

BC/TNT Joint Conservation
Land Management Program

(Wildlife O&M)



2016 -19
Provincial Application
Part 2

HCTF Project # 0-451

THOMPSON-OKANAGAN



THOMPSON-OKANAGAN
YEAR 1
Proposed Annual Activities

Thompson - Okanagan Region Property/Complexes Included in Plan

2016-17

Please list the property/complexes listed in the budget spreadsheet for year 1 of your plan.

Antlers Saddle Complex

Dewdrop - Rosseau WMA

Duck Meadows (LEA 1), Duck Meadows (LEA 2)

Keremeos Creek (LEA) -- Wainright

Kilpoola Lake (LEA)

McTaggart Cowan WMA

Okanagan Falls Biodiversity Ranch

Salmon Arm Bay (LEA)

Shorts Creek

Skaha Lake East (LEA 1, Skaha Lake East (LEA 2)

South Okanagan WMA Complex

Trust Creek (LEA 1) -- Mackenzie/Hamlin , Trust Creek (LEA 2) -- Ritchie

VASEUX LAKE – EAST, WEST, NORTH: Vaseux Lake (LEA 9) -- Sub-lot 15, Vaseux Lake (LEA 10) -- Sub-lot 35, Vaseux Lake (LEA 7) -- Salter

Vaseux Lake (LEA 1) -- Winters/MacIntyre Bluff

Vaseux Lake (LEA 11) -- Thomas Ranches, Vaseux Lake (LEA 2) – Brock, Vaseux Lake (LEA 3) -- Brock/Mavety

Vaseux Lake (LEA 4) – Emery, Vaseux Lake (LEA 5) -- Franmar

Vaseux Lake (LEA 8) -- Schneider

Vernon (LEA) -- Swan Lake

White Lake Basin Biodiversity Ranch

THOMPSON-OKANAGAN
YEAR 2
Proposed Annual Activities

Thompson - Okanagan Region Property/Complexes Included in Plan

2017-18:

Please list the property/complexes listed in the budget spreadsheet for year 2 of your plan.

Antlers Saddle Complex

Duck Meadows (LEA 1), Duck Meadows (LEA 2)

Keremeos Creek (LEA) -- Wainright

Kilpoola Lake (LEA)

McTaggart Cowan WMA

Okanagan Falls Biodiversity Ranch

Salmon Arm Bay (LEA)

Shorts Creek

Skaha Lake East (LEA 1, Skaha Lake East (LEA 2)

Skull Mountain (NEW - ACQ)

South Okanagan WMA Complex

Swan Lake WMA (NEW – pending designation)

Trust Creek (LEA 1) -- Mackenzie/Hamlin , Trust Creek (LEA 2) -- Ritchie

Vaseux Lake – EAST, WEST, NORTH: Vaseux Lake (LEA 9) -- Sub-lot 15, Vaseux Lake (LEA 10) -- Sub-lot 35, Vaseux Lake (LEA 7) -- Salter

Vaseux Lake (LEA 1) -- Winters/MacIntyre Bluff

Vaseux Lake (LEA 11) -- Thomas Ranches, Vaseux Lake (LEA 2) – Brock, Vaseux Lake (LEA 3) -- Brock/Mavety

Vaseux Lake (LEA 4) – Emery, Vaseux Lake (LEA 5) -- Franmar

Vaseux Lake (LEA 8) -- Schneider

Vernon (LEA) -- Swan Lake

White Lake Basin Biodiversity Ranch

**Green text indicates property/complexes new for this cycle*

THOMPSON-OKANAGAN
YEAR 3
Proposed Annual Activities

Thompson - Okanagan Region Property/Complexes Included in Plan

2018-19:

Please list the property/complexes listed in the budget spreadsheet for year 3 of your plan.

Antlers Saddle Complex

Dewdrop-Rosseau WMA

Duck Meadows (LEA 1), Duck Meadows (LEA 2)

Keremeos Creek (LEA) -- Wainright

Kilpoola Lake (LEA)

McTaggart Cowan WMA

Okanagan Falls Biodiversity Ranch

Salmon Arm Bay (LEA)

Shorts Creek

Skaha Lake East (LEA 1, Skaha Lake East (LEA 2)

Skull Mountain (ACQ)

South Okanagan WMA Complex

Swan Lake WMA (pending designation)

Trust Creek (LEA 1) -- Mackenzie/Hamlin , Trust Creek (LEA 2) -- Ritchie

Vaseux Lake – EAST, WEST, NORTH: Vaseux Lake (LEA 9) -- Sub-lot 15, Vaseux Lake (LEA 10) -- Sub-lot 35, Vaseux Lake (LEA 7) -- Salter

Vaseux Lake (LEA 1) -- Winters/MacIntyre Bluff

Vaseux Lake (LEA 11) -- Thomas Ranches, Vaseux Lake (LEA 2) – Brock, Vaseux Lake (LEA 3) -- Brock/Mavety

Vaseux Lake (LEA 4) – Emery, Vaseux Lake (LEA 5) -- Franmar

Vaseux Lake (LEA 8) -- Schneider

Vernon (LEA) -- Swan Lake

White Lake Basin Biodiversity Ranch



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Keremeos Creek

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Keremeos Creek

2. Habitat Description / Values:

This property is located in the very dry hot bunchgrass biogeoclimatic sub-zone variant of the southern Similkameen Valley. It contains 5 biophysical habitat types: Stream, black cottonwood - red-osier dogwood floodplain, water birch - red-osier dogwood swamp, gravel bar and shallow open water (likely transient during freshet). A flood control dike also runs through the property, along the river. Approximately 19.6 ha are within the dike, with 17 ha outside the dike. At the time of acquisition, only one small property of private land in the lower Similkameen had been protected by a conservation organization (Ginty's Pond). The habitat types on the Keremeos Creek property are capable of supporting many rare species of fish, birds, bats, amphibians, reptiles and mammals. These include: Umatilla Dace, Mottled Sculpin, Chisselmouth, Yellow-breasted Chat, Tiger Salamander, Night Snake, Great Basin Spadefoot, Painted Turtle, Western Screech Owl, Lewis' Woodpecker, Nuttall's Cottontail and Western Harvest Mouse.

The site is adjacent to about 15 ha of crown land and borders the Similkameen River, which is also maintained as Crown. Ginty's Pond is not directly connected but is nearby. The north and east sides of the site are hobby farms, orchards and residential developments. The property is a good example of riparian property and features a large stand of cottonwoods.

3. Guiding Documents:

TNT/Province Lease Agreement, 1996
TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

Close proximity to Provincial Conservation holdings and Regional parks provides opportunities for cost sharing partnership and collaboration.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Maintain Biological diversity	1: encourage public awareness and sustain traditional recreational uses	1: Signs maintained 2:	1: Public informed of habitat values and property goals 2:
	2: Maintain good relations with the neighbouring communities and First nations	1: 2:	1: 2:
Goal 2: To sustain natural habitats and unique flora and fauna	1: Continue invasive species management	1: decreased occurrence of invasive species 2:	1: Biodiversity maintained 2:
	2: Compile and update vegetative and wildlife species inventory data	1: Inventories completed for wildlife and ecological communities	1: Biodiversity maintained 2:



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

		2:	
Goal 3:	1: Conduct risk assessments for “non-built” hazards (e.g. wildlife trees)	1: inspections are completed and deficiencies /risks are addressed	1: public continues to enjoy a safe environment for wildlife viewing and interpretation



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Kilpoola Lake

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Kilpoola Lake

2. Habitat Description / Values:

This property includes a diversity of important habitats within the vegetative zone defined by riparian lakeshore through a mix of open bunchgrass grasslands (primarily big sagebrush), aspen copses, and open, dry coniferous woodlands dominated by Douglas-fir with scattered Ponderosa Pine. The site contains habitat for several listed wildlife species including snakes, amphibians, and bats. Feature species on the property include tiger salamander (to be confirmed) and Brewer's Sparrow, with capability for other listed species including Sage Thrasher, Whiteheaded Woodpecker, Grasshopper Sparrow. It is also prime habitat for many mammals, including Spotted Bat and Nuttall's Cottontail, and amphibians, such as Great Basin Spadefoot Toad and Tiger Salamander

This diversity of habitats in the area creates a situation of high avian diversity, and make this site a favourite among BC birdwatchers (makes up part of the Kilpoola Lake Important Bird Area). The site hosts many rare or endemic species of fauna and flora, such as Merriam's Shrew and Lyall's Mariposa Lily (found in the high country above Kilpoola Lake), which occur nowhere else in Canada.

3. Guiding Documents:

TNT/Province Lease Agreement, 1994
Kilpoola Lake Management Plan 1994
TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

Rental income from field house, possible site for a field research station. Close proximity to Provincial Conservation holdings of BC Parks provides opportunities for cost sharing partnership and collaboration.

