



Minutes

MRWCC Board Meeting

March 25, 2021 – 1:30 PM

Zoom Meeting

Present:

John Ross, Brian Hills, Suzanne Liebelt, Ken Miller, Darcy Wills, Will Lindeman, Scott MacCumber, Ron McNeil, Lorraine Nicol, Aaron Domes, Ross Ford, Ed Sloboda, William King, Joan Hughson, Warren Cunningham, Tim Romanow, and Mary Lupwayi

Absent: Ben Ellert, Kristen Dykstra

Guests: Roy Sando (*Presenter*) and David Hunt (Landsat water use modeling project) portion on the meeting

1. Welcome and introductions

- John Ross welcomed everyone to the zoom meeting
- He brought the meeting to order at 1:37pm

2. Approve Agenda

Motion: Lorraine Nicol moved to approve the agenda. Suzanne Liebelt seconded. **Carried**

3. Minutes from January 28, 2021 meeting

- Page 5 last bullet should read: AEP not aware of the information discussed with Ken Miller by Canada's Accredited Officer to the IJC. The IJC is meeting the second week of February and expect their plans to look at options for improving beneficial use of water will be discussed at that meeting
- Part 11 bullet 1 should read: Giving a reminder mid-February instead of an update

Motion: Ross Ford moved to accept the minutes as amended. William King seconded. **Carried**

4. Financial update

- January and February, 2021 Financial Statements
- The financial statements were presented
- Core operation grants were discussed
- Approximately \$62,000 balance as of February end
- There are project expenses that are to be paid by the end of the fiscal year
- After other core expenses are paid by end of year, we should be close to spending the full balance
- If any balance, a note will be sent to AEP with the report that some projects were postponed to next fiscal year due to Covid19 restrictions
- Year end report is due on April 15, 2021

Motion: Will Lindeman moved to accept the financial statements as presented. Scott MacCumber seconded. **Carried**

5. Landsat water use modeling project – Roy Sando - USGS (*joining us at 2:30pm*)

- Introductions were conducted
- Roy Sandos gave a project overview of the Landsat water use modeling project
- The USGS is using satellite consumptive water use in the Milk River basin, through the use of an algorithm called Operational Simplified Surface Energy Balance (SSEBop) to estimate the amount of water used by crops
- The project is conducted by IJC, USGS in cooperation with Montana Department of Natural Resources, AEP and ECCC to help improve the data needed to properly apportion water between Canada and US in the St. Mary and Milk River basins
- He presented the timeline and goals:
 - The project will be completed in 3 phased:
 - Phase 1 – focused on obtaining and preparing the datasets required for the SSEBop. Phase 1 was completed in 2020
 - Phase 2 – Will be completed in spring and summer of 2021 and 2022 and will involve field work to gather information on irrigated land in Milk River basin
 - Phase 3 – Will begin in 2023 and will focus on running and optimizing the SSEBop model for the upper Milk River basin
 - Expected outcomes:
 - Historical database of consumptive water uses in the St. Mary and Milk River basins
 - Bi-weekly or monthly estimates of consumptive water use
 - An online, interactive Web Application that will allow irrigators and resource managers to visualize and compare current and historic conditions in the basin
 - Keep communications going and incorporate feedback
 - In the process of understanding how and when to engage with land owners and what role the MRWCC might want to play in the process
 - To be discussed at the WSM Team meeting scheduled April 8, 2021
 - MRWUA would like to volunteer information that is valuable to the project
 - Keep program transparent and looking for as much participation as possible
 - Metering data that was collected prior is crucial to the project
 - Valuable project

Action: Tim/Ken/Brian to schedule a follow-up meeting with Roy in the next couple of weeks

6. Grants

- Core operations (AEP)
 - Submitting report on April 15, 2021
 - Expecting to receive the 2021/22 fiscal year grant within the first quarter
- CAP update
 - Have submitted a joint application with OWC for joint programs
 - Pending approval
- ACA Education Grant
 - Pending approval
 - For SAR habitat in the watershed
- Canada Summer Jobs 2021
 - Pending approval

