



**PHOTO:** Ecosystem restoration on Sunflower Hill, Kimberley Nature Park: logged winter 2006, prescribed burn spring 08.

## ER PROGRAM HIGHLIGHTS 2006-09

### 2006

■ The Ministry of Forests and Range announces a province-wide ecosystem restoration initiative modelled after the Rocky Mountain Trench Ecosystem Restoration Program and funded by the Forest Investment Account. The ER initiative is headed by Greg Anderson, founding chair of the Trench ER Steering Committee, and headquartered in Invermere. By 2009, fire-maintained ER programs are operating in 10 BC forest districts: Arrow Boundary, Cascades, Central Cariboo, Chilcotin, Fort Nelson, Kamloops, Okanagan-Shuswap, 100 Mile House, Rocky Mountain and Vanderhoof.

### 2007

■ Rocky Mountain Forest District hires Randy Harris as its first ecosystem restoration team leader. RMFD stewardship supervisor Dean Draper is assigned to work full-time on ER Program contracts.

■ The province's first ecosystem restoration non-renewable forest licences (NRFLs) are awarded to Tembec. Harvesting 56,000 cubic metres under the 2 licences is completed in 2009 and results in 929 hectares of Open Range on Cherry Tata and Sheep Creek North Range Units.

■ The Trench Society begins operations on its 2,000-hectare Waldo North Grasslands Restoration Pilot Project. By 2009, 900 ha are logged, 500 ha are hand slashed, and the project's

first monitoring report is published, comparing 2005 pre-treatment and 2008 post-treatment vegetation data.

■ Columbia Mountains Institute of Applied Ecology and the Society for Ecological Restoration BC Chapter host a sold-out conference in Cranbrook. *Ecological Restoration in Southeastern British Columbia - Grasslands to Mountaintops* features 20 presentations, including 6 on the Trench ER Program. The ER Steering Committee is a conference sponsor.

■ The cross-border Rocky Mountain Prescribed Fire Council is established to coordinate prescribed burns from Radium Hot Springs to Montana. Members are BC Ministry of Forests and Range, BC Parks, BC Ministry of Environment, Parks Canada, The Nature Trust, The Nature Conservancy of Canada, Regional District of East Kootenay, City of Kimberley, City of Cranbrook and Rexford Ranger District, Kootenai National Forest, Montana.

### 2008

■ The Trench ER Program's first 5-year plan is approved. The plan, to be updated annually, prioritizes projects, lays out an orderly progression of treatments for each project, develops annual implementation plans and budgets, coordinates activities among ER partners, provides information to stakeholders and First Nations, and meets requirements of the Forest and Range Practices Act and Kootenay Boundary Land Use Plan.

■ The Trench ER Program is a major beneficiary of federal and provincial job-creation grants aimed at workers impacted by the ongoing downturn in the BC forest industry and the global economic recession. Galloway Lumber receives the first grant in 2008. By mid-2009, the Trench Society, Tembec, S&D Hunt Logging and Purcell Resources have also received grants of varying amounts and duration. By March 2010, grants totalling over \$4 million will have provided short-term jobs for about 100 loggers, mill workers and professional foresters working on ER projects from Radium to Newgate. Juvenile stems on about 3,500 hectares are scheduled to be hand slashed, piled and burned.

■ The ER Steering and Operations Committees hold their first joint planning workshop. Four priority areas are identified:

- (1) Structure – Meeting Rules – Decision Making
- (2) Goals – Prioritization – Vision
- (3) Effectiveness Monitoring
- (4) Communications – Reporting In/Out.

■ The ER Program contracts with the East Kootenay Invasive Plant Council to treat about 2,300 hectares on ER project sites. A similar amount of work is funded in 2009.

### 2009

■ The ER Program, Nature Conservancy of Canada, Nature Trust of BC and Thunderhill Ranch agree to cooperatively manage 4,500 ha of Lewis's woodpecker habitat in the Dutch-Findlay area between Canal Flats and Fairmont.

■ Tembec is the successful bidder on 2 new restoration NRFLs totalling 65,000 cubic metres of sawlogs and pulpwood. Harvest area will cover a total of about 750-800 ha on Cherry Tata and St. Mary's Prairie Range Units.

