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## Final Minutes

International Souris River Board Conference Call  
March 18, 2009

1. Dale Frink convened the meeting at 10:00 a.m. CDT, 9:00 a.m. MDT/CST.
2. Discussion of mid-March flow forecast and determine if flood operations will be required.

Ed Eaton had spoken to Brian Connelly, Senior Forecaster, USNWS, Chanhasset, MN to request:

- the production of forecasts of 30 day unregulated flow volume at Sherwood;
- probabilistic forecasts at Sherwood at 2%, 5%, 10%, and 50%;
- hydrographs of inflow into Boundary Reservoir to assist with planning of diversion into Rafferty; and
- forecasts of local runoff below the Saskatchewan dams to Lake Darling and from Lake Darling to Minot.

The 50% probability forecast at Sherwood is 179,000 acre-feet (226,000 dam<sup>3</sup> which is close to SWA forecast of 220,000 dam<sup>3</sup>). If the ten year flood and volumes occur, it is expected that Lake Darling will fill. Gary Erickson reported that Lake Darling is presently at 1589.98 ft.

In terms of drawdown, Rafferty Reservoir and Lake Darling in combination, are at a level to store a 1:100 year event. However, Alameda is 2 m above and Boundary is 1 m above the required level to store a 1:100 year event.

Rafferty Reservoir is presently at 547.5 m. and could be brought up to 551 m, which represents about 150,000 acre-feet of storage. Alameda Reservoir is presently at 560 m and could be brought up to 563 m or if required to 565 m (about 2 m above FSL), which represents about 35,000 acre-feet of storage.

The USNWS 10% probability of occurrence for a 90 day flow volume for local inflow below the Canadian reservoirs and upstream of Lake Darling is 134,000 acre-feet, which is greater than the available storage in Lake Darling. The low estimate is 70,000 acre-feet.

Ed Eaton suggested that flood operations should be invoked. The 1989 Flood Agreement in Section 4.3, page 1-26, indicates that flood operations will be invoked when the estimated 30-day unregulated volume at Sherwood Crossing equals or exceeds a 10-percent (10-year) event, which is equal to 175,200 ac-ft (216,100 dam<sup>3</sup>); and/or

when the local 30-day volume at Sherwood Crossing is expected to equal or exceed 30,000 acre-feet (37,000 dam<sup>3</sup>).

**Doug Johnson moved to invoke flood operations. Gregg Wiche seconded. Carried**

Ed Eaton noted that there is some cause for concern at the City of Minot. The probabilistic forecast for Minot is fairly high. Dan Jonassen noted the City of Minot's levees can handle 7500 cfs. There is potential for 1500 to 2000 cfs outflow from Lake Darling at the time of local runoff occurring below Lake Darling.

3. Discussion of 2009-10 workplan. Paul Pilon asked if the 2009-10 work plan will be presented at the April meeting of the IJC. Brian Yee reported that updating of the work plan was to be discussed at the Feb Board meeting and at this conference call. Due to the absence of Russ Boals, further discussion of the work plan was deferred.

4. Discussion of International Watershed Initiative Projects

Gregg Wiche noted that the Aquatic Ecosystem Health Committee has a small \$13,000 proposal to submit for IWI funding to review the water quality monitoring plan on the Souris River basin. The proposal is focused on reviewing the water quality monitoring in the USA portion of the Souris River basin. Paul Pilon asked if there would be value in expanding the review to include the Canadian water quality monitoring sites.

Brian Yee spoke with David Donald (Manager, Water Quality Monitoring, Environment Canada). He indicated that there is only one site Souris River at Coulter (just downstream of Westhope) that is operated as part of the Souris River bilateral water quality monitoring. Gregg Wiche indicated he would revise the proposal to include the Canadian station.

**Dennis Fewless moved to give Russ Boals and Dale Frink the authority to submit the water quality IWI submission upon their review and approval. Doug Johnson seconded. Carried.**

There was discussion of submission of a proposal to conduct LIDAR surveys in the basin in preparation for a hydrologic basin model. Doug Johnson will ask some of his staff to put together a short write-up for a cost estimate that can be provided to Ted Yuzyk and Willem Brakel. Bob Harrison suggested that it be vetted through the Hydrology Committee.

**ACTION:** Doug Johnson to setup a conf call of the Hydrology Committee for the end of May to discuss the IWI proposal.

5. Other Business -- none
6. Adjournment – Dale Frink adjourned the meeting at 11:00 a.m.

## **List of Attendees, International Souris River Board Conference call, March 18, 2009**

### **Board Members in Attendance**

Bob Harrison, Member for Canada, Manitoba Water Stewardship  
Dale Frink, USA Co-chair, ND State Water Commission  
Dennis Fewless, Member for the USA, ND Department of Health  
Doug Johnson, Member for Canada, Saskatchewan Watershed Authority  
Gregg Wiche, Member for the United States, US Geological Survey  
Scott Gangl, Member for the United States, North Dakota Game and Fish

### **Regrets**

Col. Jonathan Christensen, Member for the USA, US Army Corps of Engineers  
Megan Estep, Member for the USA, US Fish and Wildlife Service  
Dwight Williamson, Member for Canada, Manitoba Water Stewardship  
Russell Boals, Canadian Co-chair, Environment Canada  
Richard Zitta, Member for Canada, Saskatchewan Ministry of the Environment

### **Support Staff in Attendance**

Brian Yee, Canadian Co-secretary, Environment Canada  
Ed Eaton, IJC Technical Specialist, US Army Corps of Engineers  
Gary Erickson, Refuge Manager, US Fish and Wildlife Service  
Kelly Hogan, Project Leader, US Fish and Wildlife Service  
Ken Bottle, Hydrologist, US Fish and Wildlife Service  
Mike Sauer, Water Quality, North Dakota Department of Health  
Paul Pilon, Engineering Advisor, IJC  
Robert White, USA Co-secretary, ND State Water Commission  
Steve Robinson, North Dakota Data Chief, United States Geological Survey  
Tom Pabian, Upper Souris Wildlife Refuge Manager, USFWS

### **Observers**

Dan Jonassen, City of Minot