5. Partner Recognition:

Boundary and regulatory signs include the Province's logos. All publications/interpretive/restorative/ enhancement signage includes the logos of all funding partners including HCT



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide, enhance, and maintain habitat for wildlife and plant diversity	1: Ensure perimeter fencing is in place to limit trespass of agriculture/cows and recreational vehicles	1: Annual property inspection 2:	1: Biodiversity maintained 2: Decreased prevalence of invasive species
	2: Maintain signage to ensure no unauthorized or incompatible anthropogenic uses	1: Signs are maintained 2:	1: Biodiversity maintained 2:
Goal 2: Maintain biological diversity and where compatible sustain traditional uses	1: encourage public awareness and sustain traditional recreational uses	1: Signs are maintained 2:	1: Fishing and hunting opportunities maintained 2:
	2: Maintain good relations with the neighbouring communities and First nations	1:	1



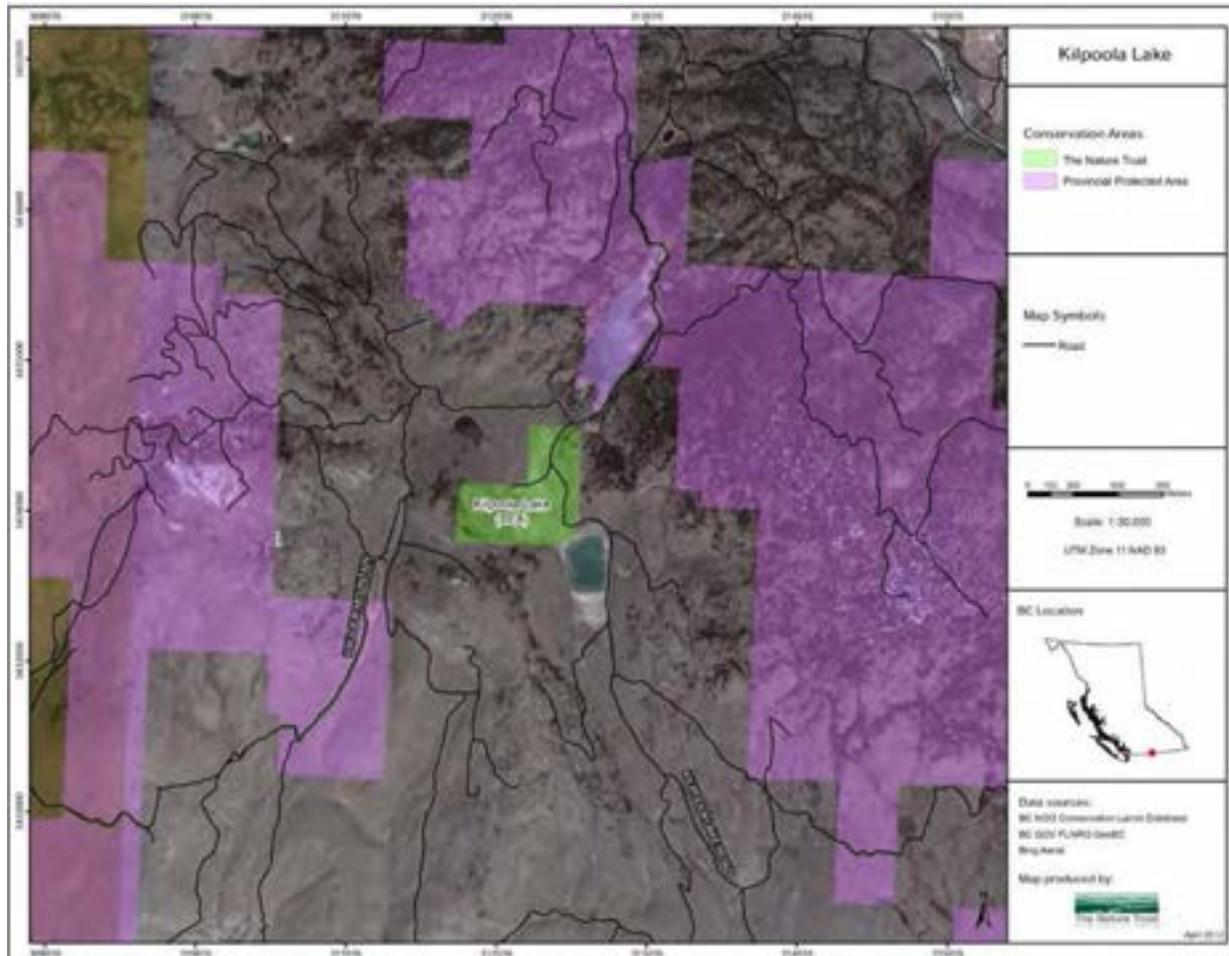
Project File #: _____

Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

		2:	2:
Goal 3: Public Safety	1: Inspect and maintain built facilities on site	1: inspections are completed and deficiencies /risks are addressed	1: public continues to enjoy a safe environment for wildlife viewing



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Salmon Arm Bay

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: SALMON ARM BAY

2. Habitat Description / Values:

This 22.4 hectare property was acquired to conserve and enhance waterfowl habitat, particularly for the Western Grebe, in Salmon Arm Bay. This area is of provincial significance since it is one of the few Western Grebe nesting sites in BC. There are also confirmed sightings of Clark's Grebes. The Western Grebe is a red-listed species because it has few active breeding sites (3 regular breeding sites in the province) which are vulnerable to habitat erosion and human disturbance.

The area is also important for other waterfowl. Ducks occur in greatest numbers in the spring and fall, particularly Mallard, Widgeon, Northern Pintail and Green-winged Teal. Herons fish along the foreshore. Raptors in the area include eagles, osprey and kestrels. Reptiles and amphibians in the area include painted turtles, garter snakes (two species), alligator lizards, western skinks, western toads and pacific treefrogs. The foreshore vegetation provides important fish habitat, especially for Chinook and Coho Fry in April - July.

3. Guiding Documents:

TNT/Province Lease Agreement, 1989
Salmon Arm Bay Properties Habitat Management Plan, 2004
TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

This property is stewarded by the Salmon Arm Bay Nature Enhancement Society (SABNES), which keeps Nature Trust management requirements to a minimum.

5. Partner Recognition:

Informational property signs acknowledge acquisition partners. Future signage, and any press releases, will acknowledge all funding and management partners.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Maintain functional ecosystems and where possible, enhance plant and animal resources in concert with the broader resources of the bay area	1: Inspect property for concerns when opportune, and create work plan	1: Property inspection completed and necessary works planned 2: Invasive species addressed	1: Maintained biodiversity and habitat. 2:
	2: Monitor and manage invasive plants, including thistle and reed canary grass	1: 2:	1: 2:
Goal 2: Allow compatible public recreational and educational use of the area only to the extent that it does not conflict with Goal 1	1: Ensure that informational signage and facilities, where present, are maintained	1: Signs maintained 2: Facility inspections are completed and deficiencies /risks are	1: Public is informed of habitat values and property goals 2:

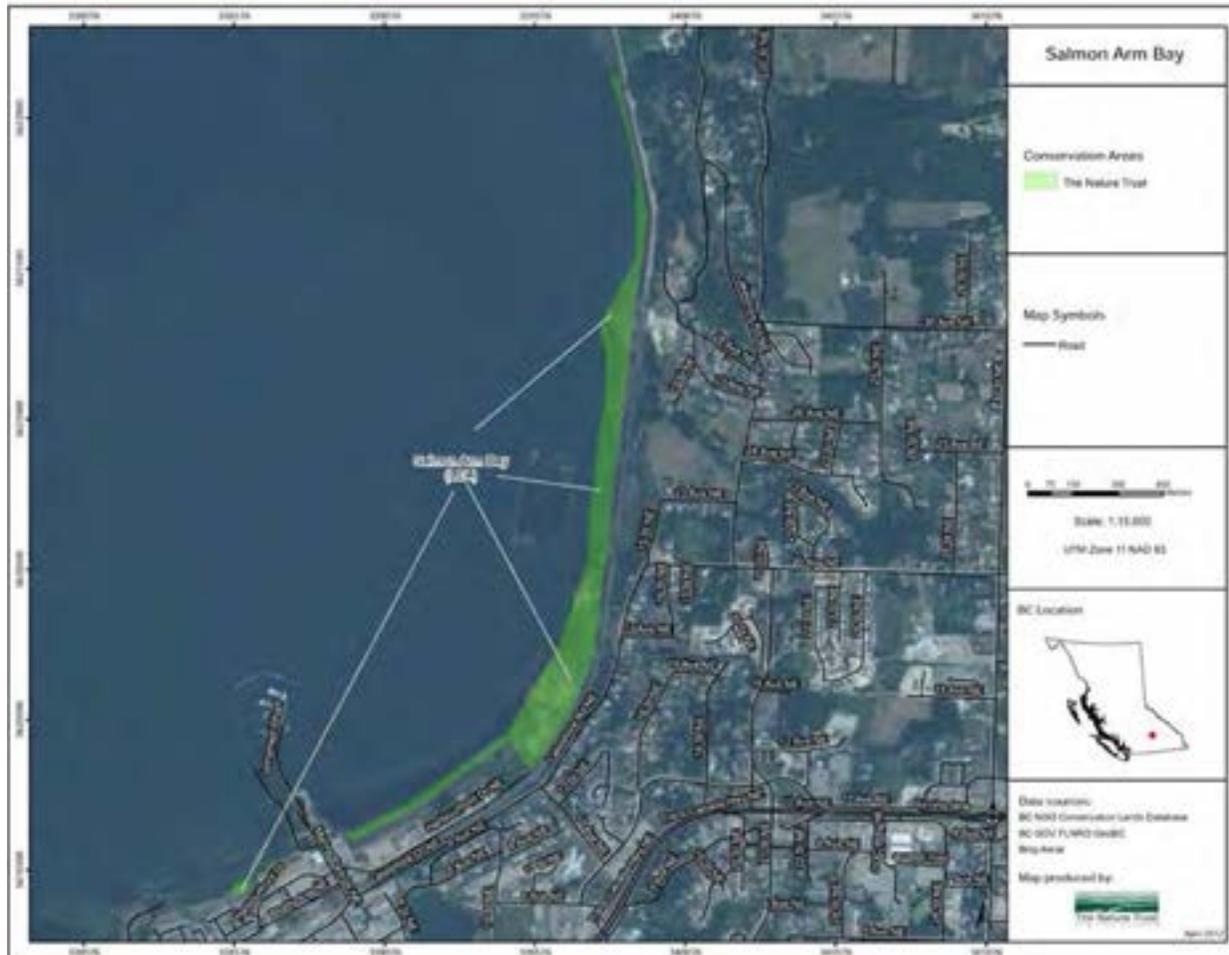


**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

		addressed	
	2: Enforce public access restrictions (i.e. dogs on leash).	1: Public access restrictions are enforced 2:	1: Balance between public use and habitat protection is maintained 2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Schneider Property

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Schneider Property

2. Habitat Description / Values:

The Schneider property spans the foot of the valley hillside, east of Okanagan Falls. Adjacent lands to the North-Okanagan Falls Biodiversity Ranch, and South-Vaseux Lake, are owned by the Nature Trust. The property is generally steep, with an overall slope to the northwest of 15% to 20%. Vegetation is dominated by antelope brush grassland, with park-like ponderosa pine and Douglas-fir forest occupying the steeper terrain hollows.

