

CROWN OF THE CONTINENT MANAGERS PARTNERSHIP 2006 FORUM SUMMARY



**THEME: WATERSHED
MANAGEMENT**

**1-3 MARCH 2006
LETHBRIDGE, ALBERTA**

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Forum Summary prepared by Madalena Pinto and Danah Duke
Miistakis Institute

SECTION A

FOREWORD AND OBJECTIVES

FOREWORD

This document summarizes the sixth annual Crown Managers Partnership Forum held in Lethbridge, Alberta, March 1-3, 2006. Fifty-four agency participants gathered to discuss collaborative ecosystem management issues in the Crown of the Continent Ecosystem.

Political, financial and technical barriers impede landscape-level collection of information necessary for trans-jurisdictional ecosystem management and cumulative effects modeling. These barriers are magnified when political borders divide a landscape. No single agency has the mandate or the resources to focus upon the entire region. Recognizing the above, a group of resource agency managers launched a new partnership initiative.

In February 2001, government representatives from over twenty agencies gathered in Cranbrook, B.C. to explore ecosystem-based ways of collaborating on shared issues in the transboundary Crown of the Continent. Participation included federal, aboriginal, provincial and state agencies or organizations with a significant land or resource management responsibility within the Crown of the Continent Ecosystem (CCE). The aim was to involve a blend of senior and middle managers with technical and professional staff that have a role in management at the ecosystem scale (e.g. conservation biologists, land use planners, etc.). No attempt was made to put a firm boundary around the area of interest, but the region is generally defined by the Rocky Mountain ecoregion from the Bob Marshall wilderness complex (MT) to the Highwood River (AB) and Elk Valley (BC) and is known as the *Crown of the Continent* (see cover graphic).

The highly successful workshop, hosted by the Waterton-Glacier International Peace Park and facilitated by Miistakis Institute resulted in a commitment by all participants to move forward collaboratively on regional ecosystem management. In order to advance progress on the above priorities, the Forum struck a Steering Committee. The Steering Committee developed a work plan to address the priorities identified by the Forum.

The Cranbrook Workshop highlighted five issues that were deemed important to the participants and could best be addressed at the larger regional ecosystem scale. They were:

- Address cumulative effects of human activity across the ecosystem,
- Address increased public interest in how lands are managed and how decisions are reached,
- Address increased recreational demands and increased visitation,

- Collaborate in sharing data, standardizing assessment and monitoring methodologies,
- Address the maintenance and sustainability of shared wildlife populations.

At the Pincher Creek, AB Forum, two more issues were added to the list:

- Promote awareness of CMP and Issues
- Design and maintain an administrative framework in support of the CMP

In April of 2002, the second annual Forum was held in Whitefish, MT. This second Forum resulted in the formalization of the group to a Collaborative Partnership (*Crown of the Continent Ecosystem Management Partnership*) that is accountable to the membership through an Annual Forum, implements direction from the Partnership through an Annual Work Plan, includes an Interagency Steering Committee as well as a Secretariat (provided by the Miistakis Institute). The Secretariat provides both administrative and technical support, including fundraising and project management. This structure and direction has been confirmed at subsequent annual Forums.

OBJECTIVES

The 2006 Lethbridge Forum was centered on the theme of watershed management. As well as providing the critical agency updates, CMP activity review, and networking opportunities, this Forum provided a number of presentations and discussion opportunities focused on watershed management throughout the Crown region.

The objectives of the 2006 Crown of the Continent Managers Forum were:

- Report on and seek direction from Forum on key aspects of the CMP newly drafted strategic plan;
- Validate and/or adjust the priorities, steering committee membership and overall approach of the CMP;
- Provide a practical opportunity to share information regarding watershed management;
- Confirm agency commitment and resourcing for Secretariat and workplan projects; and
- Provide a formal and informal networking opportunity for various jurisdictions in CCE

SECTION B

FORUM OUTCOMES

1. The 2006 Forum was initiated by a welcome address delivered by the Honorable Guy Boutilier, Minister of Environment, Alberta who acknowledged the importance of the Crown watersheds and commended the efforts of the Crown Managers Partnership.
2. Participants heard updates from agency representatives on their activities since the 2005 Kalispell Forum, as well as their current priorities and initiatives.
3. The Steering Committee updated the CMP on progress over the year which included the initiation of a strategic plan and continued outreach through the CMP website.
4. A draft of the CMP strategic plan (2005-2009) was presented that included a vision, mission, goals and workplan that will facilitate the CMP strategically addressing issues in the Crown.
5. The theme of the 2006 Forum was watershed management. Presentations included the Flathead Basin Commission, the Blackfoot Challenge, the Kootenai River Network, the Oldman Watershed Council, and the Milk River Watershed Council Canada with a panel discussion focused on the opportunities and challenges associated with Crown watersheds.
6. A facilitated discussion focused on the future direction for the CMP resulted in the following:
 - The CMP has agreed to broaden it's partnership to include non-governmental organizations (NGO's, industry etc.) and discussed avenues to engage a broader constituency.
 - Recognizing that the CMP is not mandated by individual agencies, some agencies are limited in what they can contribute to the CMP. A discussion highlighted the importance of sharing information and understanding that contributions will come in different forms and at different times but also recognizing that greater success will be achieved by the sum than by the parts alone.
7. CMP partners voiced continued support for the CMP. The Steering Committee was tasked with finalizing the 2005-2009 strategic plan and developing the 2006 workplan.
8. The Crown of the Continent Managers Partnership (CMP) continues to include an

Interagency Steering Committee, accountable to the membership through an Annual Forum, which implements direction from the Partnership through an Annual Work Plan.

9. The Miistakis Institute for the Rockies continues to provide Secretariat support, subject to available agency resources. The Secretariat provides both administrative and technical and research support, including fund-raising coordination, resource leveraging, and project management.

SECTION C

FORUM DETAILS

The following is a point form summary of the presentations and discussions from the forum. The intent is not to capture every detail, but to provide a summary of the main points and ideas.

Thursday, March 2, 2006

Welcome and introductions

Bill Dolan

Welcome to Lethbridge and to the 6th annual CMP Forum

Ian Dyson

Introduced the Minister of the Environment, the Honorable Guy Boutilier

Honorable Guy Boutilier

- Water is about how we work together. Admire the attendees' ability to come and work together, both the USA and Canada, for the common goal of protecting the Rockies.
- Forum theme is one near and dear to the Ministry. The Ministry is committed to protecting watersheds with the Water for Life initiative. Alberta's innovative water plan is the first of its kind – work with advisory councils to insure local watersheds well into the future.
- What we have left, will be the test of time. Have we been true to ourselves in protecting what we have been given? If we changed how Canada was set up what would still be important would be the sustainability of how we use it.
- Sharing information together, harnessing energy together gives a better chance of sustaining and conserving our environment
- Comprehensive plan of water protection and consumption for water species and economic development. Need to balance between the two in consultation process' which are near completion.
- Speech from the Throne – continue to implement commitment to water for life planning. Public Officials mirror what people are saying – feels good about that.
- Being good neighbours reminds him of three important words – “and then some” Be good neighbours and then some.... Hon. Boutilier carries it forward as his mantra and knows everyone at CMP does as well.
- Look for synergies with how transboundary issues are addressed. – through positive action.

- What kind of energy do you want to use – Alberta wants to seek first to understand neighbours and for neighbours to understand us. Alberta partnership in this venue is one such way.
- Alberta tries to identify the environmental values people want and works and encourages all to work towards achieving those goals, harnessing the positive energy.
- Alberta is moving from being a regulator to be a partner at the table.

Mayor Robert Tarleck

- Welcome to Montana folks. Important to build bridges and not walls. This is an important conference. Not many people but collectively have tremendous power.
- The community of Lethbridge supports economic development, social development, respect for environment, and respect for culture. Any structure is as strong as its weakest pillar. Need to recognize that progress cannot be made outside of environmental sustainability. Haiti developed too quickly without consideration for soil erosion, etc.
- The coming together of science and policy makers of two nations and states and provinces, and also native councils should be considered, is a huge task but can't think of something that gives me more pride in taking part of than in preserving our environment.

