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INTERNATIONAL
SOURIS RIVER
BOARD



CONSEIL
INTERNATIONAL
DE LA RIVIÈRE SOURIS

International Souris River Board

Kelly Inn 1800 North 12th Street
Bismarck, North Dakota -58501 - Phone: 701-223-8001
February 20, 2014

Final Minutes

Board Members:

Russell Boals, Todd Sando, Megan Estep, John Fahlman, Colonel Daniel Koprowski, Gregg Wiche, Mike Ell for Dennis Fewless, Scott Gangl. Via conference call – Nicole Armstrong, Mark Lee. Regrets – John-Mark Davies.

Attendees:

Lana Pollack, Mark Colosimo, Scott Jutila, Bob White, Colin Angus, Dan Selinger, Girma Sahlu, Jim Olson – KXMC TV Station, Minot; Dan Jonasson, Steve Robinson, Allen Schlag, Jeff Woodward, Frank Durbian, Dennis Reep, Lance Meyer, Tim Fay, Bruce Holliday, Ken Bottle, Cliff Hanretty, Claude Martin, Joe Goodwill, Tom Pabian, Darin Schepp, Heather Husband,

Via conference call – Ted Yuzik, Syed Moin, Al Pietroniro.

1. Introduction and Opening Remarks.

Todd Sando opened the meeting at 8:35 a.m. and welcomed IJC Commissioner Lana Pollack, IJC Advisor Mark Colosimo, Board members, and other participants to the meeting. Russell Boals also extended similar welcome notes to all attendees. T. Sando invited Board members and other participants to introduce themselves.

2. Approval of Agenda.

The agenda was approved as circulated.

Motion: Col. Daniel Koprowski moved to accept the agenda as presented. John Fahlman seconded the motion. Carried.

3. Approval of Minutes:

a. August 8, 2013 Face-to-face Meeting Minutes – John Fahlman suggested a minor modification in Agenda item # 5 - Hydrology Committee Report, fourth bullet- add the Water Security Agency (WSA) has now secured a second consultant to look at the PMF. The PMF study will be available once all the reviews have been completed. Nicole Armstrong also suggested minor changes on page 9, under Agenda#14 (c), Nutrient Management Study.

Motion: Megan Estep moved to accept the minutes as amended. Col. Daniel Koprowski seconded the motion. Carried.

b. September 17, 2013 Conference Call Minutes – No changes were made to the minutes.

Motion: Gregg Wiche moved to accept the minutes as circulated. Col. Daniel Koprowski seconded the motion. Carried.

c. November 18, 2013 Conference Call Minutes – No changes were made to the minutes.

Motion: Col. Daniel Koprowski moved to accept the minutes as circulated. Megan Estep seconded the motion. Carried.

4. Review of Action Items

It was agreed that any outstanding action items will be discussed as part of committee reports.

The action item related to the Spring 2009 Flood Report is outstanding. Scott Jutila mentioned that he has the draft ready and will send it out to board members once the internal editing has been completed.

5. Review of 2012 Hydrologic Conditions, Spring 2013 Hydrologic Forecast, and Planned Operations

a. Saskatchewan

John Fahlman reported that there was a large snowpack in 2013. However, the potential high snowmelt was moderated by dry soil conditions and a relatively slow melt. The runoff into Rafferty Reservoirs was approximately 1:20 flood event. In comparison, the runoff into Alameda was about 1:10 year event. The precipitation in the summer of 2013 across the entire province was generally near normal. The Water Security Agency (WSA) relied on rainfall to fill the reservoirs. The fall precipitation in the 30-days freeze-up was generally below normal except in central Saskatchewan which was above normal. Topsoil conditions were characterized as being generally adequate. The long range precipitation forecasts from Environment Canada for southern and central Saskatchewan indicate near normal precipitation for the winter of 2013/2014. Based on conditions as of February 1, 2014, both WSA and NWS project below median runoff. This projection is based on the assumption of average precipitation for February, March, and April 2014.