The majority of the lands on this property are in a relatively natural condition. The predominant features on this property include steep compound slopes, rock outcroppings, ponderosa pine parkland forest and antelope brush and blue-bunch wheatgrass grassland. Species found on the property include California Big Horn Sheep, Western-rattlesnake, Lewis's Woodpecker, and pallid bat.

3. Guiding Documents:

NT/Province Lease Agreement, 1994

Schneider Management Unit Plan, 1997

POSTFLEDGING HABITAT USE AND MOVEMENTS OF

BREWER'S SPARROWS (SPIZELLA BREWERI BREWERI) IN THE S. OK. REGION, 1999

Silviculture Plan for Schneider Property (S.L. 10), 2000

Herbicide Demonstration on Schneider Property, 2000

TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

Close proximity to Vaseux Lake Conservation holdings provides opportunities for cost sharing partnerships and collaborations.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife and plant	1: Manage invasive species	1: decreased occurrence of invasive species 2:	1: Decreased prevalence of invasive species 2:
	2: Develop and maintain vegetation management strategy and restoration plan	1: biodiversity maintained or increased where applicable 2:	1: biodiversity maintained or increased where applicable 2:
Goal 2: Maintain biological diversity, and sustainably manage cattle	1: Maintain existing monitoring programs to ensure that detrimental impacts are prevented or minimized	1: monitoring completed 2:	1: Biodiversity maintained 2:
	2: Ensure perimeter fencing is in place to limit trespass of agriculture/cows and recreational users	1: fences maintained 2:	1: recreational use continues where applicable



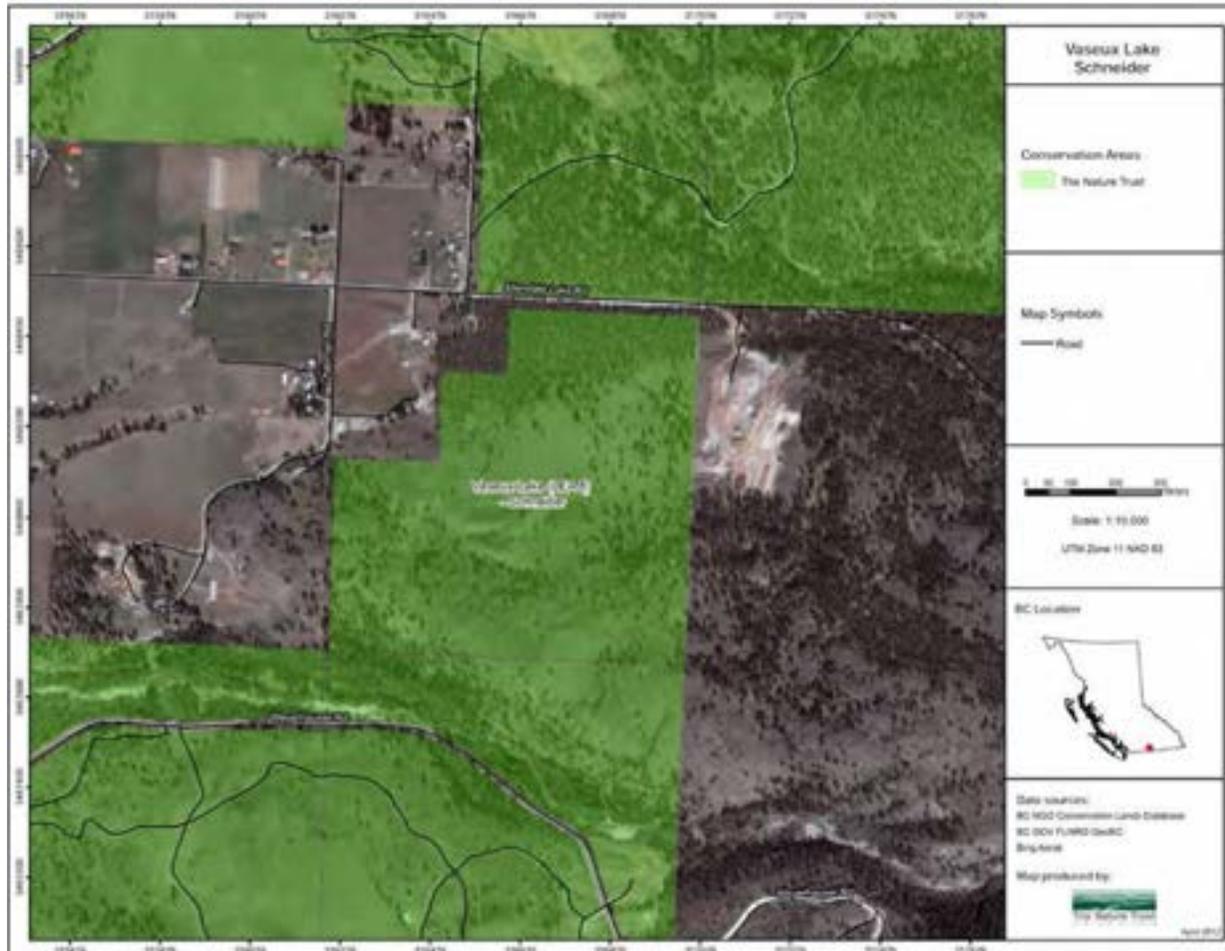
Project File #: _____

**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

			2:
	3. Review RUP and work with Range Tenure holder to ensure BMP are being met.	1: RUP reviewed 2:	1: Cattle managed for biodiversity and SAR 2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Shorts Creek

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Shorts Creek

2. Habitat Description / Values:

Shorts Creek originates near the Okanagan-Nicola Divide at an elevation of 5600 feet, and flows in an easterly direction. Upper Shorts Creek occupies a prominent, deeply incised valley with steep, nearly perpendicular walls rising to plateau levels nearly 3000 feet above the valley floor. Because of its wide elevation spread (5200 - 2200 feet) the upper valley offers a broad spectrum of ecological niches for both flora and fauna. The area sustains predatory birds, black bear, cougar, coyote, mule deer, whitetail deer and bighorn sheep.

The Shorts Creek Valley is an area of rolling wooded hillside or natural grazing areas with Shorts Creek running through the centre. Bighorn sheep pass through the area, and it is a lambing ground. It is also a good example of a relatively undisturbed ponderosa pine/bunchgrass association. This property is strategically situated at the entrance to a dramatically beautiful and environmentally unique Valley. Shorts Creek contains not only the last remnant herd of Bighorn Sheep in the North Okanagan but it is also host to several rare plants including false yarrow (*Chaenactis alpina*), a first finding in BC, the mountain hollyhock (*Iliamna revularis*) and an unusual flame flower (*Talinum okanoganese*). This property is topographically and ecologically representative of the lower elevations of the Shorts Creek Valley and protects a fine stretch of creek and is essentially the "plug" to the narrow valley where the bighorn sheep are found.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

3. Guiding Documents:

TNT/Province Lease Agreement, 1984
TNT/Province Management Agreement 2011

4. Financial Sustainability:

Proximity to Provincial conservation holdings of BC Parks provides opportunity for cost sharing partnership and collaboration