- To fund the summer student in July and August if approved
- ECCC Priority Places Grant – Producers leading the way project
 - Pending approval
 - Surveying up to 150 cow calf producers across the watershed on ecological goods and services relating to SAR programs
- 2021-22 Habitat Stewardship Program (HSP) Myotis Bat stewardship project
 - Stewardship program for SAR for myotis bat project
 - The project will center on Bat inventory and stewardship project with producers. Working with producers to identify both bat roosting locations and overwintering habitat areas
 - White-nose syndrome (WNS) is a disease of hibernating bats caused by fungus that affect bats during the winter and has caused a decrease in bat population in Eastern Canada and the US. Had been detected in the Milk River Watershed around Glasgow, Montana last summer
 - It has not been detected in Alberta yet but it's a matter of time before it gets to Alberta since bats migrate across the border
 - These bats use a lot of big cotton wood trees along the river and other big shelterbelt trees and abandoned farm buildings
 - Not much is known about them
 - This project if successful, will involve working with producers to identify potential roosting structures and a technician will be hired to do bat surveys in summer using bioacoustics sounders and be able to determine species to get an idea of the number that is roosting and develop recommendations for producers on BMP for bats
 - Will give out bat boxes/condos to replace other habitats that might be destroyed
- SSHRC grant application: Project title: “Beyond the last drop” Addressing the climate adaptation gap in water security
 - Dr Jeremy Pittman with the University of Waterloo had invited the MRWCC to partner on a SSHRC grant application
 - The following were part of the zoom discussions about the program:
 - Dr. Pittman, Margo Herbert (U of Regina), Lorraine, Tim, John and Mary
 - They were looking for a letter of support from MRWCC for the program
 - After discussions it was clear that they were looking for funding and staff time
 - In the end it was agreed that the project was not a fit at this time for the MRWCC as we are not in a position to provide staff time and funding

7. Work Plan review

- Revised the work plan that was presented at the January 28 Board meeting
- This is a part of the report that will be provided with the grant report in April
- The workplan will be updated as covid conditions improve and grants are approved

Motion: Lorrain Nicol moved to accept the workplan as presented. Suzanne Liebelt Seconded. Carried.

8. DataStream Project – MRWCC data <https://gordonfoundation.ca/initiatives/datastream/>

- DataStream is led by The Gordon Foundation at the national level and carried out in collaboration with regional partners in the Mackenzie River Basin, Lake Winnipeg watershed, and Atlantic Canada
- DataStream provides a digital backbone for diverse monitoring groups to access, visualize, and download full water quality datasets
- On March 11, Mary Kruk gave a good presentation of the project to the following MRWCC members:
 - Ron, Tim, Brian, and Mary
- A chance to provide a place to store, share, and compare water monitoring data across watersheds
- A valuable tool that will put historical data on the online platform
- There is no current agreement with AEP so all GOA data would not be posted until or if an agreement is reached
- Citation will be provided to ensure data ownership is observed
- City of Calgary is one of the organizations that are already participating in the DataStream project

Motion: Ron McNeil moved that MRWCC participate in the DataStream platform in data sharing. Lorraine Nicol Seconded. **Carried.**

9. Team updates (see attached)

1. Community Awareness and Involvement Team (CAIT)

Had a meeting on March 16, 2021

- Youth Engagement Program
 - School programs
 - Caring for Our Watersheds (CFOW): Ads were sent to all local school
 - Erle Rivers High School has entered 4 teams
 - Watershed Video Competition: We introduced the competition to local schools to eliminate paper contact and go with paperless contest due to Covid19
 - There has been no interest this time around
 - WOSPP partnership
 - Province has cut the interpretation program for 2021
 - WOSPP and Dinosaur Provincial Park were the only 2 parks that are permitted to maintain some programs
 - The education programs across the province have been cut from service for 2021
 - WOSPP has suspended all in-person educational programming but there is demand for virtual programming. The Park staff will undergo training in online program delivery
 - All MRWCC online programs that are currently on the Park's website to be temporarily hidden from public viewing until in-person education programs have resumed
 - Canada Summer Jobs Program
 - Submitted an application
 - Pending approval
 - If funded the placement will be in July and August