Boundary Reservoir was at an elevation of 560.3 m on February 1, 2014. According to the 1989 Agreement, the required pre-runoff drawdown elevation of 560.0 m. The volume of water currently in storage is above the pre-runoff elevation is 18,000 dam³. Since Boundary Reservoir

is a critical water supply to the City of Estevan, WSA intends to ensure an additional 18,000 dam³ storage is available in Rafferty in addition to Rafferty's required pre-runoff drawdown elevation. As a result, no releases are planned from Boundary at this time.

Rafferty Reservoir was at an elevation of 549.5 m on February 1, 2014. Throughout the winter, releases from Rafferty were maintained to achieve the February 1st target level of 549.5 m as per the 1989 International Agreement. Based on the 90th % inflow estimate of the 1989 Agreement, the required pre-runoff drawdown level is 550.2 m. Therefore, no additional pre-runoff drawdown is required for Rafferty inflow. However, as noted above an additional 18,000 dam³ must be made available in lieu of Boundary Reservoir.

Alameda Reservoir was at an elevation of 560.95 m on February 1, 2014. The maximum elevation for February 1st specified by the 1989 Agreement is 561.0 m. Based on the 90% confidence inflow specified in the 1989 Agreement the required pre-runoff drawdown level is 561 m. Therefore, it is not necessary to draw down Alameda any further before spring runoff.

b. North Dakota

Steve Robinson, USGS, provided a summary of 2013 flow conditions for the US portion of the Souris Basin. According to S. Robinson's report, the total volume of flow past the Long Creek at Noonan gage through December 31, 2013 calendar year was 90,413 acre-ft (111,524 dam³). This volume is about 172% greater than the median flow for the last 53 years. Flows for the reporting period January 1 to December 31, 2013 is 4,010 ft³/s which ranks 5 in 54 years of record.

S. Robinson also reported that the total volume of flow past the Souris River near Sherwood gage through December 31, 2013 calendar year was 295,080 acre-ft (363,981 dam³). The total flow for the 2013 calendar year exceeds the period of record median by 650%. Flows for the current year, based on the last 82 years of data are in the normal to above normal range. The peak discharge for the period January 1 to December 31 was 2,500 cfs (70.8 m³/s).

Flows recorded at the Souris River near Westhope gage, according to S. Robinson, exceeded the long-term mean for the entire period. The peak discharge for the period January 1 to December 31 was 5,400 ft³/s (153 m³/s).

The ND State Water Commission and the USGS have a low-flow monitoring program on the Souris River main stem in the vicinity of the Eaton Irrigation Project near Towner, North Dakota. Neither of the two monitoring gages was operated this past spring due to the higher than normal river levels.

Allen Schlag, NWS, mentioned there is still flow in the Souris which is higher than normal, but not excessive. There is very little snow cover in the US portion of the basin. There are no issues in Lake Darling however; there could be issues below Minot due to high water content in the soil and the resulting higher groundwater base flow. A. Schlag also noted below normal temperatures for the next three months with no significant precipitation. He also mentioned lower frost/soil temperatures, for example the frost depth was 43 inches in Bismarck, 53 inches in Wilston, and 39 inches in Towner. These are unusual frost depths resulting from extremely cold temperatures and very little snow cover. There is potential for flooding if it rains while the ground is still frozen. It is expected the soil will be free from frost by April. Cliff Hanretty, Eaton Irrigation District, noted that the soil is saturated and there are already problems with high groundwater and water in basements in his area.

c. US FWS

Frank Durbian presented a summary of refuge operations and flows for 2013. The total provisional inflow measured at Sherwood for the period January to May 2013 was 146,636 ac-ft (180, 876 dam³). This inflow was 176% of the historic record for the same period. The total provisional outflow measured at Foxholm on the south end of the Upper Souris Refuge for the first five months of 2013 was 150,734 ac-ft (185,930 dam³). This outflow was 213% of the historic record for the January-May period. Lake Darling elevation increased 1.20 ft (0.37m) from 1595.79 ft (486.4 m) on January 1st to 1596.99 ft (486.76 m) on May 31, 2013. Lake Darling was at 1596.95 ft (486.75 m) on June 1st 2013.

On March 19, the ISRB declared the 2013 runoff a flood event of 1:10 or greater. The 2013 flood event was officially declared over on July 15, almost four months after it was first declared.

