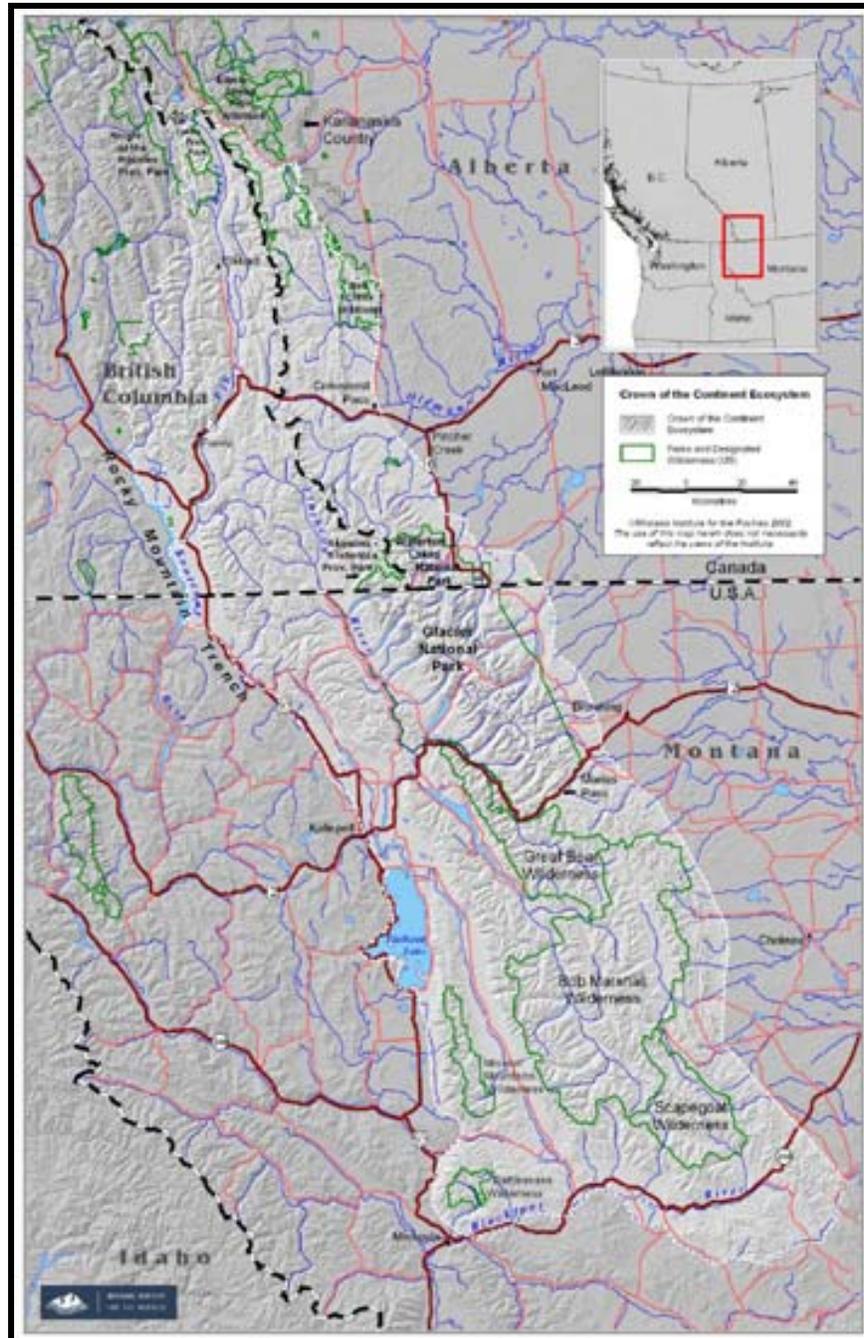


# CROWN OF THE CONTINENT MANAGERS PARTNERSHIP 2005 FORUM SUMMARY

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**MARCH 2-4, 2005  
KALISPELL, MONTANA**

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## SECTION A

### FOREWORD AND OBJECTIVES

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#### FOREWORD

This document summarizes the fifth annual Crown Managers Partnership Forum held in Kalispell, Montana, March 2-4, 2005. Fifty-three 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. 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 2005 Kalispell Forum was the first Forum conceived from the outset with a theme: invasive plants. As well, as providing the critical agency update, CMP activity review, and networking opportunities, this Forum provided a number presentations and discussion opportunities related to this pan-Crown issue of concern.

The objectives of the 2004 Crown of the Continent Managers Forum were:

- Report on and seek direction from Forum on key aspects of the CSC workplan;
- Validate and/or adjust the priorities, steering committee membership and overall approach of the CMP;
- Provide a practical opportunity to share information regarding invasive vegetation;
- 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

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1. Participants heard updates from agency representatives on their activities since the 2004 Cranbrook Forum, as well as their current priorities and initiatives.
2. The Steering Committee updated the CMP on progress on the Workplan, and committed to revising it for 2005/06.
3. The Miistakis Institute reviewed activity on the Regional Landscape Analysis Project (RLAP) over the last year, highlighting the feedback from the agency consultation meetings.
4. The Steering Committee presented three options for proceeding with RLAP, and outlined their preference for a continued but revamped approach. The Steering Committee committed to detailing an approach based on CMP feedback to be included in the 2005/06 Workplan.
5. The 2005 Kalispell Forum was the first to have a theme for the presentations: Invasive Plant Management. Presentations included and panel sessions on programs and strategies from both the Canadian and American perspective, Case Studies, and a discussion of methods for predicting invasive plant behaviour.
6. Facilitated breakout sessions on the Invasive Plant Management theme explored: Crafting an Educational Message; Hazard Risk Assessment; Early Detection/Rapid Response; and Reclamation/Revegetation.
7. Breakout group participants identified several actions items related to Invasive Plant Management that could be supported in some way through the CMP:
  - Facilitate application of Maria Mantas' risk assessment approach to jurisdictions in Canada;
  - Support design and production of a suite of education and outreach products and efforts across the Crown;
  - Establish best management practices for a range of activities that may encourage spread and establishment of invasive plants;
  - Provide web-based information for managers in the Crown of the Continent that includes a range of items to support invasive plant management (examples include the products and ideas listed above as well as other information needs such as a list of native plant nurseries, seed companies, maps, etc.); and
  - Establish a CMP Invasive Plant Network or Taskforce with representatives from jurisdictions wishing to remain in communication on issues. This group could serve as the vehicle to undertake the other actions items.

8. CMP partners voiced continued support for the CMP. The Steering Committee was tasked with developing the 2005 Workplan.
9. 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.
10. The Miistakis Institute for the Rockies continues to provide Secretariat support, subject to available agency resources. The Secretariat provides both administrative and technical support, including fund-raising coordination, resource leveraging, and project management (e.g., for RLAP).

## SECTION C

### FORUM DETAILS

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

**Thursday, March 3, 2005**

**Welcome and introductions**

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**Pam Kennedy – Mayor of Kalispell**

Welcome to Kalispell

**Summary of key outcomes from 2004 Cranbrook Forum**

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Bill Dolan, Acting Superintendent Waterton Lakes National Park

Mick Holm, Superintendent, Glacier National Park

- This is our fifth meeting
- AB Environment, GNP, and WLNP were the three main agencies that brought this group together.
- Our focus is on resource management agencies
- At our initial Cranbrook meeting, we determined our main objectives and formed a steering committee.
- Outcomes of 2004 forum:
  - Theme was fire because of the events of 2003.
  - It was the first year that we included representatives from local government. Their response to the CMP was positive and so we focused on invasive plants this year to make it relevant to everyone. It's certainly a topic that's affecting all the public lands we manage.
  - We agreed to move forward with the Regional Landscape Analysis Project (RLAP).

**Agency updates**

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

## **Mark Holston, Flathead Basin Commission**

- On an institutional level, the FBC has moved to make permanent its administrative relationship with MT DNRC. A bill introduced in the Montana Legislature in 2005, SB 138, would remove the sunset clause currently attached to the FBC and retain administrative attachment to DNRC Water Resources. The bill also makes permanent the ex-officio DNRC Water Resource position (currently Rich Moy).
- The FBC doubled its staff in 2004 and hired a full time executive director, Mel Lehman
- Regarding policy issues associate with the Crown region, the FBC has been closely monitoring new interest in coal mining projects in and near the head waters of the North Fork of the Flathead River in SE BC.
- In response to proposals for open pit mining and CBM production, and citing concern for the many international and national designations that encompass the basin in the US and Canada, including WLNP and GNP, among other attributes, the FBC authored a resolution in May 2004. It requests that the MT Congressional Delegation, “seek assistance from the US Secretary of State to invoke the provisions of the Boundary Waters Treaty (1909) to assess the cumulative impacts of new coal mines and methane gas exploration and production on water quality/quantity, the environment, and on the economic, social and wildlife resources of the Flathead drainage before permits or tenures are granted.”
- The FBC Biennial Report to the MT Legislature also reiterates this theme in its recommendations to the MT Congressional Delegation, stating, “the FBC requests that the Delegation continue its efforts to represent the interests of MT at the federal level to protect water quality in the headwaters of the North Fork of the Flathead River.”
- As of this date, the FBC is in the process of drafting additional letters to the three member state Congressional Delegation, stating, among other things:
- “Therefore, we urge you to request that he US State Department and External Affaires of Canada to as the IJC to accomplish two goals:
  1. Create a binational board to prepare a comprehensive baseline assessment of the transboundary Flathead Basin shared by MT and BC that would guide future land and water management and development decisions and also serve as the basis to project impacts caused by specific projects.
  2. Facilitate a process to implement the IJC’s third recommendation in its 1988 report on the Flathead Basin in BC. The outcome should provide economic opportunities for both BC and MT while at the same time protect the many amenities within the Flathead River Basin of BC and the integrity of WLNP in Canada and GNP in the United States.”
- We are seeking Canadian partners who can partner with us on monitoring water quality at the border.
- This is the time before any new intensive industrial activity takes place; we need to get some baseline data there.

## **Mark Holston on behalf of Rich Moy, Montana Department of Natural Resources and Conservation**

- DNRC has been active on a cross border natural resource issue on the east side of the divide → a water apportionment issues involving the St. Maries and Milk Rivers.
- In December 2004, acting on a 1921 IJC order, created an international task force to find ways to optimize water apportionment in the two international systems (eight members, four from U.S. and four from Canada).

