Our Water – Our Legacy

The Meander

THE MILK RIVER WATERSHED COUNCIL CANADA • FALL/WINTER 2021

Milk River Water Contingency Plan for Water Shortage Periods update

July 2020 during the low flow on the Mlk

The MRWCC was successful in obtaining funding from Alberta Ecotrust Foundation to produce a document that will compile the lessons learned from the 2020 water shortage experience and develop a comprehensive contingency plan for future shortage events such as diversion infrastructure failure or droughts. We have contracted the project to WaterSMART Solutions Ltd., who have been interviewing community leaders and all levels of government from municipalities, provincial regulators, to federal international joint commission officials and the water survey of Canada. The collected information is helping generate a final plan that can be used as a future guide to manage water shortage periods and will incorporate the following themes:

Communications, water sharing agreements for irrigators, In-stream flow needs, water use reporting templates, municipal water backup plans, community bulk water fill stations, water monitoring, regulatory requirements, procedures for the division of the waters of the St. Mary and Milk rivers, municipal water restriction policies and bylaws.

Some valuable information has already been collected that will help manage future situations and the importance of clear and timely information sharing has been clearly demonstrated. Water managers need to have up to date information about river or water conditions and forecasting or modeling information is needed for water managers as soon as possible. There are also opportunities to improve the understanding of natural flow conditions and in particular the measurement and reporting procedures and how we communicate that with the entire watershed community. It should be noted that actions and suggestions in the plan will be completely voluntary and assist managers at all levels to make more informed decisions.

Thank you to everyone who continues to support the project, watch for updates and the completed plan in the new year.

Securing a future for bats in the Milk River watershed project

Riparian corridors, farmsteads, hoodoos, and canyons of the Milk River watershed are home to critical habitat for many species at risk, one of the least known species is the Little Brown Myotis Bat. During the summer of 2020 White Nose Syndrome (WNS) was first detected in bat populations within the Milk River watershed of Montana and is likely to spread within the Alberta portion of the basin during the next 5 years. At the same time, healthy mature riparian cottonwoods, abandoned farm structures, and natural features that all provide habitat are in declining conditions. Bats are critical for helping control mosquitoes and night flying insects largely pests to agricultural crops. Recent research in the US indicated a surprising decrease in daily weight gains of 3-4% in caving yards and pastures where pressure from bloodsucking insects was prolific and bats were not present.

This fall, the Watershed Council was successful in obtaining funding from the Government of Canada (ECCC) to help support our understanding of bats in the watershed and mitigate some of the challenges to our bat populations!

This project will voluntarily work with producers and landowners/managers to Identify Little Brown Myotis Bat roosting and overwintering habitat along the Milk River riparian corridors and on existing structures/farmsteads, of field shelterbelts. A wildlife technician will help monitor usage and inventory species presence and abundance. All participating landowners will be given an opportunity to implement stewardship projects such as protection of existing nesting and roosting structures, mitigation placement of bat boxes and larger habitat structures, fencing for trees or shelterbelts, and education on the potential impact of WNS and other threats to all bat populations found within the watershed. Having a technician out for an evening survey is a great experience for families especially kids or grandchildren!

Milk River Watershed

The project will kick off this winter with an information campaign; field and farm visits to be arranged for spring 2022. Landowners interested in learning more are encouraged to contact the MRWCC at 403-647-4342 or tim@mrwcc.ca or watch our website for more details.

A one-year contract is currently being offered via the MRWCC website with the hopes of having a technician hired to work within our community on this project starting January 2022. If you know someone interested in working with us on this fun and exciting project, please send them our way! If you are a landowner with questions about the project or potentially with a location to survey this coming spring, please give us a call.

Past Photo Depicting Producers Leading the Way

Producers Leading the Way Project

The MRWCC in working with our municipalities, and NGOs, to facilitate the Environment & Climate Change Canada funded project focusing on Opportunities for Improved Native Grassland Conservation and Species at Risk Stewardship within the Milk River Watershed or more commonly known as the 'Producers Leading the Way' Project.

Our grasslands provide a host of ecosystem goods and services that go far beyond mere forage production to feed cattle. Producers on the land are more aware of this than most, and they often end up covering more than their fair share of expenses required to protect our native grasslands. This project recognizes that society benefits from well-functioning, healthy grasslands, and is seeking input from producers on how to better protect these lands.

The Project Team has identified a menu of tools of interest and incentives available to livestock producers to implement conservation strategies on private and public native grasslands throughout the 4 municipalities of the Milk River Watershed. The outcome of this project is to better inform future programs designed to maintain or improve Species at Risk habitat across the Milk River Watershed, with producers determining what is practical and acceptable for their operations.

The MRWCC will be targeting surveys of approximately 120 cow-calf producers across 4 rural municipalities (Cardston, Warner, Forty Mile, and Cypress) through various questions and responses. Survey results are to be spatially reported by municipal division to identify tools of interest and incentive trigger points for the support of future programs.

The survey is being made available by email shared either from the MRWCC direct producer contact list or confidentially by your municipality. If you are a livestock producer within the watershed who operates even partly on native deeded or leased rangeland and you have not received a survey invite, please feel free to contact us directly by email or phone and we will be sure to send you the information needed to fill it out. We also recognize that some community producers would prefer a printed copy of the survey to fill out and return to the MRWCC office so additional paper copies are available at your local Ag Service Board office or the MRWCC office here in Milk River.

Participants who complete the survey are eligible to enter a draw for $100.00 UFA gift certificates! 20 gift certificates available, which gives approximately a 1 in 5 chance of winning as a token of our appreciation for providing this valuable feedback.

Additionally, community focus group meetings will be held with producers to discuss the project and introduce the work over the winter months please watch for details on how you can also participate and hear about potential programs and other producer feedback. A final summary report that documents the process, results, and recommendations is anticipated to be completed by March 2022.

Left: Portable Watering system on Red Creek - Photo by Tim Romanow
Above: Irrigation on the Milk - Photo by William King
Bottom: Figure 1. Location of Red Creek water quality sampling sites.

REVIEW OF RED CREEK WATER QUALITY:
Livestock, Irrigation and Protection of Aquatic Life

Prepared by S. Riemersma, Palliser Environmental Service Ltd.

Introduction

Red Creek is a small tributary of the Milk River in Alberta. The headwater tributaries of Red Creek originate southwest of the Town of Milk River in Alberta (Canada) and Montana (United States). The mainstem of Red Creek starts in Montana and flows in a northeast direction into Alberta for 49 km where it joins the Milk River (Figure 1). The confluence of Red Creek and the Milk River is approximately 34 km downstream of the Town of Milk River. Approximately 9 km of the mainstem Red Creek is in Montana and 40 km is located in Alberta.