- Mary and Suzanne to take a lead role in developing the work plan to see how it fits with WOSPP
- Will need someone with experience
- There is plenty of opportunity to support shared messaging with the park staff
- YRDs
 - Planning to have a modified in-person camp
 - Planning a one-day camp on July 8 at WOSPP
 - Smaller groups to ensure Covid19 protocols are followed
 - Will have two camps for younger youth and older youth in groups less than six
 - Will have one meal – a bagged lunch
 - Registration fee is \$25/youth
 - Sponsorship: Applied for a \$4,000 grant from the Alberta Grazing Lease Holders' Association and have gotten confirmation that the grant has been approved
- Upcoming events
 - Online Auction
 - Scheduled for March 29 to April 4, 2021
 - The funds that we get from the auctions help to leverage project funding from other funders and are critical for water monitoring analytical expenses
 - Thank you to all who have sponsored
 - AGM
 - May 27, 2021 from 10 am to 12noon
 - Through zoom
 - Will only be a business meeting, brief organizational council meeting to follow in the afternoon

Action: Mary to send this year's open seats to Board members

- Bat project
 - Submitted a proposal for 2021-22 Habitat Stewardship Program (HSP)
 - The project will center on Bat inventory and stewardship project with producers. A number of bats species in Alberta are SAR
 - White-nose syndrome (WNS) is a disease of hibernating bats caused by fungus that affect bats during the winter and has caused a decrease in bat population in Eastern Canada and the US. Had been detected in the Milk River Watershed around Glasgow, Montana last summer
 - It has not been detected in Alberta yet but it's a matter of time before it gets to Alberta since bats migrate across the border
 - In our watershed, bats use large cottonwood trees along the river, farmstead shelterbelt trees, and abandoned farm buildings/structures.
 - Not much is known about distribution, populations, and hibernacula for non-migratory species.
 - This project if successful, will involve working with producers to identify potential roosting structures and a technician will be hired to do bat surveys in summer using bioacoustics sounders and be able to determine species to get an idea of

the number that is roosting and develop recommendations for producers on BMP for bats

- Stewardship component of the project will involve installation of bat boxes/condos to enhance or mitigate loss of habitat due to natural deterioration of structures or trees.
- This will be a voluntary project working with interested landowners
- Ecotrust Grant
 - Approved for \$20,000
 - Will be focused on the development of a Water shortage contingency plan and outreach; telling the 2020 water shortage story and water conservation through best practices experiences and lesson learned.
 - Project timeline is April 2021 to March 2022
 - WSM Team to lead the project and will be discussed at the April 8th Team meeting
- ECCC Priority Places Grant
 - Identifying producer payment program opportunities for ecological goods and services:
 - Focusing on what incentive trigger points are required to interest producers' participation
 - Applying for \$50,000 to identify producer challenges and survey producers within the watershed across the four municipalities to see if programs are feasible for future implementation
 - look at demographics and cost of stewardship
 - Will need to work with municipalities and producers
 - Have submitted an expression of interest and just waiting for feedback from Environment Canada
- Community Awards Nominations
 - Heritage Tree Program
 - Environmental Stewardship Awards Program
 - The community award projects nomination deadline was February 12
 - No nominations received
 - There was a consensus within the Team members to forego the awards this year and host them every 2 or 3 years based on merit.
- Milk River Recreational Users
 - The MRWCC will try to post river information and safety tips once a week because there is a lot of interest in river information and recreation this season
 - Will work with WOSPP on information management
 - Concerns regarding river safety, trespass, and access already; getting emails and requests for information at least a few times a week.
 - Promote an informal registration system for Poverty Rock area in working with WOSPP
- Promote Xeriscape