Bill Dolan – Historical Summary of the CMP

- Historical Summary of CMP

2001 Cranbrook, BC – brought land managers together

2002 Whitefish, MT – Steering Committee formed. Included agencies and universities. Developed work plans.

2003 Pincher Creek

2004 Cranbrook, BC. Started incorporating themes for each Forum. Theme: Fires

2005 Kalispell, MT. Theme: Invasive Plants. Developed a working group to advance this issue with regards to the Crown.

2006 Lethbridge, AB. Ian Dyson and Rich Moy have taken strong leadership in organizing this forum. Theme: Watershed Management

- Introduced Steering Committee members present.

Ian Dyson, Brace Hayden, Jimmy DeHerrera, Rich Moy, Len Broberg, Mark Holston and Bill Dolan

Secretariat: Miistakis Institute represented by Danah Duke and Guy Greenaway

- Round the room introductions.

Agency updates

Agency representatives give a brief update, highlighting changes since last year's forum.

- Cliff Thiesen – Alberta Community Development (ACD)
 - ✓ Significant floods occurred in June 2005 resulting in significant damages to park facilities, closures of parks and campgrounds. Damages across the SW Management Area exceeded 8 million dollars and included the loss of pedestrian bridges, trails and one campground. In 2005 over 1.5 million dollars were spent on flood clean up and restoration.
 - ✓ Implementing the Water for Life goals. Goals include providing safe and secure drinking water, protecting and ensuring healthy aquatic ecosystems and ensuring reliable, quality water supplies for a sustainable economy. In past two years have spent approx 1.3 million on assessment of well and water treatment systems, upgrading water treatment and distribution systems and properly decommissioning wells and distribution systems that did not meet standards. It is anticipated that will spend a similar amount in the next two years. ACD has also been working with urban municipalities (Calgary in particular) and the private sector to develop four engineering wetlands in the past four years to improve the storm water quality entering into Fish Creek and the Bow River.
 - ✓ Have initiated an assessment of designated OHV trails for Bob Creek Wildland with intent of realigning trails and hardening stream crossings to reduce environmental impact.
 - ✓ Upgrading of park facilities, and planning for the revitalization of campgrounds.
 - ✓ Added biologists position (Calvin McLeod) – will be responsible for inventory, monitoring and control of invasive species, completing biophysical work for West Castle Wetland Ecological Reserve and be the Parks representative on interagency group such as the Oldman Basin Carnivore Advisory Group etc.
 - ✓ Management planning – developing plan for Bob Creek Wildland and Black Creek Heritage Rangeland. Working on the Oldman Dam Recreational Area plan and having it fit with Area Structure Plan.
 - ✓ ACD continues to support several interagency research projects including:
 - Pursuit of a Community Oriented Wolf Strategy through the Oldman Basin Carnivore Advisory Group. They are experiencing increased depredation. Wolves have been collared and are collecting data on movement.
 - Western Blue Flag Recovery Team – developing a comprehensive invasive species plan. If get funding will have a strong education component.

- Riparian health assessment work
- Elk management in the southeast slopes.
- ✓ Protection of Castle Area – There have been considerable pressures and campaigns both for and against the creation of new protected area within the Castle Area just north of Waterton Park. Number of meetings with this regard. Unfortunately, the two groups are operating in isolation and there is no dialogue between them. Not sure how it will go.
- ✓ Year Ahead: 2006
 - Three to four million is to be spent on flood restoration in SW Management Area.
 - Continued focus on assessment and up grading of potable water system, revitalization of parks and campgrounds and trail work in Bob Creek Wildland.
 - Resource management – Community oriented wolf strategy through Advisory Group. Doing a biophysical inventory at West Castle Ecological Reserve to provide inventory and baseline data on hydrology and species. This will provide a basis to quantify future environmental impacts from the controversial development at Castle Mountain Resort.

- Brace Hayden – Glacier National Park, Montana
 - ✓ Staff changes in Kalispell
 - New Deputy Superintendent is Stephanie Dubois (formerly Supt of Chaco Canyon N. Historic Park and Aztec Ruins in New Mexico).
 - New Chief Ranger is Mark Foust (formerly Branch chief for Ranger Activities for the NPS Intermountain Regional Office in Denver).
 - New Chief of Science and Resource Management is Jack Potter (formerly Deputy Chief; Jack has long association with Glacier in increasingly important management positions)
 - ✓ Going to the Sun Road Reconstruction – major impact statement few years ago. Advised to rebuild road and not close it and try to minimize delay. Funding from Congress is dribbling in –sequencing for construction over next 8 years. This summer’s phase – completion of emergency repairs which is being complicated by new emergencies on the east side.
 - ✓ Intelligent Transportation System – tied to mitigation money for reconstruction of GTSR. Slated to begin this year is the construction of transportation centre at T intersection near Apgar. Shuttle busses will be available. There will be computers for visitor to get information on delays, other places in park to visit; etc.
 - ✓ CORE Analysis – Park management is wrestling with how to make up an anticipated budgetary shortfall that will total approximately \$1 million over next 5 years – looking for efficiencies, reorganizations, etc.

- ✓ Avalanche Mitigation Hazard EIS – Stems from Burlington Northern Santa Fe Railroad’s desire to control avalanches on the south side of the Park near Marias Pass – one method is to blast – serious incidents occurred during the winter of 2003-2004
 - Park is preparing an Environmental Impact Statement that looks at a variety of alternatives including additional shed construction – draft should be available to the public by June
 - In the interim; park may issue emergency special use permits allowing blasting to mitigate an immediate hazard (will be dealt with on a case by case basis) – we did so for the first time this past weekend.
- ✓ Great Northern Environmental Stewardship Area Partnership – Protocol signed in 1992 after a series of bear-train collisions resulting from grain spills.
 - *Protocol: to create an operationally and environmentally safe rail corridor between East and West Glacier.*
 - Significant improvements to infrastructure over years; good relationship with Railroad – GNESEA duties have expanded to include other corridor infrastructure (US Highway 2); Living with wildlife brochures; emergency response coordination; etc.
 - Now BNSFR (Railway) has applied for a takings permit under the Endangered Species Act – GNESEA partnership is very involved in reviewing the Habitat Conservation Plan that BNSF must prepare and will likely be a key player in implementing the HCP.

Q: What is a takings permit? A takings permit under the Endangered Species Act allows for the removal of a specific number of bears from the ecosystem (an accounting of bears killed on the railway). They must show how they will mitigate the loss of bears – railway is working closely with agencies. May involve getting more money to protect areas.

- Ian Dyson – Alberta Environment (AENV)
Sustainable Resource and Environmental Management (SREM): there is a significant push underway by environmental and natural resource management agencies in the Government of Alberta to take a new approach to environmental management. An inter agency SREM office has been struck and is working on several priority projects, including launching a Land Use Framework for Alberta in 2006. Two notable events have occurred within the first week of March. First, the executive committees of the three departments that co-chair the deputy ministers' Sustainable Development Coordinating Council have released a 'SREM Charter' that articulates their understanding of and commitment to SREM. Key points include - concrete environmental outcomes, joint commitment to develop and deliver those outcomes (integrated information and implementation systems), commitment to working in partnership with others and adopting place based approaches. Second, the Environment deputy has struck a Change

Team to drive realignment in AENV that is structured around five critical program streams - systems improvement, water, climate change, cumulative effects management systems and conservation strategy. At a regional level staff are engaged in multiple partnerships including the Calgary airshed, a low impact development committee and various sub basin water management planning exercises. Projects of particular interest to the Crown include:

- ✓ Southern Alberta Sustainability Strategy: the analytical phase is mostly concluded and the resulting products will be made publicly available this spring. The partnership/planning phase will commence in 2006. The plan will prioritize for environmental outcomes on southern Alberta landscapes and identify priority issues/areas for resolution.
- ✓ South Saskatchewan River Basin Water Management Plan: The plan will identify how much water should be left in the main stem reaches of the SSRB. There will be effective closure of the Bow and Oldman basins to new licensing (current legislation allows transfers). The draft plan underwent public review in the Nov/Dec 05. Public feedback has been compiled and final changes are being made to the plan in response. The aboriginal consultation component is concluding by the end of March. It is hoped to finalize the plan before summer.
- ✓ No update on the Oldman and Milk River WPACs as they are on the CMP agenda.
- ✓ Prairie Conservation Forum: a new five year blueprint for the conservation of biodiversity in prairie and parkland Alberta will be released this spring. The plan focuses on an approach (research/understanding, stewardship/collaborative action and awareness that is similar to the approach being taken by the CMP. The partnership's most recent occasional paper deals with an overview of southern Alberta watersheds. Copies were available at the CMP forum and are available on-line:
<http://www.albertapcf.ab.ca/>
- ✓ Riparian Management System: a project is underway to develop an integrated riparian management framework. The project is taking a systems approach looking at riparian policy/management controls, conservation easements, monitoring etc... and is being piloted in the Calgary area.

