INTERNATIONAL SOURIS RIVER BOARD FINAL Minutes of Meeting held on February 27, 2008

The meeting was called to order by the Canadian Co-chair, Russell Boals, at 10:00 a.m., February 27, 2008. The meeting was held in the Chateau Room, Holiday Inn, Winnipeg Airport-West, 2520 Portage Ave., Winnipeg, MB. A list of attendees is attached.

1. Review of agenda.

<u>Col. Jonathan Christensen moved to accept the agenda. Seconded by Dwight Williamson.</u> Carried.

2. Approval of minutes from September 21, 2007 conference call.

<u>Doug Johnson moved to approve the minutes of the September 21, 2007 conference call.</u> Seconded by Col. Jonathan Christensen. Carried.

3. Review of action items from September 21, 2007 conference call

- Ensure full text of 1989 agreement on IJC Souris Board website. On the agenda as item 20.
- Natural Flow Methods Committee to meet On the agenda as item 10.
- Development of work plan and governance model documents On the agenda as item 18.
- <u>US EPA representation</u>. Mark Colisomo reported that he has been in contact with EPA Region 8 and they indicated that resource shortfalls and other priorities make their participation in the ISRB difficult. Mark also spoke with EPA headquarters and they indicated that EPA would continue their participation in the ISRB. Mark suggested a representative from the Natural Resources Conservation Service may be suitable given their interests in water quality from an agricultural perspective. The North Dakota State Conservationist was contacted regarding Board membership but has not replied to the IJC. Dale Frink noted that the NRCS has no regulatory responsibilities. Dwight Williamson noted that US EPA were actively involved in the bilateral water quality monitoring group. Dwight suggested that US EPA would be the preferred representative from Manitoba's perspective.
- <u>2006 Annual Report</u>. Bob White met his commitments for production of the draft and final reports in a timely manner.
- <u>Letter to IJC supporting watershed initiative in Souris basin</u>. Brian Yee had prepared a letter from the ISRB to the IJC endorsing the watershed initiative project in the Souris River Basin. The letter was signed by Russell Boals and Dale Frink and submitted to the IJC in October 2007.
- <u>Presentation to IJC on combined board</u>. Russell Boals reported that a presentation was made to the IJC at its October 2007 meeting. The presentation discussed the operation of the Board in its first year as a combined water quantity and water quality Board.

Water Quantity

4. Compilation of Souris River flows to December 31, 2007

Scott Hill reviewed the natural flow determination for Souris River at International Boundary (Sherwood). He noted that the initial determination showed a surplus of 3500 dam³. An error was identified and a revised determination indicated a deficit of 1773 dam³. Russell Boals reviewed the results of an investigation into reasons for the change. Russell Boals noted that in September, the natural flow determination showed a deficit of 370 dam³ and it was agreed that base flow in the Souris would make up the deficit by year-end. Russell Boals noted that an error in the calculation of evaporation on Alameda Reservoir was discovered. Dale Frink noted that the USFWS had attempted to operate Lake Darling at 1597 ft. elevation and this elevation was not achieved. Due to the June 1st elevation of Lake Darling, the Canada-USA split in shares is 50/50. Doug Johnson noted the importance of the end of August computation of natural flow which is discussed by the ISRB at its September conference call. Dale Frink moved to accept the natural flow determination. Megan Estep seconded the motion. Carried.

5. Review of 2007 hydrologic conditions and forecast for spring 2008

Scott Hill noted that hydrologic conditions in Saskatchewan in 2007 were at or slightly below normal. Doug Johnson reviewed Forecast and Operation Plan for Souris River Basin for 2008. SK Watershed Authority is forecasting a below normal runoff for the SK portion of the basin as of February 1, 2008.

Doug Emerson from USGS, Bismarck reviewed hydrologic conditions for the North Dakota portion of the watershed. Doug also presented a forecast prepared by Charlene Prindiville, US National Weather Service. Dale Frink noted that snowpack in the Rocky Mountains is normal or near normal but snowpack on the plains is far below normal.

Alf Warkentin reviewed hydrologic conditions in the Manitoba portion of the Souris River basin in 2007. Flow in the Souris River was very low from July 2007.

6. Review Water Quantity Monitoring Plan for 2008

Scott Hill noted that acoustic velocity meters will be installed to better monitor the inflow into Rafferty Reservoir. Russell Boals asked about the status of check measurements (measurements are done at the same location and same time by the Water Survey of Canada and the US Geological Survey). Check measurements have not been conducted.