## **Cam Lane, AB Sustainable Resource Development**

- FireSmart Program:
  - Conducted 150 km fuel modification adjacent to Canmore Nordic centre
  - Crowsnest FireSmart Community Protection Initiative
  - Through community based Lost Creek Advisory Committee, developed a proposal for 10km of fire protection plan
  - Options include: thinning, grazing, logging, prescribed burns etc.
  - Community recommendations will be taken forward to Lost Creek Advisory Committee
- Castle Access Management Plan (AMP)
  - Currently reviewing the Castle Access Management plan recognizing the original objectives which were: address motorized recreational access, considering the protection of wildlife populations and habitat, promote responsible motorized recreational access, promote a balanced solution, continue to provide a system for the management of motorized recreational access etc.
  - Assessing the shortcomings with the plan, and what is needed to protect some of the sensitive areas.
  - For more information contact on Castle AMP contact: Darryl Johnson (403-562-3210)
- Shell Oil's reducing activity in the Waterton Castle Area
  - Shell Oil has voluntarily reduced activities in some environmentally sensitive areas
  - Working with SRD to help remediate and restore wildlife habitat in the Castle Region and reinforce the Castle AMP by preventing motor vehicle access to sensitive areas
  - Set a goal of no net increase in vehicle access caused by Shell operations. Any new motorized access created an equal amount is closed.
  - For more information contact Carita Bergman (403-627-1116)

## **Roy Doore, Bureau of Indian Affairs**

- The Bureau of Indian Affairs is in transition with the new office of Trust Management which started four years ago and is still on going. I now work under Deputy Trust Officer, Cliff Hall, but I am still a Bureau of Indian Affairs employee.
- We established a Blackfeet Conservation District with the Glacier County Conservation District, BIA, Blackfeet Tribe, USDA, FSA, and DNRC. We primarily deal with the State Federal Agriculture Office out of Bozeman, Montana. The Blackfeet District handle most of the Indian operator's requests for Conservation Planning, Range Management programs, water development, cross-fencing, shelter belts and trees. The U.S. Department of Agriculture Farm Service Agency has set up an outreach program with ranchers for management conservation need and financial assistance. We also established a Blackfeet Weed District with the Conservation District and are planning for a busy season this year.
- The agency had a chance to participate with FEMA (Federal Emergency Management Agency) in the hurricane disaster in Florida last fall. We ended up dispatching 49 people to Georgia to help with damage assessment and inventories. These people are now FEMA and on a stand by status registrar.
- Ongoing Reservation Wide Range Survey, working on 370 Range Units. Last Survey was done in 1963-67. This survey will be on the best planning tools we will have access to. We are currently in the process of doing the survey, but that's just the beginning because we've got to take that information and plug it into a Range Management Plan.
- With the ongoing drought, we look forward to a busy fire season. We will have a large human resources available to the fire sector. We should have around 25-35 crews available.
- Last year was bad, only two regular dispatches. Chief MT Hot Shots were busy with special assignments.

#### **Cathy Barbouletos, Flathead National Forest**

- Grizzly Bear DNA study – occurring within the Flathead and all around us.
  - Key objective is to determine the population size as the grizzly bear is threatened under ESA
  - We put together with Kate Kendall a systematic sampling across 8.3 million acres last summer.
  - We thought we'd get 20,000 samples, but we ended up getting 33,000 samples - no other project of this magnitude.
  - There has been real interagency collaboration on this with two Canadian scientists from Nelson.
  - 6000 samples have been analyzed – results expected in a year
- Swan Valley Plum Creek Purchases
  - We are working with them to determine which lands are best sold off to federal lands or commercial development.
- Post fire Revision Community Fire Plans

- Post fire 2003, we did assessments to determine what the post fire landscape should look like
- We had 108 people who wanted to help us – we didn't build any roads, didn't cut any green trees, and avoided riparian area and get out what is left. Part of the management of species is managing the void. What do you do? Do you let the species come, or do you manage it? We received money to monitor for invasive species and respond if they come.
- A law was passed a couple of years ago – county commissioner level, we developing county fire plans. Most of those are coming to completion, and the county commissioners sat around looking at maps to determine where to put their grant money. We're doing a lot of fuel reduction in the forest and working with the communities in this regard as well.
- Snowmobiling
  - Fairly controversial everywhere
  - We were asked to come up with a settlement agreement.
  - We sat in over a 12 meetings with the Wilderness Society and the snowmobiling folks. By the end of the negotiations, they knew what the other person was thinking and why. We walked out of that room in total agreement.
  - Final issue has yet to be issued.

*Ian: Do you see any potential for using this Crown initiative to inform and educate folks to make them aware of the scope and scale of these issues?*

Cathy: Yes. There might be more interest from this group about what we're doing. I don't know what that would look like. Jimmy and I go on the road all the time to make presentations to various groups. It seems to work well in small groups versus large ones. We've monitored and identified the areas that are in need of change. Fire fuel reduction is, snowmobiling is not. This helps us keep it focused.

### **Wayne Stetski , BC Ministry of Water, Land and Air Protection**

- Wildlife populations healthy.
- Invasive weeds are a priority and additional funding coming from government to control spread. Mechanical, biological and chemical controls are utilized.
- Seven rivers in the southeast corner of BC, including the Elk and Wigwam Rivers are becoming classified waters which means limited rod days for angling guides and special fishing licences with increased fees for fishing. Non-British Columbians will pay more than residents.
- Grassland ecosystem restoration is a priority and is being accomplished through tree removal, brushing and fire.
- British Columbia and Montana have a signed off Environmental Co-operative Arrangement that is waiting for a Memorandum of Understanding to be signed off

before implementation can occur. In future this will address issues like coal mines and coalbed methane.

- WLAP continues to support the CMP financially and through membership in the Steering Committee.

**Wayne Stetski, (for BC Ministry of Sustainable Resource Management)**

- Completed the Southern Rocky Mountain Management Plan which addresses recreation access through zoning and land use principles. Maps are available. Enforcement a challenge.

**Wayne Stetski (for BC Ministry of Small Business and Economic Development)**

- A new multi-million dollar interpretive centre called the Elk Valley Coal Discovery Centre is being built in Sparwood as a joint private/public initiative.

**Brace Hayden, GNP**

- The CMP grew out of discussions with GNP and WLNP four or five years ago. I'm pleased to see these forums continue and hopefully they are of value to all of you.
- In GNP, this past year was very quiet compared to 2003.
- Commercial Services Plan – completed in 2004
  - Determine the level and type of services that are necessary and appropriate
  - Maintain historic lodges
  - One of our backcountry chalets will be managed as full service chalet, the other (Granite Park Chalet) will be retained as hiker shelter.
  - Public showers, guided underwater diving tours to be added as new commercial services
- Going to the Sun Road reconstruction
  - Proceed on a limited basis until funding in new highway bill comes through
  - Mitigation strategies have been developed to assist public while road is being redone.
  - Interpretation efforts to show there are other areas of the park to explore and a shuttle service are among these mitigation efforts.
- Burlington Santa Fe railroad
  - Requesting use of explosives for avalanche control
  - Fast track EIS with USFS and MDOT
  - We're hoping that that effort will be completed prior 2005-06 winter.
- Quartz Creek drainage fish barrier
  - Lake trout are migrating up and we fear they'll get into the quartz creek drainage where we have bull trout so a fish barrier was constructed.
- Snowmobile/Access lawsuit
  - GNP banned snowmobiles based on EA in the 1970's.

- We're involved in litigation with a private owner who believes he has a right to snowmobile into his GNP property.
- Appealed to 9<sup>th</sup> Circuit Court of Appeals after winning at the District court level in Missoula
- Vital Signs program
  - Embarking on vital signs monitoring program of long term ecological health.
  - Purpose: to determine status and trend in condition of selected park resources leading to management changes as necessary
  - Began with extensive review of past and current info on research and monitoring: a series of workshops were held to develop pertinent ecosystem models and to develop preliminary lists of parameters to be modeled.
  - This parallels something in Parks Canada– ecological integrity program; hoping to work with WLNP ecologist, Cyndi Smith
  - Parameters and protocol development should be finalized by October 2005

### **Ian Dyson, Alberta Environment**

#### Phase 2 Water Management Planning, South Saskatchewan River Basin (SSRB)

- A draft plan identifying how much water should be left in the main stem rivers of the SSRB is under development. Input has been received from 4 multi-stakeholder advisory committees. Aboriginal consultation has to take place. The draft plan will be publicly reviewed. The southern basins are effectively fully allocated and this has resulted in environmental trade-offs. It is hoped the plan can be concluded in 2005.

#### Southern Alberta Sustainability Strategy (SASS)

- The project concept is to facilitate a public process leading to a consensus on the major sustainability challenges facing southern Alberta - what the issues are, how they interrelate and what next steps should be. A two year internal tool building and analysis phase is coming to conclusion. Reports have been produced on sustainability literature, the current state of the landscape, a socio-economic overview of southern Alberta, 14 'sector stories' outlining past, present and anticipated future challenges, and country residential growth. Considerable geospatial data, trend and metric data have been collected, and ALCES used to explore a 'base case' and various plausible future scenarios. A linked input/output economic model has been developed and scenario analysis exercises undertaken. A decision needs to be made soon regarding the launching a public planning process.

#### Watershed Planning and Advisory Councils (WPACs)

- Under the provincial 'Water for Life' strategy, basin councils will eventually be set up province wide to promote partnership approaches to watershed management. WPACS have been established and supported with significant financial and in kind resources in the Bow and Oldman basins. Efforts are underway to establish a WPAC on the Milk River.

#### Prairie Conservation Forum

- A large partnership has been promoting the conservation of biological diversity in prairie and parkland Alberta since 1989, Development of an Occasional Paper detailing the State of Prairie Water is underway. This document is intended to provide a baseline resource for the southern Alberta WPACs. Forum members are currently also engaged in a vigorous dialogue over Wind Farms on native prairie.

#### Sustainable Resource and Environmental Management Framework (SREMF)

- Since the fall '04 provincial election, an initiative to modify environmental governance in Alberta has gained significant momentum. Traditional sectoral approaches to environmental management are not sustainable with resources available given the rapid growth Alberta is experiencing and are not effectively addressing cumulative effects. There is building momentum for a place-based, partnership approach that focuses on environmental outcomes for all environmental media. As a first step, lead provincial departments are making efforts to demonstrate an ability to work together collectively. Stay tuned.