▪ Cathy Barbouletos – US Forest Service, Flathead National Forest

- ✓ The Roadless Initiative proposes the management of roadless areas (generally areas at least 5000 acres with no roads) – It has gone to the courts to determine how to define this and then back to State Governors. The Montana Governor sent it back to councilors to set up diverse groups and make proposals back to the Governor. Goes to Governor March 15. Waiting to see what happens.
- ✓ Fire Recovery – required to go to community groups to ask how to manage National forests. Two years ago, 108 people involved – Question? What consensus do we want to manage the forest recoveries? Salvage was one strategy. Received money otherwise

wouldn't. Made culvert and water upgrades. Improve hydrological to fire recovery. Worked with communities on where to reduce fuels for community protection and identified high priority areas. Community and Forest Service both getting funding and working together.

- ✓ Grizzly – looking at recovery in 5 zones. Received money to do DNA work. Data is coming in to give density and geospatial information of where bears are. 28 bears so will be able to get trends and managers get the information to help with management.
- ✓ Forest Plan – there is a new rule to come up with plan faster, focused on vision, where to go not just nuts and bolts administration. It will be out in a couple of weeks.
- ✓ 10 % of staff gone to help with aftermath of Hurricane Katrina – very humbling.
- ✓ Flathead Forest Service staff quietly keeping open 1530 roads, 2200 trails, 91 recreational sites, 48 cabin rentals and campgrounds.

Question: How is roadless defined?

Legal answer: Roadless can have snowmobiles, no OHV or motorized, and is at least 5000 acres. Answer actually sends you to a 1986 Map. Some has been developed but not much.

- Darryl Johnson – Alberta Sustainable Resource Development

- ✓ 2005 – 2008 – Strategic Plan Priorities include:
 - Fire Smart Program – fire safe communities.
 - New sustainable forest management planning.
 - Biodiversity strategy
 - Regulatory streamlining
 - Resource Information Systems – the weakest point due to poor funding. This is a huge issue.

Highlights within the Crown:

- ✓ Water for Life – developing operational plan
- ✓ Wetland Policy Team – support to watershed protection advisory committees and stewardship groups.
- ✓ Involved in aquatic ecosystem monitoring, aquatic species and habitat management, biodiversity monitoring
- ✓ Working on bed/shore management with cottage residences and access management with regards to the operation of motorized vehicles
- ✓ Coal Bed Methane – reclamation of fescue – not very successful. What to do with water from coal bed methane.
- ✓ Grizzly bear Research – will be getting DNA data for southern Alberta.
- ✓ 1000 trees in Crownsest Pass have Mountain Pine Beetle.

- Rich Moy – Montana Department of Natural Resources and Conservation

Water Right Issues

- ✓ The MT Department of Natural Resources and Conservation is working with a broad based group of constituencies in evaluating how to conjunctively manage surface water and ground water as one source, especially in basin closed to surface water appropriations. The need is to protect senior surface water right holders.
- ✓ The Montana legislature has expedited the state wide adjudication of water rights. DNRC has over 202,000 water rights that will need to be adjudicated by the end of a ten year period. Funding for the process is from a fee placed on existing water right holders.

Transboundary water issue:

- ✓ Mary River/Milk River
 - Governor Schweitzer has placed the rehabilitation of the St. Mary Canal and diversion work as a high state priority. A broad based group of citizens within the basin are working with DNRC to accomplish this rehabilitation. The cost of the rehabilitation will be approximately \$135 million. The State has already allocated \$10 million toward this endeavour. The project was built over 85 years ago and is in desperate need of major rehabilitation as there is a reasonable likelihood of a major failure.
 - The State is working to quantify the reserved water rights of the Native American Tribes and mitigate the impacts on non-Indian water users in the Milk River basin of Montana. There are four Native American reservations with in the Milk River Basin with Treaty rights that date back to 1855.
 - International Joint Directive – Boundary Water Treaty Order. The State is involved with Alberta and Saskatchewan and both federal governments to determine how to optimize each country’s entitlement of Milk And St. Mary River waters under the Administrative Procedures. These Procedures are to apportion the flows in accordance with the 1921 IJC Order. The draft report is being finalized.
- ✓ Transboundary Flathead River Basin – 2 processes will be initiated in the next few months. Premiere Campbell of B.C. and Montana Governor Schweitzer met recently and agreed to work together on resolving our differences on transboundary issues within the Flathead Basin.
 - B.C. has invited Montana to participate in the B.C. regulatory process on the evaluation of the proposed Cline coal mine in the transboundary Flathead of BC, which is located north of Glacier National Park.
 - MOU - Environmental Cooperative Arrangement. Montana and B.C. will work together to finalize the MOU that implements the Environmental Cooperation Arrangement that was signed by Governor Martz and Premier Campbell in Sept 2003. The Agreement calls for the State and Province to work together to protect, enhance and conserve our shared environment for the benefit of existing and future

generations. We want to define “win-win” options that satisfies the needs of both countries.

- Kelly Cooley – Municipal District of Pincher Creek

The MD of Pincher Creek is involved with several initiatives that are relevant to the Crown Managers Partnership:

- ✓ Southeastern Slopes Task Force – an initiative of the MDs’ of Pincher Creek, Ranchland, Bighorn, and Clearwater County, its aim to raise awareness with the public, the provincial government, and other stakeholders on six broad issues related to recreational abuses within the Crown and other “backcountry areas:

- Water quality and impacts on riparian zones
- Invasive weed proliferation
- Road use/maintenance, access rights
- Lack of enforcement of existing regulations
- Lack of adequate signage for appropriate land use
- Challenge of provision of emergency services

The Task Force recently presented its final report, which outlined its concerns and proposed solutions, to the Standing Policy Committee for Alberta Sustainable Resource Development, including Alberta Environment. They also have released video and print material related to the concerns of the task force to the media, general public, and various interested associations, including the Alberta Association of Municipal Districts and Counties (AAMD&C). MD Councillor Rodney Cyr has been an active voice on the Task Force.

- ✓ Support to Cumulative Impact Analysis of Oil & Gas and Wind Energy Development – involves financial support of research conducted primarily by landowner groups including the Pekisko Group & the Livingstone Landowners. Support from the MD of PC is added to that of the MD’s of Ranchland and Willow Creek.
- ✓ Board Of Directors Of Oldman Watershed Council – our rep is MD Council Reeve Brian Hammond
- ✓ FireSmart Initiatives – MD council supports Alberta Sustainable Resource Development and adjacent municipalities on beneficial management strategies in fire prevention and management in forested areas.
- ✓ Southwest Conservation Partnership – a highly successful initiative spearheaded by the Agricultural Service Boards of the MD’s of Pincher Creek, Ranchlands, and Willow Creek, and supported financially by the Alberta Environmentally Sustainable Agriculture program (AESAs). The SWCP’s aim is to facilitate cooperative conservation initiatives within the partnership area. Among successes are the successful facilitation of several active cooperative landowner-run watershed groups, stakeholder awareness & education on recreational abuse in the backcountry, and overall facilitation of conservation initiatives in the region. More information on SWCP initiatives can be obtained through the partnership coordinator Jeff Porter - jrporter@telus.net.