Paul Pilon asked if the protocols for International Gauging Stations include check measurements. Russell Boals indicates that the Procedures for International Gauging Stations state only that the records will be mutually reviewed and approved. The Procedures do not speak to field data collection methods.

7. Water appropriations in the Souris River Basin during 2007

Doug Johnson reported that in Saskatchewan, one project was cancelled with a licensed allocation of 79 dam³.

Bob White reported that in North Dakota, no surface water permits were issued. Three groundwater permits were issued. It is expected that the groundwater withdrawals will have no impact on surface water.

8. Operation of U.S. refuges and reservoirs on the Souris River in 2007 and plans for

2008

Megan Estep reviewed refuge operations in 2007 and plans for 2008. Megan noted that return flow from the Eaton Irrigation District is usually about 60%, however, it may be lower this year as the Eaton Irrigation District lands are very dry.

9. <u>USFWS Comprehensive Conservation Plans</u>

The Comprehensive Conservation Plans for Des Lacs, Upper Souris, and J. Clark Salyer Wildlife Refuges were finalized in late 2007. Megan Estep reviewed highlights of the plans. She noted that operation of Lake Darling at 1596 feet would reduce erosion at the upper end of reservoir and provide storage for flood events that may occur after spring runoff.

10. Report by the Natural Flow Methods Committee on review of impacts of proposed revision to Lake Darling operating

The NFMC was to meet in the fall of 2007 to review the USFWS' proposed changes to Lake Darling operating levels and to provide a report to the ISRB with potential implications. Dale Frink noted that until such a review is conducted, USFWS will not be changing operating levels. Doug Johnson reported that the NFMC did not meet.

ACTION: Doug Johnson to coordinate a meeting of the NFMC to be held in May 2008.

11. Operation of Rafferty, Alameda and Boundary Reservoirs for 2008

Doug Johnson reported that SaskPower will be rebuilding the spillway for Boundary Reservoir in 2008. Flows will be diverted to Rafferty using the Boundary to Rafferty diversion.

Repairs to the gates at Alameda Dam will be done in the summer of 2008. Doug Johnson estimates that 16,000 dam³ will be released from Alameda Reservoir. He estimates that an over-delivery of 7,000 dam³ will occur or about 73% of the best estimate of the 90-day natural flow at the International Boundary.

Repairs at Rafferty will be done one gate at a time. A block will be used to allow flood storage.

SWA will coordinate activities with USFWS.

12. Update by the Flow-Forecasting Liaison Committee

Alf Warkentin reviewed the list of of hydrometric, climatalogical, snow survey and soil moisture stations. He noted that the Environment Canada network of climate stations has been significantly reduced. He also noted that there is a new network of real-time weather sites being developed as a result of a joint venture between WeatherBug and the Canadian Wheat Board.

Water Quality and Aquatic Ecosystem Health

13. Compliance with water quality objectives for 2007

Bruce Holliday distributed a hardcopy report 2007 water quality conditions and

exceedances and gave an overview of the report. Some final data was not yet available.

A total of 13 samples were collected by Environment Canada in 2007 (February, April, May, June, July, August, September, and November). 10 samples were collected at Westhope which included a triplicate (July 11th) and one triplicate sample (September 18th) with the USGS at Coulter.

The Dissolved Oxygen was only below the 5 mg/L objective on February 20, 2007 with a value of 0.25 mg/L. There were two samples that recorded above normal DO readings, April 12, 2007 (18.25 mg/L) and November 18, 2007 (Greater than 20 mg/L).

Dennis Fewless reviewed 2007 water quality data and exceedances for the Sherwood station. Some final data was not yet available. It was noted that there are some similarities in the exceedances at Sherwood in comparison are similar to the exceedances at Westhope.

Russell Boals asked if there has been any analysis to compare data collected by the member agencies against data collected at Sherwood and Westhope. He also asked if there had been comparisons against data collected in neighbouring jurisdictions. Dennis Fewless said that analysis has not been done and he suggested that such an analysis would be useful

14. Water Quality Monitoring Plan for 2008

Bruce Holliday distributed a hardcopy of the proposed monitoring plan for the Souris River at Westhope for 2008/09. The plan included the number of samples to be collected by month, analytical parameters, and schema.