#### **Elliot Fox, Land Management Department Director, Kainai First Nation aka Blood Tribe**

- We're one of the four tribes of the Blackfoot Confederacy
- Currently occupy the largest "Indian Reserve" in area in Canada with a population of approximately 10,000 registered members.
- Our current area of interest in the Crown is a fairly limited (appx. 1940 Ha) area in the Belly River drainage adjacent to WLNP known as the "Blood Timber Limit" that was set aside in the 1880's generally for timber and wildlife use.
- Chief and Crowsnest Mountains are two of the most culturally significant sites to the Blackfoot Tribes in the COCE
- We had a tribal election this past November. New Chief (Charles Weasel Head) after 8 years.
- We've just completed (February) an orientation process with the new Chief and Council.
- This year, the Blood Tribe will be undertaking a review of our forest management plan with the new Chief and Council. Forest Management Plan was developed in 1996 with the primary objective being sustainability.
  - In 2000, we developed a selective harvest plan based on a 90 year rotation. Planned to initiate harvesting in 2001, however market conditions deteriorated and harvest was not undertaken.
  - Limited forest base does not justify an annual harvesting operation.
  - Idea of Selective Harvest Plan is to remove a 4-5 year volume of timber in one year, every 5-10 years on a sustainable basis.

- Selective harvest will begin whenever market improves. No rush to harvest.
- Oil and gas extraction is ongoing using wells drilled in the mid 1960's.
  - No new well sites have been established – previous Chief and Council recently (2003) rejected a well site proposal targeted for an undisturbed area on “Beebe Flats” directly adjacent to the Belly River Campground in Waterton Park.
  - No new planned expansion of oil and gas exploration or development outside existing well sites (surface leases).
- Bull Trout program
  - Currently collaborating with WLNP and AB Fish and Wildlife agencies on a follow-up bull trout population assessment (fish trapping and redd surveys) in the North Belly River to occur from August – September 2005.
  - From 1995-2000 these agencies jointly conducted a bull trout population assessment in the Waterton and Belly River drainages and found, among other things, that the Belly River population was the most viable fluvial population in southern Alberta, south of Banff. Waterton River population not as healthy in numbers.
- There's been some mention by the newly elected Chief and Council of an interest in undertaking recreational development on the Blood Timber Limit, pending feasibility. Development of a golf course, resort and campground have been mentioned, however due to the seasonal use of and access to this area and the close proximity to the amenities in the Waterton townsite, the Land Management Department is quite confident that no major development will occur. Also, the current natural state of this area is highly valued by elders, spiritual leaders and the general public. Will keep CMP updated on the outcome of the Forest Management plan review and any new proposed developments.
- Leafy spurge & Noxious Weeds
  - Noxious weed infesting approximately 10,000 acres on the main Blood Reserve located between Fort Macleod and Cardston and is slowly moving up the lower reaches of the Belly River.
  - On our timber area, there's one stand of leafy spurge that was observed in the mid 1990's. It is evident that the spurge was brought in by a non-native permittee transporting cattle to this grazing permit area.
  - Waterton Park has been very cooperative in assisting the Blood Tribe in continued monitoring and suppression of this isolated stand of leafy spurge. At this point, no expansion has been observed. Annual monitoring is continuing for leafy spurge and other noxious weeds.
  - Spotted Knapweed also observed on the main Belly River flood plain adjacent to Waterton Park and the Province of Alberta. Annual monitoring and suppression being conducted in conjunction with Cardston County and WLNP.
- Guided Hunting

- The Land Management Department has received an inquiry from an interested Blood Tribe Outfitter about the potential for conducting a limited (5 or less) number of guided elk hunts on the Blood Timber Limit on an annual basis. The clients would be non-native individuals and would require Alberta elk licenses. Dialogue ongoing, no confirmed hunts at this point.
- development is very non intrusive.
- Our traditional “medicine men”, spiritualists, herbalists and healers still utilize the Blood Timber Limit and other areas of the Crown to collect culturally significant vegetation (timber , herbs, roots and berries) on a limited and non-commercial basis for various purposes including traditional ceremonies.
- These same individuals also utilize various “vision questing” sites in the Crown.
- Although the area of the Blood Timber Limit is not as large compared to some of the other jurisdictions in the Crown, responsible management and sustainability of this highly valued resource is a priority for the Blood Tribe.
- The Blood Tribe continues to have an interest in advocating for the protection and preservation of traditional land use and cultural resources and sites in the Crown.

#### **Cliff Thesen, Alberta Community Development**

- Organizational change
  - Provincial election in November resulted in a new minister and deputy minister
- Current management issues
  - Private vs public provision of services (issues with obtaining private contracted services) is a major issue in our parks
  - Some new money being allocated for capital development with the priority being placed on potable water systems (new drinking water standards) and public safety issues
- Management of Bob Creek Wildland and Black Creek Heritage Rangeland
- These two protected areas (established 1999) are located adjacent to each other and are located on the north east edge of the Crown of the Continent. The two protected areas share a common boundary but are different classifications and are managed somewhat differently. We are currently in the final stages of completing a single management plan for two areas. We’ve been working on getting a management plan done for the two sites as it has been difficult to manage the two together.
- Black Creek Heritage Rangeland
  - First and only heritage rangeland in the system
  - Even though the protected area is foothills/montane, the classification reflects the traditional land use of livestock grazing.
  - 19,175 acres in size
  - A significant amount of grazing occurs

- Resource management concerns include livestock predation by wolves, riparian health, and invasive species
- Bob Creek Wildland
  - 51,341 acres in size
  - OHV use is allowed
  - A significant amount of grazing occurs
  - Resource management concerns include livestock predation by wolves, riparian health, and invasive species and impacts of OHV use on trails and stream crossings
- Co management Agreement between AB Community Development and Alberta Sustainable Resource Development
  - SRD Fish and Wildlife division is responsible for the primary management of wildlife resources
  - SRD Range Management Division is responsible for the primary management of grazing within the two protected areas
  - ACD – Parks and Protected areas is responsible for the management of recreational activities
- Research Activities
  - Riparian health assessments on a number of stream reaches
  - Study to look at range utilization using GPS collars on cattle
  - We established the Old Man Basin Carnivore Advisory Group - blend of NGO and governmental groups to examine large carnivore management in the southeastern part of AB from Kananaskis to WLNP
  - Conducting wolf monitoring project using VHF and UHF collars to gather biological data on wolf packs in the area in relation to depredation activity, territory and movement, aversive techniques to control or reduce depredation.
  - Membership:
    - Alberta Trappers Association
    - Alberta Beef Producers
    - Federation of Alberta Naturalists
    - Local ranching community
    - Defenders of Wildlife Canada
    - Southern Alberta Conservation Cooperative
  - We have three different collars on three different wolf packs.
  - In conjunction with that, there's some work being done by Conrad Thiessen who's looking at the genetics of different packs. The movement of wolves between AB and BC may become apparent from his work. One of the wolves ended up in Helena, so there's a lot of movement going on.
  - Have to determine how to manage wolves in the long term. And identify a sustainable strategy.

### **Cyndi Smith, Waterton Lakes National Park**

- Investment in Ecological Integrity through a major national funding initiative – Ecological Integrity Innovation Fund – make a difference in 3-5 years, knowledge able to be transferred to other parks/agencies, engage Canadians
  - We obtained partial funding for restoration of two high priority disturbed sites
- National Ecological Integrity Monitoring Program – Waterton part of the Montane Bioregion with 6 other parks
  - Major emphasis on determining measures through consultation with stakeholders and working with other agencies on bioregional monitoring
  - Participating in workshops with Glacier National Park staff in their Inventory & Monitoring network initiative
- Auditor General reviewing Parks Canada’s Ecological Integrity initiatives, particularly in the area of partnerships, research, monitoring and restoration – looking particularly at process around national commitments made 5 years ago
  - Waterton Lakes NP chosen as one of a handful of parks for a site visit
  - Highlighted our partnerships with Crown Managers Partnership
  - National report due late 2005
- Final provisions of SARA came into effect on all federal lands
  - Deadlines for recovery strategies, consultations, legal listings
- Recent Federal Budget was positive for Parks Canada ... not least in that we were exempt from a new round of cuts in most federal departments
  - Major strategic investment in infrastructure, and ongoing addition to infrastructure budget
  - Additional investment in Ecological Integrity
  - Outside of parks a specific investment in invasive species also

### **Mike Quinn, University of Calgary, Len Broberg University of MT**

- Started together a transboundary program for students at the universities to discuss issues of relevance to the Crown.
- We invite you to provide us with opportunities and research opportunities for graduate students.
- We’re happy to support this initiative in any way we can.

### **Rod Cyr, MD Pincher Creek**

- We have issues with respect to weeds, water, access, roads and emergency services.

- We had a conference in Edmonton two years ago, to try to approach the government to see what we can do.
- We have two main management zones in Alberta; the green zone and the white zone
- The green zone is a big recreational zone for everybody. We have no control over it.
- We have maps and we have access management approved, but we lack enforcement to enforce them and no educational plan.
- It'll be interesting to see what happens in the next couple of years

## **Steering Committee Report to Forum**

**Ian Dyson, Alberta Environment**

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### **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

### **Background**

- An initial step - Cranbrook Forum - 2001
- A pivotal stage - Whitefish Forum - 2002
- Staying the course - Pincher Creek Forum - 2003
- Moving forward – Cranbrook Forum 2004
- This year's forum, "sustainable momentum", Kalispell 2005.
- We're five years old, and so how do we move this forward?
- Confirm our identity: Are we a networking forum or do we have some objectives that we want to accomplish collectively with some commitment of resources?

### **CMP Concept**

- Geographic area
- Land/Resource management agencies and First Nations/Tribal Lands

- Participants - senior/middle managers with technical/professional staff at regional scale
- Development of management tools, data management and science at ecosystem scale, in cooperation with academia
- Administrative Structure/Function of CMP
- Annual Crown Managers Forum hosted by W-GIPP

### **Delivery**

- Steering Committee with broad representation and accountable to CMF through workplan
- Secretariat and project management support provided by Miistakis Institute for Rockies
- Annual core funding for Secretariat provided by participating agencies
- Projects cost shared by agencies with direct interest (includes “in-kind” support)
- Leveraging of fiscal resources 15-30 : 1
- Are we essentially networking or do we have some shared objectives?

### **Baseline work plan**

- Get a better handle on cumulative effects of human activity across the Crown ecosystem
- Responding effectively to increasing public interest in how the environment is managed and decisions are reached.
- Strategies for coping with increasing recreational demands and increased visitation.
- Collaborate in sharing data, standardizing assessment and monitoring methodologies.
- Ensuring the maintenance and stability of shared wildlife populations.
- Promoting awareness of the CMP and a collaborative approach to issues identification and management.
- Design and maintenance of an administrative framework in support of the CMP.

With minor variations, this is the foundation that the SC has been working with over the past few years. We can revisit it if necessary and determine if this is what we still want to do collectively.

### **2004 Workplan Priorities were:**

- Continue to implement the RLAP (ALCES) project for Crown. RLAP is a substantive agenda item for us at this time. Just carrying on with what we’re doing isn’t going to get the outcomes we want. We need to make some decisions with regards to RLAP at this forum.