Landowners at Red Creek have been concerned about water quality for livestock, irrigation activity and aquatic life. Although water quality has been collected by the MRWCC and reported annually since 2006, additional water chemistry data (e.g., ions and metals data) were not typically included in the annual reports. This review of water quality aimed to address landowner concerns by assessing additional water quality data in comparison to available water quality guidelines. Note that only water chemistry parameters that had provincial guidelines established for livestock water, irrigation water and the protection of aquatic life were assessed in the report.

Red Creek as a Source of Livestock Water

The only parameter of concern for livestock was sulphate which sometimes exceeded the livestock water quality guideline.

- Water with sulphate concentrations less than 500 mg/L is considered good for livestock use. At Red Creek, annual median sulphate concentrations ranged from 828 to 1,100 mg/L with maximum concentrations reaching 1,300 mg/L.
- Water with sulphate concentrations in this higher range is still considered acceptable for livestock use; however, livestock may develop scours or refuse to drink the water if not accustomed to it. These higher sulphate concentrations may contribute to trace mineral deficiency in calves which can cause depressed growth rate, fertility and immune response.

Red Creek as a Source of Irrigation Water

A few parameters exceeded the irrigation quality guidelines, including the metal boron, salinity (as measured by total dissolved solids and conductivity) and fecal coliform bacteria. In the case of Boron, the exceedance was considered minor.

Metals

- Concerns with boron toxicity from Red Creek irrigation water are likely minor. The median boron concentration marginally exceeded the lower range of the guideline once in five years, and 6 of 23 samples exceeded the guideline with boron concentrations ranging from 512 to 623 µg/L. Crop-specific guidelines for boron indicate that Red Creek irrigation water may have limitations for blackberries. Economically more important crops in the watershed such as wheat, barley, oats and alfalfa have boron tolerances >500 µg/L.

Salinity

- Water used from Red Creek for irrigation may have limitations due to salinity. The median total dissolved solids (TDS) and conductivity values exceeded guidelines for irrigation. Typical median TDS values ranging between 1,800 and 2,000 mg/L and could impact several sensitive fruit and vegetables, and some pasture and hay crops. Water from Red Creek may be suitable to irrigate vegetables more tolerant of salinity (e.g., beets, zucchini, asparagus) or more tolerant hay and crop species (e.g., canola, oat hay, wheat hay, mountain brome, tall fescue, sweet clover, perennial ryegrass, oats, rye and barley).

Fecal Coliform Bacteria

- Irrigation guidelines for fecal coliform bacteria were often above the irrigation guideline of 100 cfu/100 mL. The concern for irrigation use is lower as the guideline was developed largely to address potential human health risks of consuming irrigated raw produce that may be consumed soon after irrigation (e.g., lettuce). Residents should be aware of fecal coliform bacteria concerns for irrigation water from Red Creek for home garden use.
- Fecal coliform bacteria are specific to the intestinal tracts of warm-blooded animals (e.g., cattle, birds, deer, muskrats, pets) and humans. More specific tests could be conducted using microbial source tracking to identify potential sources of fecal coliform bacteria. If cattle are determined to be a source, measures such as offstream watering and fencing to prevent direct cattle access to streams may be beneficial in reducing bacteria counts. Riparian fencing can have additional benefits such as increasing bank stability, reducing bank erosion and sediment, reducing transport of nutrients and metals by way of sediment adsorption and increasing habitat diversity for wildlife.

Red Creek as a Source of Water for Aquatic Life

Water quality at Red Creek occasionally did not meet dissolved oxygen and dissolved metals, and Total Selenium guidelines established for the protection of aquatic life.

Dissolved Oxygen

- Dissolved oxygen concentrations at the upper and middle sites occasionally did not meet guidelines for the protection of aquatic life. Dissolved oxygen concentrations <5 mg/L may result in the mortality of some fish. Fish species captured at Red Creek include Yellow Perch, White Sucker, Longnose Sucker, Northern Redbelly Dace, Lake Chub, Brassy Minnow, Fathead Minnow, Brook Stickleback and Iowa Darter. Yellow Perch, Fathead Minnow and Iowa Darter have been classified as tolerant to low dissolved oxygen concentrations with an acute lethal dissolved oxygen concentration of <1 mg/L.

Metals

- Total selenium concentrations at lower Red Creek are persistently elevated and exceed the chronic guideline of 2 µg/L (median concentrations range from 3.43 µg/L to 10.50 µg/L) . Anthropogenic sources of selenium include coal mining, coal-fired power plants, smelter emissions, oil and gas refining, wastewater discharges and landfills. None of these anthropogenic sources are likely to contribute to Red Creek; therefore, selenium in Red Creek is likely naturally occurring. Soils naturally high in selenium are found in arid and semi-arid areas where soil is alkaline including some areas of the Prairie Provinces.
- Selenium bioaccumulation in aquatic environments is complex and can vary widely within and between species. It is dependent on many biotic and abiotic factors, including the amount and form of selenium, the presence of other elements and compounds, food preferences, temperature, type of habitat, species sensitivity, life stage, and trophic position or food web structure. Background selenium concentrations rarely reach levels that result in acute effects. The concentration of selenium resulting in acute endpoints in invertebrates (cladocerans to mussels) has ranged from 9.9 to 203,000 µg/L. Acute toxicity concentrations of selenium for fish has ranged from 600 to 23,400 µg/L. The more common route for selenium toxicity is through chronic exposure at lower concentrations. Some researchers have found negative effects on biota in ecosystems with very low water selenium concentrations, at or below 2 µg/L.