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

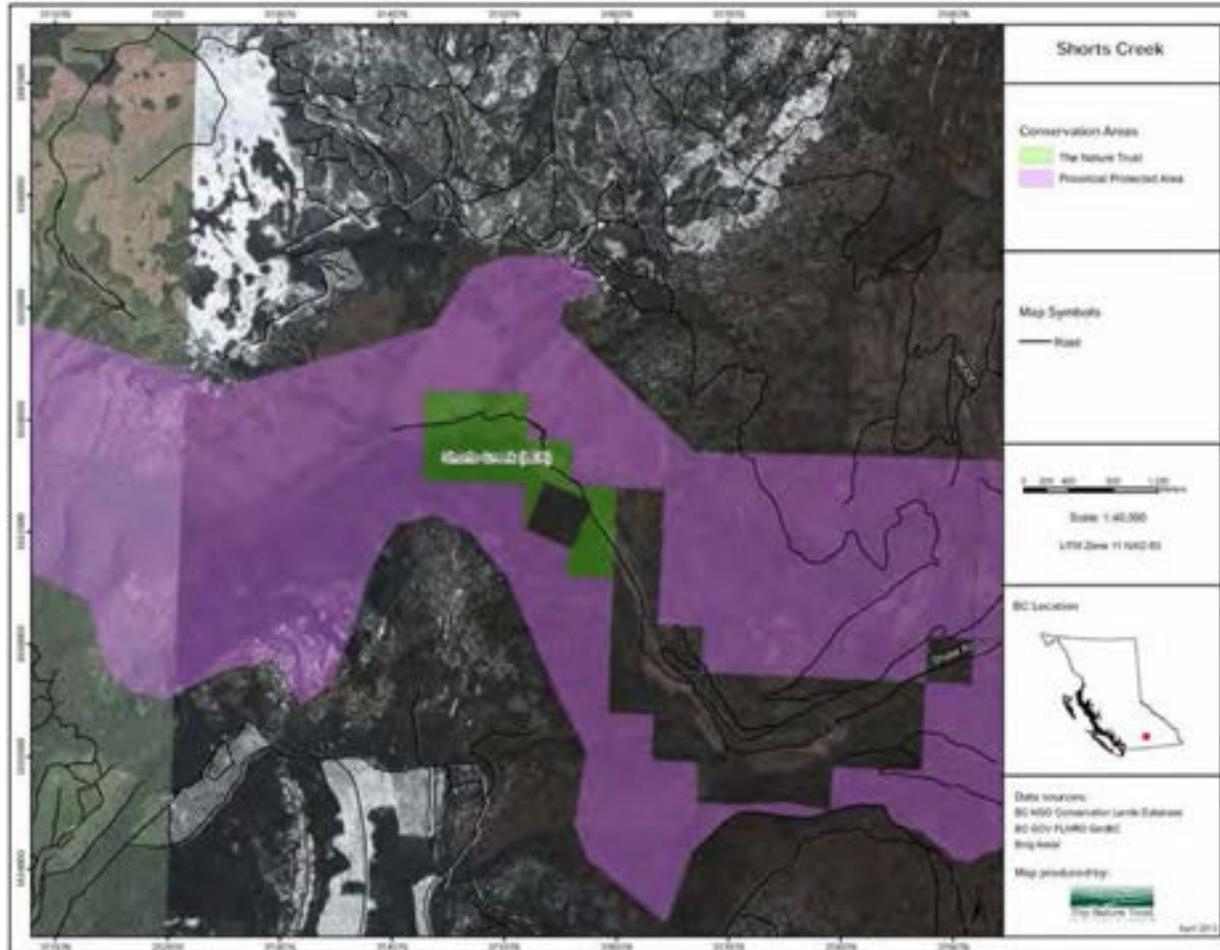
6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife (in particular Big Horn sheep) and plant diversity	1: Manage invasive species	1: Decreased occurrence of invasive species 2:	1: Decreased prevalence of invasive species 2: Biodiversity maintained
	2:	1: 2:	1: 2:
Goal 2: Maintain biological diversity	1: Maintain good relations with the neighbouring communities and First nations	1: Signs are maintained 2:	1: Public informed of habitat values and property goals 2:
Goal 3: Public Safety	1: Conduct risk assessments for “non-built” hazards (e.g. wildlife trees)	1: inspections are completed and deficiencies /risks are addressed	1: Public Safety maintained



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Skaha Lake - Eastside

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Skaha Lake - Eastside

2. Habitat Description / Values:

One of the last remaining low elevation grassland benches on the east side of Skaha Lake, this 116.28 hectare property was purchased to conserve critical winter and early spring habitat of a Band of Bighorn sheep. The area is representative dry interior grassland/Douglas fir/Ponderosa pine habitat, and was in threat of residential development. The aspect is primarily south west; with elevations ranging from lake level at 340 m to 925 m at the northwest corner. Lower slopes are open range, consisting primarily of a grass and forb community. Upper slopes give way to rock outcroppings and rock faces with Douglas fir/ponderosa pine forest cover occurring on ledges and in draws. Two intermittent creeks flow through the parcels. A small pond on the lower portion of the West boundary provides both a buffer from the road (preventing road kill along increasingly busy eastside road) as well as a source of water. The property is bordered by Skaha Lake to the west, with private holdings to the north and south, and Crown land to the east.

3. Guiding Documents:

TNT/Province Lease Agreement, 1988
TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

Proximity to Provincial conservation holdings, BC Parks, WMA, provides opportunity for cost sharing partnerships and collaboration

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife (in particular Big Horn sheep) and plant diversity	1: Continue invasive plant management along road/power right-of-way, prevent spread into surrounding areas	1: inventories completed for invasive 2: Utility right-of-way plans reviewed for conservation concerns	1: Biodiversity maintained 2: Improved awareness of conservation concerns by Utility companies in area
	2: Continue public trail closures on steep sections prone to erosion, to help reduce anthropogenic disturbance.	1: 2:	1: Biodiversity maintained 2: Improved awareness of conservation concerns by Public and local community
Goal 2: Maintain biological diversity and where compatible sustain traditional uses	1: encourage public awareness and sustain traditional recreational uses	1: Signs maintained 2:	1: Public informed of habitat values and property goals 2:



Project File #: _____

Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Goal 3: Public Safety and appearance	1: Maintain signage and routine inspection of parking area	1: signs Maintained 2:	1: Public continue to enjoy a safe environment for wildlife viewing and interpretation 2:
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Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name:

Region:

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Swan Lake Property

2. Habitat Description / Values:

This property, at 3.24 hectares, maintains a long narrow stretch of low lying pasture with an estimated 3,900 feet of foreshore along Swan Lake. The lot is level with an indefinite shoreline with extensive areas of marsh, cattails, reeds, sedges, except for approximately 50% of the northern portion which is subject to a high water table with reduced utility. Swan Lake is one of the most important wetland habitats in the south central interior of British Columbia.

Regionally, wetlands are an endangered habitat type due to encroachment and degradation brought about by human settlement and land development. The lake is a resting and feeding stop for migratory birds in the spring and fall. Over 200 bird species occur at the lake. In the past, Swan Lake was nationally recognized for its value to staging and breeding waterfowl and contained a rare nesting colony of western grebe, which has now disappeared, but may be recoverable with proper management. Status as a bird sanctuary was first proposed in 1922. The lake and surrounding upland have local significance for small mammal, reptilian and amphibian production.

3. Guiding Documents:

TNT/Province Lease Agreement, 1993
TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

Duck Unlimited recently acquired property within the Swan Lake area, possible collaboration and partnership opportunities exist. North Okanagan Naturalist Club acts as onsite warden.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife and plant diversity	1: Manage invasive species	1: decrease occurrence of invasive species 2:	1: Decreased prevalence of invasive species 2:
	2: Work with neighboring land owners to inform about conservation concerns	1: 2:	1: 2:
Goal 2: Maintain biological diversity	1: Maintain good relations with the neighbouring communities	1: Partnerships developed/maintained with local communities/groups 2:	1: Stewardship of the area being led by local community 2:
Goal 3: Public safety	1: Annual property inspection	1: Annual property inspection	1: Biodiversity maintained



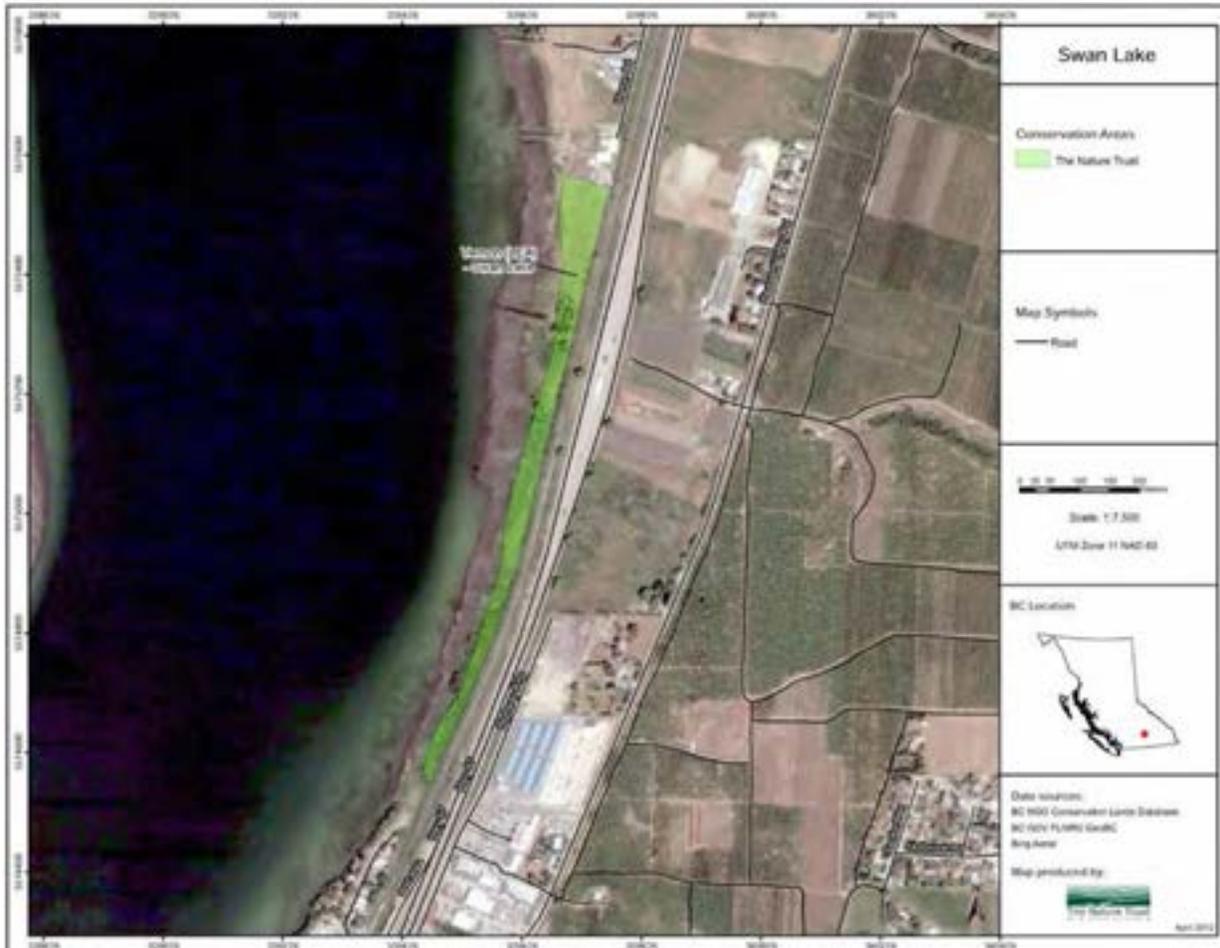
Project File #: _____

**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

		completed	
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Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Trust Creek Property

