# INTERNATIONAL SOURIS RIVER BOARD



# CONSEIL INTERNATIONAL DE LA RIVIÈRE SOURIS

International Souris River Board Summer Meeting
Grand International Inn, Minot, ND
June 15, 2010
Final Minutes

- 1. Introduction and Opening Remarks. Dale Frink convened the meeting at 8:30 a.m.
- 2. Approval of Agenda. There were no changes to the agenda.

Gregg Wiche motioned to accept the agenda. Megan Estep seconded the motion. Carried.

3. Approval of Minutes of February 23, 2010 meeting and Minutes of March 23, 2010 conference call.

Russell Boals requested a change to the February 23, 2010 draft minutes on page 3, item 5b, last sentence: changing the word "does" to "may".

Doug Johnson motioned to accept the minutes as amended. Bob Harrison seconded the motion. Carried.

Russell Boals noticed a spelling error in Moose Mountain in the March 23, 2010 draft minutes.

Dwight Williamson motioned to accept the minutes as amended. Gregg Wiche seconded the motion. Carried.

4. Review of Action Items.

See attached table, Appendix A.

5. Review of June 14, 2010 Public Meeting.

Dale Frink thought the meeting was successful and noted that about 10 members of the public attended the meeting. There was considerable discussion from the public on issues pertaining to water management when those issues fall under the overlapping jurisdictions of the city of Minot and the county. Russell Boals agreed that the meeting was very useful. David Donald commented that Heather Duchscherer's presentation on water quality on the Souris River was very good. In regards to the harm to riparian habitat identified in the field surveys, David noted that there are programs in Canada that producers can access to address riparian protection. Doug Johnson stated that Saskatchewan Watershed Authority's surveys indicate cattle presence in the stream. He thought the presentation was timely and useful to see the impacts of cattle operations in Saskatchewan on the Souris River. Doug noted that the Upper Souris Watershed Planning Activity being led by Saskatchewan Watershed Authority covers the Souris River basin in Saskatchewan upstream of Sherwood. Dennis Fewless noted that Heather Duscherer has been involved in

that activity. He also noted that North Dakota has some cost share programs with funding from various sources to provide producers with incentives to address riparian zone fencing and protection. Dwight Williamson noted that Manitoba has similar programs to address riparian zone protection.

6. Determination of Natural Flow of the Souris River at Sherwood to May 31, 2010.

Russ Boals reviewed the table (attached). The Long Creek basin had a diversion of 7689 dam<sup>3</sup> most due to a diversion of 6407 dam<sup>3</sup> to Boundary Reservoir. The Upper Souris River basin above Estevan had a diversion of 14717 dam<sup>3</sup> primarily due to a diversion of 2478 dam<sup>3</sup> at Nickle Lake and 11148 dam<sup>3</sup> at Boundary Reservoir. The Moose Mountain Creek basin had a diversion of 6511 dam<sup>3</sup> most due to a diversion of 3196 dam<sup>3</sup> at Alameda Reservoir and 1865 dam<sup>3</sup> at Moose Mountain Lake. The total diversion in the Souris River basin in Saskatchewan was 32054 dam<sup>3</sup>. Recorded flow at Sherwood was 14405 dam<sup>3</sup>. Natural flow at Sherwood was 35078 dam<sup>3</sup>. As this is under the 50000 dam<sup>3</sup> criterion, the USA share is 50% of 17540 dam<sup>3</sup>. Flow received by the USA was 16100 dam<sup>3</sup> with a resultant under-delivery as of May 31 of 1440 dam<sup>3</sup>. Surplus delivery of 1325 dam<sup>3</sup> was made on Long Creek thereby satisfying the Recommendation in Section 2 of the 2000 Interim Measures as Modified.

Dale Frink noted that in February it had appeared that conditions were right for flood conditions but the very gradual spring thaw with frequent freeze-thaw periods had resulted in much lower than expected flows. Dale Frink asked Doug Johnson what the plans are for making up the deficit. Doug noted that with recent inflow into Rafferty Reservoir after May 31 due to rainfall, the deficit is likely around 4000 dam<sup>3</sup>. Doug has had discussions with Kelly Hogan regarding the best time to make the release to meet the needs of USFWS. Scott Gangl noted that if a release can be maintained in the summer, this would help improve the dissolved oxygen levels in the Souris River.