# TRENCH ER PROGRAM: Treatment Summary (Crown Land)

Fiscal Year Apr 1 – Mar 31	Total Area hectares (ha)	Harvesting ha	Prescriptions ha	Slash/Thin ha	Pile & Burn ha	Prescribed Burn ha	Seeding ha	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*
*includes Mapping (\$10,880), Archaeological Surveys (\$9,000), Invasive Plant Control (\$10,000)								
<b>TOTALS</b>	<b>62,105</b>	<b>11,801</b>	<b>23,967</b>	<b>12,165</b>	<b>1,157</b>	<b>13,015</b>	<b>25</b>	<b>\$5,698,942</b>
<b>PROPOSED</b>								
<b>2009-10</b>	11,794	395	6,500	3,200	1,090	609	1,000	\$3,538,409

## Ecosystem Restoration: Parks & Conservation Properties

Agency	Locations
Parks & Protected Areas, BC Ministry of Environment	Premier Lake, Kikomun Creek, Norbury Lake, Wasa Lake & Dry Gulch Provincial Parks Wycliffe Corridor & Newgate (Earl Ranch) conservation properties
Parks Canada	Kootenay National Park: Redstreak Mountain (Radium Hot Springs)
Nature Conservancy of Canada	Kootenay River Ranch, Thunder Hill Ranch, Ashworth Hoodoos & Pine Butte Ranch conservation properties
Nature Trust of BC	Cherry Creek, Big Ranch, Columbia Lake West & Hoodoos-Hofert conservation properties



Kootenay River Ranch



Premier Lake Provincial Park



The Rocky Mountain Trench Ecosystem Restoration Program gratefully acknowledges the financial support of Columbia Basin Trust, which delivers social, economic and environmental benefits to the residents of the Columbia Basin.



## ER PROGRAM FUNDERS: 1997-2009

The Rocky Mountain Trench Ecosystem Restoration Program acknowledges with thanks the following funding sources. Their contributions have paid for restoration treatments on the ground, as well as associated activities such as research, monitoring, mapping, public outreach and communications.

Funds are used for projects on Crown land under ER Program management (see sidebar at right). The program works in partnership with all agencies undertaking ecosystem restoration in the Trench – including national and provincial parks, municipalities and conservation landowners – but does not fund their projects.

Ministry of Forests & Range	2,016,422
Fish & Wildlife Compensation Program	1,063,485
Job Opportunities Program	733,450
Habitat Conservation Trust Fund	534,818
Grazing Enhancement Fund	417,735
Forest Renewal BC	345,120
Rocky Mountain Elk Foundation	236,100
Columbia Basin Trust	126,500
Ministry of Environment	67,500
Land Use Coordination Office	60,000
Ministry of Agriculture	50,000
Premier's Special Sheep Permit Fund	20,000
Ministry of Transportation	16,177
Union of BC Municipalities Interface Fund	11,635
<b>TOTAL</b>	<b>\$5,698,942*</b>

\* to March 31, 2009

## CURRENT COST ESTIMATES

TREATMENT/ACTIVITY	LOWER	UPPER
One prescription	\$5,000	\$10,000
One prescription with cruise		\$20,000
Ribbon Wildlife Tree Patches	\$1,500 Dependent on size and complexity	\$4,000/ha
Slashing	\$90 Dependent on access and density	\$300/ha
Machine Thinning (Feller-buncher & Skidder)	\$800 Dependent on access and density	\$1,250/ha
Slash and Pile	\$300 Dependent on access and density	\$450/ha
Pile Burning	\$50 Dependent on access and density	\$300/ha
Sloop Burning		\$450/ha Plus slashing or piling
Prescribed Burns	\$15,000	\$35,000
Mastication		\$1,100/ha
Update Maps		\$5,000/yr
Archaeological Surveys		\$6,000/yr
Intensive Monitoring		\$40,000/yr



PHOTO: Waldo North Range Unit, site of the Trench Society's restoration pilot project, after logging in 2007.

## 2030 ER targets under review

About 249,000 hectares of Crown land in the Rocky Mountain Forest District are classified as fire-maintained or Natural Disturbance Type 4 (NDT4).

The ER Program's initial goal, published in *Blueprint for Action 2000*, was to have 135,000 ha of Crown NDT4 in Open Range (OR) or Open Forest (OF) condition by 2030, and to maintain those conditions in perpetuity.

With more accurate mapping, the extent of Crown NDT4 under ER Program management has been revised downward. *Blueprint for Action 2006* cited 118,500 ha. Further calculations now put the area under program management at 107,000 ha, or about 43% of total NDT4.

The numbers will undergo yet more analysis in 2010 to determine total hectares currently in OR/OF condition, total area still to be treated, and timeframe for all managed hectares to reach maintenance condition.