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Trust Creek Property

2. Habitat Description / Values:

The Trust Creek area north of Naramata is the largest intact vestige of the very hot, dry bunchgrass biogeoclimatic zone on the east side of Okanagan Lake. The area is comprised of several properties, totaling 89 ha. A matrix of habitat types occur in close proximity including: lakeshore, lacustrine escarpment and bench, ravines, rock-outcroppings, talus, cliffs and coniferous forests. The habitat types could potentially support many species of conservation concern, including: lark sparrow, common poorwill, Lewis's woodpecker, prairie falcon, badger, great basin pocket mouse, Nuttall's cottontail, western rattlesnake, spotted bat and Townsend's big eared-bat among others. The property also supports significant archaeological values including pictographs, Indian cache pits, the remains of a historic trail used by natives and traders, as well as considerable interest by First Nations people regarding native plants. This area is conserved with a combination of acquisition, conservation covenants and private land stewardship on the four key properties, thereby preserving significant habitat values and linking corridors between the privately held conservation lands and crown land to the north and east.

3. Guiding Documents:

TNT/Province Lease Agreement, 1996
TNT/Province Management Agreement 2011
TNT Weed Management Strategy 2001



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

Due to the limited access of this conservation area complex there are limited partnerships to generate additional revenue however there is a volunteer warden on the property.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide, enhance and maintain habitat for wildlife and plant diversity	1: Annually inspect property for concerns	1: decreased occurrence of invasive species 2:	1: Biodiversity maintained 2:
	2: Manage invasive species	1: 2:	1: 2:
Goal 2: Maintain Biological diversity and where compatible sustain traditional use	1: Maintain archeological values on property	1: Annual inspections completed 2:	1: Stewardship of the area being led by local community 2:
	2: Sustain traditional uses of land regarding native plants	1: 2:	1: 2:



Project File #: _____

Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Goal 3: Public Safety	1: Conduct risk assessments for “non-built” hazards (e.g. wildlife trees)	1: Inspections completed deficiencies/risks are addressed	1: Increased awareness of conservation concerns by public
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Project File #: _____

Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Vaseux Lake – Brock & Thomas

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Vaseux Lake – Brock & Thomas

2. Habitat Description / Values:

The Vaseux Lake-Brock Box Canyon (LEA 2) and Thomas Ranches (LEA 11) Unit spans rocky outcrops and grassland benches at the foot of the valley hillside, southeast of Okanagan Falls. The unit is generally steep, dominated by southern and western aspects. Rocky outcrops and terraces rise to more than 200 feet above the paved access road. Vegetation is characterized by rolling antelope brush grassland interspersed with large pockets of sagebrush, with parkland ponderosa pine and Douglas-fir occupying steeper terrain and hollows. A steep sided canyon, containing a moist paper birch gully, runs through northeastern portion of the unit. A small water reservoir occupies the hollow above the northern opening of the canyon. Also located on the unit are a hayfield and lands previously cultivated to vineyards.

The lands comprising this unit were originally acquired because they contain critical habitat including a substantial area of endangered antelope brush ecosystem, and Class 1 and 2 winter range for California Bighorn Sheep. Also, this unit adjoins other conservation holdings and crown lands containing a variety of complementary habitat types.

3. Guiding Documents:

TNT/Province Lease Agreement, 1994
Thomas-Brock Management Unit Plan 1997
South Okanagan Rare Bat Inventory 2000
Post-Fire Weed Management within the Vaseux Fire Final Report-2004
Weed Management Strategy for Brock Irrigated Field 2001
TNT/Province Management Agreement 2011



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

As per the management plan for this property complex the Vaseux Conservation Strategy-Management Unit Plan has been in place since 1997 and includes representatives from CWS, the Province, and TNT

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF



**Wildlife Operations & Management
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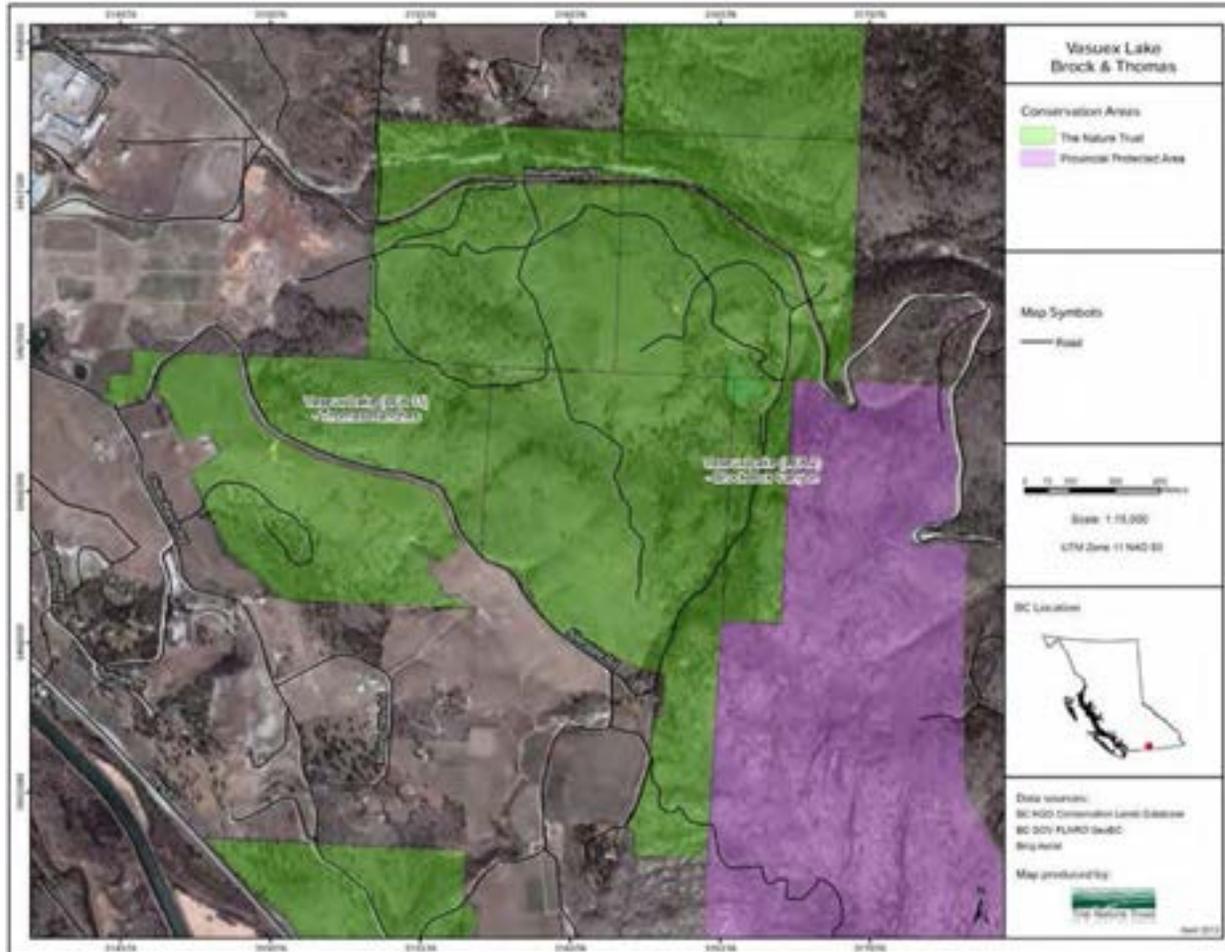
6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife and plant diversity	1: Manage Invasive species	1: continue involvement in SOSIPS now OASIS 2:	1: Decreased prevalence of invasive species 2:
	2: Maintain fences and signage to prevent trespass	1: 2:	1: 2:
Goal 2: Maintain biological diversity	1: Maintain existing monitoring programs to ensure that detrimental impacts are prevented or minimized	1: Annual monitoring completed	1: Biodiversity maintained 2:
	2: Ensure Utility Right-of-way holder minimizes impacts to conservation values	1: 2-Utility right-of-way plans reviewed for conservation concerns 2:	1: Improved awareness of conservation concerns by Utility companies in area 2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: VASEUX LAKE – EAST, WEST, NORTH

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: VASEUX LAKE – EAST, WEST, NORTH

2. Habitat Description / Values:

The Northwest Upland Management unit, made up of Vaseux Lake (LEA 3, 9 and 10), extends above the eastern shores of Vaseux Lake. Water birch-red-osier dogwood swamp hugs much of the shore line. This riparian area gives way to upland slopes and benches consisting primarily of open ponderosa pine forest, and antelope brush grassland. These benches in turn, give way to rocky cliffs and outcrops, talus slopes, and higher elevation bluebunch wheatgrass grassland and ponderosa pine forest. The rocky cliffs on this unit are of particular importance, as they provide critical habitat for California Big Horn Sheep, in addition to supporting snake dens, bat roosts and nesting sites for Canyon Wrens and White-Throated Swifts. The unit's location, view-points and close proximity to Highway 97 and Oliver Ranch Road, provide ideal opportunities for interpretive/educational development.