# Megan Estep motioned to accept the determination of natural flows. Gregg Wiche seconded the motion. Carried.

7. Review of 2010 spring hydrologic conditions, water management operations, and forecast for summer 2010.

#### 1. Saskatchewan

Doug Johnson provided an overview of the 2010 spring runoff in Saskatchewan. Boundary Reservoir is at 561.8 m elevation. The diversion from Boundary Reservoir to Rafferty Reservoir was only used once. Boundary Reservoir is currently full. Rafferty Reservoir is at 550.8 m or about 1 foot above FSL. This is to be released to bring the level down to a target of 550.5 m. Alameda is at 561.3 m elevation. Doug noted that Alameda will need to be lowered by about 1 foot. Precipitation since April across Western Canada has been >200% of normal. Flooding is prevalent in many areas of Saskatchewan. About 5 million acres remain unseeded in Saskatchewan due to the wet conditions.

#### 2. North Dakota

Steve Robinson provided an overview of the 2010 spring runoff in North Dakota. He noted that flows in the upper part of the basin were lower than expected. Flows in the lower part

of the basin were higher. Peak flows at Sherwood and Westhope were below normal ranking 66 in 80 years of record and 41 in 81 years of record respectively. However, the mean daily discharge in April and May at Westhope were higher than the long term statistical daily flows. Dale Frink noted that there was a considerable snow pack but the slow melt resulted in limited runoff. Allen Schlag noted that their measurements of frost depth indicated that frost penetration was lower than normal. Doug Johnson noted that sublimation resulted in considerable loss of snowpack in Saskatchewan.

# 3. Manitoba (Bob Harrison, Alf Warkentin)

Bob Harrison noted that Alf Warkentin is retiring and thanked him for his many years of service to the Board. Bob Harrison reviewed a report prepared by Alf which provided an overview of the 2010 spring runoff in Manitoba. The 2010 spring peak flows and stages were average to below average. Runoff began in mid-March but was slowed by a very gradual melt. Spring runoff and peak flows were less than had been predicted in the February and March flood outlooks.

# 4. U.S. Refuges and reservoirs on the Souris River

Kelly Hogan noted that inflow to the refuges was less than expected. Releases from the refuges were started in mid-February in preparation for what was expected at that time, a significant runoff. When the slow melt resulted in much lower flow forecasts, the releases from the refuges was cut back.

# 8. Update from Hydrology Committee

#### a. Terms of Reference review

Megan Estep reported there has been limited progress by the committee. She noted that there has been no feedback received on changes to the Terms of Reference.

#### b. Membership update

Megan asked if Bob Harrison is still participating as a member of the committee. Bob replied that he would. Megan noted that there has been no change in the membership of the committee.

#### c. Review of work plan items

This was completed during the discussion on action items. The committee has not met recently and progress has been limited. Russ Boals asked if the committee had any plans to meet in late summer or in the fall. Megan and Doug Johnson indicated that they had no plans to meet. Russ and Dale Frink encouraged the Committee to meet.

ACTION: Doug Johnson and Megan Estep to arrange a meeting of the Hydrology Committee to make progress on work plan items.

#### 9. Update from Flow Forecasting Liaison Committee

#### a. Terms of Reference review

Bob Harrison reported the Terms of Reference have been circulated. There has been no feedback received on changes to the Terms of Reference. Russ Boals suggested an action item for the Board to review the Terms of Reference for the Hydrology Committee and the Flow Forecasting Liaison Committee and if no comments are

submitted by July 30, the Terms of Reference should be considered final.

ACTION: Board to submit comments on Terms of Reference of the Hydrology Committee and Flow Forecasting Liaison Committee by July 30.

# b. Membership update

Allen Schlag confirmed that Brian Connelly is the US co-chair.

# c. Review of work plan items

There was some discussion of the annual report provided by the SRFFLC. Allen noted that the Canadian and USA co-chairs agreed to produce the report on alternate years (the Canadian co-chair would produce the report one year and the US co-chair would produce the report the next year).

# 10. Update from Aquatic Ecosystem Health Committee

a. Terms of Reference review No discussion.

## b. Membership update

Russ Boals reported that Richard Zitta had indicated that he will be focused on other priorities and suggested another Board liaison be selected. Russ also reported that a chair of the Committee has not been selected. At this time no one has volunteered to Chair the Committee. Bruce Holliday volunteered to coordinate a conference call of the Committee. Selection of a chair will be on the agenda for that call.

ACTION: Bruce Holliday to coordinate a conference call of the AEHC.

Gregg Wiche reported that Joel Galloway will be able to participate on the committee.

Scott Gangl was selected to be the Board liaison replacing Richard Zitta.

# c. Review of work plan items No discussion.

# 11. 2010-11 Work plan

Russ Boals reviewed the 2010-11 work plan. He suggested there are sufficient activities on the work plan. Gregg Wiche suggested the timeline for the completion of the review of the joint water quality monitoring program be changed from September 2010 to February 2011.