- Last year water consumption decreased by 50% mainly due to reduction in watering lawns
- There is need to promote xeriscaping as one way of water conservation
- Need to look at another tour or a brain storming session of people involved with xeriscape to share and promote xeriscape and provide information on drought tolerant plants
- Make a request to the Town Council to see if there is a possibility of providing some sort of incentive for rate-payers who practice water conservation strategies, could highlight through the town newsletter “water conservation champions”
- Town of Milk River Beautification Program
 - Planting flowers in half barrels and individual businesses in town are able access them for their businesses to help beautify the Town
 - The Town will provide the barrels and soil
 - The program will start in May
- Fall Harvest Festival
 - Asking if the MRWCC would like to be involved
 - Team to provide ideas of any work and themes

2. Research and Monitoring Team (R&M Team)

Had a meeting March 16, 2021

- Water Quality Monitoring Program
 - 2020 report
 - Had data sondes after the diversion failure and the data will be available from AEP soon
 - Additional sampling was collected down stream of Milk River at the municipal sewage lagoon site at the request of the Town of Milk River. There were concerns about seepage issues and impact on water quality. The Town is now working with an engineer to fix the lower lagoon and address erosion challenges along the bank.
 - We have additional data collected for 2020 during the natural flow
 - The 2020 report is in progress
 - 2021 program
 - Limited analytical budget, will continue with the main sites
 - Have a commitment for collaboration with AEP – Mary is working on scheduling with partners
 - Pinhorn was not monitored in 2020 due to budget constraints and similarity to HWY 880 site. since sediment increases down stream, the Pinhorn was important because it was the most down stream site in the system. In order to maintain the integrity of the data, consistency is the key for comparable data through time
 - Dropped the Eastern Tributary sites for 2020, currently looking at the value of rolling up the existing data for trends and brief research and science note

- Planning to do a summary on the Red Creek data in the next fiscal year, supports both WSG efforts on the ground and potential investigations into off stream storage opportunities
 - The 2021 sampling will start April 7, will not represent a spring open water sample as it is anticipated the St Mary diversion will resume the week of March 22nd, noted that we do not regularly get an early sample prior to the diversion

- 2023 State of the Watershed (SOW) Report - Terms of Reference
 - Sandi Riemersma presented a draft of the 2023 State of the Watershed Report, Terms of Reference. She described the approach that will be taken to update the 2013 Transboundary Milk River SOW Report with a planned timeline of the 2023 project, 10 years following the last report. The Terms of Reference will provide a review of the previous report, and suggest an approach to developing the second report using old and new collaborations established since the last report was written.
 - AEP might not be able to provide as much support as previously done due to less resources available
 - The draft TOR will be circulated to the Team for comments or additional feedback
 - There are more partners this time around willing to help with GIS products and funding

- Water Quality summary - Red Creek
 - Discontinued water sampling last year on Red Creek
 - Starting to work on a data summary report to be completed next fiscal year
 - The lower Red Creek site has been of interest to the Milk River Water Users Association (MRWUA) and a summary of the water quality would help support with the baseline conditions and impact it has on the main stem Milk River

- Long-term water quality report – 15-year trend
 - Working on a 15 year trend data
 - Planning to produce 2 reports: The detailed report and a research and science note, a wrap up for the state of the watershed report

- 2020 natural low flow river observation report
 - Observation data is compiled
 - 10 cameras doing time lapse and opportunistic images on and near the river as flows and conditions changed throughout the season.
 - Almost 50 hours of drone footage provided by Colynn Kerr, a MRWCC volunteer
 - 28 observation reports that were sent from the public
 - Putting together a presentation of the 2020 observations

- Natural flow fish survey results 2020 – Shane Petry
 - The sampling results were fairly similar to other samples in non diversion periods of time
 - Didn't find major stranding or large isolated pools of fish kills. A few dead fish observed
 - Sampled from the North Fork to the Eastern Crossing using sampling protocols developed for SAR within the Milk River

