INTERNATIONAL
SOURIS RIVER
BOARD

CONSEIL
INTERNATIONAL
DE LA RIVIÈRE SOURIS

International Souris River Board

Environment Canada Boardroom
Regina, SK
February 23, 2011

Final Minutes

1. Introduction and Opening Remarks.

   Russell Boals convened the meeting at 10:00 a.m. He introduced Todd Sando, the new U.S. Co-Chair.

2. Approval of Agenda.

   There were no major changes to the agenda. Russell Boals gave a general overview of the objectives of the Board meeting. Russell stated that the first objective is to have a retrospective review of 2010 basin conditions and operations; and the second objective is to discuss the conditions and operations for the 2011 spring freshet and required Board activities.

   Modifications - under agenda item #6, Dan Selinger noted that he has replaced Dave Helfrick of Water Survey of Canada (WSC).

   In addition, Gregg Wiche requested to add "Web *Access to Hydrometric Data*" on the draft agenda. Russell suggested that the web access topic be placed under "Other Business" on the agenda (item #18).

   Gregg Wiche motioned to accept the agenda as modified. Doug Johnson seconded the motion. Carried.

3. Approval of Minutes of September 24, 2010 meeting and Minutes of January 28, 2011 conference call.

   September 24, 2010 minutes – Megan Estep motioned to accept the minutes. Doug Johnson seconded the motion. Carried.

   January 28, 2011 minutes – Richard Zitta motioned to accept the minutes. Gregg Wiche seconded the motion. Carried.

4. Review of Action Items,

   See attached table, Appendix A.

5. Update from Hydrology Committee (Megan Estep & Doug Johnson)

   The committee has not met since its last Board meeting.

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

   Dan Selinger reviewed the determination of natural flow of the Souris River at Sherwood for 2010 (attached). The total diversion to December 31, 2010 was 55, 493 dam^3. Total recorded flow at Sherwood was 99, 522 dam^3. Flow from non-contributing areas was 23, 010 dam^3. The total natural flow at Sherwood was 132, 005 dam^3. Therefore, the U.S. share (40% of the total natural flow at Sherwood) was 52, 800 dam^3. Flow received by the U.S. was 101,646 dam^3; which resulted in a surplus delivery of 48, 846 dam^3. With respect to Long Creek, the recorded flow at Western Crossing was 24, 100 dam^3, and the recorded flow at Eastern Crossing was 33, 196 dam^3 which also resulted in a surplus delivery of 9, 096 dam^3.

   Russell Boals asked if there were any issues or concerns with the data provided. Dan Selinger mentioned that there was some missing evaporation data, but nothing major. Todd Sando noted the over delivery received by the U.S.

   Gregg Wiche motioned to accept the determination of the 2010 natural flows be accepted, Doug Johnson seconded the motion. Carried.

7. Review of 2010 Spring Hydrologic Conditions, Water Management Operations, and Forecast for spring 2011.

   a. Saskatchewan
   Doug Johnson provided a summary of the 2011 spring runoff forecast for Saskatchewan. Last summer, the agricultural land in Saskatchewan received 5 inches of precipitation. The fall precipitation was somewhere between 85-115% of normal. In the southern portion of the basin, the precipitation was about 150% of normal. Doug also provided graphs depicting the 2010 summer and fall precipitation, cropland topsoil moisture conditions, percent average precipitation for the Prairie Region from November 1, 2010 to January 31, 2011, and snow-water equivalent for the same region. The next Souris update will be available on March 1, 2011. Above normal runoff is expected in the Souris River Basin.

   b. North Dakota
   Steve Robinson provided an overview of the 2010 spring runoff in North Dakota. Flows in the Souris River basin were earlier than expected for the spring of 2010. The total volume of flow past the Long Creek at Noonan gage in 2010 was 26.9% (26,912 ac-feet or 33,196 dam^3) of the average annual flow for calendar years 2003-2010. The flows past the Souris River at Sherwood were 30.5% (80,683 ac-ft or 99,522 dam^3) of the average annual flow for calendar years 2003-2010. The total flow recorded at the Sherwood gage for the first five months of 2010 was much less than what was experienced in 2009. However, the flow for the entire 2010 calendar year exceeded calendar year 2009 by 4,516 ac-feet (5,570 dam^3). Through May 31, peak spring freshet stages and flows were much less than expected. The peak of 131 cfs (3.71 m^3/s) for Long Creek at Noonan gage ranked 39 in 51 years, while the peak of 250 cfs (7.1 m^3/s) for the Souris River at Sherwood ranked 66 in 80 years of record.