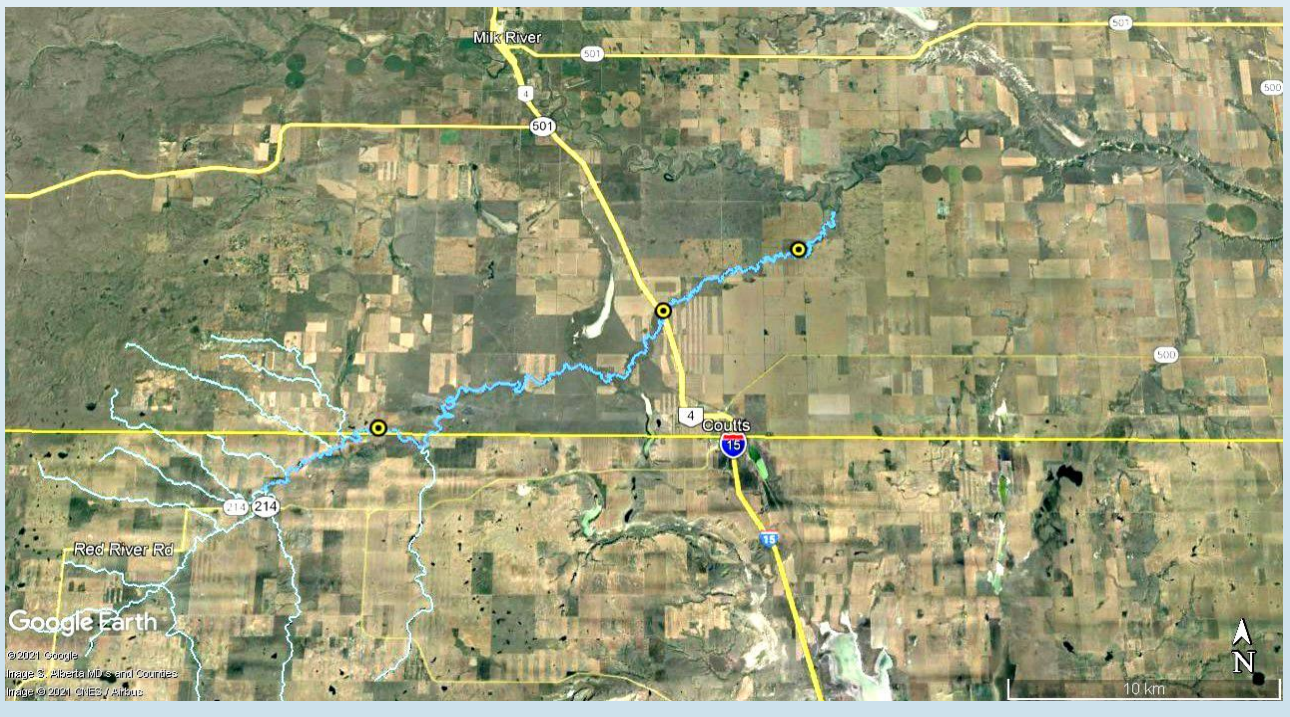
Nutrients

- Total phosphorus and total nitrogen are high at Red Creek. Both nutrients are required for plant growth; however, excessive concentrations can result in dense algae and aquatic plant growth. Aquatic plant coverage of between 75% and 100% are often observed at Red Creek, as well as algae coverage greater than 50%. Nutrients can be stored in decaying plant material and bottom sediments and can be a continual internal source of nutrients in freshwater systems.

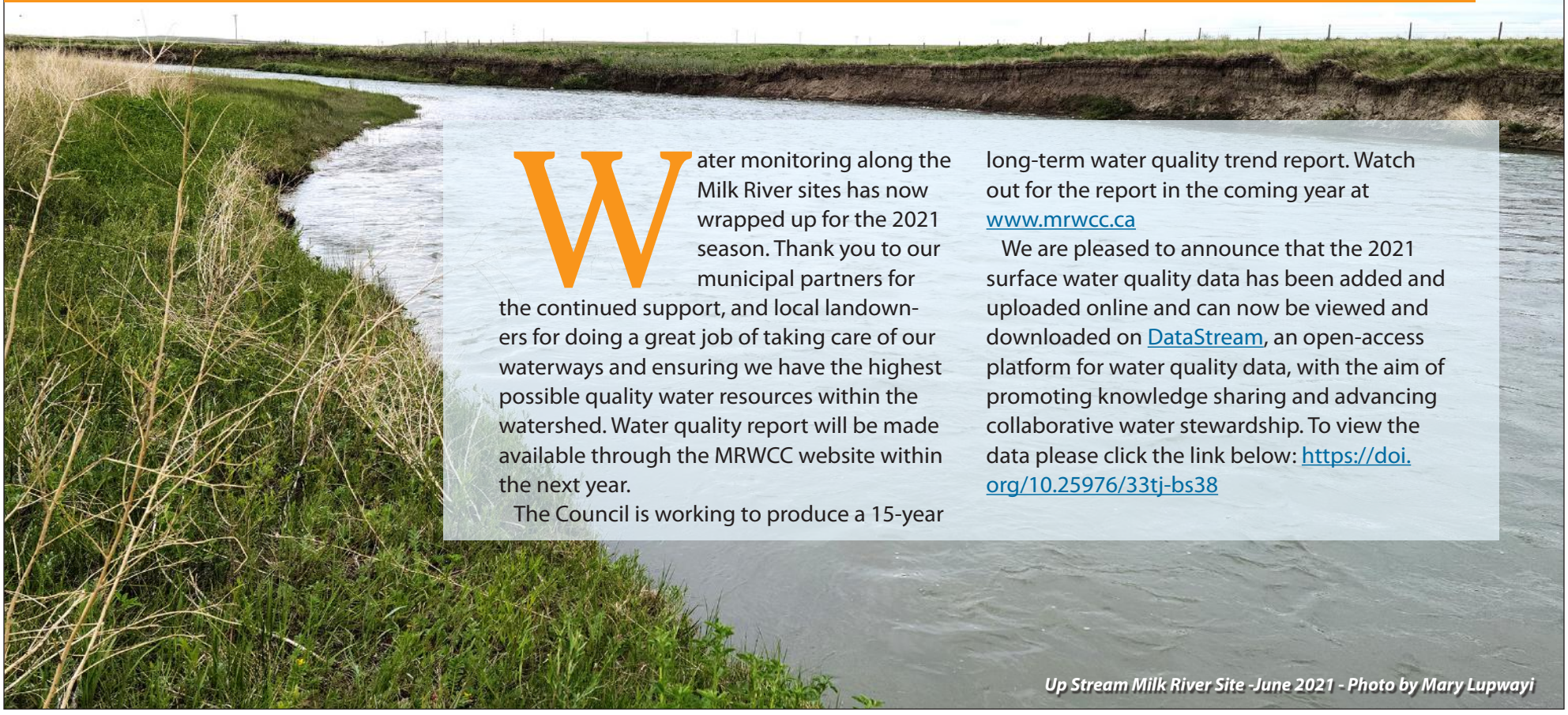
Conclusions

- Water quality is influenced by several factors including surficial geology, soils, weather and climate, and groundwater influence. Generally, water quality tends to degrade in wet years compared to dry years, as contaminants leach from soils and are transported to surface water. This mobilization is typical and is observed in the Red Creek data.
- Water quality at Red Creek has some limitation for use; water quality is high in sulphate that may increase occurrence of scours in livestock, and high salinity may limit the irrigation of sensitive crops. Low dissolved oxygen may occasionally stress aquatic life, particularly at the upper and middle sites.
- While most metal concentrations are sufficiently low, Total Selenium is consistently above guidelines established for the protection of aquatic life. While selenium may be naturally occurring, additional monitoring could be undertaken to better understand its occurrence and confirm sources in the Red Creek watershed.

