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## FINAL Minutes

International Souris River Board  
Conference Call, September 25, 2009

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1. Approval of Agenda

- a. Russell Boals opened the meeting at 10:00 a.m. MDT. Dwight Williamson motioned to accept the agenda. Megan Estep seconded the motion. Carried.

2. Approval of Minutes of June 18, 2009 meeting.

- a. Ed Eaton suggested an amendment to minute 4.10.d as he had completed the task. Megan Estep motioned to approve the minutes of the June 18, 2009 meeting as amended. Doug Johnson seconded the motion. Carried.

3. Review of Action Items from the June 18, 2009 meeting.

- a. See attached table – Status of Action Items.

4. Determination of Natural Flow of the Souris River at Sherwood from January 1 to August 31, 2009.

- a. Dave Helfrick reviewed the determination of natural flow. Highlights noted:
- Rafferty Reservoir rose 2.5 m during runoff.
  - Long Creek runoff was twice the long term average.
  - Natural flow at Sherwood of 185,142 dam<sup>3</sup> was the highest since 2001.
  - U.S.A. share was 74,000 dam<sup>3</sup>. They received 86,560 dam<sup>3</sup> resulting in a 12,500 dam<sup>3</sup> surplus.
  - All reservoirs in Canada are at or near FSL. Releases are being made to drawdown the reservoirs in preparation for the 2010 spring runoff.
- b. Russell Boals noted that recorded flow at Eastern Crossing of Long Creek exceeded the recorded flow at Western Crossing of Long Creek thereby meeting the criteria for Recommendation 2. Dale Frink motioned to accept the determination of natural flows. Gregg Wiche seconded the motion. Carried.

## 5. Apportionment Requirements and Actions

- a. Doug Johnson reported that Rafferty and Alameda Reservoirs are 12 cm and 17 cm respectively above February 1 target levels. Release rates of 1 m<sup>3</sup>/s from Rafferty and .2 to .3 m<sup>3</sup>/s from Alameda combined with evaporation rates of approximately 1 m<sup>3</sup>/s will bring reservoirs to target elevations by October 31. Total release into North Dakota is expected to be 7700 dam<sup>3</sup> or 6,250 acre-feet. Flow rates at the border are currently 1.6 m<sup>3</sup>/s.
- b. Kelly Hogan noted that Lake Darling elevation is at 1595.86 feet which is normal operating level.
- c. Gary Erickson noted that at J. Clark Salyer the intention is to lower the pools by 6000 acre-feet and then continue to match outflow to inflow. Flow rate at Westhope is currently 180 cfs and they expect to maintain this flow to mid-December.
- d. Bob Harrison noted that as long as flows stay uniform, this should not cause any problems in Manitoba. Dale Frink asked if flow rates could be increased so the 6000 acre-feet volume could be passed before December 1. Russell Boals suggested SWA, USFWS, and MWS discuss water management operations. All agreed.

ACTION: Gary Erickson, Alf Warkentin, Doug Johnson, and Kelly Hogan to discuss water management operations.

## 6. Update on water quality conditions.

- a. Bruce Holliday reported that the high flows had some flushing which resulted in lower TDS. Mike Sauer noted that nutrients and loading will have increased due to inundation of farmland. He also noted that the flushing effect of high flows can remove vegetative matter in the channel which can lead to improved DO levels in the winter. There was some joint sampling conducted in July and August as part of the QC process.

## 7. 2008 Souris River Board Annual report

- a. Bob White reported on the progress of production of the annual report. It is in the process of being sent for printing.

