

The Meander

Fall 2005

The Meander

This is the third issue of the Meander, a quarterly newsletter for the people living and working in the Milk River watershed. It provides current information on activities in the watershed and is brought to you by the Steering Committee for the proposed Milk River Watershed Council Canada.

Bonanza Day A Success!

The Proposed Milk River Watershed Council Canada set up a display at this year's Bonanza Day in Milk River. There was a lot of interest expressed in the proposed Council from people living in the watershed, as well as from the many visitors returning to Milk River for the town's homecoming weekend.



A Little History

"In March 1870, I travelled from Muscleshell to Fort Browning on the Milk River, and for a distance of forty miles I do not think we were out of easy rifle shot of buffalo... we could see many miles on either side; but... the eye only met herd after herd of grazing and slowly moving buffalo... three days later I passed over the same trail on my return trip, and the vast herds had disappeared as if by magic."

These observations were made by Peter Koch, a Woodhawk and a Wolfer in the Dakotas and Montana (Brown and Felton 1955).

PUBLIC MEETING ANNOUNCEMENT

November 30, 2005

in Milk River

7:00 pm to 9:30 pm

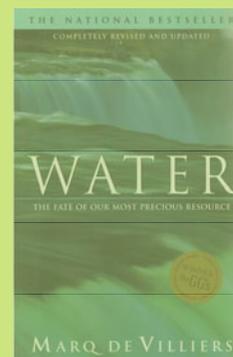
Join us on November 30, 2005 at the Senior's Center in Milk River (across from the Town Office) to review the proposed Milk River Watershed Council Canada's draft Mission, Vision, Goals, Bylaws and Action Plan!

You can review these documents on our website at www.milkriverbasin.org/ or pick up a copy at the Town and County Offices in Milk River, Warner, Cardston or Foremost.

This is your chance to comment on the work that the Steering Committee has done since the last public meeting held on April 27, 2005.

We want to hear from you! If you can't attend the meeting, please provide any comments you may have to Sandi at 403-921-5667 or palliser.environmental@telus.net.

Worth Reading...



Water: The Fate of Our Most Precious Resource
By Marq De Villiers

This National Bestseller is a winner of the Governor General's Literary Award. It highlights the ever increasing concern over water supply and frames the issues in an international context.

Milk River Remote Monitoring Project Update

Submitted by: *Lawrence Schinkel, AAFRD*

In the Summer Edition of the Meander, we highlighted the Remote Monitoring Pilot Project that is being conducted to determine whether it is possible to manage water use by collecting real-time information throughout the irrigation season. The Milk River watershed was chosen for this study because it was possible to include every water user in the study. In addition, the information collected during this study will help members of the Task Force (established to assist the International Joint Commission) better understand water use in the Milk River watershed.



Thirty-five flow meters were installed in the fall of 2005, eleven of which also had remote telecommunication devices installed. Three types of meters are being evaluated in this pilot study including the McCrometer bolt on turbine, the MUIS Controls Insertion Turbine and the MUIS Controls Insertion Magnetic flow meter. All three of the flow meters were tested by Alberta Agriculture and were found to offer very low resistance to flow and were accurate compared to traditional magnetic flow meters. These flow meters will be evaluated during the 2006 season to see how they function under regular use conditions. The flow meters can be a tool for producers to manage irrigation water. All of the meters have an instant flow display in gallons per minute, in addition to totaling the accumulated volume throughout the season.



Three types of communication devices have been installed, including cellular and satellite technology. The systems are Optimum Instruments, ROM Communications and Bentek. These communication devices will send pulses from the flow meter every 100 gallons per minute and send it to the internet by cellular or satellite network. Once transmitted, Alberta Environment staff can view the total usage and see how much water is being used at any time during the irrigation season. All three communications devices will be evaluated through the winter and the 2006 season to monitor air temperature and battery voltage.



This year was used to install the monitoring devices. The real test to see whether this type of remote monitoring is effective will be conducted throughout the 2006 growing season. Thanks again to everyone for their cooperation and participation in this study!

Protecting Water Quality

Everyone agrees that water is one of our most important resources. Protecting water quality and conserving water quantity are two things we can do to ensure our legacy to future generations.

Water quality can be degraded by point source and non-point sources of contamination. Point source pollution is the release of contaminants through the outlet of a single conduit, such as a pipe or ditch. Discharge from wastewater treatment plants, stormwater outfalls, or overflows from a lagoon to a stream or lake are all considered point sources. Although point source pollution can be the most significant source of contamination, it is also the easiest to fix. Non-point source pollution does not originate from one location. Controlling non-point source pollution is difficult and usually requires a change in land management practices.



Nutrients, particularly phosphorus, in water can increase plant and algae growth that lead to taste and odour problems in water. In addition, when plant material decays, the process uses up oxygen and lessens the amount available for fish. Sometimes, this will result in a fish kill.

