



2012 WPAC SUMMIT
Hosted by
Milk River Watershed
Council Canada

WPAC SUMMIT REPORT



September 24 to 27, 2012

September 24th 2012 – (optional) International Headwaters Tour

Discussion was held with representative from the United States Bureau of Reclamation regarding infrastructure on the Swift Current Creek and the Sherburne Dam Site. The Dam backs into Glacier National Park Montana and is an important reservoir feeding late season flows for critical water allocations to the St Mary River and the Milk River Diversion. Challenges at the site result in only seasonally available fish habitat below the dam. Mike Hilliard, Resource Specialist with USBR describe a fish salvage project along the creek during dewatering which annually involves removal of stranded fish from the creek and relocation to larger over wintering waters in the St Mary River below the confluence with Swiftcurrent. It was suggested that an eventual solution may include the remediation of the dam structure with fish ladders and maintenance of some minimum flows to create conditions suitable for additional live stages.

Dawn LaFleur Restoration Biologist with Glacier National Park Montana presented a short history of invasive species management in Montana and how policy and management of Invasive species was almost non-existent in Glacier until it was almost too late. Invasive species such as Spotted Knapweed displace native plant, simplify the plant community and reduce range and riparian health. The park focuses energy and resources in containing these species and working the areas of colonization with citizen science based monitoring in backcountry areas of the park and try to prevent the establishment and introduction of new invaders with programs like the park weed free forage and hay usage. Dawn also outlines the history of cooperation and exchanges of resources between Glacier and Waterton Lakes National Park Canada. Dawn noted the importance of trans-boundary partnerships in issues like invasive species and successful initiatives like the Crown Guide to invasive plants that was and is considered the standard for weed id and management and is soon to enter its third printing. It was also noted that there are over 3 million acres of Spotted Knapweed in Montana and it's important for Alberta to continue to strengthen control and monitoring initiatives especially at the WPAC scale to prevent the 100's of millions in lost production and impacted acres of native grasslands.

Participants then viewed the diversion site and diversion canal from the Highway and access roads on route to the First Siphon structures along the St Mary Canal system. Noted were the challenges with the diversion condition and that plan are for an upgraded diversion site and fish barrier with the next few years. Budget constraints were noted as reasoning for the “Fix on Fail” state of infrastructure along the system.

The next site for the tour was at the top of the diversion siphon over the St Mary River. History of the site was discussed, as well as concerns over capacity, age of infrastructure, and reliability. Ken Miller of the Milk River Watershed Council Canada also shared history of the International agreements, apportionment, and ongoing negotiations of the international joint commission. Ken also outlined the progress of the JIT (Joint Initiative Taskforce) and personal perspectives as an irrigator on the Milk River and the importance of Security of Water Resources for his operation and the Community along the Milk River in Canada.

Upon return to Canada, the tour met with Kevin France of ESRD – Public Lands, and viewed the recent Del Bonita to Milk River Fire. Kevin led a discussion regarding the fire intensity and grassland recovery. The fire was over 15,000 acres in size, burning less than two weeks prior to the tour, the fire intensity was higher than anything previously observed by public lands staff for a grassland fire. Noted that some areas 100% of organic materials have been burned and the mineral soil remaining was virtually sterilized. The fire encompassed nearly 95% native grassland.

Following Kevin France, Uldis Silins for the University of Alberta outlined interest in studying the effects of prairie grassland fire on watershed health integrity and water quality. Professor Silins indicated that to the best of his knowledge no one has archived runoff from a grassland fire of this intensity and characteristics and also outlined the potential impact of heavy metals, released phosphorus, and organic carbon on water quality and the aquatic ecosystem. Professor Silins also indicated there are potential complications due to Dissolved organic carbon within chlorination treatment systems and potential for the formation of carcinogenic compounds. The MRWCC in cooperation with ESRD and University of Alberta, and University of Waterloo are undertaking a project to monitor watershed recovery with a series of recovery monitoring sites within the burn on differing intensities as well as the looks at impact of potential contaminants from runoff and wind erosion events.