The full report can be accessed on the MRWCC website at: https://www.mrwcc.ca/files/4516/3699/4549/RedCreek-WQReport_Final_November_4_2021.pdf



Milk River Water Monitoring update



Water monitoring along the Milk River sites has now wrapped up for the 2021 season. Thank you to our municipal partners for the continued support, and local landowners for doing a great job of taking care of our waterways and ensuring we have the highest possible quality water resources within the watershed. Water quality report will be made available through the MRWCC website within the next year.

The Council is working to produce a 15-year long-term water quality trend report. Watch out for the report in the coming year at www.mrwcc.ca

We are pleased to announce that the 2021 surface water quality data has been added and uploaded online and can now be viewed and downloaded on DataStream, an open-access platform for water quality data, with the aim of promoting knowledge sharing and advancing collaborative water stewardship. To view the data please click the link below: https://doi.org/10.25976/33tj-bs38

Up Stream Milk River Site -June 2021 - Photo by Mary Lupwayi

WATER SUPPLY INFORMATION

How are the waters of the St Mary and Milk Rivers divided? Who makes the decisions? Here is a simple info graph from Alberta Environment and Parks to help understand the system and letter of intent. For more information check out www.rivers.alberta.ca and click on the Milk River Basin.

St. Mary and Milk River Basins
Canadian and American Entitlements

Boundary Waters Treaty (1909)

- Equal apportionment between the two countries, with flexibility for more than one half of either river to be taken by either country to afford more beneficial use for both
- For the irrigation season, specific flow or percentages of natural flow for each country
- Established the International Joint Commission (IJC) and its decision making powers

International Joint Commission (IJC)

- 1921 - Order of the IJC clarified where flows are measured and how they are apportioned
- Flow volume is calculated every 15 days by Water Survey of Canada and the United States Geological Survey

St. Mary River Entitlements

January	April 1 - October 31	December
Canada/USA share St. Mary River natural flows 50/50	Canada entitled to 75 per cent of natural flow of the St. Mary River up to natural flows of 18.9 cubic metres per second and 50% of natural flows above this threshold.	Canada/USA share St. Mary River natural flows 50/50

Milk River Entitlements

January (non-irrigation season)	April 1 - October 31 (irrigation season)	December (non-irrigation season)
Canada/USA share Milk River natural flows 50/50	Canada entitled to 25 per cent of natural flow of the Milk River up to natural flows of 18.9 cubic metres per second and 50 per cent of natural flows above this threshold.	Canada/USA share Milk River natural flows 50/50

St. Mary and Milk River Watersheds Map

Alberta

St. Mary and Milk River Basins
Canadian and American Entitlements

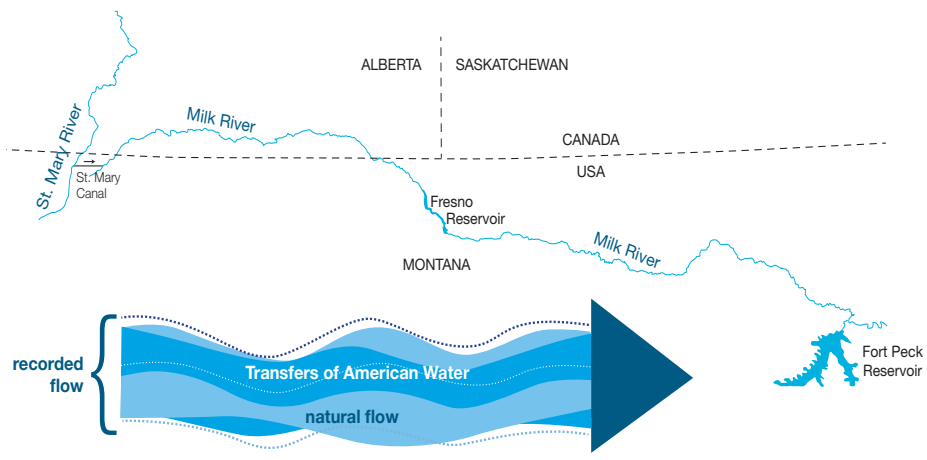
Letter of Intent (2001)

- Mutually beneficial agreement allowing each country to use more of its alloted share during seasonal low flow periods.
- Historically, natural Milk River flows are very low in the late summer.
- Historically, natural St. Mary River flows are low prior to mountain runoff around June.

March 1 - May 31	June 1 - September 15	Oct. 31
USA can accumulate deficit of 9800 dam³ (8,000 acre ft.) on the St. Mary River from March 1 to May 31	Canada can accumulate deficit of 4900 dam³ (4,000 acre ft.) on the Milk River from June 1 to September 15	Deficits must be equalized by Oct. 31

Inter-basin Transfers on the American Side

- U.S. St. Mary Canal transfers part of the U.S. entitlement from the St. Mary River to the Milk River for storage in reservoirs downstream in Montana.



- Under the LOI, unless otherwise agreed to by the IJC, the U.S. can only accumulate a deficit between March 1 and May 31, however, water may be transferred throughout the year.
- When water is being transferred, recorded flow of the Milk River is much higher than the natural flow.

Alberta

State of the Watershed Report update 2023

It's hard to believe we are coming up on 10 years since the release of the Transboundary State of the Watershed (SOW) report! Many have enjoyed flipping the pages to learn about all aspects of the natural conditions of our watershed across not only Alberta but also Montana and Saskatchewan. This book has been used for everything from a coffee table book to a teaching tool for colleges and universities. Reporting has ranged from the demographics of our communities, history, current of conditions of our native rangelands, groundwater, surface waters, and critical infrastructure that supports everyone.

We are excited to announce we are working to renew and update the Transboundary SOW over the next year with expanded and new partners in all three jurisdictions. Much has happened since the last compilation from a water management perspective to changes in our physical environment, and land management and stewardship. We have helped fill gaps in our knowledge about wildlife and fish resources and fostered relationship reconciliation actions with our indigenous community members.

There will be opportunities for community members to get involved, to be announced over the coming months! This is likely to include a watershed photo contest to help us fill the pages with images that help tell our story but also exciting opportunities for the artists and storytellers within our community to become involved.

Milk river at Writing On Stone Provincial Park

International Watersheds Initiative Remote Sensing of Consumptive Use study update

During June and July 2021, members of the interagency Technical Working Group supporting the International Joint Commission (IJC) Accredited Officers for the St. Mary and Milk Rivers spent a combined three weeks visiting fields in the basins. Visits were used to identify the type, timing, and location of irrigation to ground truth satellite imagery. Despite travel restrictions and exceptionally dry conditions, scientists were able to complete field visits on both sides of the U.S.-Canada border. The work was a collaborative effort between U.S. Geological Survey (USGS), Montana Department of Natural Resources and Conservation, The Blackfeet Nation, Alberta Environment and Parks, Environment and Climate Change Canada, and landowners/irrigators in the basin.

