.

In response to a question from Senator Triplett, Mr. Streckfuss said the Corps of Engineers bases its decisions on the historical record and not the geological timeframe of the Missouri River Valley. He said the Missouri River system performed very well in that although the regulated flow caused a tremendous amount of damage an unregulated flow would have been catastrophic. He said public safety is the corps' No. 1 priority, not guaranteed flood protection, but risk mitigation. He said the potential for a dam failure or levee breach is always present, but the corps works and plans to mitigate this risk.

In response to a question from Senator Nodland, Mr. Streckfuss said there are eight authorized purposes for operating the Missouri River system. He said one of the purposes has a lack of water-flood

control--as its focus, while the other seven authorized purposes involve more water in the system. He said flood control is a primary purpose, but the eight authorized purposes must be balanced between more and less water.

### **MORTON COUNTY**

Chairman Fischer recognized Mr. Bruce Strinden, Chairman, Board of Morton County Commissioners, Mandan. Mr. Strinden presented an information sheet ([Appendix K](#)) summarizing Morton County flood information as of October 7, 2011. He said Morton County has spent approximately \$530,300 for flood protection, including levee construction and sandbags. He said Morton County estimates it will cost approximately \$60,000 to remove debris and has spent \$475,000 to resurface graveled roads and approximately \$325,000 to resurface or repair paved roads in the county.

### **BURLEIGH COUNTY**

Chairman Fischer recognized Mr. Clyde Thompson, Finance Director, Burleigh County, Bismarck. Mr. Thompson said Burleigh County has committed \$10 million to flood fighting efforts in the county, and approximately 602 properties were affected by 2011 flooding. He said early estimates indicate that Burleigh County has experienced a \$19 million reduction in property value and significant damage to boat ramps in the county.

### **CITY OF BISMARCK**

Chairman Fischer recognized Mr. Bill Wocken, City Administrator, Bismarck. Mr. Wocken said Bismarck plans to keep the levees constructed during the 2011 flood season in place through next spring. He said Bismarck is cleaning up grade raises and sandbag embankments constructed for the 2011 flood season and studying and reviewing what, how, and why the flood occurred. He said Bismarck is conducting three separate studies to find answers to issues raised by the 2011 flood.

In response to a question from Senator Triplett, Mr. Wocken said Bismarck would like to see money allocated to study the 2011 flood event in Bismarck and financial assistance with infrastructure funding.

### **CASS COUNTY**

Chairman Fischer recognized Mr. Jason Benson, Engineer, Cass County, Fargo. Mr. Benson discussed damage to Cass County and roads in Cass County as a result of 2011 flooding. A copy of his presentation is attached as [Appendix L](#).

In response to a question from Senator Triplett, Mr. Benson said approximately \$3 million of the \$17 million total spent on the 2009, 2010, and 2011 floods were from local sources.

### **CITY OF FARGO**

Chairman Fischer recognized Mr. Dennis Walaker, Mayor, Fargo. Mr. Walaker said the 2011 Fargo flood situation pales in comparison to that being experienced by Minot and Bismarck/Mandan. He said the city of Fargo stands ready to assist these communities in any manner it can. He said Fargo is trying to prepare for any flood that may occur before the diversion is completed as completion of that project is at least 10 years away. In the meantime, he said, Fargo must be prepared to address any flood that may occur.

### **RAMSEY COUNTY**

Chairman Fischer recognized Mr. Joe Belford, Chairman, Board of Ramsey County Commissioners, Devils Lake. Mr. Belford distributed an information sheet ([Appendix M](#)) concerning 2011 road repair estimates prepared by the Department of Transportation and Devils Lake flood infrastructure expenditures from 1994 through 2012. He said the impact to agriculture has been \$52 million, the business impact has been \$194 million, and approximately 1,150 jobs have been lost as a result of flooding.

Chairman Fischer recognized Mr. Jeff Frith, Manager, Devils Lake Basin Joint Water Resource Board, Devils Lake. Mr. Frith discussed flooding in the Devils Lake Basin and a copy of his PowerPoint presentation is on file in the Legislative Council office. He said the estimated cost of current road improvement projects is \$172.6 million. He said total future costs are estimated to be \$85 million as a result of the flooding in the Devils Lake Basin.

Concerning the Devils Lake embankment, Mr. Frith said, the first embankment was constructed in 1984. Since 1996, he said, the embankment has been raised three times at a cost of \$60 million. He said the current raise will extend the current eight-mile embankment to over 12 miles at an estimated cost of \$150 million. Concerning agricultural economic impact, he said, the total impact on business activity in the region from both direct and indirect losses is estimated at \$194,000,419 annually. He said this loss of business activity ultimately is reflected in lost jobs in the region. He said surface water in the Devils Lake Basin has increased from 120 square miles, or 3 percent of the basin, in 1991 to 819 square miles, or 23 percent of the basin, as of July 2011. In other words, he said, what was once 76,800 acres is now 524,160 acres under water.

In response to a question from Senator Robinson, Mr. Frith said the positive impact on fishing and recreation as a result of increased water is overwhelmed by the negative impact on agriculture and the business economy.

In response to a question from Representative Nelson, Mr. Frith said the board supports the Tolna Coulee control structure but at a lower level. He said if sufficient water is taken out of Devils Lake and a

control structure is constructed at a lower level, it is the hope of the board that the structure will never be needed.

### **CITY OF MINOT**

Chairman Fischer recognized Mr. Alan Walter, Director of Public Works, Minot. Mr. Walter updated the committee concerning flood damages in Minot and new flood control measures being addressed. He said homeowners in Minot experienced \$16 million in damages, and businesses in Minot experienced significant losses from property damage as well as lost business activity. He said preliminary estimates call for approximately 400 to 500 home buyouts in Minot, and property acquisitions must commence for right-of-way acquisition for flood control purposes in Minot.

In response to a question from Senator Triplett, Mr. Walter said the city of Minot will have a preliminary estimate of requests to present to the Legislative Assembly by November 3.

### **WESTERN AREA WATER SUPPLY AUTHORITY**

Chairman Fischer recognized Mr. Denton Zubke, Chairman, Western Area Water Supply Authority, Watford City. Mr. Zubke discussed the establishment and activities of the Western Area Water Supply Authority. A copy of his presentation is attached as [Appendix N](#). He also distributed the September 20, 2011, issue of the *Buzz*, the Western Area Water Supply Authority newsletter (on file in the Legislative Council office).

Chairman Fischer recognized Mr. David Johnson, Project Engineer, Western Area Water Supply

Authority, Watford City. Mr. Johnson reviewed Phase 1 and Phase 2 of the project and future anticipated developments.

In response to a question from Senator Nodland, Mr. Zubke said the authority should have its first water depots operational within the next four months to six months.

### **STAFF DIRECTIVES**

Chairman Fischer said he envisioned the committee would compile the information received to date and have the information available for the special session. Senator Nodland said the summary should include the cost request estimates as well as local matching funds provided or required to the extent the information is available.

**It was moved by Senator Burckhard, seconded by Senator Nodland, and carried on a voice vote that the Legislative Council staff be requested to prepare a damage assessment summary for the upcoming special session.** Senators Fischer, Burckhard, Luick, Nodland, and Triplett and Representatives Damschen, Devlin, Kreun, Hofstad, Nelson, and Schmidt voted "aye." No negative votes were cast.

No further business appearing, Chairman Fischer adjourned the meeting at 3:50 p.m.

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Jeffrey N. Nelson  
Committee Counsel

ATTACH:14