2016 Annual Forum

We Need the Needles: Coordinating Action to Conserve 5-Needle Pine Forests in the Crown of the Continent
Crown of the Continent Ecosystem (CCE)

- Hydrological apex
- Largely native landscape
- Carnivores, aquatic, floristic diversity
- Ecological, geographical, political convergence
- International Peace Park
CMP Steering Committee 2016

- Caryn Miske: Flathead Basin Commission, MT
- Cindy Sawchuk, Operations, Alberta Environment and Parks (AEP), AB
- Dennis Madsen: Waterton Lakes National Park, AB
- Erin Sexton: University of Montana, MT
- Greg McDermid, University of Calgary, AB
- Greg Watson U.S. Fish and Wildlife Service, CO
- Ian Dyson, Planning, AEP, AB
- Len Broberg: University of Montana, MT
- Linh Hoang, Region 1, U.S. Forest Service, MT
- Mary Riddle (Chair): Glacier National Park, MT
- Mike Bruised Head, Kanai Tribe, AB
- Mike Munoz: Lewis and Clark National Forest, MT
- Peter Swain: Alberta Parks, AEP, AB
- Rich Janssen, Confederated Salish and Kootenay Tribes, MT
- Rob Davies: Flathead National Forest, MT
- Rob Simiertisch: Alberta Parks, AB
- Steve Fry: Dept of Natural Resources and Conservation, MT

Coordinator: Sasha Harriott; Spatial Analyst: Shannon Blackadder
Annual Fora

- Feb 2001, Cranbrook: Trans-boundary collaboration
- April 2002, Whitefish: Cumulative Effects
- April 2003, Pincher Creek: ALCES
- Feb 2004, Cranbrook: Fire
- March 2005, Kalispell: Invasive plants
- March 2006, Lethbridge: Watershed Partnerships
- March 2007, Cranbrook: Ecological Health
- March 2008, Whitefish: Carnivores
- Feb 2009, Pincher Creek: Biodiversity
- April 2010: Fernie: Climate Change
- March 2011: Polson: Aquatic Invasive Species
- March 2012: Lethbridge: Tribes and First Nations
- March 2013: Fernie: Boundaries & Large Landscapes
- Missoula 2014: Climate Change Adaptation
- March 2015: Lethbridge: Terrestrial Invasive Species
- March 2016: Fernie: 5-Needle Pines

Crown Managers Partnership
CCE Interdependency: Water
CCE Interdependency: Water

Here Be Dragons

LEGEND
- Crown of the Continent
- International Borders
- Provincial/State Borders
- Major Watersheds (CEC Level 1)
- OUT OF MAP/ECO

WILDERNESS SOCIETY 75 YEARS 1935 - 2010

crown
conservation initiative

Crown Managers Partnership
CCE Interdependency: Grizzlies
N. Kintla Ck.  Cameron L.  Waterton L.  Crypt L.  N. Belly R.  Belly R.

Waterton Glacier International Park
Stitching Our Nations Together
Everything, actually

Air – Land – Water – Biodiversity - Ecosystem services
Achieving desired environmental outcomes across our borders
First Nations/Tribal land
National Parks
US Bureau of Land Management
US Fish & Wildlife
US Forest Service
Federal
Provincially Protected Areas
State Trusts
Montana Fish, Wildlife, & Parks
Provincial/State
Private Conservation Land
Plum Creek Timber
Private Land
CCE Ecoregions

Canadian Rockies
Columbia Mountains/Northern Rockies
Middle Rockies
Clear Hills and Western Alberta Uplands
Aspen Parkland
Northwestern Glaciated Plains
In this thing together….

- The environment doesn’t recognize jurisdictional boundaries;
- There is a need for cooperation and stewardship in a world of shared resources; and
- Canadians and Americans have an enduring interest in peace, goodwill and a willingness to work together cooperatively.
Stressors

Climate Change

Human footprint

Invasives
Transboundary Crown Collaboratives

Crown Managers Partnership
Crown Conservation Initiative
Crown of the Continent Ecosystem Education Consortium
Crown of the Continent Geotourism Council
Round Table on the Crown of the Continent
Universities Crown Transboundary Program
Crown of the Continent Resource Learning Center
Sub Regional Crown Initiatives

- Tribes and First Nation initiatives
- Kootenay Conservation Program
- Oldman Watershed Council
- Blackfoot Challenge
- Southwest Crown Collaborative
- Waterton Biosphere
- Clearwater Resource Council
- Southern Foothills Initiative
- Swan Valley Connections
Conservation Goals:
- Terrestrial and aquatic integrity, disturbance regimes.