With regards to the J. Clark Salyer National Wildlife Refuge, saturated soil conditions and late heavy snow events in the Souris River Basin produced significant local runoff in addition to releases made from dams in Saskatchewan and Lake Darling. As a result, the refuge was flooded from April through July 2013. The total outflow measured at Westhope for 2013 was 848,230 ac-ft (1, 046, 292 dam³). This was 85,279 ac-ft (105,192 dam³) more than the total measured inflow.

d. Manitoba

Mark Lee reported precipitation in 2013 was above normal in Manitoba. Soil moisture analysis shows southern and western regions of Manitoba had above normal conditions at the time of freeze-up in 2013. Furthermore, parts of the Souris River Basin are showing similar antecedent moisture and soil moisture conditions similar to fall 2010. The 2013 peak flow of the Souris River at Wawanesa occurred during the ice breakup period. The estimated peak was 8,500 ft³/s (240.7 m³/s). Well above normal flow conditions continued throughout the summer. A peak flow of approximately 6,800 ft³/s (192.6 m³/s) occurred in early July. In comparison, the normal flow for this time of year is a few hundred cubic feet per second. Flows and levels at the time of freeze up were well above normal along the Souris River in Manitoba. Current flows within the Souris are also above normal conditions.

The Manitoba portion of the Souris River Basin currently has normal snow pack conditions. Snow water equivalents have ranged from 50 to 80 mm (2.0-3.1 inches). Environment Canada's long term weather outlook for the first three months of 2014 is predicting near normal temperatures and precipitation throughout the basin. Although it is too early to predict, current conditions are showing slightly above normal flood potential conditions for the main stem of the Souris River. Manitoba's tributaries have slightly above normal runoff potential. However, actual runoff volumes and peaks are highly dependent on future weather conditions and upstream reservoir operations both in North Dakota and Saskatchewan.

The Board discussed the type of flood event to declare for 2014; and whether it should be a 1:10 event. We are still below average for this time of year and it will take a significant event to declare the flood status. Allen Schlag, NWS, stated the system as a whole is not close to 1:10 year flood event at this time. We are not there unless something dramatic happens in the near future.

Russell Boals noted that the basin is slightly below normal in Saskatchewan and North Dakota, but wet in Manitoba. A conference call for the third week of March was suggested to decide on the flood event.

Action: Secretaries will set up a conference call for March 20, 2014 at 10 a.m. CDT/9:00 a.m. CST for the Board to review the hydrologic conditions and determine the flood event.

Action: WSA will provide the 90-day volume estimate in time for the conference call.

6. Determination of Natural Flow of the Souris River at Sherwood to December 31, 2013

Dan Selinger reported the results of natural flows determined by Environment Canada for the period ending December 31, 2013. The total diversion in the Souris Rivers basin was 30,140 dam³. Recorded flow at Sherwood was 363,981 dam³. The natural flow computed at Sherwood was 331,444 dam³. According to these computations, the US share at 40% was 132,580 dam³. The flow received by the US was 366,184 dam³ which constitutes a surplus delivery of 233,604 dam³. The annual flow requirement / apportionment at Long Creek has also been met with a surplus of 32,924 dam³. D. Selinger also noted that there have been continuous high deliveries to US since 2009 and onwards.

Motion: Gregg Wiche moved to accept the Natural Flow Computation to December 31, 2013. Megan Estep seconded. **Carried.**

7. Hydrology Committee

John Fahlman requested that he and Megan Estep should step down from being the co-chairs of the Hydrology Committee. Ken Bottle and Rob Kirkness will take over the role of the co-chairs. K. Bottle has prepared a list of committee members and the outstanding action items assigned to the committee. The Hydrology Committee will be re-structured under the new co-chairs.

Motion: John Fahlman moved that he and Megan Estep step down from their co-chairs position and be replaced by Rob Kirkness and Ken Bottle, respectively. Motion seconded by Megan Estep. **Carried.**

Action: Secretaries to provide the Board with current list of membership for all committees.

8. Water Quantity Monitoring

Gregg Wiche, USGS, reported that the hydrometric network is sound and working properly. No changes are planned for 2014. Jeff Woodward mentioned that there won't be any changes to hydrometric gauges monitored by Environment Canada. J. Woodward added two evaporation stations will be automated this year. Operation of Boundary Reservoir, Long Creek near Maxim, and Souris River near Bechard will be transferred from WSA to Environment Canada after Spring 2014.