This summer's work was part of the second phase of a larger, three-phase project being led by the USGS. The project is funded by the IJC through the International Watersheds Initiative. Phase One, completed in 2020, focused on obtaining and preparing the input datasets required for modeling used to estimate consumptive water use from irrigation in the basin. The main focus of Phase Two of the project is to collect data that can be referenced during the modeling (Phase Three) and used to distinguish irrigated land from non-irrigated land in satellite images. On-site irrigation verification will occur next summer as well, with all of Phase Two tasks being completed by the end of 2022. Finally, Phase Three will begin in 2023 and focus on running and optimizing the model that will be used to estimate consumptive use in the basin. One expected product from Phase Three is an easy-to-use web application the public can use to obtain and visualize current and historical consumptive water-use data in the basin.

More information on the project can be obtained at the following links:

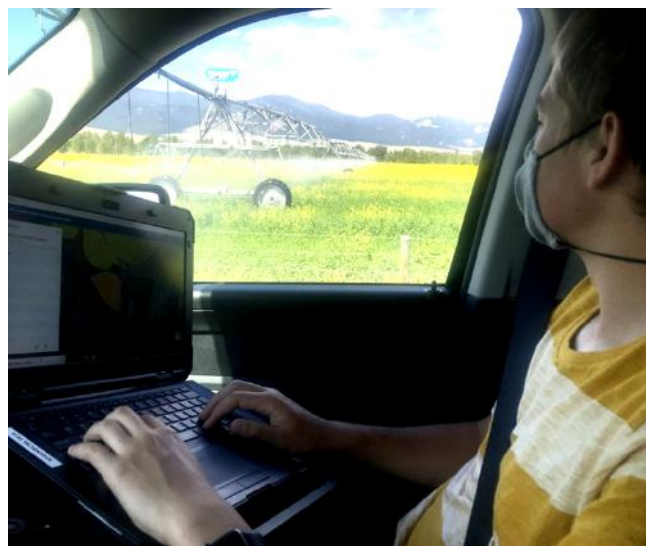
Podcast, Eyes on Earth, episode 43, "U.S.-Canada Water Use"

Fact Sheet, "Using Satellite Imagery to Estimate Consumptive Water Use from Irrigated Lands in the Milk River Basin, United States and Canada"

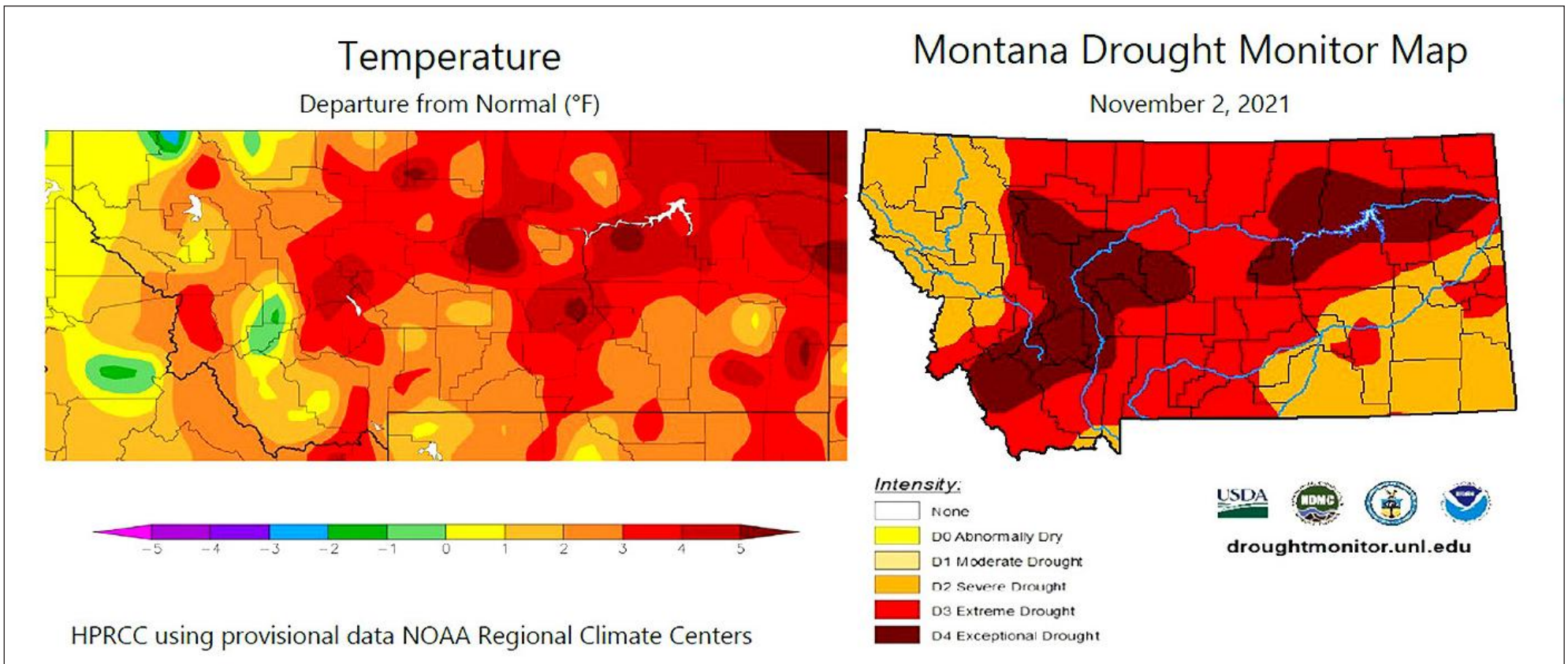
Web page, "Using Satellites to Measure How Thursday Crops are in the St. Mary-Milk Rivers Region"

Web page, "Landsat will help U.S. and Canada Share River's Water"

Or by contacting project lead, Roy Sando, at tsando@usgs.gov.



U.S. Geological Survey employee visiting a field to map irrigated lands in the St. Mary and Milk River Basins.



