

Rocky Mountain Trench Ecosystem Restoration Program

Summer 2011

BLUEPRINT FOR ACTION UPDATE 2010-11

NEWS BRIEFS ...

GREG ANDERSON, FOUNDRING CHAIR of the Trench ER Program's Steering Committee and more recently manager of BC's provincial ecosystem restoration program, retired in March. Greg and his achievements were roasted and remembered at a well-attended send-off at Fairmont Hot Springs in April, but he will continue to champion ER in retirement as an advisor to the BC program. Watch for an interview in an upcoming issue of *Restorations News*. (Al Neal, who has worked with Greg for the past several years, is now BC's ER strategic team leader.) In the photo at right, Greg admires a retirement gift presented by his Invermere colleagues: a fire-scarred larch "cookie" that records his career milestones.

THE DUTCH-FINDLAY RESTORATION PROJECT on the west side of Columbia Lake has won The Land Trust Alliance of British Columbia's first Land Trust Award for Outstanding Land Program (see photo next page).

The award, presented at an April 1 gala in Victoria, was accepted on behalf of all project partners by Nature Trust of British Columbia CEO Doug Walker, Nature Conservancy of Canada Regional Vice President Linda Hannah, and Patrick Daigle from the BC Ministry of Environment.



From left: Doug Walker, Linda Hannah, Patrick Daigle

Other partners in the ongoing Dutch-Findlay project are the Trench ER Program, Fish & Wildlife Compensation Program, Ministry of Forests, Lands and Natural Resource Operations, and Thunderhill Ranch.

Columbia Basin Trust, Community Adjustment Fund, Habitat Conservation Trust Foundation, Job Opportunities Program and Rocky Mountain Trench Natural Resources Society also supported the 4,500-hectare project that is restoring habitat for the rare Lewis's woodpecker, and improving grazing for cattle, elk and deer.

THE 2011-16 UPDATE of the ER Program's 5-year operating plan has been posted on the [ER website](#).

Appendix I provides a schedule of restoration projects by treatment, year and site. Appendix III lists areas of Open Range and Open Forest by range unit and pasture. Five-year plan maps are also posted at www.trench-er.com.



Greg Anderson

A COLUMBIA BASIN TRUST GRANT to the Rocky Mountain Trench Natural Resources Society (Trench Society) will once again fund ER communications. Activities in 2011-12 will focus on the goods and services provided by grassland and open forest ecosystems. More frequent ER newsletters are also in the works, along with additions to the popular online [ER Library](#).

ANOTHER SUCCESSFUL BIOENERGY WORKSHOP was held June 13-14 in Cranbrook – the fourth in a series of events aimed at fostering small-scale bioenergy development in the Kootenays. The latest workshop was designed for participants with specific plans for thermal biomass heating projects. Sponsors were the Trench Society, BC Bioenergy Network, Columbia Basin Trust, Green Heat Initiative and SCR Management Inc. Workshop DVDs will be available soon: check the [Trench Society](#) website for details.

THE TRENCH SOCIETY HAS HIRED a two-person field crew to do routine pre- and post-treatment monitoring at restoration project sites. Ariana McKay is a UBC grad with a BSc in natural resources conservation; Kate Stevens is entering her second year as a natural resources/environmental technology student at College of New Caledonia in Prince George. This is the second summer a field crew has been hired with funding from Columbia Basin Trust, ER Program Steering Committee and Canada Summer Jobs.



