

**SOURIS RIVER BILATERAL WATER QUALITY MONITORING GROUP
MEETING NO. 20
FEBRUARY 16, 2006
REGINA, SASKATCHEWAN**

Final Minutes – February 16, 2006

20-01 At 10:15 W. Dybvig and D. Fewless welcomed everyone to the meeting and asked all attendees to introduce themselves. All the members and observers introduced themselves. Jim Petsnik, Manitoba Water Stewardship, joined via conference call. A list of attendees is shown in Appendix I.

Agenda Item 1 & 2 - Approval of the Agenda

20-02 Members approved the Agenda: Appendix 2

Agenda Item 3 – Approval of Minutes, February 22, 2005 meeting

20-03 The draft minutes from the February 22, 2005 meeting were approved.

Agenda Item 4 – Review of Action Items – February 22, 2005

20-04 It was agreed that the “Montana – North Dakota’ error in the June 2003 minutes would be corrected and an errata would be sent out.

Action: Done - Mike Sauer.

20-05 **Action item 18-17** ‘P. Jain agreed to inform the group when the site is agreed upon.’ This was in reference to the status of the Estevan landfill and Hazco Environmental Services Ltd. The Group could not recall receiving any updates about this action item.

Action: R. Kellow will contact Saskatchewan Environment about the location and report back to the Group. Still outstanding.

20-06 **Action Item 18-26** The Task force did not meet during this period. The monitoring strategy of the Sherwood site was changed as a result of the USGS’s sensitivity analysis on streamlining the frequency of the monitoring protocol without losing sensitivity.

20-07 **Action Item 18-28** US Fish & Wildlife Service monitored for Dissolved Oxygen during the winter of 2004. A fish kill was reported on the Upper Souris River during February 2004.

There was discussion regarding the cause of the low D.O. Manitoba was asked if these WQ conditions posed a problem prior and/or during snowmelt and break-

up. High conductivity and TDS were not the issues for Manitoba. Anoxia and the associated taste and odour problems were a bigger concern. The town of Souris, Manitoba is the first one downstream to use the water as a drinking water source.

The USGS had automatic WQ monitors at Sherwood and Westhope but they were removed at the end of the water year (2004). This was due to reductions in funding. TDS has an objective but there is no objective for Conductivity. The USGS reported that it cost approximately \$15K – 18K to operate the continuous monitoring and if they had to reinstall the monitors, there would be installation costs. The USGS and Environment Canada confirmed that they will continue collecting the routine WQ grab samples as outlined in Appendix B of the 2002 Annual Report.

20-08 **Action item 18-23** The Monitoring Group has not seen any updates or progress reports from S. Vecchia about rerunning the new program on Sulfate and the remaining major ions to determine if there are any differences. Bob Lundgren will contact S. Vecchia about the status of the Sulphate and Major ion results.

Action: Bob Lundgren – Still outstanding. Each member to check what needs to be done. D. Fewless will check with the U.S.G.S.

Agenda Item 5 – Annual Report 2003 (in progress)

20-09 An errata will be distributed to Board members, interested parties and inserted into any undistributed copies informing them that on pages 20, 24, and 25, 'Montana' should be 'North Dakota' and correcting an incomplete sentence on page 25.

Action: M. Sauer – Done.

20-10 There appeared to be an error with Sodium in the data table for the Sherwood site. It might be a decimal error and the (Max-Min) values appear to be reversed.

Action: B. Lundgren – M. Sauer reported the error was fixed.

20-11 USGS and Environment Canada will forward all tables to M. Sauer for inclusion into the 2003 report by mid March 2005. Committee members have also agreed to complete the annual reports for 2003, and 2004. J. Syrgiannis has updated the Excursion Table. The updates were distributed by M. Sauer. The historical data is good, except Ammonia and Arsenic that will go into the 13th report. Updates to pollution sources will be included if available (in Section 5.2). Since this is the last meeting of the Committee before its merger with the International Souris River Board, it was suggested to combine the 2003, 2004 and 2005 annual reports.

Action: It was agreed to combine the 2003, 2004, and 2005 annual reports (have only partial data in 2005). B. Holliday and M. Sauer to follow-up.

J. Syrgiannis commented that TDS and TSS went down in 2003. However, these parameters were high in 2004. Not sure about the flow regime, but 2004 was a dry year. Flows were slightly above normal in 2002. J. Syrgiannis also stated that there was nothing very unusual in 2005. There were continuous exceedances of phosphorus and sodium, which seemed to be a chronic problem. M. Sauer noted this might be due to background levels which might require re-visiting the objectives after amalgamation. EPA is looking at nutrient criteria on an eco-region basis which might be of interest to the Water Quality Monitoring Group. If the phosphorus level is excessive, maybe it is not the limiting factor. The limiting factor might be nitrogen. The Terms of Reference (TOR) call for re-evaluation of the objectives every 5 years. It was agreed to re-evaluate the objectives, but the Water Quality Monitoring Group held back because EPA was still developing the criteria.