9. Water Appropriation in the Souris River Basin During 2013

J. Fahlman provided a list of license application for 2013 in Saskatchewan. There were four applications for surface water for a total of 8 dam³. In addition, the WSA received 18 new applications for groundwater of which 6 were approved. There are a total of 37 licenses approved /renewed to operate with a total volume of 3,709 dam³.

Bob White reported on the temporary permits issued in North Dakota in 2013. There were 57 new surface water permits issued in 6 counties for a total volume of 1,540.1 ac-ft. The water uses range from dust control to oil-well development, irrigation and road construction, among others.

10. Flow Forecasting Liaison Committee

John Fahlman reported that Committee has not met recently. The next meeting is proposed for March 3, 2014. Mark Lee mentioned Manitoba will announce a new member of the Committee soon.

11. Update from the Aquatic Ecosystem Health Committee (AEHC)

Bruce Holliday and Heather Husband provided a brief update on AEHC. B. Holliday mentioned the Committee has not met since May 2013. Another meeting will be scheduled in the next four weeks. One of the tasks the Committee will discuss is the “***Communication Protocol for Fish Kills in the Souris River***” (a handout was distributed to the Board indicating current committee members and contacts). B. Holliday and H. Husband mentioned AEHC has approved the protocol.

The Board needs time to review the protocol and possibly approve it at the March 20, 2014 conference call.

Action: Board to review and approve the Communication Protocol at the conference call to be held on March 20, 2014.

12. Compliance with Water Quality Objectives for 2013

B. Holiday also presented a summary of the water quality monitoring program. A total of nine samples were collected by Environment Canada in 2013 – eight samples were collected at Westhope and one joint sample was collected with the USGS at Sherwood. The data is incomplete as of February 6, 2014; therefore the results in this report are provisional.

The highlights included:

- Total Phosphorus exceeded its Water Quality Objective 0.10 mg/L for 7 of the 8 samples collected in 2013.
- *Sodium exceeded its objective of 100 mg/L for three of the samples reported to date
- *Sulphate exceeded its objective of 450 mg/L in one of the eight samples collected in 2013.
- *Total iron exceeded its water quality objective of 300 µg/L on April 29, 2013 with a value of 682 µg/L.

- pH value of 8.51 units was observed on September 23, 2013 compared to the objective 8.5 units.
- The Dissolved Oxygen (DO) concentration was above the 5 mg/L Water Quality Objective for all samples in 2013.
- Fecal coliform exceeded its Water Quality Objective of 200 no. /100mL once in 2013 with a value of 300 on June 17, 2013.
- *Chloride did not exceed the Water Quality objective of 100 mg/L in 2013, and
- *Total Boron did not exceed its objective of 0.50 mg/L in 2013.

*Indicates incomplete /provisional data until all the data have been received.

B. Holliday added 2013 is the first time since 1999 that Total Phosphorus value has been below its Water Quality Objective of 0.10 mg/L. Since April 2010, Chloride has not exceeded its Water Quality Objective of 50 mg/L. B. Holliday cautioned since the water quality data is incomplete and as a result a detailed interpretation of the data cannot be made at this time.

- Organics – Pesticide samples were collected in April, May, June and July of 2013. 2,4D, Atrazine, Bromoxynil, MPCA, and Picloram had positive results, but were below their respective Water Quality Objectives.

13. Water Quality Monitoring Plan

The 2014 Water Quality Monitoring Plan will be the same as 2013, unless flood conditions warrant otherwise. In that case, more samples may have to be collected.

Bruce Holliday announced he will retire on May 20, 2014. The Board thanked Bruce for his long term support to the water quality program and work with the AEHC.

Action: Board will look for another co-chair to lead the AEHC.

14. Report from the Souris River Task Force

Plan of Study (POS) – 2011 Flood

Scott Jutila gave a brief report on the Task Force which met yesterday on February 19, 2014. Both the Governor and Senator of North Dakota have sent a letter to the IJC to move the POS forward. North Dakota is prepared to provide financial assistance. Lana Pollack mentioned that the IJC has checked with governments in mid-December 2013 seeking for a response regarding the funding. To date, there is no reply from both sides of the governments. In the meantime, the IJC is trying to find some money internally to fund some of the activities identified in the POS.