Dennis Fewless reported on the monitoring plan for Souris River at Sherwood. Bruce Holliday noted that Environment Canada currently samples for Total Coliform, Fecal Coliform, and Fecal Strep. Bruce suggested that Total Coliform be replaced with E. Coli sampling. Dennis Fewless noted that North Dakota has switched to E. Coli. Doug Emerson noted that the US EPA standard is E. Coli. Thon Phommavong added that E. Coli. is likely a better indicator for changes pertaining to human activity and agricultural activity. A decision on the switch from total coliform to E. Coli. will be referred to the Aquatic Ecosystem Health Committee. Thon Phommavong suggested that the water quality objectives be reviewed as well.

ACTION: Aquatic Ecosystem Health Committee to review monitoring for E. Coli. vs Total Coliform.

ACTION: Aquatic Ecosystem Health Committee to review water quality objectives.

15. Water Quality Annual Report for 2003-05

Bruce Holliday reported that there has been limited progress on the report due to human resource shortfalls and other priorities.

16. Aquatic Ecosystem Health

• Winter Anoxia plus Total Maximum Daily Load

Dennis Fewless reported that Dr. Wei Lin, North Dakota State University has completed his

assessment work and is in the process of developing a water quality model that will provide a TMDL for the upper Souris River basin in North Dakota. The winter anoxia near Sherwood has been an issue since 1999. Dennis Fewless noted that there is a Ph.D. proposal to examine cause and effect in the reach from Sherwood to Minot.

17. <u>Update on water projects</u>

• Coal-mine expansion proposal in SE SK – update on environmental assessment process

Thon Phommavong noted that the Environmental Impact Assessment has not been completed. It is expected to be completed in April 2008. Thon will check to see if the Canadian Environmental Assessment Agency has been engaged in the process.

ACTION: Thon Phommavong to confirm that CEAA has been engaged

• Northwest Area Water Supply – draft environmental assessment report released Dec, 2007

Dale Frink reported that the US Bureau of Reclamation released a draft Environmental Impact Statement (EIS) in December 2007. The comment period on the draft has been extended to March 28. There is no construction between Minot and Lake Sakakawea occurring until the EIS is finalized.

• Ethanol Plants in Manitoba

Dwight Williamson noted that an ethanol plant has been proposed for the Minnedosa area in Manitoba which may lead to increased water use in the Manitoba portion of the basin.

Administration

18. Workplan and governance model

Russell Boals indicated that he has not been able to complete the workplan. He will complete and circulate the workplan in the next two weeks by email.

ACTION: Russell Boals to complete a draft workplan and submit to ISRB by March 15, 2008

Russell Boals noted that the Board members are appointed to 3 year terms. Some documentation of this is required. The Board provides recommendations for Board members to the IJC. Paul Pilon will check records at the IJC. He also recommended reviewing the annual reports.

ACTION: Paul Pilon to send to Brian Yee copies of the appointment letters for the members of the current Board.

In regards to the committees, Russell suggests that Terms of Reference for each of the committees is required. Megan Estep suggested that the NFMC be re-named to a Committee on Hydrology as its mandate has grown beyond focusing only on natural flow.

The Board agreed that a Flow Forecasting Liaison Committee is still required but the Terms of Reference need to be updated.

The Board agreed that an Aquatic Ecosystem Health Committee should be established. Thon Phommavong suggested that such a committee include a representative from the

Lower Souris Watershed Committee and a representative from Saskatchewan Environment. Dale Frink suggested the committee include a representative from North Dakota Game and Fish. Other names suggested for this committee include: Bruce Holliday, Environment Canada; Nicole Amstrong, Manitoba Water Stewardship; Mike Sauer, North Dakota Department of Health; Kevin Johnson, USFWS; and Bob Lundgren, USGS.

Doug Johnson suggested that each committee have one Board member to provide link from the committee to the Board. All agreed.

19. Watershed mapping initiative

Ann Fritz reviewed progress in North Dakota. Two of the 5 sub-basins have been reviewed. Review consists of comparing the digital GIS data to 1:24K aerial photography. Personnel requirements were: 6 people from 4 organizations. Ann, as technical coordinator provided technical advice about data structures and standards, hydrologic liaison, data, and coordination between cooperating agencies. The ND Watershed Boundary Delineation project has been in progress for ten years. The total costs for contractual work for the US portion of the Souris River Basin was \$29,445. Issues that arose: edgematching in areas of limited relief and achieving agreement on non-contributing areas. Russell Boals noted that PFRA is the singular agency that is responsible for delineating drainage basins in the prairie provinces. Doug Johnson noted that Natural Resources Canada (NRCan) is working on a project to delineate drainage basins nationally in Canada. There is a concern that the NRCan project may result in data that is not aligned with the PFRA data or the data that may develop out of an International Watershed Boundary Delineation project.