## 8. Update on International Watershed Initiative

- a. Gregg Wiche reported that the water quality monitoring review project had not moved forward as receipt of funding from the IJC was delayed. Gregg Wiche had contacted the IJC and they indicated that larger projects had received priority for

<p>funding.</p> <p>b. Russell Boals reported that the Board had asked the IJC to lead on a hydrology/hydraulics workshop. Russell noted that he has not heard from Paul Pilon.</p> <p style="text-align: center;">ACTION: Russell Boals to contact Paul Pilon for follow-up.</p> <p>a. Doug Johnson noted that a discussion of needs will be part of the Hydrology Committee discussion to take place in October.</p>
<p>9. ISRB presentation at IJC Fall meeting in Ottawa</p> <p>a. Russell Boals reviewed what would happen at the IJC meeting. Russell reviewed the proposed content of the presentation. Brian Yee suggested adding a slide discussing the 2009 spring flood event.</p>
<p>10. Update from Committees</p> <p>a. The Hydrology Committee will meet at 8:30 a.m., October 8 in Bismarck at the offices of the State Water Commission.</p> <p>b. Other items covered under review of action items.</p>
<p>11. Arrangements for February 2009 meeting.</p> <p>a. All agreed to hold the next meeting on Tuesday, February 23, 2010 in Denver, Colorado at the offices of the USFWS.</p>
<p>12. Other Business</p> <p>a. Russell Boals noted the draft water information kits produced by the consultant. He requested the Board to review and provide comments. Kits will go to print in November.</p> <p style="text-align: center;">ACTION: Board to provide comments to Brian Yee by mid-October. Brian will forward comments to the consultant by the end of October.</p>
<p>13. Adjournment.</p> <p>a. Meeting adjourned at 10:50 a.m.</p>

# **DETERMINATION OF NATURAL FLOW OF SOURIS RIVER AT INTERNATIONAL BOUNDARY (SHERWOOD)**

All Quantities Reported In Cubic Decametres

FOR THE PERIOD: JANUARY 1 TO AUGUST 31, 2009

LONG CREEK BASIN												
LARSEN RESERVOIR			4	BOUNDARY RESERVOIR					10	11	12 *	13
				INFLOW	OUTFLOW							
1	2	3		5 *	6	7	8	9				
STORAGE CHANGE	EVAPORATION	DIVERSION	TOWN OF RADVILLE PUMPAGE	LONG CREEK AT EASTERN CROSSING	LONG CREEK NEAR ESTEVAN	ESTEVAN PIPELINE	DIVERSION CANAL	TOTAL (OUTFLOW)	DIVERSION	MINOR PROJECT DIVERSION	U.S.A. DIVERSION BETWEEN WESTERN & EASTERN CROSSING	TOTAL DIVERSION LONG CREEK
143	154	297 (1+2)	30	55700 1050 PIPELINE	12200	1420	33600	47220 (6+7+8)	9530 (5-9)	840	300	10997 (3+4+10+11+12)

UPPER SOURIS RIVER BASIN - ABOVE ESTEVAN												
NICKLE LAKE RESERVOIR				18	ROUGHBAK RESERVOIR			RAFFERTY RESERVOIR			25	26
14	15	16	17		19	20	21	22	23	24		
STORAGE CHANGE	EVAPORATION	CITY OF WEYBURN PUMPAGE	DIVERSION	CITY OF WEYBURN RETURN FLOW	STORAGE CHANGE	EVAPORATION	DIVERSION	INFLOW	OUTFLOW	DIVERSION	MINOR PROJECT DIVERSION	TOTAL DIVERSION UPPER SOURIS RIVER
5200	2016	1410	8626 (14+15+16)	670	600	272	872 (19+20)	125540	34900 1050 PIPELINE	89590 (22-23)	1540	99958 (17-18+21+24+25)

LOWER SOURIS RIVER--ESTEVAN TO SHERWOOD			
27	28 *	29	30
CITY OF ESTEVAN NET PUMPAGE	SHORT CREEK DIVERSIONS IN U.S.A.	MINOR PROJECT DIVERSION	TOTAL DIVERSION LOWER SOURIS RIVER
1250	1360	1000	3610 (27+28+29)

MOOSE MOUNTAIN CREEK BASIN							
MOOSE MOUNTAIN LAKE			ALAMEDA RESERVOIR			37	38
31	32	33	34	35	36		
STORAGE CHANGE	EVAPORATION	DIVERSION	STORAGE CHANGE	EVAPORATION	DIVERSION	MINOR PROJECT DIVERSIONS	TOTAL DIVERSIONS MOOSE MOUNTAIN CREEK BASIN
123	969	1092 (31+32)	13700	4515	18215 (34+35)	1450	20757 (33+36+37)