- Was done during the natural flow to see if there is no change in the species distribution. Mostly for Rocky Mountain Sculpin, Sauger, and Stonecat were all observed to be distributed same as previous sampling years with augmented water systems
- The only fish not found was Western Silvery Minnow (WSM). Further observation was done after diversion was back on to see if WSM was present and there were observations of WSM but were not in large schools as would normally observe. Not sure what kept WSM populations down compared to the other fish species. There are plans to do a post sampling of WSM this year to see if distribution goes back to normal
- The report is near completion. Going through final technical reviews and minor edits
- Hwy 880 Bridge water sampling investigation report – Ron and Tim
 - Conducted a one-time opportunistic sampling above the HWY 880 sampling site during the natural flow period to measure conductivity and the influence of salinity across the Deer Creek
 - The focus was between WOSPP and HWY 880 Bridge
 - This was brought by water quality on the main stem at the 880 Bridge not correlate with the downstream locations sampled
 - Wanted to see if there is influence from surface flow rather than ground water
 - Samples Deadhorse Creek or Black Coulee coming in from the Deer Creek Ranch and the analysis showed spikes of sodium absorption ratio and electrical conductivity (EC)
 - From the North West, sampled the Masinasin Creek and the analysis showed a spike in salts and EC
 - Down stream Smith Coulee which empties in the 880 Bridge site was not flowing and sampled from a dugout which could have a possibility of ground water influence. There is also a possibility of ground water influence in any of the other creeks sampled
 - This reconfirms work done by PFRA back in the 80s and also confirms the winter exceedances that were being observed at the 880 Bridge during natural flows in January and February flagged under the long-term monitoring network
 - Different micro watersheds are different contributors at different times with interesting dynamics which would warrant additional investigations
 - Some of micro watersheds' information would be useful in the SOW report
 - There are other studies done in the past on salinity e.g., on Verdigris Coulee and others that can be looked at as well
 - One other past study done and can be looked at is the “Channel Losses and Gains Assessment” by Greg MacCulloch and Gerry Wagner from Environment Canada, 2010/11. This is insightful when looking at ground water salinity
 - Will do some follow-up with AEP to determine if there is additional interest
- Coliform counts measurements at the WOSPP beach – Aaron Domes
 - Due to the Covid19 lab capacity, no samples were taken from the WOSPP beach site
 - AHS planning to sample the beach at WOSPP which was identified as a priority site
- Phase 2 Watershed Resiliency and Restoration Program (WRRP) Wrap-up
 - Wrapping up phase 2 WRRP program

- Working on the final report
 - Happy with the outcome
 - 1400 head of livestock that has been improved through better management
 - 42 km of riparian corridor/exclusion fencing
 - Working on 2 smaller restoration projects that will be completed in the spring
 - The final report to be completed end of the month
 - Looking to do a producer tour once Covid19 restrictions are lifted
- 2021 Science Forum
 - Working with County of Warner to present a joint webinar series
 - Bring in interesting pre-recorded presentation or if there are other ideas of presentations that would work for virtual presentations with interactive questions
 - Can include a few presentations on 2020 situation including WQ, fish, and infrastructure repair and replacement in Montana
 - Need to maintain contact and engagement with the community

3. Water Supply and Management Team (WSM Team)

- Hosting a Team meeting on April 8, 2021
- Use the meeting for direction on the water shortage contingency planning work that will use the \$20,000 Ecotrust grant
- MRWUA:
 - Have put together an information package that was delivered to AEP 3 weeks ago. Hired an engineering company to map the footprint and volume of the proposed storage site on the Red Creek
 - Retrieved some historical information on discussion between MT and AB with regard to shared storage
 - The information has been passed on to AF to see what kind of support to give and how that will fit in with AF department. AF not sure when they will provide a response
- St Mary Diversion is anticipated to start up the week of March 22nd some minor canal maintenance needs to be completed this week before final inspections
- Fresno Reservoir is at approximately 30% full and Sherburne is near 90% Montana anticipates moving significant water through April and early May. Operational schedule is for near 500cfs diversion rates in April. Snowpack is average to slightly below average
- The IJC has confirmed that they are actively working on details of modeling potential joint storage projects on the Milk River and that funding is secured for the work
- Milk River Water Users Association is looking at opportunities to develop a smaller off stream storage project that would accommodate balancing water for late season flows to Montana to avoid deficits under the letter of intent in years Montana does not have the opportunity or capacity to divert early season St Mary river water
- Water Survey of Canada – Natural flow and Channel loss survey 2020
 - Tim Ma with EC will be providing a report shortly providing a summary of the field collection campaign in 2020. Field flow data and sampling for isotopic analysis was conducted last fall with MRWCC staff assistance. Curtis Bertrand