Mike Laitta noted resource requirements for the next steps in the International Souris River board project. Mike recommended that a core technical group be formed to oversee the ISRB project.

Dwight Williamson noted that any watershed boundary delineation project in the Souris should align with activities such as GeoConnections, and the NRCan hydro-model project.

Mike Laitta also noted that once the dataset is created there are on-going issues related to maintenance and stewardship.

Russell Boals suggested that Brian Yee take on the role of coordinating a meeting of potential stakeholders in Canada. Some suggested attendees include: PFRA, NRCan, EC, SWA, Manitoba Water Stewardship, USGS, ND State Water Commission.

ACTION: Brian Yee to coordinate a meeting of potential stakeholders.

20. ISRB website updates

Brian Yee reviewed the recent updates to the website. He noted that Willem Brakel of the IJC had followed-up with the IJC webmaster and the full text of the 1989 agreement was now on the website. Brian Yee noted that additional staff at the IJC office has resulted in considerable improvement in turnaround time on posting of items to the website.

21. IJC spring meeting update

Mark Colisomo noted that the spring meeting of the IJC would be held April 15-16, 2008 in Washington, D.C. at the Fairmont Hotel.

22. ISRB public meeting for 2008

Russell Boals reviewed the first public meeting which was held July 9, 2007. No members of the public attended and at the July 10, 2007 ISRB meeting there were some discussions about holding future public meeting at events that the public are already attending – i.e., the Board going to the public. One such meeting is the spring meeting held in Minot coordinated by the North Dakota State Water Commission with attendance from water users. Bob White noted that the purpose of that meeting is to discuss the expected spring runoff and as he coordinated that meeting, he felt it was inappropriate for a public meeting of the ISRB. The Board agreed to hold the public meeting again at the same time as the July ISRB meeting.

23. Other business

The IJC is holding an International Watershed Initiative workshop in Vancouver, March 18-19, 2008. The representatives from the ISRB will be Russell Boals and Doug Johnson.

24. Date and location of July 2008 meeting

Dates in July were reviewed and none met the Board members schedules. Russ Boals suggested the Board meeting be held the morning of June 19, with the public meeting to be held in the afternoon of June 19. All agreed on that date. Tentative location: Souris, MB.

Action: Bob Harrison to follow-up on meeting location and a suitable facility.

List of Attendees, International Souris River Board meeting, February 27, 2008

Board Members in Attendance

Russell Boals, Canadian Co-chair, Environment Canada
Dale Frink, USA Co-chair, ND State Water Commission
Dwight Williamson, Member for Canada, Manitoba Water Stewardship
Dennis Fewless, Member for the USA, ND Department of Health
Megan Estep, Member for the USA, US Fish and Wildlife Service
Col. Jonathan Christensen, Member for the USA, US Army Corps of Engineers
Doug Johnson, Member for Canada, Saskatchewan Watershed Authority

Regrets

Bob Harrison, Member for Canada, Manitoba Water Stewardship Gregg Wiche, Member for the United States, US Geological Survey Richard Zitta, Member for Canada, Saskatchewan Environment

Support Staff in Attendance

Alf Warkentin, Senior Forecaster, Manitoba Water Stewardship
Ann Fritz, Environmental Scientist, ND Department of Health
Robert White, USA Co-secretary, ND State Water Commission
Brian Yee, Canadian Co-secretary, Environment Canada
Bruce Holliday, District Officer, Water Quality Monitoring, Environment Canada
Doug Emerson, Chief, Hydrologic Studies Section, US Geological Survey
Gary Erickson, Refuge Manager, US Fish and Wildlife Service
Ken Bottle, Hydrologist, US Fish and Wildlife Service
Mark Colisomo, Engineering Advisor, IJC
Mike Laitta, Geographic Information Systems Coordinator, IJC
Paul Pilon, Engineering Advisor, IJC
Scott Hill, Operations Manager, Environment Canada
Susan Eros, Senior Policy Analyst, Environment Canada
Thon Phommavong, Manager, Saskatchewan Environment