NON-CONTRIBUTORY BASINS		
39	40	41
YELLOW GRASS DITCH	TATAGWA LAKE DRAIN	TOTAL ADDITIONS
32500	2580	35080 (39+40)

SUMMARY OF NATURAL FLOW					
42	43 *	44	45	46	47
TOTAL DIVERSION SOURIS RIVER BASIN	RECORDED FLOW AT SHERWOOD	NATURAL FLOW AT SHERWOOD	U.S.A. SHARE	FLOW RECEIVED BY U.S.A.	SURPLUS (+) OR DEFICIT (-) TO U.S.A.
135322 (13+26+30+38)	84900	185142 (42+43+41)	40% OF 44 74060 50% OF 44	86560 (12+28+43)	(46-45) 40% SHARE 12500 (46-45) 50% SHARE

RECOMMENDATION - SECTION 2		
ANNUAL FLOW OF LONG CREEK		
48	49 *	50
RECORDED FLOW AT WESTERN CROSSING	RECORDED FLOW AT EASTERN CROSSING	SURPLUS (+) OR DEFICIT (-) FROM U.S.A.
46000	55700	9700 (49-48)

\* DATA CONTRIBUTED BY U.S.G.S.

International Souris River Board Meeting  
September 25, 2009  
Attendance

**NAME & AFFILIATION**

Dave Helfrick – Water Survey of Canada  
Megan Estep – U.S. Fish & Wildlife Services (Denver CO.)  
Robert White – N.D. State Water Commission  
Steve Robinson – USGS  
Doug Johnson – Saskatchewan Watershed Authority  
Scott Gangl – N.D. Game & Fish Department  
Bob Harrison – Manitoba Stewardship  
Gregg Wiche – USGS, Bismarck N.D.  
Mike Sauer – N.D. Department of Health  
Kelly Hogan – USFWS, Souris River Basin Refuges  
Russell Boals – Environment Canada  
Dale Frink – N.D. State Water Commission  
Brian Yee – Environment Canada  
Allen Schlag – USNWS  
Dennis Fewless – N.D. Department of Health  
Duane Anderson – USNWS  
David Donald – Environment Canada

**Regrets**

Richard Zitta – Saskatchewan Environment  
Paul Pilon – IJC (Ottawa)  
Mark Colosimo – IJC (Washington, D.C.)  
Ken Bottle – U.S. Fish & Wildlife Services  
Dwight Williamson – Manitoba Water Stewardship

Draft Agenda  
International Souris River Board  
Conference Call  
11:00 a.m. CDT (MB, ND, MN); 10:00 a.m. MDT (SK, CO)  
Friday, September 25, 2009

To join the conference, please call **1-866-646-2080**.

At the prompt, using the keys on your telephone, enter the following conference code: **7805040**, followed by the "#" key.

1. Review of agenda
2. Approval of minutes for June 18, 2009 meeting
3. Review of action items from the June 18, 2009 meeting
4. Natural flow determination--January 1 to August 31, 2009
5. Apportionment requirements and actions
  - October to December 31, 2009
  - Prior to February 1, 2010
6. Update on Water Quality Conditions
7. Approval of 2008 Souris River Board annual report
8. Update on International Watershed Initiative
  - Update on proposals submitted
  - New proposals – LIDAR, others
9. ISRB presentation at IJC fall meeting in Ottawa
10. Update from Committees
11. Arrangements for February 2009 meeting (Denver?)
12. Other business
13. End of call