   The peak flow of 637 cfs (18 m^3/s) for Long Creek at Noonan for the 2010 calendar year

occurred on June 21st as a result of a rain event. This flow ranked 27 in 51 years of record. The peak of 450 cfs (12. 7 m^3/s) for the Sherwood gage ranked 59 in 81 years of record. The daily flows at Sherwood exceeded the long-term mean starting in mid-June and continued through the remainder of the year. As in past years, flows in the lower part of the basin were greater than expected. Through May 31, the peak spring freshet flow for the Souris at Westhope was 981 cfs (27.8 m^3/s), which ranked 41 in 81 years of record. For the 2010 calendar year, the peak flow of 1,640 cfs (46.4 m^3/s) for Westhope occurred on June 26. This peak ranks 30 in 81 years of record. The flows at Westhope exceeded the long-term mean for the entire year.

The North Dakota Water Commission and the USGS continued a low-flow monitoring program on the Souris River mainstem in the vicinity of the Eaton Irrigation Project near Towner, North Dakota. Neither of the two monitoring stations was operated in 2010 due to high river levels.

c. Manitoba

Dwight Williamson provided a summary of the present conditions and the prospects for 2011. Flows in the Souris River as of mid-February 2011 ranged from near zero at Coulter to about 16 cfs (0.45 m^3/s) at Wawanesa. Virtually all of the flow at Wawanesa was coming from the Oak Lake Aquifer west of the Souris River in Manitoba. Soil moisture and snow cover are above normal along the U.S. boundary. As a result, spring run-off could be above average for streams near the international boundary. Areas downstream of Melita are likely to experience normal to above normal spring runoff.

Serious flooding could occur along the Souris River mainstem in Manitoba this spring due to high soil moisture and heavy snowcover in the North Dakota portion of the basin. According to U.S. National Weather Service forecast for Westhope, flooding in the Manitoba portion of the Souris Basin could reach 1974 proportions based on average weather conditions from now on. The 1974 flood is the third largest on record, third only to the floods of 1976 and 1999. Flood duration this spring could be similar to that in 1974 when it continued well into June due to high runoff from the Saskatchewan portion of the basin. Weather conditions will determine the severity of spring flooding.

d. U.S. Refuges and Reservoirs on the Souris River

Kelly Hogan noted that pools were above their target levels. Releases from the refuges were started in September and continued through the winter months. Current releases (Feb 23rd) from Lake Darling were at 900 cfs (25.5 m^3/s) and could go up to 1,200 cfs (34 m^3/s) by the weekend. For additional storage, could raise Lake Darling to 1601 ft, but that could cause flooding in the Park upstream. Ed Eaton asked how high the release from Lake Darling could go before causing downstream concerns. Kelly stated that releases could reach 1,200 cfs (34 m^3/s), but the Town of Burlington will have issues with flooding. The elevation at Lake Darling is being maintained at 1595.4 ft to stay ahead of releases coming from Saskatchewan.

Although releases are being made from J. Clark Slayer, Manitoba will not see this water for a while. Releases are also being made from Pool 367 to stay ahead of releases coming from

Saskatchewan. Ed Eaton inquired about the snow-water equivalent in Saskatchewan. Doug noted that it is in the range of 3-4 inches. Doug also mentioned that the Flood Forecasting Liaison Committee (FFLC) is meeting and coordinating on a regular basis, either by phone or email, to discuss and exchange information about the spring flooding in the entire basin. Manitoba is also plugged in the coordination. Philip Matulla, MWS, has been identified as the contact person for Manitoba.