September 25 – Respect the Past, Stewarding the Future Writing on Stone Provincial Park

Participants were provided a variety of options for select a sessions on the day, including:

Milk River Stewardship Project Implementation Tour – Brad Downy

Participants had the opportunity to learn about how not for profit conservation organizations such as ACA and MultiSAR are supporting livestock producers in the watershed; developing wildlife friendly projects that also improve riparian and rangeland health. Brad explained how groups like theirs have a responsibility to foster good relationships with the local community in order to help keep intact functioning landscapes for both agricultural production and species at risk in the watershed.

Defining a Watersheds Cultural Identity – Paulette Fox (Naatawawaohkaakii)

Paulette lead a discussion with the group that examined the history of the Blackfoot People, reflecting on historical accounts and examined the use of GIS to link Blackfoot environmental knowledge with ecological and cultural databases. Paulette shared her perspectives on watershed management and planning exercises. Key messages and insight was shared with the group regarding how to engage first nations in State of the Watershed Reporting; Paulette encouraged all WPACs to stop trying to “integrate” first nations and traditional knowledge, and start to build linkages. Using tools like Digital Storytelling would be beneficial to capture perspectives, and knowledge; Paulette recognized that one approach would be to include traditional knowledge as a separate section in SOW reports. For example, the Milk River Watershed Council included this as a stand along section in their 2008 SOW prior to the analytical analysis and scientific data within the report. The MRWCC recognized that the 2008 edition was not fully inclusive as possibly, but thought the exercise identified knowledge gaps; and their 2013 edition will have stronger and additional information for inclusion. Paulette also noted the importance of building linkages with first nation youth and leaders, too often First Nations are looked at as a historical perspective and stories of current linkages and direct involvement of youth are sometimes lost or unrecognized. Paulette encouraged all WPAC’s to continue to foster working relationships with First Nations in all of the watersheds, and recognized the benefit of non-government lead planning exercises like Alberta WPAC’s in managing our landscapes.

Digital Storytelling a tool for stewardship promotion and the Real Beef Initiative – Norine Ambrose

Norine Introduced Participants to the Process of Creating Digital Stories and their applications in delivering messages to a diverse audience. Digital Stories are short videos that use graphics and digital media techniques to assist participants in producing short, first-person narratives that can be presented in a variety of traditional and social media formats.

The ritual of sharing insights about life can be immensely valuable both to those who speak and those who bear witness. People who believe they are mundane, uninteresting, or unmemorable possess beneath this mask a vivid, complex, and rich body of stories just waiting to be told. Listening is hard. Most people are either too distracted, or too impatient, to be really good listeners. Yet anyone can learn to listen deeply. When they do, they create space for the storyteller to journey into the heart of the matter at hand. People see, hear, and perceive the world in different ways. This means that the forms and approaches they take to telling stories are also very different. Sharing stories can lead to positive change. Personal narratives can touch viewers deeply, moving them to reflect on their own experiences, modify their behavior, treat others with greater compassion, speak out about injustice, and become involved in civic and political life. Whether online, in social media or local communities, or at the institutional/policy level, the sharing of stories has the power to make a real difference. To view stories or to learn about the real beef initiative, go to: www.cowsandfish.org

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The Crown of the Continent Managers Partnership & Aquatic Invasive Species Project Ian Dyson and Bill Dolan

The CMP is unique; there are two provinces, one state and two countries involved, it is a trans-boundary partnership; formed in 2001-2002 in hopes of improving the management of a large complex ecoregion containing multiple jurisdictions. This is accomplished by management agencies working together in the Crown of the Continent, across all jurisdictional boundaries. The CMP built on the successes of the Waterton/Glacier International Peace Park working relationship.