Ariana McKay & Kate Stevens

TRENCH ER PROGRAM: Treatment Summary Crown Land 1997-2011

Fiscal Year Apr 1 - Mar 31	Total Area hectares	Harvest Open Range / Open Forest	Prescriptions Open Range / Open Forest	Slash/Thin/ Space	Pile & Burn	Prescribe Burn	Grass Seed	Cost
1997-98	784			64		720		\$32,520
1998-99	3,771	1,328		978		1,465		\$231,795
1999-2000	3,412	940		1,002		1,470		\$317,685
2000-01	4,936	475		2,420		2,041		\$572,570
2001-02	4,945	623		2,733		1,589		\$667,440
2002-03	2,197	1,238		600	216	143		\$341,000
2003-04	2,226	1,125		731	156	214		\$262,449
2004-05	4,204	800		843	161	2,400		\$307,766
2005-06	2,883	1,000	432	328	11	1,112		\$310,076
2006-07	7,219	1,000	3,858	802	348	1,212		\$589,715
2007-08	18,343	1,480	15,844	789	42	187		\$697,761
2008-09	7,185	1,792	3,833	875	223	462	25	\$1,368,165
2009-10	19,357	337	14,943	3,000	475	601	1,000	\$4,028,926
2010-11	5,296	1,542	2,316	541	619	278	175	\$1,583,496
*TOTALS	86,758	13,680	41,226	15,706	2,251	13,894	1,200	\$11,311,364
Less Prescriptions	45,532							
Average/yr	6,197	977	2,945	1,222	161	992	86	\$807,955

* **TOTALS** Each time a hectare is treated, it is included in the Total Area column. Thus a single hectare can be counted up to six times if it falls under each of the six categories above. Total hectares in restored condition are estimated at about +20,000. An accurate inventory of restored hectares is expected in 2011-12.

TRENCH ER PROGRAM: Funders Crown Land 1997-2011

The Ecosystem Restoration Program extends sincere thanks to the following funders whose generous contributions over the years have paid for restoration prescriptions, treatments and related activities such as planning, mapping, research, monitoring, communications and public outreach.

Job Opportunities Program	\$3,460,288
Forest Investment Account	1,608,310
Fish & Wildlife Compensation Program	1,311,973
Community Adjustment Fund	1,221,813
Ministry of Forests, Lands & Natural Resource Operations (formerly Ministry of Forests & Range)	638,813
Habitat Conservation Trust Foundation	628,460
First Nations Emergency Services Society	480,000
Grazing Enhancement Fund	417,735
Forest Renewal BC	345,120
BC Community Gaming Grant	265,910
Rocky Mountain Elk Foundation	236,100
Land Based Investment Account	213,538
Columbia Basin Trust	173,324
Ministry of Environment	67,500
Land Use Coordination Office	60,000
Ministry of Agriculture	50,000
Union of BC Municipalities Interface Fund	46,635
Premier's Special Sheep Permit Fund	20,000
Agriculture Environment & Wildlife Fund	18,438

Ministry of Transportation	16,177
BC Wildlife Federation	16,000
Cattle Industry Development Council	5,000
Canada Summer Jobs	4,993
TOTAL	*\$11,306,127
* to March 31, 2011	

Our first provincial award!



TRENCH ER PROGRAM: Treatment Summary Non-Crown Land 2007-2011

Fiscal Year Apr 1 - Mar 31	Total Area hectares	Harvest Open Range / Open Forest	Prescriptions Open Range / Open Forest	Slash/Thin/ Space	Pile & Burn	Prescribe Burn	Cost
2007-08	696			422	139	135	\$538,758
2008-09	1,575	30	300	428	727	90	\$2,191,151
2009-10	80			80			\$114,900
2010-11	633	132	120	364	26	30	\$784,328
TOTALS	3,023	162	420	1,294	892	255	\$3,629,137

BC Parks, First Nations, Nature Conservancy of Canada (NCC), Parks Canada and The Nature Trust of British Columbia (TNT) are restoring non-Crown land in the southern Rocky Mountain Trench. A partial summary for years prior to 2007-08 includes the following:

- BC Parks – Dry Gulch, Kikomun Creek, Norbury Lake, Premier Lake, Wasa Lake provincial parks. Restoration initiated in 1997. By 2005, 253 ha fully treated, 30 ha partially treated. Various treatments, as shown in the table above, ongoing since 2005.
- First Nations – Akisq'nuk (Columbia Lake), Aq'am (St. Mary's), Shuswap, Tobacco Plains reserves. Restoration and interface fuel management initiated in 2008.
- NCC conservation properties – Ashworth Hoodoos,

Kootenay River Ranch, Pine Butte Ranch, Thunder Hill Ranch. Restoration initiated in 2005. Various treatments ongoing since.