- ✓ Invasive Plant Management – The MD of Pincher Creek participates in numerous inter-agency partnerships to manage invasives within the Crown. Examples include the South Region Agricultural Fieldmen’s annual invasive plants calendar, application under the new federal invasive species program to combat Leafy Spurge infestations, and facilitation of invasive control in riparian areas, forestry, & parks/recreation areas. For more details, contact Kelly Cooley – kcooley@mdpincercreek.ab.ca, or visit www.mdpincercreek.ab.ca. Also contact Kelly for details on the 2006 North American Weed Management Association/Alberta Invasive Plants Council Conference in Calgary September 18 – 21, or visit www.nawma.org or www.invasiveplants.ab.ca.

- Bill Schenk – Montana Department of Fish and Wildlife and Parks
 - ✓ Agency is not involved in land management – responsible for fish and wildlife resources. Provide fishing and hunting for the public. License dollar for hunting and excise dollars from equipment.
 - ✓ 70% of deer and elk wintering grounds are in the land they manage.
 - ✓ Fisheries – Flathead headwaters. No more water with native fish intact. Looking to poison, sterilize lakes to reintroduce as close to native species as possible over the next 10 years (western cutthroat trout). Walleye – working hard to hold line on keeping east of continent divide.
 - ✓ Wildlife – Good working relationship with counterparts in BC. Grizzly studies monitoring - are very happy with. Exchange of restoration species... grizzlies etc.
 - ✓ Landwise - conservation easements obtained in Swan Valley.
 - ✓ Investigators are finding a proliferation of sophisticated poaching operations for out of state or in state hunters, wealthy, without license, during hunting or out of hunting season. Loosing a lot of animals.
 - ✓ Conservation – major effort to promote carrying pepper spray in the outdoors – when selling hunting licenses, contact at offices etc. Want to get it to be standard practice for the public to carry pepper spray.

- Len Broberg – University of Montana
 - ✓ Works with Mike Quinn on the Transboundary Management Program between the Universities of Montana and Calgary. Can provide students for projects and some money to support that.
 - ✓ Annual meetings around research in the Crown bringing together industry, government, and NGOs. Preliminary meeting in fall. BC, Montana and AB.

- Bill Dolan – Waterton Lakes National Park

- ✓ Providing financial support to the metadata framework
- ✓ Involved in numerous partnerships including: the Southern Alberta Sustainability Strategy, the Peace Park, the CMP, and the Nature Conservancy in Waterton (involved in the largest land conservation project in Canada ever)
- ✓ Hosting annual Waterton / Glacier Peace Park Science Day – April 27th

Steering Committee Report to Forum Brace Hayden, Glacier National Park

Current Steering Committee:

- Brace Hayden/Leigh Welling - Glacier National Park
- Marc Holston - Flathead Basin Commission
- Roy Doore - Bureau of Indian Affairs
- Wayne Stetski - BC Water Land Air Protection
- Jimmie DeHerrera - Flathead National Forest
- Bill Dolan - Waterton Lakes National Park
- Mike Quinn - University of Calgary
- Len Broberg - University of Montana
- Rich Moy – Montana Dept of Natural Resources and Conservation
- Elliot Fox – Blood Tribe
- Ian Dyson - Alberta Environment
- Danah Duke - Miistakis Institute for Rockies
- Larry Price – BC Integrated Land Management Bureau

Progress 2006

Since the meeting last spring in Kalispell the Steering Committee has been working with the Miistakis Institute on the following work plan items:

- ✓ a metadata framework
- ✓ outreach through the website
- ✓ increasing awareness of the Crown
- ✓ the CMP Strategic Plan

The Committee discontinued the RLAP project as it was not getting the support it required. Lots of spatial and trend data was gathered that the Miistakis Institute may be able to use for future CMP projects.

Invasive Plants Working Group Update

(Presented by Kelly Cooley)

- This working group was established after the Kalispell Forum to share what works.

- Initial action include: developed an email list of contacts, held conference calls and a first meeting in the spring. Will follow with a fall meeting to see what worked, what didn't.
- The group is sharing information on education tools and strategies.
- The focus of the last conference was a proposal put together by Leigh Welling for an Invasive Plant Guide for the Crown. It would include for example cross border watch species, look a likes, methods of eradication and prevention. Asked for \$38,000 asked for 2 yrs. Will know soon if funding is in place.
- BC and Flathead will also contribute a few thousand dollars for the printing. Agencies will provide photos.
- Kelly has the list of the Invasive Plant Group if anyone would like to be added to list.

Strategic Plan

- The Draft Strategic Plan 2005 – 2009 and the Vision and Mission in the draft were presented. The plan may be viewed at www.rockies.ca/cmp.
- Why a strategic plan? The CMP is now 5 years old. Lessons have been learned and the CMP can now work on focused projects that would strategically help the Crown.
- The Draft Work Plan was also presented (www.rockies.ca/cmp) with an initial discussion on Goal 1 taking place.

Goal 1

- ✓ Has the CMP done any work on environmental outcomes? That's what we're working towards.
 - ✓ Concept of indicators – how exhaustive will it be? Is it a wide open program, or just an initial list? Probably have two workshops at U of C and U of M and invite range of expertise so, yes, could see a wide list.
 - ✓ Lots of groups already doing this so probably first would find out what everyone's already doing and then see if that information can be used.
 - ✓ When would the workshop be and would we be looking at water indicators etc? Don't have a date set, second part – all of the above.
 - ✓ It would be good to see what all groups are already doing and then see if have a few indicators used across all groups and if can use these indicators at a broader scale with uniformity. Can be simple initially and then expand.
- There are no commitments yet to this strategic plan. Currently just looking to see if the Membership is in favour of this strategic plan and proceeding with this direction. Part of the plan includes holding a workshop to find out what agencies are doing and what indicators would be important to the Membership

Panel Discussion - Crown Watersheds Challenges and Opportunities

Moderated by Mary Sexton, Dept. of Natural Resources & Conservation, Montana

Flathead Basin Commission (FBC) – Rich Moy

- Why was the Flathead Basin Commission created? Many people were moving to the basin and there was concern over the potential water quality impacts of a proposed coal mine north of the border in B.C. Federal funds were found to prepare a programmatic Environmental Impact Statement of the Flathead Basin. An outcome of this process was the realization that there was need for a body of citizen and government folks to work together in protecting water quality of the basin, which led to the creation of the Flathead Basin Commission by the Montana legislature. Interestingly, the EIS was under the control of a group of basin citizens.
- The Commission consist of 23 members. It is a partnership of governor-appointed citizen from various interests and representatives of local, state and federal governments, a member of the Confederate Salish and Kooteni Tribes, and a liaison from the BC provincial government.
- The Commission believes that local problems are best solved by local people. The Mission of the commission is to protect the existing high water quality and the aquatic environment of Flathead Lake and its tributaries and to monitor changes in water quality and the environment.
- The Commission also promotes economic development while preserving the existing high water quality and aquatic environment of the basin.
- Accomplishment of the Commission include the facilitating and implementation of BMPs for timber industries and homeowners within the basin, set water quality standards and targets for Flathead called TMDL that are to be meet. The Commission has spent over 2 million dollars of grant funding assessing and implementing nutrient reduction projects over the past 10 yrs through its Voluntary Nutrient Reduction Strategy program.
- Education – The Commission sponsors “know your watershed” workshops to help basin residence understand issues within their watersheds and provides forums to educate basin residents on how to implement BMPs on their shoreline.
- Monitoring – The Commission has an active voluntary water quality monitoring program which involves over 100 local residences.
- International – facilitated the development of a comprehensive land and water strategy for the North Fork of the Flathead. The strategy was to be used to begin discussions with BC on compatible land uses within the transboundary Flathead.
- Supported the U.S. involvement in the IJC Reference on the proposed Cabin Creek coal mine.