8. Water Quantity Monitoring

Scott Hill reported that there will be some minor adjustments to the monitoring program operated by Environment Canada. Evaporation calculations will be now done using data from the automated site.

Gregg Wiche stated that three additional automated sites will be added to the network by the USGS. Just improvements and automation, no major changes. However, the impending budget cut is an issue in the U.S. which could potentially affect the network in general.

9. Water Appropriation in the Souris River Basin during 2010

Doug Johnson reported that there were no appropriations in Saskatchewan. Bob White stated that there were six appropriations in North Dakota: 1 for fish and wildlife, 1 for irrigation, and 4 for industrial use (mainly for oil companies). The total volume of appropriation in North Dakota was 712.2 ac-ft (878.5 dam^3).

10. International Watershed Initiative (IWI) Projects

Mike Laitta, IJC, gave a PowerPoint presentation on the outcomes and next steps on the IJC Hydrologic/Hydraulic Modeling workshops held in June and November 2010 and the Phase III Hydrologic Data Harmonization workshop held January 10-14, 2011. The Hydrologic Data Harmonization is a four-step process conducted under three phases that will provide a single 1:50 or 1:250 scale hydrologic layer across the international border. There were discrepancies in matching the hydrologic boundaries at the Canada-U.S. border. In phase 1, those discrepancies were resolved to seven seamless sub-basins across the international border by the Task Force led by Mike Laitta. In phase 2, technical representatives from various agencies worked through the details of the harmonization, and reviewed the delineations and the streamflow network. In phase 3, the dataset received further review for final approval.

A question was raised about the resolution – Mike replied it is 50 m and 30 m in Canada and the U.S., respectively. Gregg Wiche asked if the delineation was done to the sub-watershed level and if we had XYZ harmonized data at the border. Mike Laitta responded no, but he said that wouldn't be a major problem. Mike Laitta noted that they didn't have the resources to do the entire Souris Basin. Doug Johnson confirmed that SWA will provide a three month commitment to the project. Mike Laitta reminded the Board that this is a bi-national project planned to sunset in 2013; and somebody has to take on the stewardship role as the data will rest with the IJC boards.

Mark Colosimo, IJC, talked about the SPARROW model that was presented in Chicago. The SPARROW Model is used in the U.S. for water quality prediction. He also mentioned the Board could undertake a pilot project for the Souris River basin.

There were questions as to how the SPARROW model will handle major reservoirs, and

multiple reservoirs. Doug Johnson mentioned that he will check with Terry Hanley from SWA to help out. Board members indicated their support to an IWI project proposal for the application of the SPARROW model.

There was more discussion about the SPARROW Model after lunch. Doug Johnson mentioned he doesn't have a good handle on the model, and suggested that the AEC undertake the lead for the IWI project. There was a suggestion to use the AEC as a technical support group and create a working group with additional capacity to implement the project. The Board agreed to go with the latter approach and to put together an IWI project proposal working with Mike Laitta and the AEC. Mike Laitta and AEC will discuss the model and structure accordingly. Russell Boals volunteered to assist in drafting the IWI proposal.

Action: AEC will prepare a Scoping Document by the end of March and the task will be added to the AEC work plan.

11. Flow Forecasting Liaison Committee

Doug Johnson mentioned the committee is working well. He also stated the committee needs to look at the Flood Operating Plans (Annex A). Ed Eaton reported that he is currently working on the spring 2009 Flood Report and will have it ready in the next month or so, and before the next Board meeting in June 2011. Ed also noted that a fair amount of runoff was expected in 2009, but did not happen. Brain Connelly has provided his critique about the high forecast for Minot. Ed Eaton read the conclusions section from Brian's report. The estimates for the spring 2009 flows were too high. The causes for the high estimates were - very low snow forecast, contributing areas were not accounted for properly, and losses in valley storage were not calibrated well. The snow surveys / Gamma ray surveys, the National Weather Service forecast, and snow-water equivalents all indicated higher runoff. However, these were not verified by ground surveys. Lessons learned – need hands-on reconnaissance, and a better forecasting procedure to avoid similar errors in the future. Another re-calibration will be made and the results will be available to the Board. Ed Eaton also mentioned that he will add a chapter in the report.