The Crown Managers Partnership seeks to demonstrate leadership in addressing the environmental management challenges in the Crown region by adopting transboundary collaborative approaches to environmental management. The voluntary partnership seeks to build common awareness of Crown interests and issues, shape relationships, and identify collaborative and complementary tasks that the various participating jurisdictions can pursue.

The CMP recently released a Strategic Plan that will help guide their projects and actions for 2011-2015. The CMP promotes strategies and activities that will help achieve the long-term outcomes to maintain or improve the ecological health of the CCE. The Plan is available for download from the CMP website: <http://www.crownmanagers.org/strategic-plan>

Bill Dolan then proceeded to discuss the CMP role, interest, and actions, in Aquatic Invasive Species throughout the Crown Ecosystem. AIS is a key initiative coming out of the CMP resulting from the 2011 Crown Managers Forum. The CMP conducted a risk assessment workshop recently in Waterton; the risk assessment focused on the introduction of zebra or quagga mussels into the COC, acknowledging that they could already be there. Main threats: boats, firefighting equipment, or any other equipment that will be in the water, fishing equipment, float planes, water transport via trucks, transboundary water flow, government inaction. Most concerned with the boats. Looked at controls in Idaho and Montana. In Alberta we are relying on controls in MT and ID and Waterton Park. Legislation is slowing moving, Looking at education. Once mussels are introduced, there is very little we can do to prevent the spread; the best is to keep it out of the country. Consequences: cost to government and stakeholder to repair infrastructure, economic losses from agriculture and tourism and recreation, social, cultural and recreation loss, decline, possible human health impacts, contamination of irrigation headwaters. Bill also presented on the Montana and Idaho experiences with Aquatic Invasives, and direction we need to head to better manage within the Alberta Watersheds.

Transboundary Watershed Cooperation – Opportunities and experiences – Sandi Riemersma

Sandi outlined the Milk River Watershed Council Canada's approach to transboundary management and State of the Watershed reporting. Sandi reflected on experiences of the MRWCC and the challenges and opportunities of working with different Jurisdictions in Montana and Saskatchewan. Sandi also looked at transboundary partnership project examples from across Western Canada and the lessons that can be applied to Watershed Management in Alberta.

Aquaculture Centre of Excellence Tour – Lethbridge College – Clay Boyes

Upon return to Lethbridge, participants were able to attend an optional tour of the Lethbridge College Aquaculture Centre of Excellence prior to dinner. Clay Boyes, facility manager provided a short history of the facility noting that Triploid Grass Carp Production and Tilapia were the initial impetus for developing the project. ACE is the only licenced facility within the province that rears Grass Carp for Biological Control of Aquatic Weeds, primarily in manmade lakes, dugouts, and irrigation systems. Clay then explained the procedure for Spawning and Triploiding the grass carp eggs. Clay then showed the facility operation and participants were able to view newly hatched fish through to 60lb spawning brood stock. Clay then explained the bio filtration system of the facility prior to demonstrating the aquaponics greenhouses attached to the facility to use excess nutrients and waste produced by the fish culture side. At the time the greenhouse was producing tomatoes, cucumbers, various lettuce/herb species and aquarium trade pond plants.

September 26th Cooperation and Science: Supporting our Partners

Honourable Minister of Environment – Diana McQueen

“regrets”

WPAC Chairman (or representative) updates

Representatives from all 11 WPAC's provided a 5 minute fly over of the major successes, challenges, and opportunities facing their WPAC. The presentations highlighted the diverse sets of challenges throughout the province and emphasized the importance of local sub regional scale watershed planning exercises. Also of note, there is no one size fits all approach to watershed planning within the province, some larger WPAC's noted the significant challenge of just getting out to the different communities with their watersheds is a challenge. Other high points included a number of WPACs recently completing or nearing completion of management plans and state of the watershed reports. Numerous communication and outreach activities are occurring and some WPAC's are beginning to challenge implementation of their watershed plans, and are fostering on the ground initiatives to improve watershed health. Some common concerns also involved clarification of the role of WPAC's in a GOA cumulative effects management system, and security of funding for core WPAC activities and projects.