- How does FBC Function? No regulatory function. Provides residence with good science and tries to arrive at consensus solutions. The Commission has gained a greater understanding of the Flathead because of the work of Dr. Jack Stanford and his staff at the Flathead Lake Biological Station. More science is still needed on the airshed.
- We still need to understand the effects of rapid population growth on water quality and land use changes in the Flathead. We need to become more proactively if we plan to get a handle on increase nutrient loads into Flathead Lake.
- How does the FBC engage the community? At this time, the FBC is not doing a very good job of engaging the community. Therefore, the Commissions plan on developing a Strategic Plan and road map to figure out how the Commission can become more effective. For example, we need to find away to reach the TMDL or water quality targets for Flathead Lake so we do not see big algae blooms in the lake. This is a great challenge.
- Is the Commission using a basin wide perspective? On some aspects we are, such as looking at reducing nutrient loads into Flathead Lake and with the operations of both Hungry Horse and Kerr dams. The Commission can still do better.
- Can the Crown Managers Partnership assist FBC manage Flathead with in Crown?
 - Yes.
 - ✓ A repository or link to the compatible data
 - ✓ More baseline data on the transboundary Flathead.

Discussion:

- Major sources of contaminating nutrient? Sources coming off lands – agriculture account for about 60%. Very little from the timber industry. Air shed accounts for about 30% of contaminants into Flathead waters but we are not sure where the particulate matter is coming from come. More research is needed.
- Flathead is developing a growth policy. The plan will be out in June. Good trend analysis in needed. We need to show people how water quality; riparian habitat and land uses have changed over time and will happen into the future unless the basin becomes more proactive. Folks need to ask, do you want to control your own growth and destiny or are you going to just let it happen?
- Funding from previous legislature was difficult because of tight funds. More money today so should not be as difficult to fund commission activities.

Blackfoot Challenge - Tina Bernd-Cohen

- The Blackfoot Challenge works in the southern end of Crown of Continent. It includes western central Montana and the Blackfoot watershed.
 - ✓ 1.5 million acres – 3 counties
 - ✓ 60% of land is in public lands

- ✓ 11% wilderness area
- ✓ 20% is private lands
- It is an amazing ecosystem with 1900 miles of streams. The river runs through the heart of the valley. Working ranches who maintain the area have maintained incredible biodiversity.
- In 1980 the Blackfoot River was listed due to:
 - lots of recreational use, tailings from mine, improper agriculture practices, second property development
- Asked what are we going to do it? Decided to focus on the river and watershed wide.
- Started a watershed group called Blackfoot Challenge 12 years ago.
- Mission: Coordinate efforts that will enhance, conserve, and protect the natural resources and rural lifestyle of the Blackfoot River Valley.
- Private / public partnership all engaged in the issues. The Board is active and meets monthly.
- Goals – to foster communication between public agencies, and to recognize and work with them.
- Work done through committees – 17 committees in total including:
 - ✓ Conservation Strategies Committee – a third of land is protected through easements.
 - ✓ Blackfoot Community Project – community is shaping its future through plan for resale of 88,000 acres of corporate timber lands.
 - ✓ Drought and water conservation – balancing water needs. Sixty to seventy-five irrigators and outfitters participate in an emergency drought response plan.
 - ✓ Education and Outreach Committee – 35 tours reaching 1200 participants.
 - ✓ Webpage
 - ✓ Adopt A Trout program for kids.
 - ✓ Habitat and Water Quality Restoration Committee –creating watershed restoration action plans, pre and post monitoring protocol for projects in the watershed.
 - ✓ Weed Management Committee - Poker cards with weed pictures, weed pulls, grazing tours, host insects released (biological weed control).
 - ✓ Wildlife Committee – reducing human-wildlife conflicts, have seen a 50% reduction in conflicts. Carcass pick-up program, Grizzly DNA study (USGA),
 - ✓ Executive Committee
- Building better communities through cooperation.

Discussion:

- The key to actual do things is engaging people and sustaining that – how do you keep it going?

Since the 70's lots of people have become forward thinking with incredible stewardship values... local leaders in the agencies, with a vision, passion and who are willing to commit their time. It is a passion and way of life for even the agency people. Once see what you can do with a few people together you can see how much can be done. Work with what you have in common and can agree on. Even though difficult issues do arise that board members disagree on, they have had enough face to face interaction that they have a level of trust even when differences arise. Also the Blackfoot Challenge brings money and technical knowledge for landowners – so better to be involved. Have pot pourri of programs so people get involved in what they want to. Rural community so people know each other and sustainability is also because of friendships. Funding sustainability is always an issue.

- Are there people in community who don't participate? Yes. Will soon be sending out a card to find out who wants to become involved. Very informal associations so now will find out who will become involved.
- What are the issues you see coming in next 10 years? Change with growth. Change with part-time landowners (have land managers and not there all year) so may not do weed management, nor have children, and may not get involved and may build big homes. Sustainability of communities will be an issue. Looking at land use planning – planning for development. Change in cultures in terms of values.
- Are there active groups that oppose Blackfoot Challenges' initiatives? No. Have limited organizations in Blackfoot (3) and lots of positive camaraderie. Move forward on positive grounds and do not take on activism role. Work on consensus.

Kootenai River Network, Montana & British Columbia (KRN) - Mike Malmberg

- A video presentation of the Kootenai River Network was presented.
- KRN is a diverse network of partnerships and agencies.
- They foster communication and implementation of collaborative initiatives to improve natural practices and water quality through 5 operating principles.
 - ✓ Involve individuals and their communities
 - ✓ Improve communication among agencies and diverse citizen groups
 - ✓ Facilitate habitat enhancement and rehabilitation
 - ✓ Use the best available science practices
 - ✓ Pursue coordination of efforts
- Grants and contributions come from collaborating agencies and volunteers who help with rehabilitation on the ground.
- Work under the Kootenai Basin Plan.
- Over 1 million dollars spent in stream restorations. 100,000 annually on outreach and education. 4 part-time contracted individuals.

- Most difficult problem is that when KRN works with a group KRN doesn't know what the final project will be – develop it but then must go for funding. If funders only fund parts of a project but the project was designed with implementation of the whole plan in mind then it gets difficult.

Oldman Watershed Council (OWC) - Wendy Devent

- The OWC is a partnership – Why? Albertans want more involvement. Environmental issues are complex and cross multiple jurisdictions and sectors. Partnerships allow us to see all sides of the issue and not just our own. Encourages information sharing. Better decisions overall.
- The OWC was formed in Sept 2004. Initially formed from two existing groups –the Oldman Basin Advisory Council and the Oldman Basin Water Quality Group.
- Non-profit. Membership is only for individuals who live in the watershed because members can become board members and wish board members to be individuals residing in watershed.
- OWC have teams including - Board, Communication and Outreach, Urban Beneficial Management Practices, Rural BMP.
- Board – 17 members and positions identified for selected sectors for broad representation.
- How well do we understand our watershed? Half of the residents are in the city of Lethbridge. Total is 160,000 residents.
- Water Quality Monitoring – monitoring on three lower watersheds. Involved in three long term monitoring sites with Alberta environment. 37 sites monitored on a yearly basis.
- Headwaters are quite good but change as move downstream. Trying to assess water at same site so it takes three hours to move downstream to a location see how same water changes at headwater to end point.
- Watershed delineation and hydrocoding – created a template and standards to merge the irrigated network with the natural hydro system. Alberta Environment and SRD then stepped up to work on the data for the next info.
- Applied Research – Manure incorporation and effect on water quality (paper publication)
- Agriculture Canada collaboration to do watershed evaluation of BMPs.
- Engage Community – Annual report, website, newsletters sent to membership.
- Community Partnerships – Lethbridge Environment Week
- Education – not enough capacity but try to do it.
- Events – annual stakeholder meeting, annual general meeting and workshop, tours of BMPs, shoreline clean-up.