The Westside Management Unit, made up of Vaseux Lake (LEA 7), extends above the western shores of Vaseux Lake. The majority of land in this management unit is in a relatively natural condition. The predominant features include towering cliffs, steep rocky outcroppings, antelope-brush grassland benches, parkland ponderosa pine forest. Bluebunch wheatgrass grassland and Douglas-fir stands are found in the higher elevation areas.

The Long property-16.4 hectares, makes up the Long Management Unit of the Vaseux Conservation Strategy. The property is uniformly steep hillside, with low moisture holding capacity and adverse topography due to unstable, exposed bedrock. The parkland forest, dominated by mature ponderosa pine and bluebunch wheatgrass, is punctuated by rock outcroppings and avalanche chutes. The upper areas are mostly invasive plant free and anthropogenic disturbances are not apparent. The property lies midway between Vaseux Lake



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and White Lake, and it's purchase contributes to building a protected connection between these two areas. The property supports habitat for many Red and Blue listed wildlife species and plant communities, including White-headed woodpecker, Pallid bat, and the Night Snake.

There are numerous species at risk dependent on the antelope-brush plant community within the Okanagan Valley including the threatened Behr's Hairstreak butterfly (*Satyrrium behrii*). The open forest habitat provides shelter and is class 1 and 2 winter range for ungulates. The properties also support habitat for many other Species at Risk including, Nuttall's cottontail, Western Small-footed Myotis, White-headed Woodpecker, Night Snake, and Western Skink.

3. Guiding Documents:

TNT/Province Lease Agreement, 1985
TNT/Province Lease Agreement, 1991
TNT/Province Lease Agreement, 1992
TNT/Province Lease Agreement (Long), 1994
West Kootenay Power Antelope-Brush Grassland Restoration Project, 1997
Vaseux Conservation Strategy-Management Unit, 1997
Vaseux Conservation Strategy-Long Management Plan, 1997
SILVICULTURE PRESCRIPTION LEIR SUB-LOT 3, 2002
SILVICULTURE PRESCRIPTION LEIR PROPERTY-WEST SIDE, 2002

4. Financial Sustainability:

As per the management plan for this property complex the Vaseux Conservation Strategy-Management Unit Plan has been in place since 1997 and includes representatives from CWS, the Province, and TNT.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife (Big horn sheep, bats and snakes) and plant diversity	1: Manage Invasive species	1: Decreased occurrence of invasive species 2:	1: Biodiversity Maintained and where applicable enhanced 2:
	2:	1: 2:	1: 2:
Goal 2: Provide opportunities for compatible wildlife oriented recreation and interpretation	1: Ensure that informational signage is maintained	1: Signs maintained 2:	1: Public informed of habitat values and property goals 2: Balance between public use and habitat protection is maintained
	2: Fences maintained to ensure compatible recreation uses and limit disturbance from/by public	1: fences maintained	1: balance between public use and habit protection is



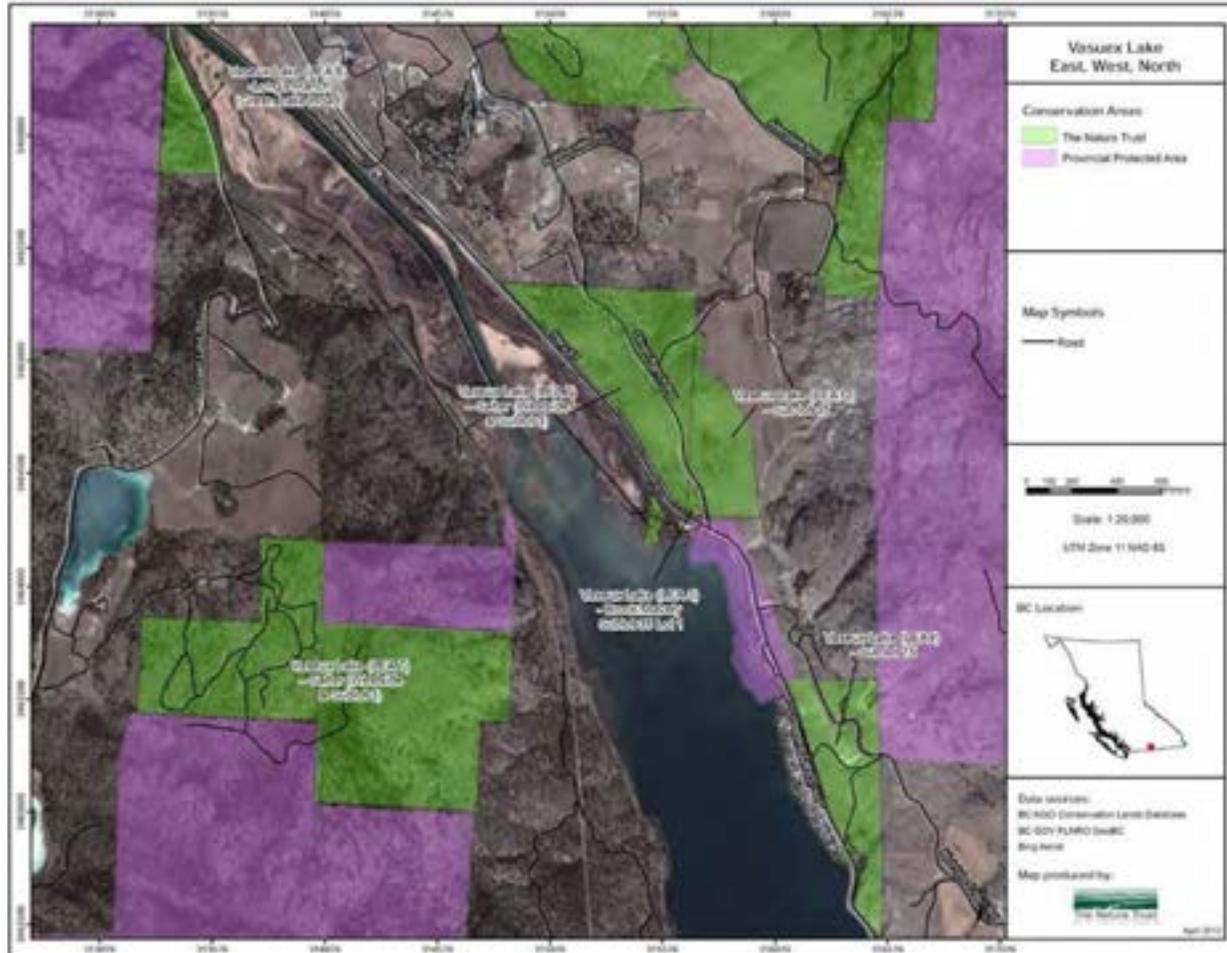
Project File #: _____

**Wildlife Operations & Management
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		2:	maintained 2:
Goal 3: Public Safety	1: Annually inspect property for concerns and plan to address	1: Annual property inspection completed and any issues addressed	1: Risk to public safety minimized



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Vaseux Lake-McIntyre Bluff

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Vaseux Lake-McIntyre Bluff

2. Habitat Description / Values:

Vaseux Lake-McIntyre Bluff, the bluff portion of the property was recently renamed by the Province of BC to n̄aylntn, pronounced nie-lin-tin, is the traditional nsylxcen (Okanagan) language name for this bluff and is not capitalized. Vaseux Lake-McIntyre Bluff is one of the most prominent properties in the South Okanagan, as well as being an important cultural site to First Nations. The cliff was formed during the last ice age, the result of tremendous ice pressure finally bursting through a dam of bedrock, forming this truncated spur. These features attract many cliff-dependent wildlife, especially significant as the bluff is situated at the narrowest part of the valley.

Blue-bunch wheatgrass and antelope-brush form much of the deeper-soiled grassland. Big sagebrush forms the dominant shrub on shallow-soiled sites. Mature ponderosa pine parkland, with antelope-brush or selaginella understories, is prevalent on the top of the bluff. A younger pine stand grows on the south west corner of the management unit. Prominent on the site are numerous rocky outcrops, talus slopes, and a steep rocky escarpment.