# Doug Johnson moved to approve the 2010-11 work plan as amended. Gregg Wiche seconded the motion. Carried.

#### 12. Update on International Joint Commission Activities.

a. Update on Hydrologic/hydraulic modeling workshop
 Paul Pilon reported on the IWI modeling workshop to be held June 28-30 in Winnipeg.
 He reviewed the planned agenda for the workshop. The workshop has two objectives: define the Boards' objectives with regard to the need and application of models and

define what models are available. Paul noted that Russell Boals, Dwight Williamson and Gregg Wiche are on the planning committee for the workshop. There are 28 people registered to attend so far and the facility holds 40 so there is room for more attendees. Those who want to attend should contact the IWI coordinators: Ted Yuzyk (Canada) and Bob Reynolds (USA). Paul noted there may be some funding to support attendance by non-federal attendees. Russell Boals noted that the workshop agenda is broader than hydrology and hydraulics and includes aquatic ecosystem health.

b. Update on International Watersheds Data Harmonization
Mark Colosimo presented a PowerPoint prepared by Mike Laitta with an update on the
Souris Basin Hydrographic Data Harmonization. The phases of the project include
basin and sub-basin and flow network delineation. Thirteen discrete polygons were
identified in the Souris River basin. There were some discrepancies in matching the
boundaries at the Canada-USA border. In phase 1, those discrepancies have been
resolved to seven seamless sub-basins across the International Boundary by the Task
Force led by Mike Laitta. In phase 2, a several day workshop will be required with
technical representatives from various agencies to work through the details of the
harmonization, review the delineations and the streamflow network. In phase 3, the
dataset will receive further review for final approval of the data.

The following next steps are recommended: at the February meeting, a 30 minute presentation is requested for the agenda to allow the Task Force to provide an update on progress. Also at that meeting, the Board would need to define people with requisite technical expertise to participate in the Phase 2 workshop. The target is to have the entire International Boundary harmonization completed by the end of the 2012 fiscal year. This means that the Souris would need to be largely completed by the end of 2011.

Bob White noted that Anne Fritz from the state of North Dakota has been involved in a drainage basin delineation exercise within the state and that activity

ACTION: Brian Yee to add a presentation on the International Watersheds Data Harmonization to the February 2011 Board meeting agenda.

Dwight Williamson suggested agencies should start identifying their technical resources for attendance at a data harmonization workshop. Russ Boals noted that Brian Yee had been involved in coordinating a meeting early in the process. Brian Yee reported that the agencies involved in that meeting included Environment Canada, Saskatchewan Watershed Authority, and Agriculture and Agri-food Canada and was focused on the Saskatchewan portion of the basin. Russ Boals asked Brian to send the list of attendees of that meeting to the Board.

ACTION: Brian Yee to send list of attendees to the early drainage basin harmonization meeting to the Board.

The Phase 2 workshop would be expanded to involve representatives from Saskatchewan Ministry of Environment; the province of Manitoba; USACE, USFWS, and various agencies in the state of North Dakota including ND Department of Health, ND Fish and Game.

#### 13. Other Business

# a. Rafferty Dam Seepage

Doug Johnson provided an update on remediation measures. French drains have been installed. A toe berm is to be installed in August/September 2010. Rafferty Dam is to be fully functional by 2011. Doug will provide an update at the February 2011 Board meeting.

# b. LIDAR surveys in North Dakota

Dale Frink reported that Ward County has conducted a LIDAR survey. The State Water Commission funded 50% of the survey. The cost was \$382K. Vertical resolution of the survey was 6 inches in Ward County and 3 inches in the City of Minot. The State Water Commission has extended the survey into McHenry County.

## c. Board Changes

Dale Frink announced his retirement. His last day at the State Water Commission is June 30, 2010. Russ Boals thanked Dale for his contribution to the Board.

## d. 2009 Annual report

Bob White reported that progress is going well. He will be contacting Dave Helfrick to obtain some data. Bruce Holliday reported that some 2009 water quality data remains outstanding. No photos have been submitted from Manitoba.

## e. Water Quality objectives

Paul Pilon asked if there is a report documenting the water quality objectives. Dennis Fewless thought the first annual report of the Souris River Bilateral Water Quality Monitoring Group would have the objectives in it. Dwight Williamson thought there may be a separate report on the topic of water quality objectives. Megan Estep noted that she has a report and she will send that to Paul. Doug Johnson asked that Megan circulate the report to the entire Board.

ACTION: Megan Estep to provide the Board and the IJC with a copy of the Souris River Bilateral Water Quality Monitoring Group report pertaining to water quality objectives.