- Demonstration Projects- Urban: water wise school garden Agriculture: off-stream watering
- Stormwater Improvement – last year surveyed Lethbridge residents. Found residents couldn't accurately identify a pesticide. Identified that there is a need to target education programming to these misconceptions. Starting with City of Lethbridge about what they are doing and what can be changed. Communicate directly with residents, directly through the stores and promoting Xeriscaping.
- Varied membership and financial and in-kind support
- State of the Watershed Report – working on one for the Oldman watershed. Not been done yet. This would allow them to embark on a watershed management plan.

Discussion:

- Are there other groups that oppose what you are doing? No. The OWC has only been active for a year and initial groups came from the point of view of making a single recommendation. The OWC looks at all the options and is not involved in making a single recommendation.

Milk River Watershed Council Canada (MRWC) - Sandi Riemersma

- The Milk River Water Management committee started with the Water Life Strategy by the Alberta government.
- Started with a survey to assess interest in the area. 95% were interested in having an advisory council - comprised of municipal, towns and villages, recreational, water co-ops and business interests.
- In April started a Steering Committee - formed to develop watershed planning and an advisory council
- November 2005 – the MRWC mission, vision, goals and bylaws were developed and publicly accepted. Non-profit status was achieved recently
- Community Awareness and Involvement team – modeling the Oldman Basin Council.
- Goals:
 - ✓ Water supply and management – to foster sustainable use.
 - ✓ Water quality and riparian protection – to monitor and promote quality water supplies.
 - ✓ Biodiversity – increase knowledge, awareness and partnerships in the watershed to conserve diversity.
 - ✓ Community Awareness and Involvement
 - ✓ Economic Development – pursue initiative that encourage economic development in the watershed
 - ✓ Foster international relationships.
- Strategy - Can't do it alone. Need to partner.
- Share watershed with Saskatchewan and Montana.

- Watershed Facts:
 - ✓ Annual precipitation of 316-414 mm, 50-80% of flow comes from snowmelt.
 - ✓ 60 years of flow records, highly regulated because of international cooperation.
 - ✓ 35 intakes for irrigation to detect water usage.
 - ✓ Milk River Aquifer – dropping due to increase of livestock and water use. 66 licences mainly for irrigation.
 - ✓ River flow increased and water quality improvements since 1917 due to diversion with St. Mary River.
 - ✓ 58% of land use is deeded and 42% is crown land.
 - ✓ Abundant wildlife.
 - ✓ Population Trends – virtually no population change between 1991-96. Slight decline since.
 - ✓ 59% agricultural economy
- MRWCC Activities:
 - ✓ Visibility – newsletter
 - ✓ Community Engagement – Cardston County, Warner, Forty Mile, and Cypress County to partner in monitoring.
 - ✓ Stewardship Initiatives – Stockman’s Grazing School, Ranchers Association, Cows and Fish Inventories.
- Why communities engage: Goals are relevant to communities, the community has a history of working together, and everyone knows each other so are accountable to each other.
- Will take a watershed wide perspective.

Discussion

- Is the Milk River aquifer connected to river? Not sure.
- Important for Canadian Milk River group to connect with it’s American counterpart. Yes, MRWCC is hoping to invite Montana Milk River members to the Annual meeting and the Stockmans’ Grazing School.

Practitioners Perspective

A Framework for Regional Collaboration – The Challenges and Opportunities

Dr. Matthew McKinney

There are Five Over-arching Lessons

1. Regional initiatives vary in terms of who initiates, scales, purpose, issues, activities and structure. Even if different (issues) there are similarities (strategies used)
2. Regional initiatives produce a variety of outcomes – Tangible outcomes (policies, programs, conservation and development actions), Intangible outcome (social, political, and intellectual capital) and New organizations.
3. Regional collaboration is not primarily a scientific or technical challenge. .. it is more of a social and political challenge. Procedural element (how to work together across boundaries). Substantive element, common policies and actions across jurisdictions).
4. No single model, but a common set of habits (or principles)
5. Effective regional initiatives take the form of network structures. Two or more organizations working together, sharing resources and solving problems of mutual interest... whether or not they have formal authority.

It is all about network building relationships in the community. Some organizations succeed where formal authorities actually struggle because no community work may be done in formal authorities.

What Compels?

- A compelling purpose or interest – pressing problem or crisis, shared vision, goal or sense of place, joint opportunity
- Interdependent interests – no single entity has the power or authority to address the problem on their own. People must believe they can achieve more if they work together than acting independently.

Unfortunately...

- The response tends to be reactive.
- It is very hard to get people to be proactive. (land use planning, use of visualization and future scenario tools – build database on visualization future scenarios to do outreach with)

What Enables?

- Collaborative Leadership. It's not positional leadership but the ability to reach across boundaries. A collaborative leader is a Stewardship Leader, Networker, Sponsor, Thought Leader, Evangelist to recruit, Broker, Project Leader, Event Organizer, Connector.
- Good Process. Mobilize and engage the right people. Define the region according to people's interests (ultimately dealing with people so not just looking at biological science).

Jointly name issues and frame options. Make collaborative decisions and take strategic action.

A tale of two regions: Land Use and transportation Planning

- Boise Blueprint for Good growth.
 - limited participation (pay to play)
 - region, issues, and solutions largely defined by regional transportation agency
 - conducted public outreach but ignored it (infill vs planned communities)
 - not surprisingly – most people involved in process were uncertain about the plans implementation. \$1 million. Lack of thinking upfront. Not taking time to design a good process.

- Cumberland Region Tomorrow
 - multiple sponsors
 - conducted a situation assessment ... which led to process design.

What Constrains?

- Institutional inertia
- People may have better options to achieve their interests
- Lack of resources
- Lack of collaborative skills
- Disconnect between civil and political will

Matthew described a planned clinic where no decision maker showed up. Do we move forward without the decision makers or do we try to bring them to the table or do we experiment with the process. Decided to experiment but need to bring the decision makers to the table.

What Sustains?

- A compelling reason
- Measure and demonstrate success progress
- Celebrate success
- Capture and share lessons learned
- Keep people engaged and recruit new people
- Develop more leaders
- Refocus and regroup around new opportunities and challenges
- Revise and renew the mission

Why Evaluate?

- Helps you adjust, adapt and improve. - It involves learning from experience and adapting activities accordingly. Improves on-the-ground success in the face of inevitable uncertainty and change.
- Maintains and builds support by measuring progress and documenting success.
- Enhances your ability to do better next time.
- Spend time and money doing things that may not cause the intended change.
- Do lots of good things but no one knows about them.
- Sense of purpose and direction may become distorted.
- Can't prove you succeeded.

What to measure?

Outcomes:

- Did you achieve your objectives or interests?
- Are you doing better than your best alternative to regional collaboration?
- Are the outcomes wise? – based on the best available information
- Can the outcomes be implemented? – politically, technically and financially feasible.

Process

- Did everyone who wanted to participate have a meaningful opportunity to do so?
- Was the process efficient relative to your alternative?
- Did you learn something from the experience? (intellectual capital)
- Did people build trust and relationships? (social and political capital)

Reflections

- Demonstrate and communicate success: networking, organizing, sharing resources, shaping a vision, articulating common threats
- Build a broader constituency: sustain a focus on agencies with authority, create opportunities to engage other people who care and can bring resources to the table. (NGOs, Business community)
- Be opportunistic: Focus on things people are predisposed to do. Take small steps toward a common goal (MOU, workshop on indicators, "Welcome to the Crown" signs, see ideas in strategic and work plans)
- Create a framework to measure and evaluate progress of CMP

Discussion

- Is it better for government or citizens to initiate? Doesn't matter who initiates as long as those who initiate embrace the collaborative process.