12. Report from the Aquatic Ecosystem Health Committee

Bruce Holliday reported that AEC has not met since last year and is planning to hold a conference call in the next couple of months. Environment Canada is monitoring water quality monthly at the Westhope site. Doug Johnson mentioned that SWA initially started making releases from Alameda and then followed by Rafferty. SWA was also monitoring the quality of the winter releases on a weekly basis. North Dakota Department of Health is also monitoring water quality at sites upstream of Lake Darling. Water quality monitoring is still going on. Mike Sauer stated that AEC is working on an IWI water quality proposal to have the USGS review the data. Joel Galloway is working on the report and will send it to AEC for subsequent transmittal to the Board.

In 2010, Environment Canada collected a total of ten samples from February to November 2010 with the exception of March at Westhope. Samples were not collected in December 2010 due to snow and access problems. Nine samples were collected at Westhope and one joint sample at Sherwood with the USGS. The data and results presented in the report are still provisional.

3. Compliance with Water Quality Objectives

Mike Sauer and Bruce Holliday reported on the water quality objectives.

A number of exceedences were highlighted in the water quality report in 2010 & 2011:

- Total Phosphorus exceeded the objective of 0.10 mg/L 100 % for all reported data in 2010. Values ranged from 0.148 mg/L in November to 0.426 mg/L in August 2010.
- The Sodium objective of 100 mg/L was exceeded 50%. The results ranged from 70.1 mg/L in April 2010 to 434 mg/L in February 2011.
- The sulphate objective of 450 mg/L was exceeded once in February 2011. Other values ranged from 151 mg/L in April 2009 to 794 mg/L in February 2011.
- The Total Iron objective of 0.3 mg/L was not exceeded this year. Values ranged from 0.111 mg/L in July 2010 to 0.260 mg/L in April 2010.
- The upper pH limit of 8.5 was not exceeded in 2010. Other values ranged from a low of 7.89 in August 2010 to a high of 8.5 in September 2010.
- The Dissolved Oxygen (DO) objective of 5 mg/L was exceeded once in 2010. Other DO values ranged from 4.1 mg/L in August 2010 to 18.1 mg/L in April 2010.
- The Chloride objective of 100 mg/L was exceeded four times in 2010.Other values ranged from 30.6 mg/L in September 2010 to 308 mg/L in July 2010.
- The Total Boron objective of 0.50 mg/L was not exceeded in 2010.
- Pesticide samples were collected in April, May, June and July. The Picloram objective of 0.05 µg/L was exceeded for all samples. The value of Picloram noted was 0.0607 µg/L in May 2010. Other pesticides like, 2, 4-D, Bromoxynil, Dicamba and MCPA had positive results, but were all below their parameter specific objectives.

14. Water Quality Monitoring Plan for 2011

Doug Johnson at the September meeting had requested additional water quality monitoring be conducted over the winter at Sherwood to assess the impacts of winter releases from Rafferty and Alameda reservoirs. Bruce Holliday reported that the Environment Canada monitoring program will remain the same. One under ice cover sampling in February, then proceed with the regular monthly sampling program during the open water season up to the end of October or November. Mike Sauer echoed similar arrangements for the U.S.

15. Review of Water Quality Standards in the State of North Dakota

The final standards have not yet been presented to the Board. Mike Sauer reported that the North Dakota Triennial Water Quality Review is now posted on the website with some additional updates. Russell Boals noted that the Total Maximum Daily Load (TMDL) report was circulated to some Board members for comments on July 5 and 30, and the comments were requested by August 23 and September 13, 2010, respectively. AEC will review the report. The Board will wait for the final report to provide further comments.