- Continue to promote public interest, recreational demand and shared wildlife goals through University of Calgary/Montana graduate students
  - Current graduate projects on Crown related issues:
    - *University of Montana*
      - Melinda Booth- black bear management in urban/suburban areas
      - Maureen Hartmann- community forestry
      - Betty Matthews- Chief Mountain tribal oral history
    - *Montana State University*
      - Jake Verschuyt- Planning for bird biodiversity on industrial forest lands
    - *University of Calgary*
      - Jennifer Grant - integrated approach of transboundary wildlife management
- Inventory data bases in Crown Region with an emphasis on available data, standards & analytical tools
- Continue to develop CMP website: [www.rockies.ca/cmp](http://www.rockies.ca/cmp)
- Generate communication materials for CMP members to promote understanding of strategic issues. We have three presentations ready to post on the website that you can use. (jurisdictional complexity, human use in the Crown and CMP)
- Organize 5th Crown Managers Forum

#### **Kalispell CMP Forum Objectives:**

- Report on and seek direction from Forum on the Steering Committee workplan
- Validate and/or adjust the priorities, Steering Committee membership and overall approach of the CMP
- Provide practical opportunity to share information regarding invasive vegetation – local governments, field/elected officials
- Confirm agency commitment and resourcing for Secretariat and workplan projects
- Provide a formal and informal networking opportunity for various jurisdictions in the Crown

#### **Support**

- Financial support over the past four years has come from: WLNP, Alberta Environment, GNP, Canadian Federal Grant (CEAA), Norcross Foundation, BCWLAP, WLNP – Federal Grant

#### **Potential 2005 workplan priorities**

- Agenda item for day 2 of AGM
- Implement RLAP direction determined by CMF at Kalispell
- Continue to promote public interest, recreational demand and shared wildlife goals through U. of Calgary/Montana graduate students

- Education/extension strategy – post materials to website, develop communications materials
- Organize 6th Crown Managers Forum (Waterton): theme?

## **Regional Analysis Landscape Project**

### **Guy Greenaway, Miistakis Institute**

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#### **History of the project**

##### **Feb 2001**

Five objectives – first being to address cumulative effects

Identified as a workplan priority

ALCES ® model introduced to CMP

##### **March 2001**

Crown Research needs workshop

Crown data management workshop

##### **April 2002**

Project initiated

Miistakis retained as project manager

##### **November 2002**

Barriers and drivers survey

Framework for project developed

Data collection begun – we have had a lot of success collecting spatial data especially the data provided by Flathead National Forest, but still at an embryonic state

#### **Strategic, Regional Cumulative Effects Assessment**

Two different approaches to CEA: 1) project based and 2) strategic

Two approaches complement each other but RLAP is a strategic CEA.

Strategic level → policy, planning level, proactive and there is a focus on alternative means of achieving goals.

- Large spatial and temporal scales
- Not explicitly required by legislation
- Complexity is high ( scale, collaboration, and data)

#### **RLAP Overview**

##### **Steps**

Data collection, 2) Base case modelling, 3) Scenario modelling and 4) Decision making

##### **Agency Consultations**

- Apparent lack of awareness amongst CMP Partners regarding what ALCES®-based CEA can/cannot do
- Inadequate understanding by Steering Committee and project managers of agency goals for regional CEA

### **Goals:**

Conduct consultations with resource management agencies in the Crown to:

1. promote awareness of the RLAP and its potential; and
2. clarify what (if any) role RLAP can play in supporting Partner agencies

### **Activities**

We did five agency consultations.

*Feedback summary of agency consultations:*

- High level of interest but very little outright support expressed
- Only one agency adamantly against it.
- There was difficulty connecting RLAP to agency work
- More support for the process than the product.
- Limited belief in the need for a regional, strategic tool

*Concerns expressed:*

- Geographic scale to show usable output
- Lack of spatially explicit output – doesn't tell you where the issues of concern happen on the landscape
- Several agencies expressed they already doing what was needed at that level
- Reservations that the model could actually accomplish the task
- Operations based agencies unable to incorporate strategic tool
- Lack of resources

*Encouragements*

- Strong support for the CMP
- Utility as issue scoping tool
- Networking opportunities seen as key strength
- Utility as communications tool
- Worth pursuing even with concerns
- Support for having smaller areas modeled
- Support for large scale data collection

**Moving forward with RLAP or beyond it?**

**Bill Dolan, WLNP**

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- We need to make a critical decision. How do we move forward? Do we want to invest energy and resources into the CEA objective or not?
- We've discussed three options or approaches as a SC. We have a recommendation but we'd like to engage in some discussion before we get to that point.

### **Three approaches:**

- **Option 1: full speed ahead**
  - ALCES®-based modeling exercise
  - Conduct on full Crown region
  - Full suite of land uses modeled
  - Multi-year
  - Incrementally seek buy-in and financial support
  - Collect full range of spatial, metric and trend data required for the model
- **Option 2: Halt the current RLAP indefinitely**
  - Indefinitely close down work an ALCES®-based, large scale cumulative effects analysis modeling exercise for the Crown region.
  - Discontinue all data collection activity
  - Move away from the Workplan Goal #1, and concentrate exclusively on other Workplan Objectives
- **Option 3: Intermediate Activities**
  - May provide tangible products / results in timely fashion
  - Can capitalize on work already completed under RLAP
  - May be more immediately usable by partner agencies
  - May contribute to future large scale project
  - Individual activities may or may not involve all agencies

### **Feedback from Forum Participants**

*Jack Potter - what are we talking about in terms of financial resources? That's one of the things I would ask. What sort of commitment are we looking at for the long term and in start up dollars?*

*Guy Greenaway - it's based a lot on how you skin a cat... but, to look at it overall over four years, the hard dollar cost was 400,000 dollars USD. When we broke that down, with a major grant from Parks Canada, it worked out to 5-10,000/year for about 12 agencies for four years participating for Option #1. It's going to vary for every given agency.*

*Bill Dolan - the other thing to add there, is the limitation of moving forward on Option #1 is the commitment of agency time more than the hard dollars. There is a capacity staff commitment required.*

Guy: the other misleading aspect about splitting across all the agencies is that existing money has been sought from pools of money that agencies have access to, rather than an agency's actual budget.

*Cathy Barbouletos: I support either option 2 or 3. The Forest Service's dilemma is that when it comes to decision making, we passed two laws (NEPA and FLMPA) that tell us how we can do certain assessments. We've been in court for over 30 years on how to do exactly this. As a concept, it's great. We use it all the time. We have 8-10 GIS specialists who do this at the site specific and strategic levels. I've got a very court driven mandate. This tool is not one we'd use because we'd use the one that has been through the courts. We can be partners in the data department, but not financially because we can't use it.*

Bill Dolan - Does your data have provisions for Canadian data?

*Cathy Barbouletos – Kate's study would've connected us, but it didn't happen.*

## **RLAP Discussion, Bill Dolan, WLNP**

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The SC has opted for **Option 3**.

**A) Generate a renewed, focused discussion on how to approach a landscape level analysis of the Crown region.**

### **Assumptions/Features**

- Assumes still merit in pursuing Workplan Objective #1, but backs up to discuss other possible approaches.
- The ALCES® modeling approach introduced as Workplan being developed; fresh look may be needed
- Could lead to a new overall approach, several smaller actions, or an abandonment of this Workplan Objective.
- Could include exploring: 1) what were the thoughts underlying and Workplan Objective #1; and 2) what are alternate ways to approach those purposes?

### **Specifics of A:**

**I. Convene a workshop/committee of the CMP that is tasked with exploring this question**

- Could include outside experts, individuals with interest / expertise in landscape level assessment, regional planning
- Would report back to the CMP with results of the discussion and recommendations.

**II. Continue current agency-specific consultations with this task as the new focus**

Going agency-by-agency identify their responses to a similar set of questions and preferred approaches

Would report back to the CMP with results of the discussion and recommendations.

***(B) Shift to a data collection / coordination project, more aligned with Workplan Goal #5 (“Collaborate in sharing data, standardizing assessment and monitoring methodologies”)***

**Assumptions/Features**

Strong feedback during consultations that collection and coordination of data very desirable aspect of RLAP

Builds on work already completed towards this objective at CMP data management workshops and in data collection for the RLAP

Data could be collected in way which allows for a modeling project to be re-convened at future point

**Specifics of B:**

**I. Collect data around each / key land uses in the Crown region**

- In each case, a ‘data story’ is created which would be available for use by CMP Partners for a variety of applications
- Would include spatial, non-spatial descriptive, historical trend, and trend projection data
- Examples could include agriculture, forestry, oil & gas, settlement, protected areas, transportation, etc.

**II. Collect data around key issues of concern in the Crown region**

Similar to (A) data stories would be created, but by Crown-wide issue or theme, rather than land use sector

Examples could include shared wildlife species of concern, water quality/quantity, fire, invasive vegetation, roads, etc.

***(C) Continue an ALCES®-based cumulative effects assessment, but on a smaller sub-region of the Crown***

**Assumptions/Features:**

Feedback from the RLAP consultations indicated possible interest in comprehensive CEA on geographically smaller area.

Assumes exercise of modeling full suite of land uses still a desirable activity, but on a smaller, more achievable, potentially more useful scale.

Would still be at a strategic level, and relatively large scale

**Specifics of C:**

- Could be based on (e.g.) one of three state/provincial divisions, by major watershed or geological division (Flathead, East Slopes/Front), etc.
- Modeling protocols would be developed applicable to the entire Crown, so future sub-region modeling exercises are comparable.

**Comments/Questions**

Bill: Does anyone have concerns with Option 3?

*Cathy: the agencies that are willing to monetarily support the effort should be the agencies who drive the product.*

Bill: I think that's evident in activity three.

*Steve: Agencies are going to continue to collect data regardless of the decision made here. If there was a standard manner in which data could be collected that would really facilitate this process. The one area of common support is in data collection and coordination.*

Guy: yes, that's a fair comment.