## ACTIVE ER MONITORING PROJECTS

Location	Objective	Agency
Cherry Creek Ranch	Overstory/Understory	TNT
Cherry Tata RU	Overstory/Understory	FWCP
Hoodoos/Hofert	Overstory/Understory	FWCP/TNT
Kikomun Cr Prov Park	Overstory/Understory	BCP
Kootenay Natl Park	Overstory/Understory/ Bighorn Sheep	PC
Kootenay R Ranch	Overstory/Understory/ Bird Life	NCC
Lewis Wolf RU	Overstory/Understory	FWCP
Newgate RU	Overstory/Understory	FWCP
Powerplant RU	Overstory/Understory	FWCP
Sheep Cr North RU	Understory	MoFR
Waldo North Project	Overstory/Understory	TS
W'mere Fairmont RU	Overstory/Understory	FWCP
Wolf Premier RU	Overstory/Understory	FWCP
Wolf-Sheep RU	Understory	MoFR

**AGENCIES:** TNT – Nature Trust of BC, FWCP – Fish & Wildlife Compensation Program, BCP – BC Parks, PC – Parks Canada, NCC – Nature Conservancy of Canada, MoFR – Ministry of Forests & Range, TS – Trench Society.

# 5 YEAR PLAN: Restoration Treatment Priorities

## LEGEND

- L = Likelihood of unfavourable outcome. C = Consequences of unfavorable outcome. 5 = high 1 = low.
- Interface Fire: based on spotting potential. 5 = high 1 = low.
- Non-Game Species: based on rare and endangered species, excluding bighorn sheep. 5 = high 1 = low.
- Ungulates: based on % of Class 1 Winter Range for elk and bighorn sheep. 5 = high 1 = low.
- Forage Crunch: based on wildlife and cattle requirements. 10 = major shortage 5 = minor shortage 0 = no shortage.
- Biodiversity: based on listed plant communities. 5 = high 1 = low.
- Planning: based on planning constraints. 20 = no constraints 10 = minor constraints 0 = major constraints.
- Economical: based on economic constraints. 20 = no constraints 10 = minor constraints 0 = major constraints.
- Regional Priority: based on stakeholder priorities. 20 = high 10 = medium 0 = low.

Range Unit	Score	Interface Fire		Non-Game Species		Ungulates		Biodiversity		Forage Crunch	Planning	Economical	Regional Priority
		L	C	L	C	L	C	L	C				
<b>Possible Score</b>	<b>170</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>10</b>	<b>20</b>	<b>20</b>	<b>20</b>
Tata Skook	119	2	2	5	5	3	3	4	4	0	10	20	20
Powerplant	119	2	2	5	5	3	3	4	4	5	20	20	20
E Columbia Lake	116	3	3	4	4	5	5	4	4	0	10	20	20
Newgate	114	2	2	5	5	3	3	4	4	10	20	20	20
Dutch-Findlay	110	2	2	4	4	3	3	4	4	5	20	20	20
Westside	110	4	4	4	4	3	3	3	3	0	20	20	20
St. Mary's	108	3	3	3	3	3	3	4	4	5	20	20	20
Cherry Tata	106	2	2	4	3	3	3	4	4	5	20	20	20
Waldo South	103	4	4	2	2	2	2	3	3	10	20	20	20
Premier Ridge	101	1	1	3	2	5	5	3	3	0	20	20	20
W'mere/Sinclair	98	4	4	2	2	3	3	3	3	0	20	20	20
Gold-Plumbob	95	1	1	4	4	3	3	3	3	10	20	20	20
Sheep Cr North	93	1	1	3	3	3	3	3	3	5	20	20	20
Peckham's	92	2	2	2	2	5	5	3	3	10	20	20	20
Pickering Hills	88	2	2	3	3	3	3	4	4	10	0	20	20
Rampart & Tokay	86	2	2	3	3	3	3	2	2	10	20	20	20
W'mere-Fairmont	73	4	4	2	2	3	3	2	2	0	20	10	10
Wildhorse-Lewis Cr	68	1	1	3	3	3	3	3	3	0	10	20	10
Lewis/Wolf	62	2	2	2	2	4	5	2	2	0	10	10	10
Findlay	52	1	1	1	1	1	1	3	3	0	20	10	10



*NRFL logging, Airport Pasture, Cherry Tata Range Unit*



*Lewis' woodpecker habitat, Dutch-Findlay Range Unit*