



## **Bow Basin Watershed Management Plan (BBWMP)** **Technical Committee Minutes**

9:00 AM – 2:30 PM, March 30, 2007 (Lunch Provided by DFO)

Third Floor Large Boardroom (North), Alberta Environment Office, 303-2938 11 Street NE, Calgary

**Attending:** Al Sosiak (Chair), Sheena Majewski (Vice-Chair), Matthew Coombs, Shelley Humphries, Cathy Ryan, Gerald Ontkean, John Jagorinec, Travis Ripley, Jamie Dixon, Francine Forrest (phone), Rob Wolfe (Coordinator), Mark Bennett (Administrator)

**Absent:** J.P. Bechtold, Richard Barrs, Fay Westcott, Earl Wilson

### **🚩 Call Meeting to Order 9:00**

- Al noted that had been a very successful series of sub-committee meetings this past week.
- Review Previous Minutes
- Review Action Items (In future all action items should be listed at the beginning of the minutes).

### **🚩 Action Items from March 9 Minutes 9:03**

- The following Action items were reported on.

**Action: Rob will provide a revised draft of the plan showing the results of the draft plan amendment process where warranted.**

- This was done.

**Action: John Jagorinec volunteered to try to track down more information on the genesis of the 1/10 recommendation (for pesticide loading in the Elbow River) from page 13.**

- John followed up.

**Action: John Jagorinec to ask Jamie Dixon what the desired phosphorus load for the Glenmore Reservoir is?**

- Jamie reported that based upon some modeling in the late '90's the Phosphorus level in the Glenmore Reservoir could actually be pushed pretty far. This is due to the significant flushing flows that occur in the reservoir. Therefore, it isn't recommended that those results be followed.

**Action: In regards to temperature Al Sosiak is to review the objective based on fish species (most sensitive).**

- Al reviewed this matter and recommends that the plan stay with a maximum temperature objective of 18° C, which is enough to protect bull trout.

**Action: Cathy Ryan to consider factors that may help resolve the confusion around Riparian Condition and Groundwater (under the influence) parameters.**

- This was done and reported to Rob.

**Action: Rob Wolfe will draft wording to reflect the unique sensitivity of the Elbow River (as a major urban water source).**

- Reflected in the revised draft Phase 1 Plan.

### **🚩 Agenda reviewed and accepted 9:08**

The following changes to the BBWMP Technical Committee Membership list were noted

- Addition of Brian Meagher (representing Trout Unlimited).
- Addition of Jamie Dixon (City of Calgary – Non-Voting Member)



- Change AAFRD references to read Alberta Agriculture and Food (Rural Development now with another Department).
- Addition of Angus Chu as alternate for Cathy Ryan.

The reach definitions for the first two reaches (for the purposes of the BBWMP and the TC work) will be amended to be consistent with the State of the Basin Report. Reach 1 of the Plan (which is S of B reaches 1&2 combined) will end at the BNP boundary, BBWMP reach 2 ends at the Bearspaw Dam.

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✚ **Action Items from this meeting:**

- The following Action items were assigned:

**Action: A review of the macrophyte guideline from B.C. needs to be conducted (not sure if this was actually assigned to someone in particular, Francine contacted European agency)**

**Action: AI to send the riparian setback review article (from the U.S) to all TC members.**

**Action: Francine to distribute the AOPA section on setbacks.**

**Action: Rob to ask the Irrigation Districts if there may be a management function they could perform to address high temperature.**

**Action: AI and/or Rob to distribute a scanned copy of the Newcombe and Jensen article to all TC members.**

**Action: Sheena will examine the applicability of Newcombe and Jensen to the Bow River situation.**

**Action: Rob to make a referral to the Steering Committee – A question on the inclusion of a *Giardia* objective since this would involve (drinking water) treatment more than pollution reduction or prevention.**

**Action: Jamie to check data to determine Fecal Coliform levels in the lower Bow reaches (Carseland to the mouth). See related action below.**

**Action: Jamie to obtain TP data for lower Bow sites (Carseland and Ronalane) from AI and prepare a chart (box & whisker) as he already did for the Elbow. (Jamie's charts are highly regarded for their artistic merit).**