*Ian: I agree too, with one important caveat. We have to have a collective point and purpose for why data is being captured or standardized. Following the initial CMP list of issues, a Data Management Workshop was held in Lethbridge in 2002. At that time it was recommended to proceed with RLAP because the process of paramatizing ALCES required collecting consistent spatial, land use, metrics and trend data. The CMP is now making a decision to change gears regarding conducting an overall collective cumulative effects evaluation of the Crown, but are not giving up on the goal. In one sense, that's a failure, because what we are busily responding to in the context of our fragmented mandates is driven by the larger cumulative effects issues on the entire Crown landscape. But its reality. We don't have the resources or time to do the job in one big project, so we need to modify our approach. I support this decision and also have some reservations about what ALCES might have been able to show us on the Crown Landscape (where so many of the issues are spatially concentrated in valleys). In doing so, however, it is critical that we now define what our incremental goals and objectives will be to move toward the Big Goal (understanding cumulative effects in the Crown and what it means for our mandates and how we work together). Otherwise we will merely substitute one impossible task (which had focus, but couldn't be resourced) for another (which is 'doable', but lacks focus).*

Bill: Ian is referring to stepping back from ALCES and having used ALCES very extensively in S Alberta, this may be appropriate.

*Wayne; what are agencies willing to commit to with your time and resources? A, B, or C? What are you looking to sign on to out of that list?*

Steve (GNP) – the issue is really whether or not that effort is part and parcel of our mandates will integrate in an effective way with what everybody else is doing. We'd participate in activity 1 and 2.

*Richard: For Activity B, there was a grant compiled to pull together data layers. That was successful but a lot of that information was changed soon afterwards. You can not overstate how large a task activity B is. That's a worthy task in and of itself. Perhaps the SC can work together to identify some of those shared needs to facilitate the coordination and collection of that data.*

Cathy: The forest service wrestled with Activity 'B' 8 years ago. We have a national committee to do work on various databases; so that forest A could be collecting data that could edge mapped to Forest B. We have national direction on how to do this. We don't have room to do it differently.

*Guy- one of the things that came up in our agency consultations is that there was concern with the magnitude of the data collection/coordination project if we were to collect all possible data. We are not going to do that. I would like to emphasize that it's part of the spirit of these tasks: there's a bunch of information (historical trends, future trends, etc.) – the model provided a framework for doing this. The data collection is probably a bit misleading; this is data corraling. This opposed to primary data collection, that's the source that feeds the task, but it's not the main task.*

Len: We had students work on gathering trend information, but it was non spatial trend information. There is a substantial amount of work to be done. You're going to get this metric information from different jurisdictions, and then you'll have to gather experts to examine this information to determine what the trends are across the landscape. It's a ton of work. You'd all have to contribute the experts. That's a very concrete next step that could be worked on under activity A or B.

*Ian: It's a huge exercise to corral information. But we need to ask, what do we want to do? What do you want to know? Then we collect the information on that versus trying to put everything on one place.*

Bill: can we find the resources to achieve activity A? (renewed focused discussion on landscape level analysis of Crown). The third activity may be followed through with the focus on just a piece of the Crown – perhaps SASS.

## **Invasive plants: environmental and social challenges**

**Don Gayton, FORREX, Nelson, BC**

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- I've had experience in various parts of around the Crown. Nelson is on the periphery of the COCE, but I have done a fair amount of work in the Rocky Mountain trench.
- There have been many scientific studies of the impact of invasives on our ecology, economy etc. and doing more research seems like a waste of money since there's been so much thorough science done.
- Why has the science had so little influence on our policies?
- The answer is education/awareness → there is a chain of ecological ignorance. E.g. Nelson Telus Phone directory. Ecological illiteracy is not the key root of the problem.
- The core problem; I circulated a petition amongst a bunch BC natural resource managers regarding the impacts of OHV use. It was unsuccessful in making change and this is the root problem – we live in the era of indifference. We know or we don't care. Or we don't know because we don't care to know.
- We're in a state of purposeful ignorance.
- There are tiny glimmers of hope; ecological restoration movement. This movement seems to have good legs and may be with us for a while.
- We attempt to restore tattered landscapes that have no value at all.
- Forest encroachment due to fire suppression → overgrazing → weed invasion
- We've been doing a lot of prescribed burning in the East Kootenays to contravene this cycle.
- Everybody cites invasive species as a key issue.
- As ecologists and land managers, we must embrace history. "All new ideas are in the history books we haven't read yet."
- We as a species think that the flora of the country we grew up in is far better than the flora of the place of the new country.
- Example: Gilpen –Largest piece of grassland between Nelson and the Okanogan. Supports white tail deer, mule deer, sheep, elk, and cows. There's been a great deal of overgrazing as a result. There's an explosion of pocket gophers as well. The Gilpen is an example of failed management efforts and lately has become a battlefield between the hunting and ranching communities. It faces OHV use, etc. Upper Gilpin has nearly 85% of its herbaceous cover dominated by weeds.
- Long list of invasives in the Gilpen – we are currently seeing the very first crashes of some of the knapweed. Not because the natives are making their way back but because of cinquefoil. The weeds are winning!
- Grassland user groups see elk or cows as the product of the grassland... this is not the case, grass is the product.

- I believe we need to educate our efforts to inform the public about weeds – virtually none of this has sunk in. We need to address the larger ecological context of weeds. As for the era of indifference the only way to end it is to rebuild our structures from the ground up and breaking free of the cost benefit analysis.
- Our natural world is homogenizing rapidly; David Quammen. “we are fast becoming a planet of weeds”
- We don’t normally think of Kentucky Blue Grass as a weed, but in certain cases, it can be very damaging. We have to look at the bigger picture.

*Ian: do you have a handle on the native interior grasslands? What is severely invaded etc? Is there a strategic handle on that or not?*

Don: Grasslands Conservation Council of BC just finished documenting and mapping the grasslands of BC. A non profit society had to do this. They are embarking on what you suggested; a broad brush of percent of invasion and ecological integrity of the BC grasslands.

### **Panel I - A Canadian Perspective**

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Cyndi Smith, WLNP  
 Kevin Paterson, East Kootenay Invasive Plant Program  
 Cam Lane, AB SRD

**Non native vegetation management: Waterton Lakes National Park**  
**Cyndi Smith, Conservation Biologist, WLNP**

#### **Accountability**

- Vegetative change due to non-native species is the more serious threat
- Canada national parks act
- Provincial legislation
- National and regional directives
- State of the park reporting – non native plant is one of the indicators we report out on
- Parks management plan
- Park ecological Conservation Plan
- Vegetation Management Strategy
- Being a good neighbour

#### **Background**

- Started controlling knapweed in the mid 1970’s
- Integrated management; chemical, mechanical, biocontrol
- Some inventory work in 1995/96 as part of the ELC
- Roadside inventory in 2001-2003

- Targeted trails inventory in 2004-05 – very little information on trails currently; we’re targeting about a dozen species that are easy to identify
- 100 species known to occur in the park – fits into the 10% rule (10% of your vascular plants are non-native)
- Most non natives are along roadsides, trail, campsites and town (developed areas)

### **Strategic objectives**

1. protect the native biodiversity of the park from the impacts of non native plants
2. protect the agricultural and other interests

### **Goals**

1. Perpetuate natural processes - Actively manage native vegetation and stands of vulnerable species to promote resistance to non native plants e.g. fescue grasslands
2. Protect native biodiversity
  - Identify new non natives in early stages before they become a problem
  - Use seeds and nursery material obtained from local native stocks to keep genetic integrity
  - Work with regional land management agencies to reduce the number of roads adjacent to park wilderness areas
  - Collect seeds locally – working with GNP on this; have collected our seeds and propagated them for us to plant back in WLNP.
3. restore native plant communities
  - control invasive non native plants such as spotted knapweed
  - actively promote research into restoration techniques for native fescue grassland
4. support the interests of neighbours
  - build relationships and share information among the agencies, individuals, and interest groups in the regional ecosystem (weed management south from CNP, SE BC, MT?)
  - in cooperation with other stakeholders, develop programs to increase the understanding of
5. promote ecological integrity
  - Communicate the importance of native biodiversity to key audiences, leaseholders, contractors etc.
  - Ensure resource and visitor management programs include communication strategies targeted at interested stakeholders and park visitors

- Repriorising of non native plants for control
- We've always managed to keep some level of commitment to native plant control.
- Identifying sites that are at high risk of invasion
- Prioritize the native sites
- Develop and implement program to monitor spread, control actions etc.
- GNP shares their exotics database with us
- Address the issue of invasive ornamentals in the town site - perhaps do a yard audit to determine which species are invasive etc.
- Strengthen partnerships locally and regionally to facilitate public education and awareness, research and management

Finalize plan in 2005

### **East Kootenay Interagency Weed Management Pilot Kevin Patterson, Weed Program Coordinator Project**

What are noxious weeds and why manage them?

- Noxious weeds displace native plant species and severely degrade important native plant communities
- Weeds impact agriculture, the economy and recreation/tourism opportunities
- A simple choice
  - a. Invest now in a coordinated local management effort at a relatively low cost to ensure a healthy future... OR,
  - b. Allow the Kootenays' noxious weed populations to spread beyond their current distribution until they affect the majority of the Kootenays' citizens and industries. This would require an expenditure of substantially greater resources simply to mitigate impacts on our economy and environment that are now foreseeable and avoidable.
- Why a local plan?
- We've got unique ecosystems in the E. Kootenays
- How do we develop a strategy that everyone can use?
- VISION: "a healthy environment and productive agriculture, unimpaired by noxious weeds, that continue to provide Kootenay residents with an exceptional quality of life"
- MISSION: "To stop the spread of noxious weed species in the Kootenays, and restore degraded lands of exceptional environmental and agricultural value during the 21st century".
- Develop a strategy to accomplish our mission → use fire fighting strategy – no need to reinvent the wheel

- Goal #1 - curb the introduction of new noxious weed species into the Kootenays through awareness and education
- Goal #2 – prevent the establishment of newly introduced noxious weed species in the Kootenays
- Goal #3 – stop and contain the spread of established noxious weed species within the Kootenays
- Goal #4 – restore lands of exceptional environmental and agricultural value
- Dollars are always a limiting factor when dealing with weeds and restoration work. Dept of Transportation; we make sure they've included restoration component of their projects at the front end.
- Summary: CURB> STOP> PREVENT>RESTORE
- The East Kootenay Interagency Weed Management Pilot Project provides an opportunity to deliver a ministry invasive plant program by a local Invasive Plant Committee.
- Provincial crown agencies are key players with respect to weed control success. (ie. 80%+ lands in EK are crown) With recent organizational changes, the effective management and coordination of the weed activities on crown land has not been accomplished. This pilot will attempt to achieve the following:
  - Pool ministry resources and jurisdictions to efficiently utilize limited funds.
  - Creating invasive plant management zones within the East Kootenay to better address weed specific issues
  - Reflect and address the weed management concerns of residents of the East Kootenay.
  - Better reflect weed management priorities with respect to resources and weed issues in the East Kootenay.