16. Update on Water Management Projects

- Northwest Area Water Supply (NAWS)

Bob White mentioned that he didn't have anything new to add since the last update. Todd Sando stated that NAWS has been in court since 2002. Currently, NAWS is going through a 3rd round of NEPA process. A draft EIS is expected at the end of this year with the final EIS planned for next year. One of the outstanding issues was impacts on Canada were not addressed (inter-basin transfer of water). All the pipeline work has been completed. Intakes and treatment have to be dealt with yet. Tremendous population growth is expected in north-west North Dakota in the coming years. In addition to municipal use, new oil exploration and drilling activities are expected to increase the demand for water.

- Lake Metigoshe

Bob White reported that there has been no update from the State Department. Russell Boals mentioned that he had raised the issue with the IJC at the fall 2010 meeting in Ottawa and has not received a response. Mark Colosimo stated that he was not sure if the issue was raised at the Governments session at the end of the IJC meeting. Mark also mentioned the IJC has a draft guideline which has gone through a legal review.

Background: In 1937, a dam was built in the U.S. that raised water level into Canada. There were some concerns in the past, but the owners on both sides want the water level on the lake to stay at its current level. The dam needs to be formally accepted by both sides. This can be achieved using two approaches - 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. At the time of construction, a request for approval to construct the dam was not submitted to the IJC. The dam is under the control of the Oak Creek Water Board.

- Other Planned Activities

Doug Johnson reported that Saskatchewan is exploring Clean Coal Technology at the Boundary Dam Power Plant. SaskPower is planning to decommission two of its older units and replace the No. 3 Unit with a new clean coal unit. The new unit has the capacity to inject CO_2 back into the ground to help with oil recovery. The new unit requires an additional 8,000 dam^3 (6,486 ac-ft) of water out of Rafferty. SWA is looking into this additional water and its implications on water levels in Rafferty. The issue will be discussed more at the June 2011 Board meeting.

There was some discussion about the Upper Souris Watershed Technical Committee. The group has completed its Watershed Protection Plan. One of the outcomes of the plan was the formation of a watershed advisory council (WAC) that will provide stewardship services to the Upper Souris River basin. Richard Zitta will provide a contact name, if needed.

North Dakota is also experiencing growth in oil exploration and drilling activities which could potentially put more pressure on water demand.

No major activities were noted for Manitoba for increased water use at this time.

17. Administration

Update Work Plan – The current work plan was approved at the June 15, 2010 Board meeting. The work plan is categorized under four major categories / results. The Board

revised the work plan and made the necessary adjustment to reflect its current responsibilities / activities (See attachment).

Action: Russell Boals will update the work plan and have it ready for approval at the June 2011 Board meeting.

18. Web Access to the Hydrometric Data

Gregg Wiche presented a Web page outlining the monitoring network for the Souris River Basin that could be accessed by internet. Currently, the web-based access is for internal use only by the USGS. If the Board is interested, Gregg mentioned that arrangements could be made to provide access to other users. Gregg also stated that the web access is interactive for flood tracking and could also switch units between Metric and English for flows and water levels. Mike Sauer asked if the site could become an IJC-Souris website. Gregg replied that he doesn't see a problem with the approach. As matter of fact, it is value-added to the work the Board does and could benefit various users, especially during flood events. The use of a disclaimer was also discussed. The Board agreed to create a web access to the Souris River hydrometric data.

Action: Gregg Wiche will work with Mike Laitta to create the web-site.

International Records Procedure

Scott Hill raised the issue with the International Records Procedure. The procedure requires one agency to do the computations and the other agency to do the checking and approval of the data for the Long Creek, Sherwood, and Westhope gaging stations. Scott also mentioned that the procedure was not followed by Environment Canada and the USGS since 2007. The Board requested that the appropriate procedures be followed in future computations.

19. Next Meeting

The next meeting will be held in conjunction with the public meeting. This year, it is Manitoba's turn to host the Board /public meeting in June. The Board proposes to co-ordinate its meeting with a public event to take advantage of the occasion. Bob Harrison and Dwight Williamson will look into this meeting. The proposed date is June 20 for the public followed by the Board meeting on June 21, 2011. If an appropriate event is happening in the Saskatchewan portion of the Souris basin in June, Doug Johnson will advise the Board and the Board will consider changing the meeting location.