Sharing the Water within the SSRB – University of Lethbridge Dr. Henning Bjornlund

Dr. Bjornlund shared his experiences with water use and management in context with experiences in Australia, and reflected on the history of water policy and management within Alberta. Dr. Bjornlund summarized the results from a number of social science projects to review the views of initially Irrigation managers in 2005 where as: Use of market based instruments 24% agreed with the use of economic instruments. Where should saved water go? 26% agreed that saved water should go the environment 36% that it should go to local industry, 44% that it should go to cities and municipalities, 69% that it should be used to irrigate dry land. In contrary, further study of irrigators in 2007 and 2012 market based instruments were seldom used, with less than 5% of irrigators buy sell or trading water rights. Though high numbers anticipated purchasing or expanding irrigated acres within the next 5 years.

Dr. Bjornlund than continued with work done reviewing influences in general on policy preferences: The importance of context, Water-based recreation - support for government intervention in most urban location and for environmental protection in most rural location. Working in recreation – support for environment protection in most urban locations, working in primary industries no support for environmental protection in Strathmore. WPAC or watershed stewardship - no support for government intervention in water stressed region and for environmental protection in most rural location. Conservation groups - no support for irrigator rights in the overall model, support for government intervention in least water stressed region.

Urban dwellers regard the environment as intrinsically valuable and are more likely to support government intervention to protect its rights. Rural residents hold more instrumental values towards the environment - the rights of irrigators and the continued viability of rural communities take precedence over the environment.

However Context matters:

The influence of scarcity implies that environmental values and policy preferences are formed, in part, by the experience people have of the environment. This is confirmed by regression analysis: Work, Recreation, membership of WPAC, Land Stewardship and Conservation groups. Values also matter especially environmental values and values associated with water as a tradable commodity. Many factors also influence policy preferences differently along the urban rural gradient and dependent on scarcity.

DNA Fecal Source Tracking on the Milk River – Tool for guiding water quality improvement projects, Lisa Tymensen, ARD

Project was initiated in 2012 to characterize concerns from high fecal bacterial counts during summer months within some areas of the Milk River. The local agricultural community was being blamed from the problem, though unsubstantiated. The partnership project was undertaken by Alberta Agriculture with support of the Milk River Watershed Council Canada. Field season collection of water samples from 4 locations along the Milk River have recently wrapped up. Analysis is currently underway, though initial results are interesting and already providing important insight into contributing factors along the river. Ecoli and Fecal Library is still being completed though different groups of markers are beginning to be teased out fairly clearly. Initial data is showing that the ecoli communities are not overly different throughout the 4 sample sites. 'A' group, primarily Domestic Poultry and semi aquatic birds, such as shore birds and geese are very low contributors, though high numbers were being reported at the Down Stream Milk River Site. 'B2' contributors, primarily Human/Dog markers, were not a major influence though they are being noted in some sites. Over 70% of ecoli are of the 'B1' group which needs to be further teased out, though it does contain markers for many wildlife and livestock species and groups. Focus now, is to further classify these markers and refine the classes of the samples.

Watershed Recovery from an accidental Hydrocarbon Release Chris Teichreb -ESRD

Chris was the lead water quality specialist for the Pembina and Plains pipeline oil spills on the Red Deer River in 2008 and 2012 respectively. Chris shared with the group the history and timeline of the 2012 spill; July 7th 2012 500,000L of light sweet crude oil was released. The pressure loss was undetected in the line and a passerby first noticed and reported the crude on the surface of the river near Sundre, AB. The pipeline was licenced to carry sour oil, and many lines are licenced to carry multiple products which makes initial response difficult until the product is identified. Stop block was placed in the pipeline, and booms installed on Glennifer Lake. The break occurred during flood stage as the pipeline was only 0.8m below the river bed became exposed and ruptured by floating debris.