Case Studies

Defining Healthy Watersheds

Facilitated by Ian Dyson

Surface-Groundwater Vulnerability Map for the Oldman River Basin – Livio Fent

- The Data Collection and Integration Working Group eventually became the Oldman River Water Council.
- Why a vulnerability assessment? To incorporate the soil-geologic media in addressing the gap between land use and water quality. To provide another tool to aid environmental planners in managing for set outcomes.
- Strategic location for water quality measurement monitoring stations – at mouths of the sub-basins. Some sub-basins had multiple locations of measurements.
- Land use along Oldman Basin consisted on natural landscape, agricultural landscapes and facilities (waste & recreation sites, well sites, population)
- Water quality variables looked at included bacteria, pesticides, nutrients, salts etc.
- Built the vulnerability model using the federal Landscape Environmental Management System (LEMS) – layers included nitrogen utilization, KLS-erosion, root zone leaching, root zone leaching enhanced with irrigated quarter section.
- The vulnerability map can be used as a planning tool for a ‘management outcomes’ based approach to water quality, especially from the land use side.
- Land use management regimes can be designated based on vulnerability classes: those with locational constraints, environmental engineering requirements and land management restrictions.
- The vulnerability maps are in the process of being refined for more operational application. They only are one component in an analytical framework.

Q: Did you assign a confidence value to the data? i.e. groundwater conductivity.
Used different values based on the density of groundwater wells for example.

Q: Were any results a surprise?
Didn't really analyze results.

**Aquatic and Riparian Condition Assessment (ARCA) – South Saskatchewan River Basin –
Rob Wolfe**

- Goals was to assess the conditions of the SSRB main stems and make recommendations for improved management
- ARCA included the Red Deer, Bow, Oldman and South Saskatchewan Basin
- 3 components of ARCA – Hydrology, Riparian health, Water quality. These three components are interrelated.
- Hydrology – concerned with flow regime. Impacts from dams, diversions, withdrawals include lower flows, changes of flood flows. Use IHA-RVA software (tool from Nature Conservancy, USA) for assessment.
- Riparian health – assessment performed by the Cows and Fish Alberta Riparian Habitat Management Society. 80% of species use riparian areas in SSRB and riparian is only 2% of SSRB landscape. Also stopover areas for migratory birds. Filters sediments and nutrients. Livestock grazing on main stem and tributary riparian in SSRB. Impacts may include – vegetation removal, loss of bank stability, erosion & sedimentation, invasive species, and loss of biodiversity.
- Water quality – there is no single measure of water quality. Measurements fall into 3 categories physical (temperature, colour), chemical (nutrients, minerals, oxygen etc) and biological (aquatic plants, animals, algae etc) characteristics.
- The ARCA final report describes each main stem reach (with photos), lists main ecological services for each reach, notes the current condition of each reach, and recommends options for improved management.
- Rob presented a few pages of the ARCA website that is scheduled for completion along with the report on June 2006
- Red Deer River Overview: of the three rivers examined Red Deer River had the greatest proportion of healthy sites. Fewest reduction in riparian health.
- Bow River Overview: majority of the sites was rated as healthy but with problems
- South Saskatchewan River Overview: of the three rivers had the smallest proportion of healthy sites
- Further comments from the Cows and Fish Report is provided on the last slides of the presentation

Determining Instream Needs of the South Saskatchewan River Basin - Wendell Koning

- The instream flow components for a riverine ecosystem include water quality, fisheries, riparian vegetation and channel maintenance.
- Water quality alone requires minimal flow however with addition of the other components greater flow is needed and in fact the increased flow need for channel maintenance feedback to provide good water quality as well as fish habitat. They are interconnected. Showed the annual hydrograph and Oldman River flows at Lethbridge (Apr to Oct)
- At lower river flows how much water can be removed from river and still have a healthy aquatic ecosystem? Habitat evaluation metrics show that long term should have no more

than a 10% reduction of habitat. Medium or short term – no more than 15% and 25% reduction of habitat respectively.

- Water Quality Instream Needs: Variables include temperature, dissolved oxygen, ammonia
- Riparian Instream Needs: river flows for cottonwood life stages.
- Channel Maintenance Flows: river channels are dynamic; channel configuration depends on balance between sediment scouring and deposition; channel maintenance flows maintain the natural balance of scouring and deposition.
- Final Product includes: flow recommendation for each week of the year; recommended flows are variable within and between years for each river, each reach.
- Can use product to do scenarios evaluations – estimating impacts where river flows are below the recommended IFN values, communicating results from the science to reality. Demonstrated some scenario evaluations.

Instream Flow Protection – Strategies in Montana Water Law - Bill Schenk

- Montana statutes with regards to water ranking priority state “First in Time is First in Right”. Historic use defines the limits of a right and beneficial use also limits a right. The water user also has a right to “unchanged stream conditions”. This right provides a level of certainty for the future.
- Prior to 1973 there was no single method of getting a water right. There were use rights, the filling of appropriations via the County, or decreed water rights. There was no state wide administration but County level or stream specific judicial actions.
- In 1973 the Montana Water Use Act was passed and created a single and exclusive method of water appropriation. Montana’s water laws were generally confirmed and updated. In this process were developed interesting concepts on water reservations to aid in protection of instream flows.
- The process involved the submission of an application, department review and evaluation, public notice, opportunity for objections, a hearing and an agency decision is made.
- With any new application, the burden of proof to ensure unchanged stream conditions falls on the party initiating an appropriation request.
- There are five mechanisms that have created protectable water rights for instream flow. 1. Murphy Rights, 2. Stored water, 3. Water Reservation, 4. Water leasing and 5. Basin closure.

Ground Water and Surface Water: Managing an Interconnected Resource - Eloise Kendy

- Ground water is the subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated. Ground water can be found in unconfined

aquifers and confined aquifers (under high pressure so that if a pipe is placed into the confined aquifer the water inside would rise above the confined boundary).

- There are water flow paths even from the confined to the unconfined aquifer. The water table relative to the stream will result in a gaining or a losing stream. Gaining and losing reaches change position seasonally.
- Pre-irrigation in Montana the spring and early summer flows were high & winter flows were low. When flood irrigation was introduced, spring and summer flows were reduced and winter flows increased. Charts on Water Level in Upper Big Hole Basin, Montana and Average flow of Gallatin River.
- The effects of urbanization on ground water can also be large. The sewerage of Long Island, NY due to urbanization resulted in ground-water storage depletion.
- Ground-water pumping can affect water quality, and streamflows (low flows will reduce habitat, decrease agricultural productions, and have recreational impacts resulting in conflicts).
- Montana does have some water closures, as well as compacts and controlled areas however there are ways at avoiding regulations. For example development in the form of subdivisions where each subdivision has individual wells do not need a permit application. Small withdrawals individually but collectively have an impact.
- The inevitable consequence of ground-water withdrawal was seen in the Fuyang Basin, North China Plain – resulted in streamflow depletion and an extremely low water table.
- Solutions should include: 1. Basin closure enforcement, 2. Water right trading, and 3. Conjunctive Management.
- Ground water and surface water are connected. Irrigation, urbanization, reservoir construction and ground-water pumping affect ground-water-surface-water interaction.
- Ground-water exceptions to basin closures encourages ground water consumption and streamflow depletion.

Refining Direction for the Crown Managers Partnership

Matthew McKinney

Q: Does anyone have comments on the Vision in the Strategic Plan?

People component is missing. It is in the mission and ecological health in vision statement does include people.

Q: What about opportunity to bring groups in? NGOs, conservation organizations. Sustain focus and integrity of CMP but supplement that with others. Thoughts?

Initially there was a strong feeling the agencies needed to develop a comfort in working with each other, to build relationships and then expand. The CMP has in addition invited local governments. Never intended to exclude others for the long term. Discussed before broadening to industry etc and how to expand it for the long term.

Past focus was research and joint management of wildlife. Now looking wider. If plan to bring people on planning mandate need to engage larger to community. If don't share where you want to go then agencies will have problems.

Q: How to involve others?

- Have Steering Committee members go to other people's meetings. Outreach.
- Annual conference - Western Premier and Western State conference
- NW Legislative Councils – Western Governments
- Work groups.
- Associates category – University, business, NGOs, watershed council or other partnerships, municipality, industry.
- Website
- Media

Needs to be structured. How can you participate and become involved (not just be a member) – so NGOs etc may be Steering Committee members. Real Partners. Move from inform and educate to seek input and advise to partnership.