Landscape Stressors
- Climate change, invasives, land use.
Transboundary Conservation Initiative

All parts of the environment

Biotic/Abiotic
Ecosystem structure and function

Key Stressors
Invasives, Climate Change, Human Footprint

Strategies to achieve conservation outcomes

Strategies to Minimize impact
Initial Conservation Priorities

- Aquatic Invasive Species
- Landscape Intactness
- Climate Change Adaptation
Conservation Priority: Climate Change Adaptation

- 2010 CMP Forum
- 2010-2011: FRAME webinars, Scenario Analysis report, EcoAdapt Workshop
- Spring 2014, Missoula:
  - CMP Annual Forum: “Managing for Climate Change in the CCE”
  - CRT AMI Workshop: “Taking Action on Climate Change Adaptation: A Workshop to Develop Shared Strategies for a Shared Landscape.”

Glacier NP: Jackson Glacier

1911

2009
CCE Climate Change Adaptation

- Initial short-list:
  - BT/WCT – habitat security and refugia
  - Prescribed fire: mixed-severity fire regimes
  - Invasives: AIS & terrestrial
  - Whitebark pine
  - Meso-carnivores
Crown Adaptation Partnership

TCI partners for climate change adaptation priorities:

• Crown Managers Partnership:
  • Erin Sexton, Flathead Lake Biological Station, MT
  • Linh Hoang, Region 1, U.S. Forest Service, MT
  • Ian Dyson, Planning, AEP, AB

• Crown Conservation Initiative:
  • Regan Nelson, CCI Coordinator
  • Stephen Legault, Y2Y Program Lead: Crown, AB, NWT

• The Wilderness Society
  • Anne Carlson, Climate Associate, Montana headquarters
Conservation Priority Status

Aquatic Invasive Species: Initial outcomes identified. Being implemented. Documentation of protocols.

Landscape - intact/connected: Initial outcomes identified. Implementation action underway at most sites.

Native salmonids: Initial outcomes identified. Actions underway.

Terrestrial Invasive Plants: Workshop held. Initial actions being identified.

Five Needle Pines: We’re it.

Meso-carnivores: Pending

Fire: Pending
Now up!
5 Needle Pine Planning Team

- Bob Keane: USDA Rocky Mnt. Research Station (RMRS), MT
- Brad Jones: AB Environment and Parks
- Dawn LaFleur, Glacier NP
- Karl Buermeyer: Helena/Lewis and Clark NF
- Michael Albritton and Mike Walton, BLM
- Mary Frances Mahalovich: USDA RMRS, ID
- Michael Murray: B.C. Forest Service
- Mike Durglo: CSKT
- Melissa Jenkins: Flathead NF
- Randy Moody: WPEF Canada
- Roian Matt: CSKT
- Rob Sissons, Waterton Lakes NP

- CAP team
- Shannon Blackadder: U of C
- Sasha Harriott: CMP
- Lisa Talavia-Spencer: AB

Regan Nelson: Crown Conservation Initiative
Climate Adaptation Fundamentals

1. Protect adequately and appropriately – refugia, gradients, heterogeneity, connectivity, scaling.

2. Reduce non climate stressors – fire suppression, invasives, harvesting, fragmentation, pollution.


4. Ameliorate local and regional climate change impacts – protect riparian corridors, shading, beavers.

5. Reduce the rate and extent of global climate change.

Start somewhere!

Adaptation ladder
Boundaries Everywhere

Air
Land
Water
Biodiversity
Ecosystem services

- Canada/USA
- BC/MT/AB
- Agencies
- Municipalities
- Landholders
- Industry
- Stakeholders

Researchers
Policy analyst
Regulate
Manage
Practitioner

Politics
Religion
Values
Culture
Developing Crown-wide Strategies

Science available to support decision-making

Opportunities and Challenges by Jurisdiction/Stakeholder

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Case Studies and Tactics

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Brainstorm Crown Strategies

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Refine and Focus Strategies

↓

Deliver and Enhance
http://crownmanagers.org/
http://www.crownconservation.net/
http://wilderness.org/

Thank-you