# f. Lake Metigoshe

Bob White reported that there has been no update from the State Department. Dale Frink provided some background to the issue. In 1937 a dam was built in the USA that raised water level into Canada. There were some concerns but some cabin owners in the past, but to his knowledge cabin owners on both sides want the water level on the lake to stay at its current level. Dwight Williamson noted that there had been some concerns from some cabin owners in Manitoba in the past but to his knowledge those concerns no longer exist. He said that the dam needs to be formally accepted and he suggested that there are two means to achieve that: state and provincial government can agree through a bilateral agreement that it is an acceptable control structure or the IJC does it through a formal application process and acceptance. Bob White said an application has been sent to the IJC which is why this matter has been raised to the State Department. However, Paul Pilon said a formal application to the IJC has not been made. At the time of construction, a request for approval to construct the dam to

the IJC was not submitted. Paul Pilon said there has never been a formal application to the IJC; however, the IJC does not have a formal application form. This form is in the process of being developed. Russ Boals asked if the IJC has a briefing note on the Lake Metigoshe issue. It would be useful as he receives intermittent requests for information on the issue and he is concerned that he may not have the latest information. It seems that such a document does not exist. Bob White noted that the dam is under the control of the Oak Creek Water Board. He said it is their responsibility to submit a letter for approval. He said he is not sure how they did that, but he said a letter has been sent asking how to proceed and it was decided to deal with Lake Metigoshe as an agreement between governments.

g. Northwest Area Water Supply (NAWS)

Dale Frink reported that the northern part of the project is nearing completion. The only part of the project not done is the connection to Lake Sakakawea.

# 14. Next meeting

A conference call will be held on Friday, September 24 at 10:00 a.m. CDT. The next face-to-face meeting will be held on Wednesday, February 23, 2011 in Regina, SK.

15. Adjournment – Dale Frink adjourned the meeting at 11:55 a.m.

# List of Attendees, International Souris River Board meeting, June 15, 2010

# **Board Members in Attendance**

Dale Frink, USA Co-chair, ND State Water Commission, Bismarck, ND
Dennis Fewless, Member for the USA, ND Department of Health, Bismarck, ND
Doug Johnson, Member for Canada, Saskatchewan Watershed Authority, Moose Jaw, SK
Dwight Williamson, Member for Canada, Manitoba Water Stewardship, Winnipeg, MB
Gregg Wiche, Member for the United States, US Geological Survey, Bismarck, ND
Megan Estep, Member for the USA, US Fish and Wildlife Service, Denver, CO
Russell Boals, Canadian Co-chair, Environment Canada, Regina, SK
David Donald, Member for Canada, Environment Canada, Regina, SK
Scott Gangl, Member for the United States, North Dakota Game and Fish,
Bob Harrison, Member for Canada, Manitoba Water Stewardship, Winnipeg, MB

#### Regrets

Richard Zitta, Member for Canada, Saskatchewan Ministry of the Environment, Regina, SK Col. Jonathan Christensen, Member for the USA, US Army Corps of Engineers, St. Paul, MN

# **Support Staff in Attendance**

Allen Schlag, Service Hydrologist, National Weather Service, Bismarck, ND Brian Yee, Canadian Co-secretary, Environment Canada, Regina, SK Ed Eaton, IJC Technical Specialist, US Army Corps of Engineers, St. Paul, MN Kelly Hogan, Project Leader, US Fish and Wildlife Service, Berthold, ND Ken Bottle, Hydrologist, US Fish and Wildlife Service, Denver, CO Mark Colosimo, Engineering Advisor, IJC, Washington, DC Paul Pilon, Engineering Advisor, IJC, Ottawa, ON Robert White, USA Co-secretary, ND State Water Commission, Bismarck, ND Kevin Johnson, Environmental Contaminants Program, USFWS, Denver, CO Bruce Holliday, Water Quality Monitoring, Environment Canada, Regina, SK Steve Robinson, US Geological Survey, Bismarck, ND