The next IJC appearance is scheduled for April 28-May 2, 2014 in Washington D.C. There will be a meeting with governments on Friday, May 2 where the issue will be discussed. Todd Sando noted that there are a number of people who are anxious and want something done to protect them from recurring flooding in the Souris. This year is the third anniversary since the 2011 flood and we need to move forward with the POS.

The Board needs to decide what activities it can move forward with while waiting for the governments to decide on.

Skip Vecchia talked about the stochastic model that has been developed for the Souris. Syed Moin has prepared a *White Paper* in December 2013 that identified activities that the Board could undertake in the short term. There are 15-20 projects with the POS. Project 7 deals with *Regional and Reconstructed Hydrology* of the Souris River in support of the review of the Operating Plan. This work has been completed and the draft reviewed.

There was discussion about **Activity 1a** – Review language of the operating plan from the 1989 Agreement and produce a white paper highlighting key element, challenges and issues face from the 1989 to the present. The US ACE with support from USGS and US FWS could prepare the white paper to the Task Force. The Board would then review the operating rules and terminology. **Activity 1b** deals with provision of recommendations on areas where changes to the language of the operating rules may be required in the present form, i.e., no changes to the operating rules. The cost would be \$10k for Activity 1a and 20K for Activity 1b, respectively.

John Fahlman noted that the Board could proceed with these activities.

Motion: Col. Daniel Koprowski moved to proceed with Activity 1a. John Fahlman seconded the motion. **Carried.**

Gregg Wiche reminded that prior to moving forward, activities have to come to the Board for review and approval.

Skip Vecchia, USGS, provided a handout that deals with a proposal to ND SWC to develop a stochastic model for the Souris River at a cost of \$280,000. This study is not meant to replace the POS. The model will simulate long-term climate variability that could result in flood or drought conditions and their associated risks. Tim Fay noted monitoring for droughts is just as important as monitoring for floods and is eager to see the results of S. Vecchia's study.

Tim Fay gave a brief report on reconstructed hydrology. The process involves removing man-made regulations. The stochastic model will generate a range of possible flows for the entire Souris River basin.

If the IJC takes on the study, the Board becomes a vetting agency. However, the Co-Chairs highlighted the need for the ISRB to be fully engaged in the IJC Study Board. J. Fahlman stated that ISRB should be fully engaged and not just play an advisory role. Megan Estep also echoed J. Fahlman's comments. Lana Pollack mentioned the IJC has all the information ready for the IJC appearance in Washington to make a decision.

The Board agreed to follow a similar approach with **Activity 2** - Compile a list of Operating Plan review related to the project. The Task Force recommended proceeding with Gap Analysis in-house with the agencies involved.

Motion: Megan Estep moved to proceed with **Activity 2** and to stay close to the Agreement. Gregg Wiche seconded the motion. **Carried.**

Activity 3 - Compile a list of physical data of the Souris River Basin - needs IJC support. This includes the Data Harmonization work currently being done by Mike Laitta. Issues related to vertical data need to be resolved. M. Laitta will assess the type of help needed from the IJC.

Action: The Board Co-Chairs will send a joint request to the IJC asking for M. Laitta's support.

Activities 4 – Compile a list of reservoir characteristics data. Requires making a list of resource issues (\$65K). Each agency is expected to come up with a list for gap analysis to the Task Force and the Board.

Activity 5 – Physical instream and valley data for the Souris River and its major tributaries. Each agency will compile a list to include, running a routing model below the dams with the addition of some cross-sections, if needed. Agencies will do the analysis and report gaps. Activities 4 and 5 simply deal with providing a list of what is available already. The Board agreed that Activities 4 and 5 should proceed.

15. Update on Water Management Projects

John Fahlman reported the City of Estevan will draw its water from the Boundary Reservoir which is a more reliable and cheaper source of water. J. Fahlman also briefly talked about “clean coal technology” and noted that there is no excess water to allocate specially in drought conditions. The “clean coal technology” could utilize 1,500 dam³/year.