**International Souris River Board  
September 25, 2009 Conference Call  
STATUS OF ACTION ITEMS**

<b>PERSONS RESPONSIBLE</b>	<b>AGENDA ITEM</b>	<b>MINUTE</b>	<b>ACTION</b>	<b>STATUS as of Sept. 25, 2010</b>
Russell Boals	Review of action items	June 18 - 4. Feb 27 - 10b.	Russell Boals to determine what analysis has been done on Inflow/Outflow vs. Change in Storage for Rafferty Reservoir and provide a report to the Hydrology Committee.  At the June 18 meeting Russell noted that he had a brief discussion with Mike. Russell was to follow-up with Mike to request a summary of his activity.	Incomplete. Russell will contact Mike for follow-up.
Doug Johnson	Hydrology Committee	June 18 - 9a. Feb 27 - 10a.	Doug Johnson to provide a copy of the revised draft Terms of Reference of the Hydrology Committee to the Board and Secretary. Doug to send out by June 25.	Incomplete. Doug noted that he would send this out by the end of September.
Doug Johnson	"	Feb 27 - 10a.	Doug Johnson to coordinate and call a meeting of a Canadian team for production of a draft procedures manual.	Incomplete.
Bob Harrison	Flow Forecasting Liaison Committee	June 18 - 10a	Bob Harrison will contact Martin Graczyk to confirm the members of the committee and arrange a process to review the Terms of Reference.	Incomplete. Bob will contact Martin for follow-up.
Bob Harrison Martin Graczyk Ed Eaton	"	June 18 - 10d.	SRFFLC to write a report on the spring 2009 flood. The report is to document what happened, provide a chronology of events, examine why the forecast (at Minot) was too high, lessons learned, and make recommendations for improvements for the future.	Incomplete.
Russell Boals	"	June 18 - 10b.	Russell Boals will provide Brian Yee with the new committee member for the Water Survey of Canada	Incomplete. Russell reported that this has not been completed.
Dwight Williamson Richard Zitta	Aquatic Ecosystem Health Committee	June 18/09-11c	Dwight Williamson to find rep on committee from MWS. Richard Zitta to follow-up with Susan Cosen as rep from DFO.	Dwight Williamson had sent an email June 25 noting that Nicole Armstrong will represent MWS. Richard Zitta sent an email to Russell Boals Sep 8 noting that Russell should send a note to Dr. Wheatley, RD of DFO. Still waiting for word from DFO.
Russell Boals Brian Yee	International Watershed Initiative Projects	June 18 - 12a.	Russell Boals and Brian Yee to revise the IJC IWI proposals to address the review committee's conditions.	Incomplete. Russell and Brian have talked briefly but have not met to discuss the revision.
Megan Estep Richard Zitta Bob Harrison	"	June 18 - 12b.	The three committees to review the IWI proposal and provide comments to the Board. Megan to contact the Hydrology Committee, Richard to contact the Aquatic Ecosystem Committee, Bob Harrison to contact the Flow Forecasting Liaison Committee.	Incomplete. Megan, Richard, and Bob will follow-up.

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STATUS OF ACTION ITEMS**

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Paul Pilon Mark Colosimo	“	June 18 - 12c	IJC to provide leadership in developing hydrologic/hydraulic modeling workshop(s). Russell Boals and Dwight Williamson to participate on workshop organizing committee.	Incomplete. Russell noted that this workshop will be preparatory activity to the hydrologic/hydraulic modeling proposals.
Doug Johnson	“	June 18-12 f June 18 - 4 Mar. 18 - 4a	Doug Johnson to lead on the development of the IWI LIDAR Proposal. Doug Johnson to setup a conference call of the Hydrology Committee for the end of May to discuss the IWI proposal. (Doug Johnson was to ask some of this staff to prepare a cost estimate for LIDAR surveys in the Souris River basin. Doug Johnson volunteered to lead on preparing the IWI proposal at the June meeting).	Incomplete. Doug reported that no progress has been made.
Don Hood	Other business -- Annual Report	June 18 - 13a.	Don Hood to send the determination of natural flow for 2008 to Bob White electronically.	Completed.
Dwight Williamson Bob Harrison	“	June 18 -13b.	Dwight Williamson and Bob Harrison to seek photos from the Souris River basin in Manitoba and send to Bob White (for the 2008 annual report)	Incomplete. No photos were received so Bob White used the same photos from the 2007 annual report for the 2008 report.
Megan Estep	Other business – Hydrology Committee	June 18 - 13c.	Megan Estep to organize a meeting of the Hydrology Committee at the USFWS office in Minneapolis for early October.	Incomplete. Megan reported that the meeting is in Bismarck.

Note: When two or more meetings are referenced to an item; that indicates a carry-forward of an action item from previous meetings.