Declaration

The International Souris River Board has declared the 2011 Spring Flood to be a 1:10 year event.

Doug Johnson motioned to accept the declaration that the 2011 Spring Flood to be a 1:10 year event. Bob White seconded the motion. Carried.

List of Attendees, International Souris River Board meeting, February 23, 2011

Board Members in Attendance

Russell Boals, Canadian Co-chair, Environment Canada, Regina, SK
Todd Sando, U.S.A. Co-chair, ND State Water Commission, Bismarck, ND
Dennis Fewless, Member for the U.S.A, 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, U.S. Geological Survey, Bismarck, ND
Megan Estep, Member for the U.S.A, U.S. Fish and Wildlife Service, Denver, CO
Richard Zitta, Member for Canada, Saskatchewan Ministry of the Environment, Regina, SK
David Donald, Member for Canada, Environment Canada, Regina, SK

Regrets

Col. Jonathan Christensen, Member for the U.S.A, U.S. Army Corps of Engineers, St. Paul, MN
Scott Gangl, Member for the United States, North Dakota Game and Fish,
Bob Harrison, Member for Canada, Manitoba Water Stewardship, Winnipeg, MB

Support Staff in Attendance

Ed Eaton, IJC Technical Specialist, U.S. Army Corps of Engineers, St. Paul, MN (by phone)
Mike Laitta, IJC, Washington D.C.
Kelly Hogan, Project Leader, U.S. Fish and Wildlife Service, Berthold, ND
Ken Bottle, Hydrologist, U.S. Fish and Wildlife Service, Denver, CO
Mark Colosimo, Engineering Advisor, IJC, Washington, DC
Robert White, U.S.A Co-secretary, ND State Water Commission, Bismarck, ND
Mike Sauer, ND Department of Health, Bismarck, ND
Bruce Holliday, Water Quality Monitoring, Environment Canada, Regina, SK
Steve Robinson, U.S. Geological Survey, Bismarck, ND
Scott Hill, Water Survey of Canada, Environment Canada, Regina, SK
Dan Selinger, Water Survey of Canada, Environment Canada, Regina, SK
Girma Sahlu, Canadian Co-secretary, Environment Canada, Regina, SK

Observers

Cliff Hanretty, Eaton Irrigation Board, ND

International Souris River Board
ACTION ITEMS – progress updated February 23, 2011

PERSONS OR COMMITTEE RESPONSIBLE	TOPIC	MINUTE	ACTION	STATUS As of February 23, 2011
USGS	Water quality monitoring at Sherwood Gage	Jan 28/11-1	USGS will continue monitoring water quality in the winter months; and monitoring equipment / conductance meter will be kept in the stream until ice break-up.	Ongoing
Doug Johnson	30-day release volume from Rafferty & Alameda Reservoirs	Jan 28/11 -2	Doug will provide the 30-day volume next week to help determine whether Lake Darling should be lowered. This would only be considered if there is a significantly higher event than the 1:10 event as currently estimated.	Completed
U.S. FWS & SWA	Current conditions in the Souris River Basin including target elevations for, and releases from Rafferty, Alameda, and Lake Darling	Jan 28/11 -2	It was agreed to reduce the outflow from Lake Darling to 100 cfs for a week or ten days. Upon receipt of information on the 30-day volume estimate from SWA, the Flood Committee could suggest whether the outflow should be increased or decreased. If the basin experiences above normal precipitation in the next few weeks, then we need to arrange another conference call to discuss our next plan of action.	Completed
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.
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.	On hold pending the outcome of IWI modelling workshops

International Souris River Board
ACTION ITEMS – progress updated February 23, 2011

PERSONS OR COMMITTEE RESPONSIBLE	TOPIC	MINUTE	ACTION	STATUS As of February 23, 2011
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.
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.
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.

PERSONS OR COMMITTEE RESPONSIBLE	TOPIC	MINUTE	ACTION	STATUS As of February 23, 2011
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.