Do inventory and build on existing networks.

Vision / Mission – This is the WHAT. (all of the above)

Add to vision – “for the benefit of existing and future generations”

Methods (The HOW)

The diagram (Appendix 1) moves to the development of a product. In the US Forest Service there are structured policies and procedures already legislated. So don't have a need to develop a product. Networking, sharing information is the benefit from this forum.

Some partners are not comfortable with expectation of creating a Crown of the Continent product per se. The information sharing improves what each jurisdiction does. Work with each other to achieve individual mandates.

All have statutes that are mandated to follow. Need to share info and build relationships. There is no mandate for the partnership, to manage Crown for the ecological health within their statutes.

Try to be consistent but realize constraints with priorities.

Mandate to protect for ecological integrity but can not do that without working outside of the park.

Philosophically yes, must work together.... Wrestling with the idea that this is going to take it down the road where will need funds and resources for a product. How to commit without a large amount of time, energy and money? If so then can't buy into it.

Even if agency doesn't have resources then people may say this is important and there is a greater power in the sum.

On a practical basis wouldn't spend too much time on defining health. Take stock and go through that quickly. Trends and setting targets is where others become involved. Be careful with limited resources. Build on existing data etc. Partnership will vary at different times. There are different types of supports and will come at different times. We are doing our jobs "and then some".

Invest existing resources more strategically.

- How much money do we have?
- How to invest it?

Can we convince elected masters – representative of population – that this is a desirable thing? Business – can they be convinced? Where is the outreach to these groups to let people know the plan is desirable?

MOU signed by two provinces and a state – lay a framework down and pushes two sides to work together. Why not do that for the Crown?

Effective management – sharing info and data.

International policies are in place but if there is no buy in then follow through may not happen. Do inventory of assets.

Types of Assets

- Money
- People
- Data
- Time
- Political leadership
- Civic will

A MOU with Canadian national parks and US national park already exists. It can work through the national parks and perhaps in future lay a state and provincial layer that is great but appears to be impediments such as national approval in the US when involving the Forest Services.

Work Plan Goals

Move Goal 5 under the organizational piece.

Page 13 – Strategies (some are to achieve a number of the goals)

Q: What's missing?

Under "Improving Understanding" (Work Plan, pages 8 -9)

- Building on what we have, don't recreate material.
- Strategy 4: Matt's experience in past has shown him boundaries are less important than the core. Focus on the heart. Don't invest a lot of time on defining boundaries - boundary definition: part of it is political and some ecological. Data collected is geographical so that's why boundaries are important.

Nature Conservancy is in the process of making a video of the Crown. (Tina will talk to Rich) – not sure if in Canada also.

Q: Other things to do?

Tentative date for the next Crown Managers Partnership Forum is February 28- March 2, 2006 in BC. Topics suggested included:

- Large carnivores or grizzly conservation
- Pine beetle

APPENDIX A

Participant List

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APPENDIX B
Agenda
CROWN OF THE CONTINENT MANAGERS PARTNERSHIP
ANNUAL FORUM
Sandman Inn, 421, Mayor Magrath Drive South, Lethbridge, AB
March 1-3, 2006

Wednesday, March 1, 2006

6:30 pm - 8:00 pm *Wine and Cheese*

Forum registration (Sandman Inn) parallel public presentation
Watershed groups / partnerships panel displays

8:00 pm - 9:00 pm *Keynote – Transboundary Watershed Challenges*

Dr. Jack Stanford, University of Montana Flathead Lake Biological Station

Thursday, March 2, 2006

7:30 am *Breakfast*

8:30 am *Welcome and Introductions*

Hon. Guy Boutilier - Minister of Environment
Mayor Robert D. (Bob) Tarleck – Mayor of Lethbridge
Bill Dolan – Acting Superintendent, Waterton Lakes National Park
Mick Holm – Superintendent, Glacier National Park

9:00 am *Agency updates*

Agency representatives highlight changes since Kalispell Forum and identify issues and potential collaborative efforts for the CMP.

10:15 am *Break. Hosted by Alberta Environment*

10:45 am *Steering Committee Report to Forum*

Summary of actions since Kalispell 2005 Forum	Brace Hayden
Update on Crown Invasive Plant Network (CIPN)	Leigh Welling
Draft CMP Strategic Plan:	Brace Hayden
Feedback on strategic plan	

12:00 pm *Lunch Break*

1:00 pm *Panel Discussion Crown Watersheds Challenges and Opportunities*

(moderated by Mary Sexton, Dept. of Natural Resources & Conservation, Montana)

A) Panel presentations:

Clark Fork: Flathead Basin Commission – Rich Moy

Clark Fork: Blackfoot Challenge, Montana – Tina Bernd-Cohen
 Kootenai River: Kootenai River Network, Montana & British Columbia – Mike Malmberg

2:45 pm *Break. Hosted by Alberta Environment*

3:15 pm A) Panel presentations: (continued)

Oldman River: Oldman Watershed Council – Wendy Devent

Milk River: Milk River Watershed Council Canada – Sandi Riemersma

4:30 pm B) Practitioner’s perspective: A Framework for Regional Collaboration – the Challenges and Opportunities. Dr. Matt McKinney – University of Montana

5:15 pm *End Day 1*

6:00 pm *Drinks and Networking Session.*

6:30 pm *Dinner*

Dinner Presentation: “Stitching our Nations Together: Transboundary Rivers from the Crown of the Continent” – Dr. Stewart Rood, University of Lethbridge

Friday, March 3, 2006

7:30 am *Breakfast*

8:00 am *Welcome - Summary Day 1- Review Agenda* Bill Dolan

8:15 am *Case Studies*

Defining healthy watersheds (Facilitated by Ian Dyson)

Surface and ground water vulnerability in the Oldman River Basin	Livio Fent, Alberta Sustainable Resource Development
Reconnaissance level aquatic and riparian assessment	Rob Wolfe, Alberta Environment
Determining instream flow needs of Saskatchewan River Basin	Wendell Koning, Alberta Environment
Protecting instream flow needs and wetlands in the Crown	Bill Schenk, Dept of Fish Wildlife and Parks, Montana
Groundwater and surface water: Managing an interconnected resource	Eloise Kendy, Kendy Hydrologic Consulting

10:00 am *Break. Hosted by Alberta Environment*

10:15 am *Refining direction for the Crown Managers Partnership*

(Facilitator: Matt McKinney)

Recap of CMP Strategic Plan

Facilitated breakout discussions

11:45 am *Confirm CMP objectives for 2006/07* Bill Dolan
Identify action items; discuss topics for next year

12:15 pm *Adjourn Meeting*

Panel Presentation Format (Thursday 1:00pm – 4:30pm)

The *Crown Watersheds Challenges and Opportunities* panel sessions will provide a high level synoptic overview of current activities for the three Crown drainages:

- Artic system – Saskatchewan/Nelson drainage, Oldman Basin
- Gulf system – Missouri/Mississippi drainage, Milk/Marias
- Pacific system – Columbia drainage, Clark Fork/ Blackfoot

Presenters will address four themes:

Theme 1 – How well do you understand your Watershed?

What do you know about your in stream flow needs, classifying the health of your watershed, research needs (e.g. Ellendorf Bull trout research), water quantity/quality studies and other important attributes of your watershed.

Theme 2 - Pursuing action and engaging the community

What are you doing to address instream flows, water quality, water quantity, best management practices, the health of your watershed etc. What is working and what is not working and who is doing it? Are your communities engaged in your watershed? If so, how did you get them engaged?

Theme 3 – Basin Wide Perspective

Do you take a watershed perspective in integrating human needs and demands with water quality, water quantity, fish and wildlife, and riparian management and how successful are you?

Theme 4 – Links with the CMP – Adding value

Are there things the partnership could do to assist you in improving the coordination and management of the rivers and streams within the Crown region?