#### *Organizational structure*

The East Kootenay Interagency Weed Committee would include the Regional District of East Kootenay (RDEK), MLA Bill Bennett, MWLAP, MAFF, MOF, MOT, MSRM, TCT, BC Hydro, BC Gas, CPR and First Nations.

#### Term

- 3yr funding
- Monies from years two and three used to leverage additional funding
- This capital investment would lay the foundation for the formation of an East Kootenay Noxious Weed Trust.
- Potential would then exist for a substantial reduction in long-term weed control dollars required by the province

- The RDEK Weed Control Program has been effective in encouraging private property owners to shoulder their respective weed control responsibilities under the Provincial Weed Act. However, there is no mechanism to ensure that crown land is managed in the same fashion. Consequently, the government agencies in some instances have not been part of the weed management strategy due to a lack of funding.
- By pooling various ministry weed control monies, and dedicating these dollars to a local East Kootenay Interagency Weed Committee, better coordination and use of resources will occur.
- We as an East Kootenay Committee have a draft plan to address riparian infestations that are currently not being dealt with. By accessing and utilizing local and community inputs, neighborhood programs can be put in place to further leverage ministry monies.
- By utilizing local representatives on the East Kootenay Interagency Weed Committee, we can continue to ensure that education and coordination occurs through-out the Kootenays.
- Integrated weed management philosophies will be utilized to ensure the long-term health of the environment in the East Kootenays

The very best time to control noxious weeds and protect our natural resources was yesterday. The next best time is today!

*Rod Cyr: How is Fording Coal buying into this program?*

Kevin: Teck Cominico – I called a meeting to talk to them a few years ago and they didn't know where they were at with weeds. Last year they donated several thousand dollars. They still have weed problems, and have a long way to go, but we have started a bit of snowball.

## **Invasive Plant Strategy**

### **Cam Lane, AB Sustainable Resource Development**

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**Definition:** invasive alien species are those introduced by human action outside their natural past or present distribution. Their introduction or spread threatens the environment, the economy, or society including human health.

Costs and threats of invasive species to Alberta's Natural resources (March 2004)

- Economic costs and ecological impacts
- Identified most significant and current and potential invasive species
- Introduction pathways.

AB has less of an invasive problem than other provinces

- Geographic barriers
- Extreme climate
- Water flows north
- Few ports of commercial entry
- Does not mean we don't have problems

Current threats: ornamentals, knapweed, leafy spurge, blue weed, hound's tongue, toadflax, etc.

Why invasive plant strategy?

- Current and emerging economic and ecological impacts
- SRD program integration was required to achieve a more collaborative, cost effective and broader focussed invasive plant program
- To assist the development of partnerships with other ministries, municipalities and counties etc

Strategy Goal: To minimize the social, economic, and environmental threats and impacts of invasive plant species to Alberta's natural forests, rangeland and fish and wildlife resources.

Partnerships: develop partnerships with other ministries, municipalities, industries and the general public to enhance SRD's invasive plant program. e.g. Last year, we had a MOU with the MD of Ranch lands for weed control.

Ten objectives focus on:

1. mandate development
2. program coordination
3. partnerships – develop partnerships with other ministries, municipalities, industries and the general public to enhance SRD's invasive plant program.
4. education and awareness - coordinated education and awareness program with other ministries, stakeholders and municipalities etc.
5. funding
6. control priorities – set priorities and directions for controlling invasive plants on SRD public land
7. surveys and monitoring – an effective invasive plant survey, monitoring and data management system will be in place to support SRD's prevention and control initiatives.
8. legislation and policies – comprehensive review of legislation and policies are required to enable SRD to manage invasives
9. compliance & enforcement
10. research

Next steps...

- SRD Invasive Species Committee will initiate development of an SRD Invasive Plants Action Plan
- Develop a Risk Assessment Framework (get economic impact data to garner political support)
- SRD will continue to be represented on the Alberta Invasive Plants Council

## Questions

Wayne: in a legal sense, what kind of legal authority do you have over private land?

*Cam: in AB, we have our weed act... that's given to the municipalities and the counties. They have authority over private lands.*

Rod - we have to update those acts from time to time, and it's time we looked at weeds again.

*Cam – we could get direction from the Ag Service Board on how to move ahead.*

Kevin: we can do it provided as a service – just as garbage collection, we have a bylaw that provides a service for weed inspection. We can issue notices and fines, and if they choose not to clean up their weeds, we can go in and clean it up for them. That doesn't apply to Crown land.

*Bill: how is the group going to deal with cross jurisdictional issues with respect to dollars and turf?*

Kevin: we focus on new invaders as high priority... it's also going to be reflective of what the region sees as regional priorities. We're only dealing with the Crown agencies... it will be difficult. It's still at a very early stage. The other big challenge is which permitting service we'll operate under. It's still in its pilot stage.

*Jack: how do provinces make decisions with respect to new non-native species and changes in species status?*

Kevin: we have a provincial noxious weed list. As a regional district, you can also set your priorities independent of that as well. We get a request from the Ministry of Ag to see if we'd like to add any new species to the list. Then they research it and determine the validity of the addition.

*Cam: In AB, there's a peer reviewed process for the pest act and the weed act. Once those lists are established the MD's and counties have the authority to elevate something as a nuisance species to a noxious species.*

## Panel II - A United States Perspective

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Dawn LaFleur, GNP, Exotic Plant Management Team Leader

Linh Davis, Flathead National Forest, Botanist

Terry Carter, Flathead national forest, Tally Lake Ranger Station

### **Invasive Weed management in GNP**

**Dawn LaFleur, GNP**

- We have 126 species that are considered non native plants, about 10% of the plant population.
- When you have limited funding, limited people and limited time, where do you spend your efforts?
- We follow Montana's Noxious weed list to focus our efforts.
- We have category I, II and III classifications
  - Category I (e.g. spotted knapweed, or leafy spurge, well established populations),
  - Category II (new invaders that have established populations e.g. orange and meadow hawkweeds)
  - Category III ( new invaders, the ones we want to watch for e.g. yellow starthistle, not an established invader, but well established elsewhere and it may just be a matter of time)
- We have a number of cornerstones when it comes to integrated weed management.
- Control measures; use manual hand pulling for hounds tongue, biological methods such as biocontrol agents. These haven't been successful at all. It may be because we are just so far north. We have cultural means of controlling invasives such as fire. Our big cultural one is our native plant restoration program where we utilize native plants in attempt to out compete non-natives. We also have chemical – there was quite a bit of criticism for waiting too long and now we have no choice, we have to use herbicides. We try to use it in conjunction with other methods.
- Implementation: we share our maps/databases with WLNP and beyond and now we can all share information. A very important part of doing weed control is prevention and education. We need to get the message out to the public. We utilize volunteers to manage weeds; takes a lot of work, but worth it because they can take that message home with them.
- The most important part is getting the people on the ground (80% of crews are funded by dollars received from entrance station and fee demonstration dollars)
- As a result of the fires in 2003, our big concern after that is what is going to happen after with noxious weeds? Burned area recovery funds to monitor and prevent noxious weeds after the fires.
- We saw an increase in St. John's Wort after the fires.

- Another source of funding; different crews (Yellowstone, Glacier) – put a jumpstart of noxious weeds in the National Park service.
- Cooperation with our neighbours is a very important part of what we do. The potential is huge for weeds to walk across boundaries. We cooperate with Flathead Forest, Flathead County, Glacier County and WLNP.
- Challenges:
  - Cattle trespass along our GNP boundaries,
  - Fescue grasslands; fescue grasslands very prone to weed invasion, a lot of road corridors serve as vectors for invasives in valuable wildlife habitat
  - Treatment techniques: we're opening up a niche, is sometimes a noxious weed that's even harder to control than the one you removed.
- The big thing is we're here in GNP to maintain the native plant communities, not kill noxious weeds. That's why we exist and that's the biggest challenge.

### **Linh Davis, Flathead National Forest, Weed Botanist**

- Flathead National Forest does have a weed EA – to control weeds
- We treat and prioritize weeds through our weed EA.
- Highest priority; Class III (new weeds that haven't established themselves), followed by II and I.
- Have a weed advisory group – people from our supervisor and district offices. We meet twice year to look at progress and new invaders.
- We have a draft management plan – needs work but on the radar screen.
- Involved in inventory – started a program to determine effectiveness of treatments and assess status.
- National survey protocol for weeds. Module called Terra where we'll enter all of our protocol into a national database. The collection of data is the same through the forests for the entire nation.
- We are also using same protocol with private landowners in the Swan Valley. We are starting an inventory protocol through trained volunteers in that region.
- Use spatial maps for determining treatment areas and treatment effectiveness.

### **Terry Carter, Flathead National Forest**

- I manage noxious weed program in the Flathead Forest.
- Our programs are based exactly like yours.
- The big problems: no money, too much land to cover... and Washington wants to know where the weeds are in a very large area; it's difficult to know where the weeds are.
- I'll inventory as we treat in areas such as trailheads, campgrounds, etc.

- Lincoln and Flathead County – toxic to livestock, turned into a large coop between a variety of landowners and agencies.
- A big problem is travelling between our locations; more time driving than treating weeds.
- Coop with Fish wildlife and parks; native fishery rearing location; it's a big disturbed mess, and so they've paid us some money to go in there and clean it up.
- WAG: Weed Advisory Group: list of priorities of what is a high priority for us to treat. Wilderness is a high priority. New invaders are high priority. Sensitive areas are a high priority. Being good neighbours. Places where we've already treated is also a high priority. Need to revisit them and ensure they don't get out of control again.

### Questions:

Cyndi: are the cooperative things you are talking about species or site specific?

*Terry: yes, site specific; money specific.*

*Cyndi: do you set them up with a signed agreement?*

Terry: no, an MOU for us is real headache, its easier for us just to all agree on it.

*Don: about the orange hawkweed, is it associated with road side disturbance?*

Linh; it begins on the roadsides, ends up in fescue grasslands, finding it in wetter areas. It spreads very rapidly.

Linh: The Flathead County have a good, aggressive weed plan for private landowners. They give them a site plan and a certain time frame to clean up the weeds. If they don't clean it up the County will do it for them.

### **Invasive Plant Management in the Crown – A view from the Ground up**

#### **Kelly Cooley, Agricultural Fieldman MD of Pincher Creek, AB**

- Perspective; it's important to see things from a different perspective – perhaps a broader view etc.
- The mad cow wars; different ways of looking at the same issue.
- Let's stick with the facts when we're dealing with these issues.