Water Supply Forecast

During the 2021 season, previously stored water in the upper St Mary's basin was released into the system following the diversion failure repairs. Disappointingly, challenges for water supply to irrigators continued as no significant deficit of water was available for repayment to Milk River irrigators after the end of June 2021 irrigation was once again cut off after the Milk River hit zero natural flow. The good news is that current projections and storage forecasting going into the winter months likely point to the US being able to divert early season St Mary River water and accumulate a deficit next spring. Storage in Sherburne Reservoir was approximately 28% full or 95% of average for the second week of November; at the same time last year the reservoir was being held at over 90% full. A single large precipitation event at the end of October raised the elevation of storage over 10 feet. Forecasters generally are looking at an average to above average precipitation for our rivers headwaters this winter, with the high likelihood of El Nino conditions bringing significant snow. In Montana, USDA monitors are closely watching trends with an expansion of extreme and exceptional drought in the southeastern portion of the watershed which will likely further strain limited water resources in 2022. Regular conditions updates are provided by the MRWCC to membership between newsletters, to get the most recent updates to your email feel free to contact our office to be added to the free membership list.

Easy to use, portable electric fencer creating temporary cattle exclusion in sensitive habitat. Photo credit Julie Landry-DeBoer, Alberta Conservation Association

Low tech, portable, temporary electric fence in sensitive habitat. Photo credit Julie Landry-DeBoer, Alberta Conservation Association

Easy to use, portable electric fencer creating temporary cattle exclusion in sensitive habitat. Photo credit Dusty Pearson, rancher.

Native Grassland Stewardship

By Norine Ambrose, Cows and Fish

As someone who works for a stewardship organization, I like to think of myself as someone who enables and supports others to care for the land, since I don't own any land outside of town (although I wish I did). I rely upon others taking information I offer, moulding the management ideas, and applying them to their own farm or ranch. Because I've seen it, I know that a well managed pasture will support more wildlife, have more stable, abundant forage to graze and also benefit water quality, being more resilient in drought or flood periods. Having worked for Cows and Fish for over 20 years, I have seen countless examples of this amazing stewardship—so many keen, committed landowners ensuring the health of their land, while also making their agricultural operation successful. Often, these are ranches or farms that have kept their upland rangelands and riparian areas (those moist areas next to streams, rivers, lakes and wetlands) healthy with thoughtful management, spanning generations. At other times, these are agricultural producers, acreage owners and others, that may have seen some loss of health to their land and have worked hard to return it to a healthier state. Sometimes change is prompted by a new view, or by an old memory - maybe they noticed something from their childhood memories has gone missing – perhaps that wonderful meadow lark song in spring, the fish they used to catch in a favourite spot, or the willows and cottonwoods for shade, that they would like to see return.

These voluntary, proactive measures to benefit rangeland and riparian areas means healthier, more productive pastures, while also benefiting wildlife in need of support—like sage grouse. In addition to looking at grazing management (timing, distribution, etc), other simple techniques can have multiple benefits and portability is valuable: portable off-site watering systems create flexibility and increase cattle weight gain, visibility reflectors on fence lines reduce wildlife collisions and fence repair costs, portable wind breaks can direct livestock away from sensitive habitats while offering much needed protection to cattle, and portable electric fencing helps landowners protect sensitive areas and aid in cattle distribution where permanent fencing may not be feasible.

Lyndon Haugan, who ranches near Manyberries, says his portable fencers have "allowed me to protect wildlife habitat and other sensitive areas on my ranch, and improve my cattle operation".

We focus on riparian areas at Cows and Fish, so we rely on partnerships to offer the best support to landowners on other aspects of management. In southern Alberta, MULTISAR (a partnership between Alberta Environment and Parks, Alberta Conservation Association, and Prairie Conservation Forum) focusses on conserving species at risk in Alberta's native grasslands. Their expertise in range health, wildlife, and grazing management that benefits species at risk complements our focus on riparian areas. Together, we are working with agricultural producers to support stewardship in critical habitat for greater sage grouse in southeastern Alberta.

Cows and Fish and MULTISAR are looking to support more projects that have mutual benefits in southeastern Alberta using SARPAL (Species at Risk Partnership on Agricultural Landscapes) funding secured by the Canadian Cattlemen's Association.

Portability = Flexibility

Portable electric fencing, windbreak shelters and livestock watering systems mean the same resources can be used in many places, adjustments can easily be made once you have tried something out.

Easy to use, solar-powered off-stream watering system reduces the amount of time cattle spend in waterbodies and riparian areas. Photo credit Cows and Fish.

Solar-powered portable off-stream waterers can easily be moved around. Even when the nearby waterbody is not fenced out from cattle, research shows that 80% of cattle drinking will occur from the trough, instead of the nearby waterbody. Image from Red Creek MRWCC tour, 2014. Photo credit Cows and Fish.

Solar-powered portable off-stream waterers can easily be moved around. Even when the nearby waterbody is not fenced out from cattle, research shows that 80% of cattle drinking will occur from the trough, instead of the nearby waterbody. Photo credit Cows and Fish.

Contact us to learn more about opportunities:

Emily Purvis
Riparian Range Specialist
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Cell: 403-635-9013
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Adam Moltzahn
Wildlife Biologist
Alberta Conservation Association
Cell: 403-795-8926
Email: adam.moltzahn@ab-conservation.com

Solar-powered portable off-stream waterers can easily be moved around. Even when the nearby waterbody is not fenced out from cattle, research shows that 80% of cattle drinking will occur from the trough, instead of the nearby waterbody. Image from Warner County/ MRWCC tour, 2013. Photo credit Cows and Fish.

Solar-powered portable off-stream waterers can easily be moved around. Excluding cattle is not required to improve cattle distribution and riparian health. Fencing, if used, can be temporary or permanent, or used to create riparian pasture units. Image from Little Bow River. Photo credit Cows and Fish.

Past AGM - Photo by Mary Lupwayi

Call for Nominations!

The Milk River Watershed Council Canada is looking for nominations for the Board of Directors at their **2022** Annual General Meeting which will be held on **May 26**.

The following seats will be open for nominations:

- Non-Government Organization - Environmental
- Non-Government Organization - General
- Agriculture – Farmer
- Agriculture – Rancher
- Water Users
- Municipal District/County (2 positions)
- Provincial Government (2 positions) one must be Alberta Environment and Parks
- Health
- First Nations (currently vacant)
- Commercial/Industrial (currently vacant)

More information can be accessed from the MRWCC bylaws at:
https://www.mrwcc.ca/files/7816/2750/2589/MRWCC_Bylaw_Revised_May_2021.pdf

Nominations will be taken from the floor at the AGM or received in advance by contacting Tim at 403-647-4342 or tim@mrwcc.ca

For more information contact: mary@mrwcc.ca or 403-647-3808

More information about the meeting and meeting agenda will be available in April, 2022.

Thank you to all members who attended the 2021 AGM!


Pre Covid Auction Items - Photo by Mary Lupwayi

Seeking donations for the MRWCC 2022 Online Auction!

Please help support watershed planning, monitoring, education, and stewardship within our community!