Suspended solids or sediment may enter water from the land by wind and water erosion, or by streambank erosion caused by a change in streambank vegetation or increased water flows. Sediment can impact fish by covering important spawning habitat and eggs that rely on a fresh supply of water for oxygen. More importantly, bacteria attached to sediment may be shielded against chlorination or UV radiation in water treatment facilities, allowing them to pass through the system into domestic water supplies.

Other chemicals, such as hormones and antibiotics, may change the reproduction capability in aquatic organisms or cause birth defects in some species.

You help protect water quality and conserve water when you:

- Apply fertilizers and/or manure to lawns and fields at an appropriate rate
- Dispose of expired or unused medications at a local pharmacy
- Only let water flow down the storm drain
- Provide offstream watering for livestock
- Maintain grass waterways and wetlands in fields
- Conserve water through timing irrigation water applied to lawns or crops
- Use low-flow shower heads and low-flush toilets.

Stabilizing River Banks – the Natural Way!

A Bioengineering Workshop was held in Calgary in mid-October where participants used live plant material to stabilize the banks of a creek that flows from north-west of Calgary to the Bow River.

Cuttings of dogwood, balsam poplar and willows were taken from a natural area along the Bow River. These species of trees and shrubs are riparian plants that like to live in moist to wet areas. They also have deep binding roots that can hold river banks together.



The cuttings were used to create “wattle fences” and “modified brush layers” to help stabilize the eroded area along the creek. The cuttings were planted in the soil in a way that will promote the growth of roots and shoots next spring. Eventually, these stakes will be large, living trees and shrubs that will help bind the soil together and reduce the force of the water on the streambank.



The vegetation is dormant now, but next year it is expected to “sprout and grow”!

THE NEWS COLUMN

Water Supply Forecast Review for the Milk River Watershed

Five months of forecasts for the three forecast points in the Milk River watershed were on average within 9.8% of the actual March to September natural runoff volume. The first four of these forecasts were closer to predictions, anticipating good runoff from spring and summer rains on wet soils. However, a lack of precipitation in the spring and resulting low runoff led forecaster's to lower the May forecasts significantly. The May forecasts were over 20% lower than the recorded March to September natural runoff volume, due to much above normal summer rainfall. This information was taken from Alberta Environment's website. For current information on the water supply conditions for the Milk River watershed, check out

<http://www3.gov.ab.ca/env/water/ws/watersupply/>.

Above normal precipitation in northeastern Alberta and in most mountain and foothill areas is expected for October through December 2005 (Environment Canada), in addition to below normal precipitation along the southern Saskatchewan border and normal precipitation for the rest of the province. Above normal temperatures are expected for Alberta for the next three months. Check out Environment Canada's long-lead precipitation outlook at:

http://weatheroffice.ec.gc.ca/saisons/index_e.html.

South Saskatchewan River Basin Draft Water Management Plan Now Available!

A draft water management plan for the South Saskatchewan River Basin (SSRB), that balances the water demands of the economy and the environment, is now available for public review. The plan is designed to ensure water is managed wisely and to encourage conservation, so the province can continue to meet water demands as the population and economic activity grow. It also establishes limits on water allocations in the Bow, Oldman, Red Deer and South Saskatchewan Rivers to protect the environment. All Albertans are invited to provide their feedback on the draft water management plan by December 9, 2005. The draft plan and supporting documents, including a link to a questionnaire, is available online at www.environment.gov.ab.ca or by calling toll-free 310-0000, then 403-297-6250.

Mark Your Calendar 2005!

Are you hosting an event that is related to water and watershed management in the Milk River watershed? Advertise your event in The Meander! Forward your event information to Sandi Riemersma (contact information below).

November 25, 2005

New deadline for **Logo Contest Submissions** for the Milk River Watershed Council Canada

November 30, 2005

Public Meeting of the proposed Milk River Watershed Council, Canada (7:00 to 9:30 pm)
Milk River, Alberta

December 1, 2005

Vulnerability Assessment Workshop for Water and Wastewater Facilities
Calgary, Alberta

<http://www.wcsawwa.net/Seminars/WCSeminar.html>

January 25-26, 2006

3rd Integrated Water Resources Management (IWRM) Workshop: Watershed Stewardship: Management Instruments for Success
Regina, Saskatchewan

<http://www.stewardshipcentre.sk.ca/>

May 2-5, 2006

2006 Alberta's Environment Conference
Edmonton, Alberta

<http://www.environment2006.com/>

Your ideas matter!

If you have any ideas, comments or concerns about the development of the proposed Milk River Watershed Council...we want to know! Contact your local area representative or the contact below if you would like more information and to understand how you can be involved.

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