Agenda Item 6 – Update on Winter Anoxia plus TDML

20-10 M. Sauer summarized the history of the winter anoxia problem. A fish kill was first noticed in 1999 in the upper Souris River and low Dissolved Oxygen (D.O.) levels were measured from the border to the upper reaches of Lake Darling. Low D.O. and high levels of ammonia were also noticed at the Mouse River Park which may have contributed to the fish kill. Fish kills were also reported in 2002, 2003 and to a limited extent in 2004. The low D.O. appears to be a systemic problem, possibly chronic and may be flow related. The type of winter may also have an influence on the extent and severity of the anoxia and fish kills. M. Sauer and J. Wood worked on D.O. levels in the Souris River few years ago.

It was suggested that the solution to lower D.O. levels, particularly in winter would be to maintain some flow in the River. This solution warrants further study to determine what kind of minimum flows would be required to alleviate the low D.O. problems. D. Fewless asked M. Sauer if he knew any USGS study, like sources of impairment, Total Maximum Daily Load (TMDL) and Anoxia issues. M. Sauer responded that data from Canada was not forthcoming; there was a fish-kill in 1999. Saskatchewan Environment is not monitoring; however, Sask Watershed Authority does monitor 4 times a year, plus during spring runoff.

20-11 Action: Richard Zitta will forward contact names and phone numbers of Sask Environment Staff to M. Sauer. A graduate student is currently working on the TMDL. M. Sauer and D. Fewless will bring the results to the new group.

Agenda Item 7 – SRBWQMG and ISRB Amalgamation

20-12 W. Dybvig updated the Group about the IJC's decision to amalgamate the SRBWQMG and ISRB. A draft was distributed previously regarding the amalgamation. D. Fewless had minor editorial comments. The draft did not address what the membership will look like. W. Dybvig mentioned that the amalgamated board will have 12 members and the IJC will let us know about the timing and who would be the co-chairs. The ISRB itself was re-established in 2002 as a watershed initiative to look at water quality and quantity issues. D. Fewless asked how we could combine the annual reports. A water quality sub-group might be needed to report to the new amalgamated board. The timing and reporting of water quality data was also discussed. There was a consensus that the one-year waiting period to receive data might make the water quality work somewhat outdated.

Agenda Item 8 – Update on NAWS

20-13 J. Petsnik updated the Group about the NAWS (Northwest Area Water Supply Project). The project was to construct a pipeline from the Missouri River to the City of Minot where it would be treated and then distributed to other communities in the surrounding areas. Manitoba was concerned about the level of treatment and the quality of the water that would be released, resulting in the potential transfer of undesirable biota into the Hudson Bay drainage basin. Manitoba launched a legal action in court against the project in 2002. On February 3, 2005, the judge agreed with the legal action and remanded it back to the Department of the Interior for additional work. The judge indicated that an EIS is not required if full treatment of the water is done on the Missouri River side of the basin. All parties agreed on a ban in December 2005. Notice of intent to appeal was granted until December 2005 for the appeal to proceed formally if the format has been decided. The Court of Appeal is in Washington.

Agenda Item 9 – Status of Lake Winnipeg Action Plan

20-14 J. Petsnik updated the Group on the status of the Lake Winnipeg Action Plan. He mentioned that the plan is moving ahead. Regulations will be put in place for water quality management zones (MZ) based on nutrients. The public consultation is in progress and the Lake Winnipeg Stewardship Board has been established. M. Sauer asked if there was a nutrient load reduction in the Assiniboine. J. Petsnik replied he was not sure. M. Sauer also asked if the water management zone would target a concentration. J. Petsnik mentioned that he could not find the information that speaks to this question. However, J. Syrgiannis reported that the water quality work will receive funding for increased

monitoring on Lake Winnipeg. The IJC and Red River Basin Board have agreed to reduce nutrients by 10% by 2010.

D. Fewless asked if there was an issue on Lake Metigoshe (a North Dakota lake) last year. J. Noren replied he was not aware of any issues regarding the lake. However, there was a severe flooding problem in May and June 2005 that affected the Bottineau County.

Agenda Item 10 – Other Business

20-15 No other business was identified.

Agenda Item 11 – Date of next meeting

20-16 It was agreed that the next meeting date would coincide with ISRB meeting as the two groups have now been officially amalgamated.

Agenda Item 12 – Adjournment

The last meeting of the SRWQMG was adjourned at 11:35 a.m. on February 16, 2006.