The MRWCC is once again seeking donations for the 2022 Online Auction.

Last year, because of your generosity we raised over $5,000. The money raised is supporting community driven watershed stewardship initiatives that help achieve balance among a thriving community, a healthy environment and a prosperous economy through understanding, dialogue and action. These individual and corporate donations are essential to leverage project funding from other funders.

We hope you will consider taking the opportunity to make a donation for our upcoming 2022 online auction. Our fundraising efforts have been a success because of your generosity and continued support over the years.

We have started accepting donations for our next online auction until February 24, 2022. We plan to have our online auction in March 2022. Exact dates will be announced closer to the auction.

If you would like to make a donation, please contact us at 403-647-3808

Any donation is acceptable: cash donation, items; big, small, used, or new will all be appreciated!

The MRWCC is a not-for-profit, charitable organization. As a registered charity we will issue a tax-deductible receipt for the value of your donation upon request.

To donate please contact mary@mrwcc.ca or simply call our office at 403-647-3808 and we will arrange pick up.

Thanking you in advance for your support!

MILK RIVER WATERSHED COUNCIL CANADA 2022 HERITAGE TREE PROGRAM


2020 Heritage Trees – Sandstone Ranch

Nominate a tree or trees for Heritage Tree recognition, whether it is located on your own property, a friend or family member's property, or in a public space (we will verify with the owner). To nominate or for more information please contact us at:

mary@mrwcc.ca
(403) 647-3808
240 Main Street, Box 313
Milk River, Alberta, T0K 1M0
www.mrwcc.ca

Nomination Deadline is February 11, 2022

What is the Heritage Tree Program?

- The Heritage Tree Program identifies and records the location of heritage trees as well as details such as age, size, appearance and most importantly their cultural and historical significance. The stories and photos of recognized trees will then be featured on the MRWCC website.
- In addition, the identification of these trees enables the MRWCC and community-minded organizations to locate potential native seed/cuttings sources. Collecting these seeds will ensure the successional planting of legacy trees for future generations to enjoy.
- Identified trees will also be provided with a wildlife/livestock proof fence and recognition plaque.
- Planting new protected legacy trees will also be encouraged under the Heritage Tree Program.

What is a Heritage Tree?

- Notable because of its size, form, shape, beauty, age, rarity, significance, or other distinctive features;
- A living relic that displays evidence of significance;
- A prominent community landmark;
- A specimen associated with a historic person, place, event, or period;
- A representative of a farm or farmstead planted by ancestors within the community;
- A tree associated with local folklore, myths, legends, or First Nations traditions;
- A tree that you choose to plant in honour of a loved one that you will care for and watch grow over the years.

Objectives of the Heritage Tree Program

The Heritage Tree Program allows residents of the Milk River watershed to celebrate the pioneering spirit of the community by identifying and nominating trees of local significance within the watershed.

- Heritage trees help ensure the sustainability of our riparian forests for future generations to enjoy.
- Trees also play a role in not only telling the stories of local history, but also play pivotal roles in providing habitat for many wildlife species, and stabilize fragile prairie soils in erosion prone areas.
- Native trees along riparian areas of the Milk River are rare and require additional protection and care for propagation.

Acknowledging Our 2021/22 Funders

A big thank you goes to our main funder Alberta Environment and Parks. This fiscal year (2021/22), Alberta Environment and Parks gave a grant of $275,000 to the MRWCC to help the Council undertake responsibilities as follows:

1. Convener and Collaborator:

To provide an important forum where stakeholders meet to share information and identify, discuss and recommend priorities for issues and initiatives within the watershed.

2. Monitoring and Reporting:

As a valuable source of information about regional issues and monitoring needs related to watershed health and management. Producing the State of the Watershed (SOW) reports that identify watershed conditions, the local pressures facing the watershed and the data and research gaps.

3. Policy and Planning:

The MRWCC is a valuable source of local knowledge for relevant government (provincial, municipal and federal) policy development. We promote and coordinate the creation and implementation of opportunities to integrate and adopt strategies from various planning, policy and operational products and processes.

The MRWCC also successfully obtained other funding from the following organizations to help with various programs:

$20,000 from Alberta Ecotrust Foundation to produce a work plan that will form the main component of a project focusing on keeping the community informed of the complexities of the Milk River and how to achieve maximum water conservation during water shortage periods.

$10,000 from Alberta Conservation Association to produce a series of virtual field trip educational videos called 'From the Field' that will allow development of curriculum linked grade 8-12 in classroom virtual fieldtrips with wildlife researchers, habitat managers, and cow-calf farmers/ranchers that are responsible for sustainable management of land, water, and biodiversity in southern Alberta.

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :

Environment and Climate Change Canada / Environnement et Changement climatique Canada

$50,000 from Environment and Climate Change Canada (ECCC) to enable us to identify tools of interest to producers to implement conservation strategies and incentive trigger points necessary to ensure participation. The outcomes of this project will inform additional stewardship programs to maintain or improve Species at Risk habitat across the Milk River watershed and potentially entire priority place.

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :

Environment and Climate Change Canada / Environnement et Changement climatique Canada

$60,000 from Environment and Climate Change Canada (ECCC) to identify Little Brown Myotis Bat roosting and overwintering habitat along the Milk River riparian corridors and on existing structures/farmsteads. 2. Monitor usage/inventory species presence and abundance. 3. Promote and implement stewardship projects such as protection of existing nesting and roosting structures, mitigation placement of bat boxes and larger habitat structures, and education on the potential impact of White Nose Syndrome (WNS) and other threats to all bat populations found within the watershed.

$4,000 from Alberta Environment and Parks. This is a Rangeland Sustainability Fund for the Southern Alberta Youth Range Days Program, an interactive event for youth and families interested in learning about working agricultural landscapes critical to environmental sustainability. This project will support core goals of the program including rangeland stewardship and adaptation, wildlife, livestock and rangeland interactions, and producer training/awareness.

In addition, we wish to thank Board members, Team members and all volunteers who give their time and resources generously to the cause of the MRWCC. In a normal year (without Covid-19) we receive over $200,000 in in-kind contributions.

Thank you! We have accomplished a lot with your valuable contributions. Without your support much of this accomplishment would not be possible.

Milk River Watershed Council Canada
2022 ENVIRONMENTAL STEWARDSHIP AWARDS

Nomination submissions should include this application form and written information about the nominee's environmental work/projects for consideration.