NAWS

Todd Sando mentioned that a few tasks were completed, such as the treatment facility in Minot. The court injunction is still in effect. The draft EIA is expected to be completed in 2014 and will go through the NEPA process.

Lake Metigoshe

Bob White reported there were no new developments since the last report. Still waiting to hear from the IJC. Mark Colosimo mentioned that the issue was raised and discussed with governments and waiting for a decision.

There was no other business from Manitoba.

16. International Watersheds Initiative Projects

a. IWI Workshop in Ottawa

Mark Colosimo reported on the IWI workshop that was held in conjunction with the IJC appearance in Ottawa. The workshop was well attended. A short list of future IWI projects/activities was prepared which included updating old and obsolete water quality objectives, nutrient loadings and algal blooms; data and information management, adaptive management, climate change, instream flow needs, and resolving vertical datum issues on a regional scale.

b. Data Harmonization and SPARROW Model

Ted Yuzyk mentioned that a meeting is planned to discuss data harmonization and Mike Laitta is working on it. Lana Pollack stated the IJC has a prototype for the SPARROW Model. No further refinements are needed to run the model. The nutrient management tool of the model could be extended to include the Rainy and Great Lakes basins. T. Yuzyk reminded the Board that new requests for proposals are due by April 1st for Canadian IWI projects.

17. ISRB as an IWI Board

The Board discussed the IJC requirements to be designated as in IWI board. One of the requirements is to have members of the public as board members. There was some reluctance and sensitivities as to whom from the public should become a board member. Lana Pollack asked why that could be a problem or why it would be a challenge to the Board. The questions raised were - How do we select a “true” representative of the public? and what transparent process do we follow to achieve that? Mark Colosimo cited examples from other boards which have a broad network and who have public membership on their boards, such as the IRRB. Nicole Armstrong suggested using the IRRB model. Another model could be to have a “stakeholder group” and have the member rotate every three years. The Board should give priority to public members who live in the basin.

Action: Board to prepare a list of potential NGOs to understand their mandate and public representation. Gregg Wiche suggested inviting NGOs to future Board meetings.

18. New Business

The 2013 Annual Report will be sent only in electronic format. The IJC is okay with accepting an electronic version of the report. ISRB will also post the annual report on the IJC website. The Board decided not to receive the US FWS monthly report as a hard copy report.

19. Next meeting

The Board will hold a conference call on March 20, 2014 at 10:00 am CDT /9:00 a.m. CST to discuss the spring 2014 flow forecast.

The next Public Session and face-to-face meeting are scheduled to be held on June 24-25, 2014, respectively in Minot, ND. The State Water Commission will host and coordinate.

Action: ND SWC will coordinate the hosting of the next face-to-face meeting.

20. Adjournment

The meeting was adjourned at 1:04 p.m. on February 20, 2014 (Bismarck, ND).

**List of Attendees,
International Souris River Board Meeting, Bismarck, ND
February 20, 2014**

Board Members in Attendance

Russell Boals, Canadian Co-chair, Retired, Regina, SK
Todd Sando, U.S.A. Co-chair, ND State Water Commission, Bismarck, ND
Col. Daniel Koprowski, Member for the U.S.A, U.S. Army Corps of Engineers, St. Paul, MN
John Fahlman, Member for Canada, Saskatchewan Watershed Authority, Moose Jaw, SK
Nicole Armstrong, Member for Canada, Manitoba Conservation & WS, Winnipeg, MB
Gregg Wiche, Member for the United States, U.S. Geological Survey, Bismarck, ND
Megan Estep, Member for the U.S.A, U.S. Fish and Wildlife Service, Denver, CO
Mark Lee, Member for Canada, Manitoba Conservation & WS, Winnipeg, MB
Scott Gangl, Member for the United States, ND Game & Fish Department, Bismarck, ND

Regrets

Dennis Fewless, Member for the U.S.A., ND Department of Health, Bismarck, ND
John-Mark Davis, Member for Canada, Saskatchewan Watershed Authority, Moose Jaw, SK

Guest: Al Pietroniro, MSC, Environment Canada, Saskatoon, SK

IJC Staff

Commissioner Lana Pollack, IJC, Washington, D.C.
Ted Yuzyk, Liaison, IJC Liaison, Ottawa.
Mark Colosimo, Engineering Advisor, IJC, Washington, D.C.