July 8th Water Quality monitoring and Wildlife monitoring was initiated. Visible product was stopped by the booms however; the dissolved components continued to move and toxic effects below are continuing. Dissolved hydrocarbons tend to be more of a risk to public health, and can cause problems for municipal treatment systems. Most notably Toluene was above aquatic life protection guidelines. None were above drinking water guidelines.

Long term Monitoring is ongoing, Plains has taken steps to directionally drill all lines a minimum of 15m below rivers and water bodies to prevent similar accidents. Industry grandfathering of standards should and most likely will be reviewed by ESRD and ERCB. Response inquiry and recommendations are still ongoing.

Drywood Yarrow Conservation Partnership and Beaver Creek Watershed Group – A model for preserving the rural character and working as a community for watershed management Dennis Lastuka and Dixon Hammond

Dennis presented on the formation and workings of the Drywood and Yarrow Creek Conservation Partnership and how the community drives stewardship of many of the key projects within their watersheds. The DYCP is in the Oldman Watershed north of Waterton Lakes National Park and has and continues to undertake a number of projects from Riparian Health inventory and improvement work, to managing bear and wolf attractants around farm yards and calving grounds. The group has been active for nearly 10years, and most recently has started hosting an annual watershed education day where 200 to 300 youth from local schools come out to one of the ranches on the creek for the day and learn about wildlife livestock and often topics like fish and riparian areas. Dennis believes that connection of the new generation to the land is lost in the school systems and these projects are important to rebuild relationships with both the AG community and conservation groups.

Dennis also mentioned the work of local landowners in the white areas of the map and providing a portal for researchers to gain access and information on private lands within their watershed and feel that too many institutions and research groups focus on the green areas of the map with forestry and public lands without considering the impact on private landowners and the lease holders that are making their homes and livings in these watersheds.

Following Dennis, Dixon Hammond told the story of the Beaver Creek Watershed Group, and how his community was one of the first local watershed groups to get going in the Oldman Basin. Over the years they have seen declines in riparian health and range conditions and with the assistance of groups like Cows and Fish, have worked on projects to reduce agricultural impact on the watershed, many off-stream watering systems, spring developments, corridor fencing projects, relocation of wintering sites, and range-land management plans have been completed in the watershed. And conditions are beginning to improve. Though Dixon noted it's no longer a rancher or livestock problem that impacting their watershed, the headwaters are in the forest reserve and random camping, trails, and off road vehicles, area tearing up the headwaters. And landuse continues to change in the area, with additional fragmentation from oil and gas, as well as wind developments and acreage developments. Dixon emphasised the need to craft and implement better management in these area, their community is doing it and its time for other organizations and agencies including ESRD and WPACs to set up and provide the tools needed to improve conditions before it's too late.

Dixon and Dennis noted that over the years a number of programs, funding, organizations, and people have come and gone all wanting to "help" but long term, its critically important to have good people and commitment to keep volunteer from burn out and be prepared to come together over an issue and do our best to provide the tool necessary for the community to take actions. Dixon noted writing watershed management plans and reports are useless expensive paper exercises if you have no intent or idea how you're going to implement those ideas. It's critically important for WPACs to support on the ground producer driven stewardship initiatives and build on our capacity and celebrate our successes.

September 27th Alberta Watershed Planning and Advisory Councils: Success at Work

Provincial Guidebook for Watershed Management Planning – Robert Wolfe, ESRD

Robert lead the group through a discussion on the progress of the provincial guidebook, examining the chapter content and layout of the book a number of good suggestions were provided. The guidebook is anticipated to be completed within the next 6 months. There will likely be additional opportunities to provide feedback on the next draft of the guide from the WPAC's. Robert noted the guide will not be a significant departure from the processes that a number of WPAC's have already undertaken across the province and the guide will include some case studies and lesson learned as well as a terms glossary to clarify potential concerns.