## **Observers**

John Pietsch, Ward County Water Resource Board, Minot, ND

# International Souris River Board <u>ACTION ITEMS – progress updated June 15, 2010</u>

PERSONS OR COMMITTEE RESPONSIBLE	TOPIC	MINUTE	ACTION	STATUS As of June 15, 2010
Doug Johnson	Development of a International Souris River Board Procedures Manual	Sep 25/09-3 Feb 27/09-10a.	Doug Johnson to coordinate and call a meeting of a Canadian team for production of a draft procedures manual. At the Feb 23, 2010 meeting, Doug reported this was incomplete.	Doug noted that the action item should be kept on the list as an action item as the manual is due to be delivered in June 2010.
Hydrology Committee (Doug Johnson and Megan Estep are co- chairs)	Calculation of Rafferty Reservoir net depletion.	Sep 25/09-3 June 18/09-4. Feb 27/09-10b.	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, 2009 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. At the Feb, 23, 2010 meeting, Russell reported that Mike Renouf no longer has the files and this is now on the work plan for the Hydrology Committee.	No progress.
Hydrology Committee	Development of a model to evaluate changes in the operating level of Lake Darling	Feb 23/10 – 5a.	Hydrology Committee to prepare a spreadsheet format compilation of models used in the Souris River Basin and review future needs and requirements.	No progress.
Bob Harrison	Flow Forecasting Liaison Committee	Sep 25/09-3 June 18/09-10a	Bob Harrison will contact Martin Graczyk to confirm the members of the committee and arrange a process to review the Terms of Reference. At the Feb 23, 2010 meeting, Bob Harrison reported that Terms of Reference have not been reviewed by the members due to other priorities. Bob is to contact Martin for follow-up.	Bob noted that Martin has circulated the Terms of Reference to the committee members but has not yet received any feedback. The committee was not active as no flooding occurred during the spring runoff.
Bob Harrison Martin Graczyk Ed Eaton	Report on the spring 2009 flood.	Sep 25/09-3 June 18/09-10d.	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.	Ed Eaton reported that he has spoken with Brian Connelly. Funding to do the work is available. Ed estimated that the report would be drafted by the end of September. Allen Schlag reported that Brian Connelly is working on a critique of the 2009 flood estimates produced by various organizations. Ed noted that he would like to incorporate Brian's report into his flood report.

# International Souris River Board <u>ACTION ITEMS – progress updated June 15, 2010</u>

PERSONS OR COMMITTEE RESPONSIBLE	ТОРІС	MINUTE	ACTION	STATUS As of June 15, 2010
Aquatic Ecosystem Health Committee	Phenol monitoring	Feb 23/10-14b	AEHC to review the phenol data and provide a written report to the Board.	Bruce Holliday reported that the AEHC has not met. Gregg Wiche noted limited phenol analysis will be done. Russ noted there are two questions to be addressed: 1. the monitoring for phenols, and 2. the process for changing the phenol objective. Dale Frink noted that in order for the IJC to make a decision on the phenol objective a report will be required.
Aquatic Ecosystem Health Committee	Water Quality monitoring	Feb 23/10-16	AEHC to prepare a report on the sampling and analysis for Total Coliform, e. coli, fecal coliform, and fecal streptococcus.	To be discussed under agenda item No. 10.
Richard Zitta Russell Boals	Aquatic Ecosystem Health Committee – finding a chairperson	Feb 23/10-19	At the Feb 23, 2010 meeting it was reported that all Committees have established a chair except the Aquatic Ecosystem Health Committee. Russell Boals is to talk to Richard Zitta about selecting a chair for the AEHC.	Russ Boals reported that Richard Zitta has indicated that he will be away on other priorities and has suggested that another Board liaison should be selected. To be discussed further under agenda item No. 10.
Russell Boals Dwight Williamson Brian Yee	IWI Modeling Steering Committee	Feb 23/10-20a 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. Brian Yee to send note to IJC indicating that Russell and Dwight will participate on the committee.	Russell Boals reported that a workshop will be held June 28-30 in Winnipeg. This will be the first of 3 workshops.
Brian Yee	ISRB SharePoint	Feb 23/10-20b	Brian Yee to contact John Yee, IT support for the IJC Ottawa, to set up a SharePoint for the ISRB.	Brian Yee reported that Jon Yee, IJC Ottawa has indicated that the SharePoint will be up and running in a week or two.
Russell Boals	ISRB Work plan	Feb 23/10-21	Russ Boals to provide suggested leads for each work plan item and send out the revised work plan to the Board.	Russ Boals reported that the work plan has been updated with suggested leads. To be discussed further under agenda item No. 11.

#### International Souris River Board <u>ACTION ITEMS – progress updated June 15, 2010</u>

PERSONS OR	TOPIC	MINUTE	ACTION	STATUS
COMMITTEE				As of June 15, 2010
RESPONSIBLE				
Doug Johnson	• • •	Sep 25/09-3 June 18/09-12 f June 18/09-4 Mar. 18/09-4a	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). At the Feb 23/10 meeting, Doug reported that this is on hold until there is a direction on the modeling to be done (which will be an outcome of the IJC workshops).	Doug Johnson reported that this is on hold pending outcome of the IWI modeling workshops.

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