#### **Agricultural Service Boards (ASB's)**

- Established by each rural municipality (county), funded jointly through municipal taxes and grants by Alberta Agriculture
- Unique system for managing weeds, conservation issues, and pests, making the most of local knowledge and work efficiencies

- Goal was (and is) provincial coordination of localized efforts, though ASB's have "grown up" and established their own priorities

Pincher Creek ASB Conservation Program is committed to:

- promotion of sustainable agriculture practices
- protection of its agricultural and environmental resources
- improve economic outlook of its citizens
- Our conservation projects over recent years have included: riparian management, sustainable grazing, and sustainable cropping.
- We've had many successful partnerships → southwestern Alberta Conservation Partnership (MD Ranchland, Willow Creek, and Pincher Creek)

Pincher Creek ASB Invasive Plant Control Program

- Inspect 950,000 acres of county land & enforce Alberta Weed Control Act
- Invasive plant control on county lands/roads (approx 3000 km or 1800 miles)
- Invasive plant I.D., education, and awareness
- Control recommendations
- Spraying equipment rental
- Facilitate inter-jurisdictional efforts
- Assist in invasive plant control research
- Monitor and support local seed cleaning

Solutions: Conservation partnerships:

- Blue Weed Blitz: annual community volunteer events to hand pull blue weed– end the day with a barbeque – very successful event, may grow to 200 volunteers
- Biocontrol: partnerships with Agriculture & Agri-Food Canada
- Southern Alberta ASB Weed Coordinator Partnership:
  - Co-funded by 19 Southern Alberta ASB's & Alberta Ag.
  - Don Townsend ([сноjet@telusplanet.net](mailto:сноjet@telusplanet.net)) - Coordinator
  - Partnership initiated to help ASB's deal with invasive plant issues that were not under their direct jurisdiction, including: Urban municipalities, Provincial & Federal Lands, interjurisdictional lands such as railways & pipelines, First Nations, Adjacent states and provinces
  - Major goals are to maintain strong awareness of Alberta's Provincial Weed Control Act & invasive plant threat
  - Directed by Agricultural Fieldmen from selected South ASB's
- Alberta Invasive Plants Calendar – printed 10,000 copies
- Our only federal tool in Canada to date: The Canada Seeds Act Certificate of Seed Analysis

- Alberta Invasive Plants Council: fairly new, multi-agency group  
[www.invasiveplants.ab.ca](http://www.invasiveplants.ab.ca)
- Canadian Weed Legislation: Currently no federal weed legislation, Canada Seeds Act has seed prohibitions, weed control is a Provincial responsibility, provincial weed legislation varies widely, Only applicable in each province, National Weed Control through “Cooperation”

#### National Strategy on Invasive Alien Species

- Interdepartmental initiative led by Environment Canada
- Rests on several international agreements such as IPPC, CBD
- Proposed Action Plan For Invasive Alien Terrestrial Plants And Plant Pests
- Phase One - Released Sept 14, 2004
- Alberta Weed Free Hay Program and North American Weed Free Forage; AB has been slow to adopt this; it's a good idea, but fairly labour intensive in doing the inspections.
- North American Weed Management Association – mission to provide education, regulatory direction, professional improvement, and awareness to preserve and protect our natural resources from the degrading impacts of weeds ([www.nawma.org](http://www.nawma.org))
- Get a weed mascot as an educational tool.

#### Questions

*Wayne: Are we winning, losing or is it just a standoff in the war against weeds? If we are losing, how do we turn it into a win?*

*Kelly: I think we're winning, b/c I've seen the awareness actually grow. That'll influence policy and funding.*

*Dawn: We used to get messages from visitors saying no herbicides in the park... now we're getting more feedback from visitors who are aware of the weeds in the park. The awareness has definitely increased. We're definitely getting the message out there.*

## Case Studies

### Evaluating Risk to Native Plant Communities from Selected Exotic Plant Species

Maria Mantas, The Nature Conservancy of Montana

#### Weed Risk Assessment:

- The Need: to assess the risk to native plant communities to be affected by weeds
- Why: allows you to focus on which species are a high priority and which areas to work in
- Our approach: looking at the threat of certain species and their threat to native plant communities
- Risk vs. Inventory – these are different – it's not telling us where we have a problem, it's where we may have a potential problem
- Definitions
  - Exotic Species – non indigenous species
  - Invasive species – non natives that move into plant communities and can spread without disturbance
  - Disturbance – any activity that can disturb the forest surface/soil
  - Susceptibility - the vulnerability of native species to the selected non native species
  - Threat – what is the impact of the non native
  - Probability of exposure – what is the likelihood of the weeds getting there in the first place
  - Risk = Susceptibility + Probability of exposure + Threat

#### METHODS

- *Determining species to evaluate:* 1) began with all county listed noxious weeds in study area, 2) added unlisted species that were considered high threat by expert panel, 3) eliminated native species, 4) highly threatening to at least one native vegetation type and 5) known from the study area, and enough data to model risk
- *Determine susceptibility of native plant communities to these species-* used different codes (unknown, closed, invasive, disturbance) to assess PNV (potential natural vegetation) build susceptibility matrix – useful product
- Also mapped matrix spatially
- *Determine level of threat to susceptible communities* - did a threat matrix with threat codes (unknown, closed, invasive, etc.)
- *Determine the probability of weed seed exposure to specific sites in the study area* – calculate distance to nearest county with known species occurrence, assign road density value to each pixel, code high traffic area pixels, assign grazing allotment value for each pixel.

- Results: for each species, get the matrices, maps displaying risk, and a quantitative summary of area at risk.
- This is a good process for determining the risk of non natives in your region.
- The purpose of this analysis is to try to prioritize your efforts.
- More information: [http://www.fs.fed.us/r1/cohesive\\_strategy/](http://www.fs.fed.us/r1/cohesive_strategy/) for online viewing of maps and downloadable jpgs.
- You can order CD with all GIS grids (free of course!)

*Bruce: have you done an analysis to see which of the variables is more important?*

Maria: no, unfortunately.

*Kelly: in terms of weed risk assessment outside of the native plant community, how difficult would it be to look at ag lands, and do an economic assessment?*

Maria: the process allows for that, but you may not go through the same procedure.

### **Ecosystem Restoration and Invasive Plants: Controlling the Germination Substrate** **Robert Gray, R.W. Gray Consulting Ltd.**

- Restoration activities lead to the establishment and proliferation of noxious weeds,
- Issue has plagued ecosystem restoration for years and has impacted more widespread applications of ER,
- ER activities often taking place in low-elevation, dry forest and rangeland ecosystems because they have been impacted by settlement and fire-exclusion the most,
- Activities often result in the creation of suitable germination substrate (bare mineral soil) through mechanical use and prescribed fire,
- ER activities can stress native plants giving invasive plants a competitive advantage.
- Project area: north of Pemberton, BC
- First we determined historic fire regime, results showed that there was frequent fire activity
- We also scanned the archives to determine historic and contemporary forest stand structure
- What does the historic plant community look like? If we're moving toward ER, we should know. This is difficult to determine but examined traditional first nations use to determine population density of certain species such as huckleberry.
- ER Operations: thinning, prescribed burning etc.
- *One strategy is to control the potential germination substrate*
- Litter layer -- Reduce the litter/duff layer, Mineral layer: and maintain or slightly reduce litter/duff so historic rhizomes etc. can germinate

- *Treatment A*: heavy crown thin/significant duff reduction, a lot of soil exposed → fairly high numbers of invasive plants
- *Treatment B*: Light Crown Thin, minimal duff reduction → by retaining cover and having a black body (scorched duff) gives better competitive advantage to natives; no invasive plants.
- Treatment – significant duff reduction results in favourable germination substrate for invasive plants
- Conclusion:
  - Restoration should focus on retaining current duff layer, (despite being outside historic range of variability), until future maintenance burns. Use the duff layer as a barrier to invasive plant establishment. Native plants will grow through it.

*Don: how hard is it to achieve this? A scorching of the duff layer but not burn through it?*

Bob: you have to measure and know your duff moisture content before you burn.

*Kelly: cost per hectare data?*

Bob: high intensity – burn is easier, taking a lot more volume, revenue was 5-10,000/hectare. Light intensity stuff is break even or subsidized but far more labour intensive.

## **Crafting an Educational Message**

### **Marijka Wessner, Missoula Co. Weed District**

- Historical perceptions of weed control: just an agricultural problem, prescriptive approach to control weeds
- Missoula county – deal with a variety of audiences: rural agricultural and ranching, urban small acreage, homeowner associations, recreationists, students, government agencies etc.
- City of Missoula – city open space acquisition – provided an opportunity for public education on weed control and native plant management
- Plant ecology: what do you want to grow?
- Perception of weed control: really different between agricultural landowners and urban/subdivision landowners
- Urban/subdivision landowners: help developed a vision of what they want to grow, focused on long term sustainable solutions
- How? Teach people to think strategies, look at all the options, try to address the cause instead of just looking at the problem
- Education Process: visual aids, increased knowledge base, more hands on activities, more leadership development, more community based, Prairie Keepers Plant Rescues,

Leave No Weeds program, Nature Center Outdoor Classroom (for kids: see who can get the biggest knap weed root)

- Increase knowledge base: 10 week, ecology based master invasive plant management course
- Weed Week Topics: “celebrate your open lands” → variety of themed walks/workshops
- Make your education program community based, create a vision,
- In MT, state wide weed awareness and education campaign and MT weed control association education committee
- 6 steps of change:1) knowledge 2) belief that it’s important to change 3) desire to change 4) belief in the ability to change 5) action and 6) sustain the change
- Education needs: social marketing, educating all audiences, more education coordinators, increased collaboration and partnerships

## **Summary of break out group presentations**

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### **Group A. Crafting an Educational Message**

*Overall Goal:* Identify ways in which the CMP can enable more efficient communication and education about invasive plants across the landscape.

*Who is the audience?*

- Staff/contractors, visitors, recreational users, neighbours, industrial users, agricultural, schools, teachers, environmental groups, educators, kids, hunters

*How do we reach them?*

- Make them care, heartstrings, economics, what’s at stake/consequences, importance of native plants
- Social marketing – focus on groups

*What is the key message we need to get across?*

- Ask why should they care?

*What tools should be utilized for communicating this message?*

- Rogues gallery of noxious weeds, posters/website; Visitors to parks visiting backcountry to view weeds video; community events; annual environment weeks/earth days; teacher workshops; conduct courses on noxious weeds for public/staff such as Basic Identification of Weeds; COCEEC ask them to focus their

expertise on this question and develop a template for a communications plan for use by agencies; seek out partnerships (“friends of”, societies, industry)

- Awareness tools: weed calendars; playing cards; placemats; leafy spurge root model; noxious weed silk flowers; pocket size weed ID book/brochures; posters “ten most wanted”; TV; radio; billboards; state trust fund

*What can the CMP do for you?*

- Request Crown Educators group work on this topic
- Use website (Miistakis) to highlight 1. research, 2. existing materials 3. sources for native seed stocks/plants, 4. visuals of weeds - mapped locations (Crown), 5. bulletins of new weed concern, 6. agency contact list to report weed sightings and sites, 7. options for dealing with weeds – links to local resource people.