Alberta Watershed Toolkit – Lisa Fox

The Alberta Center for Sustainable Rural Communities (University of Alberta) and Sustainability Resources Ltd. have developed a base inventory of initiatives and literature for water and watershed management in rural Albertan Communities. This website & resource directory is complemented by content-rich workshops that focus on knowledge and resource sharing. This base inventory of resources has been developed for and by rural communities in Alberta specific to interventions around water quality and water quantity. We are looking to YOU to help us define the utility of these resources. Please log in, add resources, comment, and discuss these Water Resources and help us to understand what resources you and your community needs to be an effective water manager. This is an online community network hosted for the development of relationships between rural community leaders, watershed councils, stewards, and citizens interested in advancing water & watershed management in Alberta.

Watershed Resources Workshops: One of the key priorities of this initiative is the communication of available resources to Alberta water managers and decision makers. These 1/2 day workshops and their content have developed to address critical knowledge and capacity gaps requested by water leaders and rural community decision makers across Alberta.

1. Traditional Knowledge & Watershed Management Planning in Alberta: October 29th - Athabasca
2. Natural Gas Development and Water Management in Rural Alberta: November 14th - Calgary
3. Municipal Water Management & Water Policy: November 15th - Lethbridge
4. Natural Gas Development and Water Management in Rural Alberta: November 19th - Edmonton
5. Watershed Hydrology and Risk Management: January 14th - Medicine Hat

These workshops are being coordinated by Sustainability Resources Ltd. and delivered by Resource Associates with guest speakers from Industry, Municipalities, and Watershed Councils. Registration is Free thanks to the support and funding from the Alberta Rural Development Network, the Alberta Ecotrust Foundation, and Shell Fuelling Change Fund to develop the capacity of water managers and decision makers across Alberta. For more information contact: www.watershedresources.ca

AB WPAC – Action Plan Implementation Breakout Session – Tim Romanow (facilitated)

In response to the draft action plan created by the AB WPAC managers, 6 discussion topics or projects were identified as possibly actions to be take or completed within the next 12 months. Time ran short to further discuss the group finds though a detailed summary is currently being compiled from the discussion notes.

Review of the Action Plan provided some general direction on planning but more teasing out of AB WPAC projects were required:

Main Themes for Discussion on Sept 27th included:

1. Watershed Entry and Exits Signs – Shannon Frank

What do we need to do in order to implement project within 18 months?

Design? Funding? Cost? Audience? Purpose? ... What aspects of WPAC goals/plans with this further?

2. Communication/Outreach Project – Harry Keess

Watershed Promotional Video? Digital Storytelling? Stewardship Stories? Usage around the province, how to target larger audiences?

A model for incorporation of new medial/social media in WPAC messaging?

Opportunities to work together: “similar messaging as travel Alberta approach”

3. Tradeshow Strategy/Municipal Partnership Presentation Package – Bob Phillips

“Messaging”

How do we further brand AB WPAC’s? Is branding important? Are there areas we can improve to further communicate to an audience at a tradeshow environment?

4. Non-Government Funding opportunities – Mark Bennett

Provincial scale (AB WPAC level –support for common initiatives)

Individual WAPC Scale

- Successes
- Challenges
- Strategies

5. Support Mechanisms for Local Producer/Landowner Driven Stewardship Initiatives

- Collaborative opportunities (AB WPAC Level)
- WPAC Scale

A. Successes: Eg OWC Watershed Legacy Program

B. Challenges:

- A. Security of Funding
- B. Promotion of good news stories
- C. Capacity building to reduce workload on leaders,
- D. Prevent burn out.

- Project Awareness and Inventory for State of the Watershed Reporting.

AB WPAC Strategy to engage First Nations – Audrey Goodwin

Is there a possibility to engage first nations as a collective (AB WPAC approach)

- Is this too threatening?
- Would a collective, non-threatening, non-government message be worthwhile to build support
- How to build Linkages?
stop trying to integrate perspectives and traditional knowledge.

****Videography of the event with full presentations will be available soon through the Landuse Knowledge Network and presentations will be available on the MRWCC website.**

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