Support Staff in Attendance

Robert White, U.S. Co-secretary, ND State Water Commission, Bismarck, ND
Frank Durbian, US FWS, Uphom, ND
Scott Jutila, US ACE, St. Paul, MN
Heather Duchsherer, ND Department of Health, Bismarck, ND
Steve Robinson, USGS, Bismarck, ND
Dan Selinger, Water Survey of Canada, Environment Canada, Regina, SK
Colin Angus, Water Survey of Canada, Environment Canada, Winnipeg, MB
Tim Fay, ND State Water Commission, Bismarck, ND
Bruce Holliday, Science & Technology, Environment Canada, Regina, SK
Allen Schlag, NWS, Bismarck, ND
Jeff Woodward, Water Survey of Canada, Environment Canada, Regina, SK
Mike Ell, ND Dept. of Health, Bismarck, ND
Lance Meyer, City of Minot, ND
Dan Jonasson, City of Minot, ND
Ken Bottle, US FWS, Lakewood, CO
Tom Pabian, US FWS, Minot, ND
Darin Schepp, ND SWC, Bismarck, ND
Syed Moin, IJC Ottawa
Girma Sahlu, Canadian Co-secretary, Environment Canada, Regina, SK

**International Souris River Board
ACTION ITEMS – progress updated February 20, 2014**

PERSONS OR COMMITTEE RESPONSIBLE	TOPIC	MINUTE	ACTION	STATUS As of February 20, 2014
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 open.
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.	Ongoing 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.
AEHC	Compliance with Water Quality Objectives	September 14, 2011	AEHC to recommend actions to be taken by the Board to address exceedences of water quality objectives	ongoing
John Fahlman	Winter release from mid-level outlet for better water quality	June 20, 2012	J. Fahlman to check with his staff if releases could be made from the mid-level out of Rafferty Reservoir to improve water quality downstream and respond to Mike Sauer.	ongoing
Flow Forecasting Liaison Committee	New Communication Strategy	June 20, 2012	The Flow Forecasting Liaison Committee will create a formal communication strategy	ongoing
AEHC	New E. coli objective	June 20, 2012	AEHC will prepare a short report detailing the justification/reasons for adding E. coli to the ISRB Water Quality Objectives	ongoing
AEHC and HC	Varying flow rates for winter releases	June 20, 2012	AEHC and HC will develop a plan for testing various winter release rates to determine the optimum flow rate to maintain DO levels	ongoing
ISRB	Engaging the Upper Souris Watershed Association with Board activities	June 20, 2012	As an IWI Board, the ISRB would continue to seek opportunities to engage watershed associations and the public	ongoing
AEHC	Terms of Reference	February 20, 2013	AEHC Co-chairs to send their TOR to the Board	ongoing
Water Security Agency	90-day volume - Souris River at Sherwood	February 20, 2014	WSA will prepare an estimate of the 90-volume for the Souris River at Sherwood for March 20 meeting	ongoing
ISRB	Flood event determination	February 20, 2014	The Board will determine the return period/flood event for Spring 2014	ongoing

International Souris River Board
ACTION ITEMS – progress updated February 20, 2014

PERSONS OR COMMITTEE RESPONSIBLE	TOPIC	MINUTE	ACTION	STATUS As of February 20, 2014
Co-Secretaries	Membership update	February 20, 2014	Co-Secretaries will send an updated list of all committees to the Board	ongoing
ISRB	Communication Protocol	February 20, 2014	Board to review and approve the “Communication Protocol for Fish Kills in the Souris River on March 20, 2014	Ongoing
Co-Chairs	Mike Laitta’s support	February 20, 2014	Co-Chairs will send a joint letter requesting the IJC for Mike Laitta’s assistance.	ongoing
ISRB	Potential Public Board members	February 20, 2014	Board will prepare a list of potential NGOs to establish a pool to draw public candidates for Board membership	ongoing
ND SWC	Next Face-to-Face Meeting	February 20, 2014	ND SWC will host the June 2014 Public and Board meeting	ongoing

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