For detailed information, check out the Environmental Awards webpage at

Forward nomination form and written submission by mail or email at:

MRWCC

240 Main Street

Box 313

Milk River, Alberta

T0K 1M0

or

Email: mary@mrwcc.ca

NOMINATIONS MUST BE RECEIVED
By February 11, 2022

I would like to Nominate:

_____

(Please Print)

Please mark an (x) for the chosen category

Individual_____

Family_____

Commercial Business _____

Environmental Group _____

Contact:

Mailing Address:

_____

_____

_____

Phone (H):_____
Phone (C): _____

Email:

_____

Please provide the following information. (Please print)

Nominator Name:

_____

Nominator's Contact:

Phone (H):_____

Phone (C):_____

Email:

_____

SELECTION PROCESS AND CRITERIA

Nominations will be assessed by a review committee chosen by the MRWCC Board of Directors.

To be eligible for an award, an individual, family, business, or environmental group must have been instrumental in demonstrating responsible environmental management practices by promoting public awareness, understanding and active concern for the enhancement and protection of the environment.

In addition, the review committee will also consider the nominees':

- long-term service and commitment;
- voluntary contributions; and;
- innovative approach.

SUMMARY OF ACHIEVEMENT

Describe in 400 words or less why your nominee deserves to win the MRWCC Environmental Stewardship Award. Ensure that your summary outlines how the nominee's efforts and achievements fulfil the award criteria as defined in this brochure. You are encouraged to include letters of endorsement and other supporting materials.

NOMINATIONS MUST BE RECEIVED BY February 11, 2022

The Milk River Watershed Council Canada (MRWCC) is looking for nominations to honour individuals, families, commercial businesses, and environmental groups that are good environmental stewards of the Milk River watershed. Nominations are in the following categories:
Individual • Family • Commercial Business • Environmental Group

Nominate anyone in the above categories that has demonstrated outstanding environmental and conservation efforts to sustain, protect, and enhance the environment within the Milk River Watershed. Self-nominations are welcome.

Milk River Watershed Council Canada
240 Main Street, Box 313 Milk River, Alberta T0K 1M0 or mary@mrwcc.ca (403) 647-3808

Board of Director's Corner

The Milk River Watershed Council Canada consists of 17 Directors and 1 Member at Large. The sectors being represented on the Board of Directors are:

2021/22 Board members: *Back row, standing (Left to Right): Ross Ford, Ben Ellert, William King, Joan Hughson, Suzanne Liebelt (Outgoing member), Brian Hills, Darcy Wills (now alternate Individual member), Scott MacCumber, Lorraine Nicol, Aaron Domes, and Ed Sloboda. Front row, seated (Executive Board Members): Warren Cunningham (Secretary), Will Lindeman (Treasurer), Ron McNeil (Vice Chairman), and John Ross (Chairman) Missing: Ken Miller, Kristen Dykstra, Ken Brown, and Peggy Losey*

SECTOR	CURRENT BOARD MEMBER
Provincial Government (Alberta Environment and Parks)	Brian Hills
Provincial Government	Aaron Domes
Non-Government Organization (Environmental)	Ron McNeil (Vice Chairman)
Non-Government Organization (General)	Ed Sloboda
Agriculture – Farmer	Ken Miller
Agriculture – Rancher	John Ross (Chairman)
Water Users (Irrigator, Water Co-ops)	Will Lindeman (Treasurer)
Towns/Villages/Hamlets	Peggy Losey/Scott MacCumber
Municipal District/County	Ross Ford
Municipal District/County	Joan Hughson
Academia	Lorraine Nicol
Federal Government	Ben Ellert
Health	Kristen Dykstra
Individual Member	William King
Recreation	Ken Brown
First Nations	Vacant
Commercial/Industrial	Vacant
Appointed Member at Large	Warren Cunningham (Secretary)

This year, at their organizational meeting, the Municipal District/County and Towns/Villages/Hamlets appointed the following members to represent their respective municipalities on the MRWCC Board of Directors:

■ Appointed Municipal reps
- County of Warner - Ross Ford – returning Director
- County of Forty Mile – Joan Hughson – returning Director
- Town of Milk River – Peggy Losey – New Director
- Village of Coutts – Scott MacCumber (Towns/Villages/Hamlets Alternate)

■ Farewell to Suzanne Liebelt and Welcome Peggy Losey!
Suzanne Liebelt has been on the MRWCC Board for 4 terms (8 years) since 2013. As a Director, representing the Town of Milk River, Suzanne served on the MRWCC Board diligently. Her resourcefulness, kindness, and generosity made her a pleasure to work with. The MRWCC Board wishes to thank Suzanne. She will be greatly missed on the Board.

The MRWCC Board wishes to welcome Peggy Losey. Peggy is not a stranger to the Council as she has worked with the MRWCC as the Mayor and Councilor of the Town Council in the past. The Board looks forward to working with Peggy!

CONTACT US

OFFICE LOCATION:
We are located in the Milk River Town Office at 240 Main Street.
ADDRESS:
Box 313, Milk River, Alberta. T0K 1M0
OFFICE HOURS:
Tuesdays, Wednesdays, and Thursdays 8 a.m. to 4 p.m.
To reach us on Mondays and Fridays please contact us
We are closed weekends and holidays

STAFF DIRECTORY:
Executive Director:
Tim Romanow
Phone: 403-647-4342
Email: tim@mrwcc.ca

Program Coordinator:
Mary Lupwayi
Phone: 403-647-3808
Email: mary@mrwcc.ca

WORKING WELL
Clean water. Well protected.

OUR WATER • OUR LEGACY • MILK RIVER WATERSHED COUNCIL CANADA

COUNTY OF WARNER

present a live, online (via Zoom)

Working Well Workshop

December 2nd, 2021
Starting at 6:30 pm

Consider how your life would change if you lost your water supply!

Did you know that a poorly maintained water well can put your water supply at risk of contamination and reduce your well yield?

If you are one of ~450,000 Albertans who use their water well for household purposes, the key to ensuring your water supply is safe and secure is knowing how groundwater works, learning about your well and understanding how to properly maintain it.

Proper water well siting, construction and maintenance will help protect your well from biofouling and contamination, save you costly repairs and ensure your well water yields are sustained over many years.

Find out what you can do to protect your well. Attend this **FREE, live, online** (via Zoom) **water well management workshop** being hosted by **Milk River Watershed Council Canada and County of Warner**, and presented by the **Working Well Program**, with technical expertise provided by Alberta Agriculture and Forestry, Alberta Environment and Parks, Alberta Health Services and licensed water well drillers.

During this live, online workshop you will learn:

- The basics of groundwater and how your well works.
- How to protect your well from contamination.
- How and when to test your well water.
- How to properly operate and maintain your well.
- How and when to shock chlorinate your well.
- What to do with old, abandoned wells on your property.
- And more.

To participate in this virtual workshop, pre-register here: https://bit.ly/3lq2PKl