- Parks Canada – Kootenay National Park, Redstreak area (460 ha), adjacent to Radium Hot Springs. Restoration initiated in 2002. Various treatments ongoing since.
- TNT conservation properties – Big Ranch, Cherry Creek, Columbia Lake West, Hoodoos-Hofert. Restoration initiated on a total of 719 ha in 2004. Various treatments ongoing since.

Funding sources include Columbia Basin Trust, Community Adjustment Fund, Fish & Wildlife Compensation Program, Habitat Conservation Trust Foundation, Job Opportunities Program, Natural Resources Canada.

ER Steering Committee revising restoration strategy

With more than a decade of on-the-ground experience, the ER Program's Steering Committee is revising its long-term strategy for restoring Crown land.

The committee's original strategic plan, *Blueprint for Action* (2000), set a goal of restoring an estimated 135,000 hectares of grassland and open forest to Open Range or Open Forest condition by 2030, then maintaining those conditions in perpetuity. (The most recent mapping puts total Crown land to be restored at 109,358 ha.)

"We had to do a reality check based on what we've learned over the years," Steering Committee Chair Ray Morello said in an interview. "We looked at all the numbers and had to ask ourselves if treating and maintaining an area of that magnitude was achievable.

"We concluded that we could never afford the costs, that the timeframe was way too ambitious. So we looked at ways where some other entity could create Open Range and Open Forest conditions without the ER Program directly funding the treatments."

Describing the change in strategic direction as a work in progress, Morello said the committee favors a method that produces maximum ecological returns.

The approach involves identifying "core" areas that will best respond to restoration treatments. Typically, these are heavily treed sites with remnant bunchgrasses and other critical understory vegetation that will flourish once forest stands are thinned to historic grassland/open forest density.

The ER Program would apply the full range of restoration treatments to core areas, and maintain them with periodic prescribed burns.

On non-core sites, Open Range or Open Forest condition would be achieved primarily via logging under a forest permit, however these sites would receive little to no follow-up ER maintenance.

"It's more of a silviculture approach where stands will be harvested in a manner to create Open Forest conditions, which will initially support increased forage production but will revert over time to support timber production for products such as pulpwood and hog fuel. The hope is that non-core sites would support future bioenergy and pulp requirements in the Trench," Morello said.

"Non-core areas might get a one-time spacing treatment after harvest but no ongoing maintenance such as prescribed burns. In effect we would be setting up a self-sustaining harvest system that would produce and maintain desired density on selected sites."

Morello, who is also Rocky Mountain District manager for the new Ministry of Forests, Lands and Natural Resource Operations, said a range inventory project recently launched by district staff will assist the Steering Committee in identifying core restoration sites.

The project will use existing data, plus new information to be collected in the field, to inventory and assess plant species, productivity, health and carrying capacity.

Meanwhile, the ER Program's Science Committee has started collating 13 years of restoration monitoring data to produce a comprehensive report on understory vegetation response to restoration treatments. The committee, which is also amending the ER Program's monitoring protocols, expects to report out next year.

Timber markets drive logging

Improved demand for pulpwood and sawlogs is fuelling a lot of restoration logging in the Trench.

From April 2010 to March 2011, just over 1500 hectares – nearly 6 square miles – of dense forest was logged to Open Range (20 stems per hectare) or Open Forest (150 stems per hectare) density.

The 2010-11 total was exceeded only once before in the ER Program's history, and 2011-12 is shaping up to be another record year.

Logging has been completed, is underway or in the planning stages on these range units: Newgate, Gold-Plumbob, Waldo, Grasmere, Ta Ta-Skookumchuck, Cherry-Ta Ta, St. Mary's Prairie, Wildhorse-Lewis Creek and Wolf-Sheep Creek. Tembec, BC Timber Sales and Galloway Lumber are the major licence holders.