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✚ **General Review of Plan and Updates (Including SC Comments) – Rob 9:20**

- Rob noted that there are currently approximately 50 recommendations in the draft of Phase 1. This is a high number, and while Rob feels it is important to not lose any of these, the number may be too large to be dealt with effectively. He proposes that the TC perform a prioritizing exercise over the next few months and confirm recommendations as high, medium or low priority. This could be done using the existing short term (= high priority), medium-term (= medium priority) and long-term (= lower priority).
- Rob led the TC through the revised draft copy of the plan. Further amendment will take place. More Steering Committee comments are being incorporated into the draft.
- There was a very good discussion on the riparian setback issue

✚ **Review Water Quality Objectives, Indicators & Recommendations for the mainstem from Carseland to Bassano to the mouth 10:10**

- There was some concern and possible confusion on the wording for the periphyton objective (150 mg/m<sup>2</sup>).
- Travis covered some of the temperature and dissolved oxygen considerations for objective setting in this reach. AI indicated that a compromise may be required. There is good data available to Carseland, but not so below the weir.
- Fish and Wildlife (F&W) have noted a fairly distinct species shift (fish species) below Bassano.



- There is very limited information on oxygen and temperature tolerances for the Lake Sturgeon.
- It was noted that F&W do not manage for cool water species from Cluny downstream
- Probably a 29°C objective below Bassano is OK with 24°C as a warning level to stop fishing. Action item to discuss this with the ID's.
- A discussion on the work of Newcombe and Jensen in regards to Total Suspended Solids. Action items for determining the relevance for the lower Bow.
- *Giardia* – Leave this as is for now, but it needs more work. Refer to the Steering Committee.
- Imperviousness – More work required (what exactly is meant by a 30% reduction?).
- Macrophytes – No numerical targets have been determined to quantify “nuisance” levels, but this may be possible.
- Nitrate – Conditions in the lower Bow are very similar to those immediately below Calgary. Therefore, it is recommended that a similar target be adopted (1.5 mg/l).
- *E-coli* – The Canadian Council of Ministers of the Environment (CCME) guideline is OK for now, but if a better indicator is determined this objective could be changed.
- Fecal Coliform – Do we need an objective for this? See action item.
- Pesticides and degradation products- Jamie noted how the TC arrived at the 1/10<sup>th</sup> objective (based on minutes from the original process), and agreed that it is OK with it for now pending the presentation from Anne Marie on this subject.

#### 🚩 Lunch 12:15 – 12:45

#### 🚩 Additional Reaches (tributaries – specifically the Highwood) 12:45

- Mark provided some background information on this question.
- No specific action is currently required on the part of the Technical Committee, but the TC should be aware of the growing interest in part of the Watershed.

#### 🚩 Continue with Draft Plan 13:00

- Total Ammonia – There is a consensus on the TC that the lower Bow should be OK for this parameter and the upstream objective can be used.
- Total Dissolved Phosphorus (TDP) – Adopt an objective consistent with the reach below Calgary.
- Total Organic Carbon (TOC) - Once again, this should be consistent with the reach immediately upstream (just below Calgary).
- Total Phosphorus (TP) – Stay with the objective of 28 mg/l, if the data supports it. See action item.

#### 🚩 Water Quantity 13:35 (Tom Tang, Jan Simonson, Anil Gupta, and Kent Berg)

- Presentation covered various components of further quantity discussion such as the ARCA indices.
- The Index of Hydrological Alteration (IHA) was also covered.
- Michael presented on the Water Quantity Stress Index.
- Further discussion required to agree on the best indicator. Rob and Matthew to explore options for TC review.

#### Future Meeting Summary

- ❑ Friday May 11, 2007 9:00 AM – 2:30 PM, 3<sup>rd</sup> Floor North, AENV (Lunch Provided)
- ❑ Friday June 1, 2007 9:00 AM – 2:30 PM, 3<sup>rd</sup> Floor North, AENV (Lunch Provided)
- ❑ Friday July 13, 2007 9:00 AM – 2:30 PM, 3<sup>rd</sup> Floor North, AENV (Lunch Provided)
- ❑ Friday August 10, 2007 9:00 AM – 2:30 PM, 3<sup>rd</sup> Floor North, AENV (Lunch Provided)