The breakout group decided that there would be:

- No mascot for the CMP
- No single messaging.

Possible themes for 2006

- Reaching out/involving others, community involvement and building partnerships
- Air shed management
- Climate change
- Noise and light pollution

## **Group B. Hazard Risk Assessment**

*Overall goal:* Identify ways in which the CMP can enable more effective use of risk assessment tools and strategies across the Crown landscape.

The break out group discussed extending Maria’s risk assessment process to Canada.

The following suggestions were generated:

1. sharing expert knowledge that has been gathered to date
2. create a communication tool (list serve) that is ongoing (weed watch list)
3. involve more Canadian experts in developing, expanding and updating the matrix.
4. Student project versus having each agency doing it in isolation
5. CMP provide expertise to develop the matrix and to store the data so everyone could access it easily
6. Store data base for users to see trends overtime
7. possibly develop map product
8. CMP could form task group to hire someone to update literature search and form experts group (Personnel cost to do this: Maria, GIS person, literature search person)

### Themes for 2006

- Water quality/aquatics
- Fisheries
- Recreation pressure and how it affects water quality
- Collaborative decision making processes

Recommended Action Item: None

### **Group C. Early Detection, Rapid Response (EDRR)**

*Overall goal:* identify ways in which the CMP can enable more effective EDRR strategies across the Crown jurisdictional boundaries.

*What types of species are most prone to be a threat in the COCE?*

- Generally the noxious and exotic plant list in each jurisdiction.
- Action Item: compare all your legislated weed lists in the COCE and look for commonalities and exceptions and add potential new invasives not on any lists and then work off a combined list.

*Are the same species being watched in Canada as in the US?*

- Most threatening species are same in US and Canada (once again refer to state, county, and provincial weed lists)

*Are the mandates and requirements the same across the jurisdictions?*

- Montana agencies work from MT state noxious weed list plus other non native invasive species lists such as county weed districts and DOI weed “cookbook”
- Waterton Lakes NP draw upon adjacent lists from BC, AB, MT plus likely additional species
- NPS – USFS – BIA Historically and primarily, mandates emphasize control and education.
- We work from what is mandated. Most go over and above their mandatory requirements
- Mandates & requirements across jurisdictions are similar with some important distinctions
- Montana counties, Alberta and BC counties all operate with the ability to “enforce” but emphasize voluntary compliance.
- Challenges in each jurisdiction
- Problem – existing weed lists not always applicable, (are all “weeds” really invasive weeds? Problems with varying definitions of what is a “weed”)
- Concern – “Is cure worse than disease?”

*Recommened Action Item:* establish a Crown Invasive Non Native Plants Network (subcommittee of the CMP)

*Processes in place to help us communicate across boundaries...*

- Miistakis Institute, CMP, North American Weed Management Association, Crown Of the Continent Research Learning Center, Glacier NP/Waterton Lakes NP cooperative International Peace Park
- Within MT working groups exist among GNP, USFS, Flathead and Glacier Counties, and BIA (Blackfeet Tribe). There is also an agreement between BC and AB (Southern Alberta Weed Coordinator Partnership/RDEK)
- Invaders Database; Plants Database; CMP agency websites and educational materials:
- Action Item: Establish COC Invasive Non-native Plants Network (subcommittee of CMP) to facilitate communication among weed and land managers within the CoC.

*Compare EDRR between agencies*

- Glacier NP and Waterton Lakes NP – Inventory/monitor with field crews, park employees, visitors, others; research appropriate control tools; implement control; follow up monitoring; all information recorded in a database, most stays internal some goes to a national database (depending on funding agency)
- Blackfeet Tribe – Similar to Glacier NP; help acquired from landowners/users, fieldmen, game wardens; range inventory GPS; data shared with county and US Congress (funding agency)
- RDEK (BC) – Mostly education, observationally driven from public, working emphasis on non inventoried areas, limited data sharing, grossly underfunded, control – need more resources
- Alberta – Similar to GNP/WLNP, share data around region/province (need to do more)

*Action Item:* Investigate NAWMA weed mapping standards – see if everyone’s databases can meet these standards. This would be a good tool for sharing information anywhere in North America.

*Does Maria’s research have merit for the CMP?*

- Can we agree on the invasive species that we’ll track jointly?

Themes for 2006:

- Recreation and public access
- Broaden discussion to “Invasive species beyond plants (loss or increase of ecological integrity)”
- Managing and distributing information to enlist publics

## **Group D: Reclamation/Revegetation**

*Overall goal:* Identify ways in which the CMP can enable more effective use of existing restoration/reclamation tools and strategies across the Crown landscape.

Revegetation: commercial species

Restoration: Native plant communities

Inclusive rather than exclusive

How to triage what's out there, Where is expertise, how to engage resources, networking – awareness, role of Miistakis

### *Reclamation Potential of Native Species*

- Structural, Stabilizing
- Sense of Timespan, Reclamation - Restoration
- Species list and methods, U of Idaho web page
- What is available to managers; Possibilities –
- Where to get species, cost; Genetic Issues – how far away – certain species site specific others broadscale; Guidelines on native prairie

### *Traditional Restoration after/or to Prevent Invasives*

“Industrial” Agricultural VS. Native

- Range of deployment – industrial, suburban
- Road maintenance/management – to reduce their role as a weed vector
- Specific requirements for soil cleanliness etc. amongst jurisdictions
- Wait for Legislative solution unlikely
- BMP's for Crown? (timber, exotics, watersheds, fuel reduction)
- Compendium: engage stakeholders, burned area restoration

### *Backlash from weed invasion – Prescribed fire – Economic issues*

- Did prescribed fire meet objectives? Effectiveness, not just implementation
- Fire – prescribed burning and burned area restoration; duff is key! Use more sensitive tools to assess and monitor conditions of duff.
- BAER (burned area emergency rehab) within COC, Being able to quickly assess fire
- Use case studies in a proactive sense we can bypass crisis management; apply lessons learned from crisis

*ESC TEMBEC -Forest Stewardship Council - Lowes, European*

*Discuss environmental issues early*

Repository information (Miistakis)

Project for Mike/Len – get student to gather best practices

*Action Item:* Adaptive management cycle

Themes for 2006:

1. Reclamation & restoration
2. Roads and access
3. Ecosystem focus with large carnivore emphasis
4. Role of NGO's as a theme or a partner
5. Managing cultural and ethnographics across the Crown (First Nations/Native American - collecting sacred and culturally significant areas)
6. Internal focus – what do we need to do to work effectively as agencies in the COCE... what things do we need overcome?
7. Water quality and water quantity

**Confirm CMP objectives and resources/ identify action items**

**Brace Hayden, GNP**

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Regional Landscape Analysis Project

Three activities under Option 3:

1. renewed focused discussion on landscape level analysis of the Crown
  - a. convene workshop/committee
  - b. continue agency specific consultations with new focus
2. shift to data collection/coordination project
  - a. Collect data around each / key land uses in the Crown region
  - b. Collect data around key issues of concern in the Crown region
3. ALCES based cumulative effects assessment on sub region

CMP SC will follow up on:

- Theme for the next year.
- Follow up on invasive plants tasks
- Resourcing the partnership
- Membership in Steering Committee
- Other?

Thank you to all the speakers for the tremendously educational experience!

## APPENDIX A

### Participant List

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## APPENDIX B

### Agenda

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#### Wednesday, March 2, 2005

06:00 pm - 08:00 pm Forum registration (Hampton Inn)

07:00 pm - 10:00 pm Reception (cash bar)

#### Thursday, March 3, 2005

08:30 Welcome

Pam Kennedy, Mayor of  
Kalispell

Summary of key outcomes from Cranbrook Forum

Mick Holm, Superintendent  
Glacier National Park and Bill  
Dolan, Acting Superintendent,  
Waterton Lakes National Park

08:45 Agency updates – agency representatives highlight  
changes since Cranbrook Forum and identify issues  
and potential collaborative efforts for the CMP

(5 min each agency)

10:15 Break

10:45 Steering Committee Report to Forum  
Summary of actions since the Cranbrook Forum  
Product updates; projected ideas for next year

Ian Dyson,  
Alberta Environment

11:15 Regional Landscape Analysis Project  
Workshop results and discussion of next steps

Guy Greenaway  
Miistakis Institute  
Bill Dolan,  
Waterton Lakes National Park

12:00 Lunch Break

01:00 Invasive Plants:  
Environmental and Social Challenges

Don Gayton, ecologist,  
Forest Research and Extension  
Partnership, BC

01:45 Break

02:00 Panel I – Agency programs and strategies: A Canadian Perspective

Cyndi Smith – Waterton Lakes National Park

Kelly Cooley – Pincher Creek

Kevin Paterson – East Kootenay Invasive Plant Program

Cam Lane – Alberta Sustainable Resource Development

03:20 Break

03:30 Panel II – Agency programs and strategies: A United States Perspective

Dawn LaFleur – Glacier National Park; Exotic Plant Management Team Leader

Linh Davis – Flathead National Forest; Botanist

Terry Carter – Flathead National Forest, Tally Lake Ranger Station

04:30 Q & A / Discussion

05:00 Sessions End, Day 1

06:30 Banquet – Hampton Inn

After dinner talk – *Predicting the Behavior of Invasive Plant Populations*

Bruce Maxwell & Lisa Rew

Land Resources and Environmental Sciences Department, Montana State University

### **Friday, March 4, 2005**

08:00 Welcome - Summary Day 1- Review Agenda

Bill Dolan, Waterton Lakes  
National Park

08:15 Case Studies

Evaluating Risk to Native Plant Communities  
from Selected Exotic Plant Species

Maria Mantas,  
The Nature Conservancy

Fire and Invasives

Robert Gray  
R.W. Gray Consulting Ltd.

Crafting an Educational Message

Marijka Wessner,  
Missoula Co. Weed District

- |       |  |              |
|-------|--|--------------|
| 09:15 | Facilitated Breakout sessions:   | All          |
| 10:45 | Break  |              |
| 11:00 | Report/Summarize Break out group presentations   | Various      |
| 11:30 | Confirm CMP objectives and resources/<br>Identify action items; discuss topics for next year | Brace Hayden |
| 12:00 | Adjourn Meeting  |              |
| 12:15 | Working lunch – CMP Steering Committee and interested CMP participants                       |              |