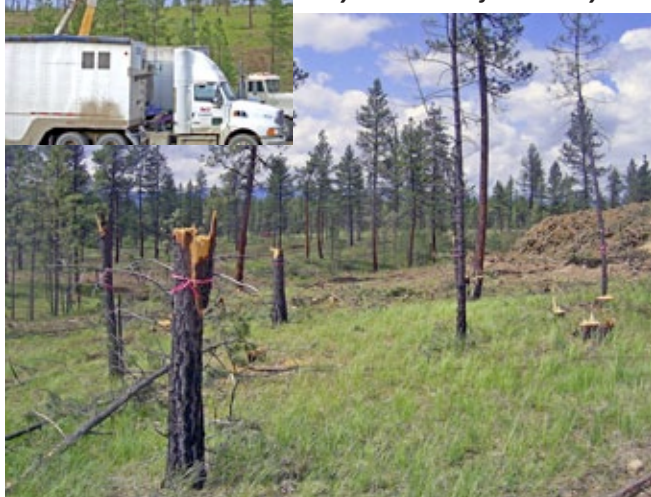
Logging is also underway on St. Mary's Reserve and a tree removal operation has just been completed on 30 hectares at Premier Lake Provincial Park.

One of the most visible operations is along Hwy 95A, in the vicinity of the old Kimberley airport, where Tembec has been falling ponderosa pine and Douglas-fir, chipping the trees on site, and hauling the chips to the company's nearby Skookumchuck pulp mill. Logging debris will be ground as hog fuel for the mill's co-generation electricity plant.

When work wraps up this summer, Tembec will have logged 85,000 cubic metres on about 900 hectares north and south of the old airport, on the St. Mary's Reserve, and west of the reserve. How much wood is that?

- 71,000 green tonnes of chips
- 1,620 chip truck loads
- 24 days of production at the pulp mill
- 34,080 tonnes of produced kraft pulp
- 24,850 green tonnes of hog fuel
- 29 days of fuel for the 36-megawatt co-gen plant.

Loading pulp chips produced on location from trees logged along Hwy 95A north of Kimberley.



Hwy 95A logging was carried out on badger habitat. Tembec flagged hundreds of burrows as machine-free zones and left high stumps to mark the protected sites.



Rocky Mountain Trench
Ecosystem Restoration Program

Restoring Nature's Balance.

The Rocky Mountain Trench Ecosystem Restoration Program is a collaborative long-term undertaking to restore grassland and open forest ecosystems in the East Kootenay/Upper Columbia Valley region of southeastern British Columbia.

STEERING COMMITTEE

Chair: Ray Morello District Manager, Rocky Mountain District, Kootenay Boundary Region, Ministry of Forests, Lands and Natural Resource Operations (MFLNRO)

Randy Harris Team Leader Ecosystem Restoration, Rocky Mountain District, MFLNRO

Lonnie Jones Rancher, Range Advisory Committee

John Krebs Senior Wildlife Biologist, Fish & Wildlife Compensation Program (Columbia Basin)

Doug Martin Senior Ecosystem Biologist, MFLNRO

Kris McCleary Environmental Science Coordinator, Parks Canada

Dan Murphy Coordinator, Rocky Mountain Trench Natural Resources Society

Andy Pezderic East Kootenay Wildlife Association

Ken Strelhoff Planning Superintendent, Tembec

Greg Tegart Regional Manager, Ministry of Agriculture

Jordy Thibeault Rancher, Kootenay Livestock Association

OPERATIONS COMMITTEE

Chair: Randy Harris Team Leader Ecosystem Restoration, Rocky Mountain District, MFLNRO

Randy Byford Forest Planner, Galloway Lumber Co. Ltd.

Sue Crowley Habitat Biologist, MFLNRO

Dean Draper Field Operations Supervisor, MFLNRO

Mike Gall Conservation Specialist, BC Parks

Gerry Grady Practices Forester, BC Timber Sales

Rae Haddow District Range Agrologist, MFLNRO

Larry Ingham Project Biologist, Fish & Wildlife Compensation Program (Columbia Basin)

Shawna Larade Range Agrologist, MFLNRO

Brent Lucas First Nations Liaison Officer, MFLNRO

Brad Munroe Kinbasket Development Corporation

Dan Murphy Coordinator, Rocky Mountain Trench Natural Resources Society

Rob Neil Kootenay Conservation Land Manager, The Nature Trust of British Columbia

Bill Redhead Nupqu Development Corporation

Darrell Smith Resource Stewardship Agrologist, Ministry of Agriculture

Gary Tipper Project Manager Rocky Mountain Trench, Nature Conservancy of Canada

Kori Vernier Silviculture Forester, Tembec

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