has sent samples to Victoria, BC for the analysis, will follow up with a report. Should help identify flow additions and losses to and from aquifers.

- In addition to the isotopic analysis, EC plans to do follow up work this summer assessing channel losses based on the data that was collected.
- USGS – Landsat modelling of water usage on the Milk River
 - Roy Sando is the lead physical scientist for a three-phase project that will merge Landsat data from 1985-2020 with field observations. Ultimately, they will develop a tool that gives both historical and near-real-time perspectives of the amount of water used on the Milk River in both Canada and the USA.
 - Field work will involve MRWCC and water users
 - Presentation in March 25th board meeting via zoom
 - https://www.usgs.gov/center-news/landsat-will-help-us-and-canada-share-river-s-water?qt-news_science_products=1#qt-news_science_products
- MRWCA and MRJBOC lobbying congress efforts
 - House Joint Resolution No. 7
 - A Joint Resolution of the Senate and the House of Representatives of the State of Montana Urging Congress, The Department of the Interior, and the Bureau of Reclamation to Repair the Funding Allocation and Authorize Funding for the Replacement and Rehabilitation of the St. Mary River Diversion and Milk River Project
 - Introduced by Rep. Casey Knudsen of Malta, House Joint Resolution No. 7 passed unanimously out of the House Agriculture Committee on February 18th, 2021 and passed unanimously (100-0) on the House Floor on February 23rd. The Resolution had overwhelming support from a multitude of stakeholders: Farmers, Bankers, Irrigators, Tribal Members, Sportsmen and Wildlife Advocates, Conservation Districts and several Governmental Agencies
 - The Resolution has moved to the Montana Senate for consideration.
 - Without an adjustment to the Federal Cost Share, critical repairs to the Milk River Project cannot happen, and structures will continue to fail
 - MRWCC has provided comment on the value of the project to Alberta, and information regarding the funding of headwater infrastructure projects within Alberta and the investment percentages by irrigation districts in Alberta for maintenance and improvements of in district infrastructure. Jenn Patrick has since prepared a briefing to the Senate

4. Transboundary Watershed Team (TWT)

- Interest has been expressed from Transboundary Grasslands Partnership members in both Montana and Saskatchewan to assist with the development of the 2023 SOW report
- SPCAP continues to host excellent webinars that have been promoted to our contacts and membership
- There is interest in having a joint tour/meeting at the diversion drop structures in Montana when the boarder opens up either during the summer or fall

10. Round table discussions

- Lorraine Nicol:
 - WPAC/Municipal study

- The survey was available for the month of February and is now completed
- Results are in and data has been analyzed
- Response rate was high
 - MRWCC – 78%
 - OWC – 53%
 - NSRB – 41%
 - BRWA – 18%
- Interesting results
- Report will be about 20 pages long
- Major question is: What is the effect of WPACs work on municipal land and water management planning?
- There were some specific questions and the answers will be given to each specific WPAC
- Each WPAC can look at the results for their individual Council and come to the conclusion of the interpretation for their report
- Project is over half way done
- Report will be done by middle of April and once approved will be distributed to the WPACs

11. Other items

12. Meeting adjournment

Motion: Ed Sloboda moved to adjourn the meeting at 3:52pm.

13. Next meeting date

- May 27, 2021 after the AGM

Signatures:

Chairman: _____

Secretary: _____