3. Guiding Documents:

TNT/Province Lease Agreement, 1990
McIntyre Bluff Management Unit Plan, 1999
South Okanagan Rare Bat Inventory 2000
TNT/Province Management Agreement 2011



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4. Financial Sustainability:

Close proximity to Provincial conservation holdings of BC Parks provides opportunity for partnership and collaboration.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide enhance, and maintain habitats for wildlife and plant diversity	1: Continue invasive species management along road/power right-of-way, to prevent spread into surrounding areas	1: inventories completed for invasives 2: Right of way plans reviewed for conservation concern	1: Biodiversity maintained 2:
	2: Ensure Utility Right-of-way holder minimizes impacts to conservation values	1: 2:	1: 2:
Goal 2: Maintain biological diversity and where compatible sustain traditional uses	1: encourage public awareness and sustain traditional recreational uses	1: Signs maintained 2:	1: Public informed of habitat values and property goals 2:
	2: Maintain good relations with the neighbouring communities and	1:	1:

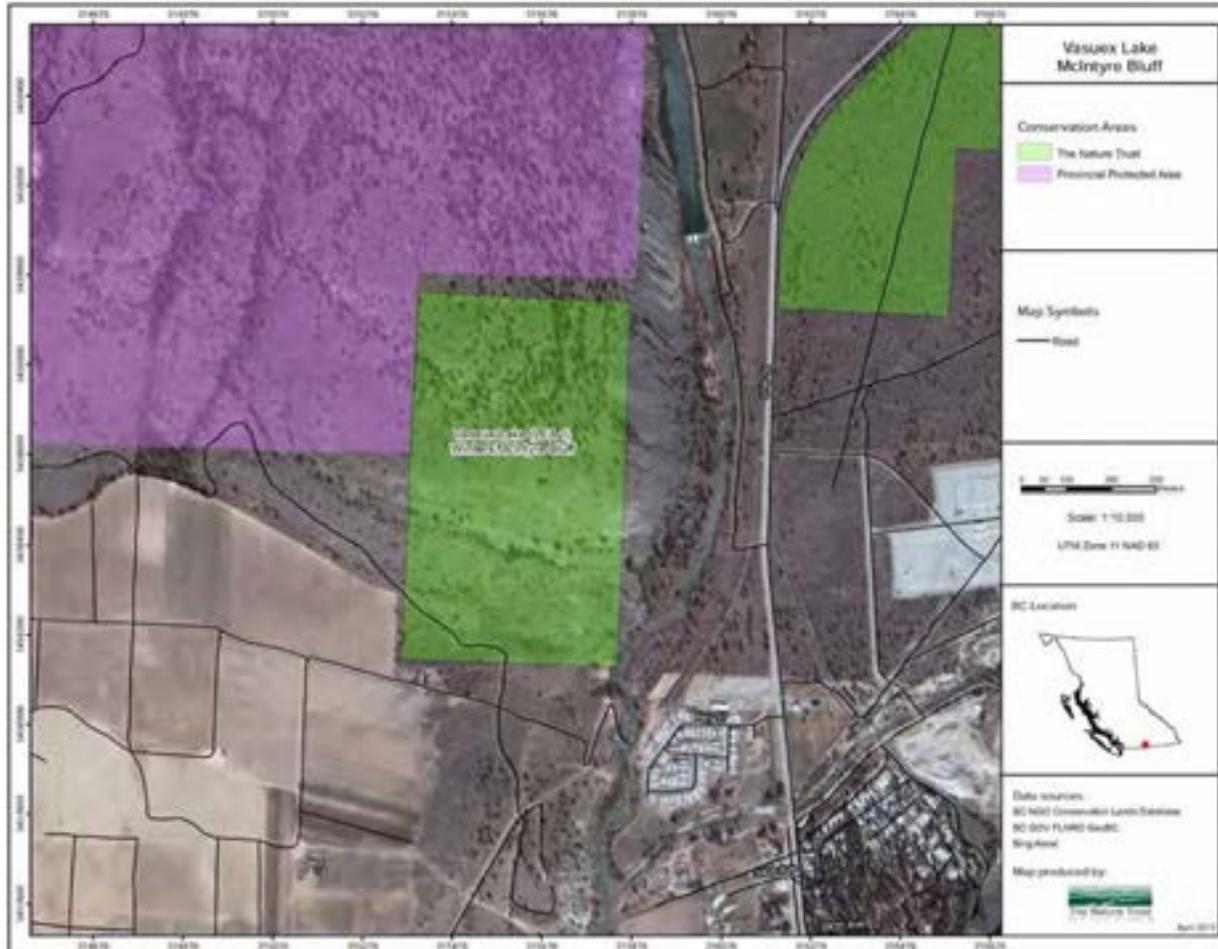


**Wildlife Operations & Management
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	First nations	2:	2:
Goal 3: Public Safety	1: Proper signage warning of steep bluff and conservation/habitat values	1: Annual property inspection completed	1: Public continue to enjoy a safe environment for wildlife viewing and interpretation
	2:	2:	2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Vaseux Lake-Emery & Franmar

Region: Thompson - Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Vaseux Lake-Emery & Franmar

2. Habitat Description / Values:

The Emery property- 64 hectares, makes up part of the Southeast Upland Management unit of the Vaseux Conservation Strategy, this unit is characterized by rugged terrain, consisting of grassland, steep cliffs, rocky outcrops, dense parkland forest and a paper birch gully. Grasslands dominated by antelope brush- globally imperiled ecosystem, sagebrush and bluebunch wheatgrass. In particular, the Emery property was purchased to secure habitat for California Big Horn Sheep. The property contains critical habitat for Rattlesnakes, Gopher Snakes, Lewis' Woodpecker and White-headed Woodpecker, among other species. The securement of the property enlarges on existing conservation lands- improving their long-term ecological viability. A two story residence is located on the property, and is operated by TNT staff, as the "Dr. Geoff Scudder Field Research Station".

The Franmar property-4.7 hectares, makes up the Franmar Management Unit of the Vaseux Conservation Strategy, this unit consists of lakefront property, bordering the southeastern shore of Vaseux Lake. The majority of the property is covered by cultivated field and orchard. The lakeshore riparian vegetation consists of a black cottonwood-red osier dogwood floodplain community; this is a Provincially Red-listed vegetation community. The property was acquired as a worthwhile addition to the adjoining conservation lands at Vaseux Lake and with the intent of restoring the riparian habitat in particular (estimated that 85% has been lost in the Okanagan). Several abandoned buildings exist on the property along with a single family dwelling that is currently rented to a long term tenant with a strong conservation ethic.



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3. Guiding Documents: *TNT/Province Lease Agreement (Emery), 1984*

TNT/Province Lease Agreement (Franmar), 1994
Vaseux Conservation Strategy-Southeast Uplands Management Plan, 1997
Vaseux Conservation Strategy- Franmar Management Plan, 1997
SILVICULTURE PRESCRIPTION EMERY PROPERTY-VASEAUX LAKE, 2002
TNT/Province Management Agreement 2011

4. Financial Sustainability:

As per the management plan for this property complex the Vaseux Conservation Strategy-Management Unit Plan has been in place since 1997 and includes representatives from CWS, the Province, and TNT.

5. Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Provide, enhance and maintain habitat for wildlife and plant diversity	1: Ensure Utility Right-of-way holder(s) minimizes impacts to conservation values	1: Utility resource plans reviewed for conservation concerns 2:	1: Improved awareness of conservation concerns by Utility corps. In the area. 2:
	2: Annually inspect property for concerns	1: Annual property inspection completed 2:	1: Habitat integrity maintained or improved 2:
	3: Ensure Field research station operates sustainably and conservation concerns addressed	1: Continued operation filed research station 2:	1: Field research station remains sustainable 2: Habitat integrity maintained or improved

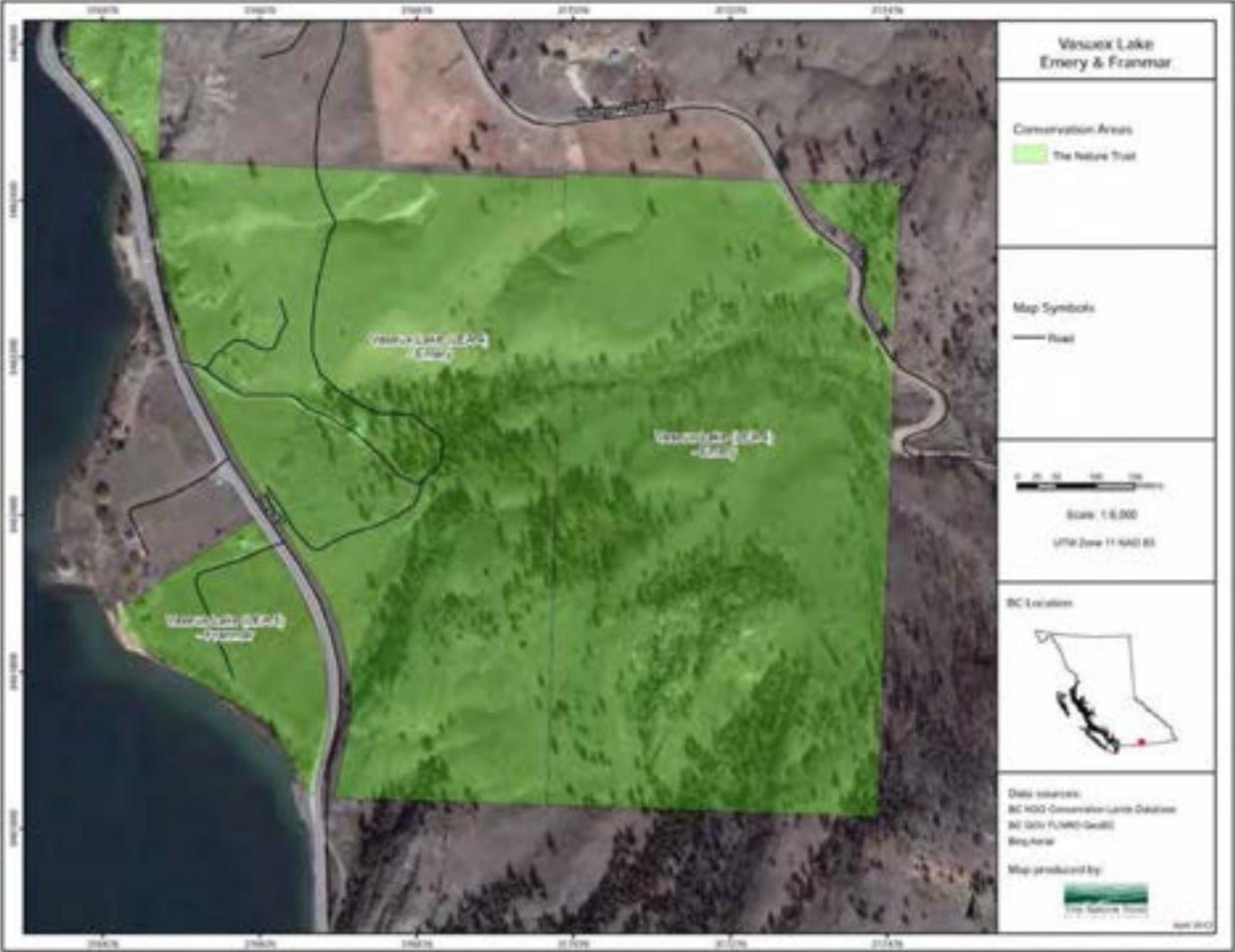


**Wildlife Operations & Management
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	4. Perimeter fencing maintained to prevent trespass	1: Fences maintained 2:	1: Decreased prevalence of invasive species 2:
	5. Manage invasive species	1: Invasive species control and monitored	1: Decreased prevalence of invasive species
Goal 2: Maintain biological diversity and where compatible sustain traditional uses	1: encourage public awareness and sustain traditional recreational uses 2: Maintain existing monitoring programs to ensure that detrimental impacts are prevented or minimized	1: Partnerships developed/maintained with local communities and First Nations 2:	1: Biodiversity maintained 2:
Goal 3: Public Safety	1: Ensure that informational signage is maintained 2: Ensure built facilities on property are inspected annually	1: Signs Maintained 2: Inspections are completed and deficiencies/risks are addressed	1: Public continues to enjoy a safe environment for wildlife viewing 2:



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Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Okanagan Falls Biodiversity Ranch

Region: Thompson Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Okanagan Falls Biodiversity Ranch

a. *CLD Reference:* *Okanagan Falls Biodiversity Ranch (not yet listed)*

2. Habitat Description / Values:

The Okanagan Falls Biodiversity Ranch encompasses 37,214 hectares of land under varying tenures, including private (fee simple) land, leased land, and crown grazing license. The Nature Trust of B.C., with support from a number of conservation partners, including HCTF, acquired the Okanagan Falls Biodiversity Ranch complex of land components between 1993 and 2000.

The majority of these lands are now leased or licensed to Culligan Ranch for management of their livestock operation.

The Okanagan Falls Biodiversity Ranch is biologically diverse, ranging in elevation from 400m to 1,800m, consisting of grasslands, rugged terrain, mixed woodlands, riparian areas, wetlands, and lakes. Riparian and wetland areas on the biodiversity ranch include McLean Creek, Rankin Spring, Thomas Creek, Shuttleworth Creek, Vaseux Creek, Dutton Creek, and numerous lakes, ponds, and spring-fed seepage areas.

In general, areas lower than 1,460m in elevation contain provincially and regionally important ecosystems and species. This includes all of the fee simple properties, Crown grazing lease, and approximately 25% of the Crown grazing license. Biogeoclimatic zones represented here include Bunchgrass (BG), Ponderosa Pine (PP), and Interior Douglas-fir (IDF).



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The habitats associated with this conservation complex are host to a great many species of provincial and federal importance, including reptiles and amphibians; neo-tropical migrant birds; and California bighorn sheep.

3. Guiding Documents:

- i. *Vaseux Lake – Okanagan Falls Biodiversity Ranch Management Plan, 2000*
- ii. *Weed Management Strategy for the Thomas Ranch Winter Holding Area, 2000*
- iii. *Weed Management Strategy for Vaseux Lake – Okanagan Falls Biodiversity Ranch and Thompson Property, 2001*
- iv. *Enhancement Plan for Thomas Ranch Mill Site, 2001*
- v. *Okanagan Falls Ranch Interim Partnership Agreement, 2009*
- vi. *Range Use Plan for Culligan Ranch, 2013 renewal*

4. Financial Sustainability:

- i. Management partners for this conservation complex include Culligan Ranch and the Province. As such, financial sustainability is maximized.

5. Partner Recognition:

- i. All publications/interpretive/ restorative/ enhancement signage include the logos of funding partners, including HCTF.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Goal 1: to maintain and restore natural grassland and associated habitat, including wetland and forests, while maintaining a viable ranch operation	1: Objective 1: Manage Invasive species	1: S-T Indic 1- Decreased occurrence of invasive species 2:	1: L-T Indic 1-Biodiversity Maintained and where applicable enhanced 2:
	2: Objective 2: Maintain protective fencing	1: S-T Indic 1- Fences are intact and effective 2:	1: L-T Indic 1-Habitat is protected or maintained. 2:
	Objective 3: Monitor habitat and species	S-T Indic 1- Research programs conducted	L-T Indic 1-Progress of management objectives is evaluated and refined
Goal 2: Provide opportunities for compatible wildlife oriented recreation and interpretation	1: Objective 1: Ensure that informational signage is maintained	1: S-T Indic 1-Signs maintained 2:	1: L-T Indic 1-Public informed of habitat values and property goals L-T Indic 2- Balance between public use and habitat protection is

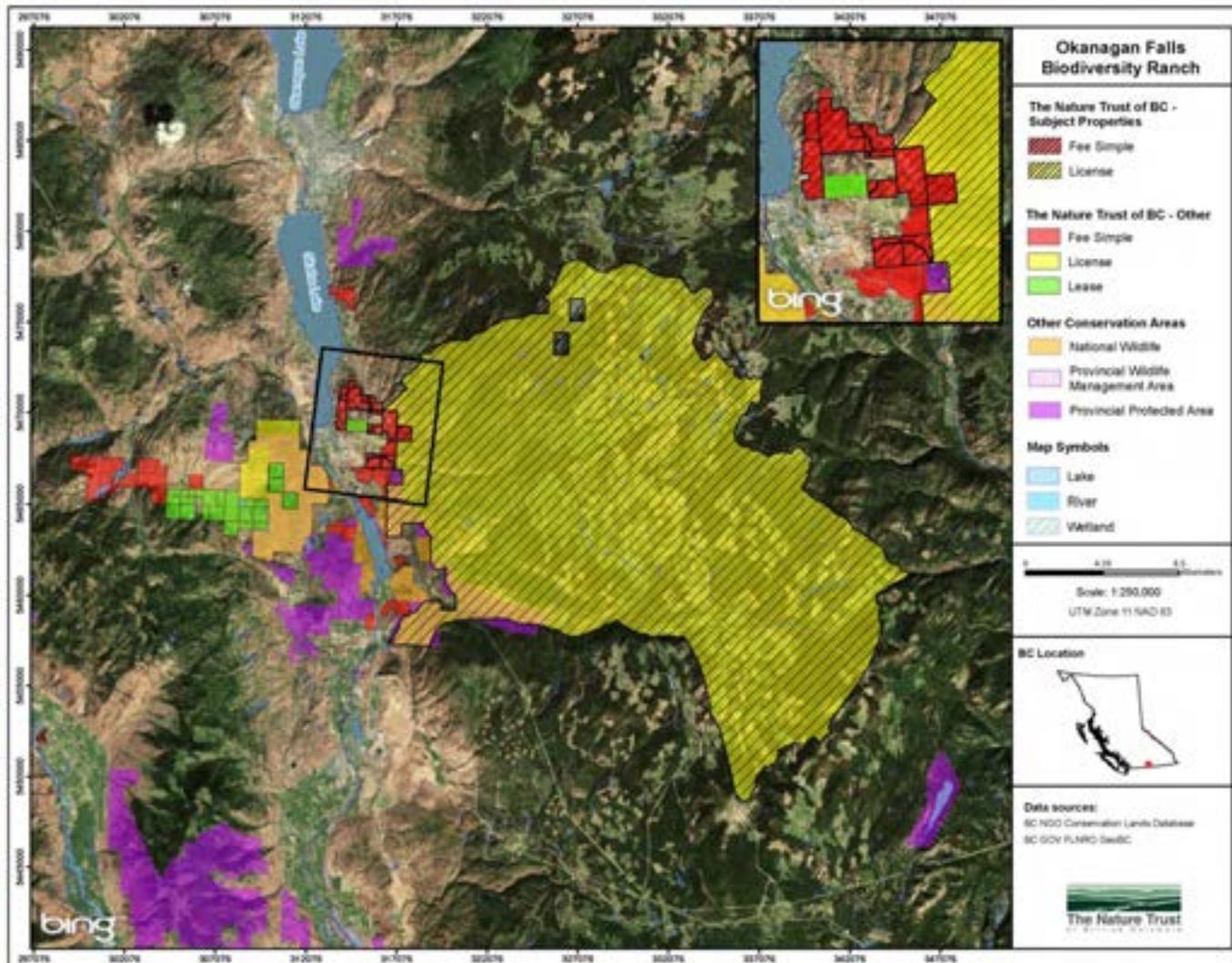


**Wildlife Operations & Management
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			maintained 2:
Goal 3: Public Safety	Objective 1: Annually inspect property for concerns and plan to address	1: S-T Indic 1-Annual property inspection completed and any issues addressed 2:	1: L-T Indic 1- Risk to public safety minimized 2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name:

Region:

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Duck Meadows Conservation Area

2. Habitat Description / Values:

This 95.78 hectare property was acquired to protect and restore Class 1 waterfowl habitat in the Monte Creek area. It is considered one of the most important wetland areas for waterfowl in the Kamloops region. Formerly drained and seeded for hay production, the wetland was reestablished in 1992 when Ducks Unlimited Canada constructed water controls to stabilize water levels in the meadow.

The restored wetland now provides critical habitat for many species of waterfowl and other birds, as well as ungulates and amphibians, and maintains water flows in Monte Creek, an important rearing area for rainbow trout.

3. Guiding Documents:

TNT/Province Lease Agreement, 1990
Duck Meadow Wetland Reclamation Project, 1992
TNT/Province Management Agreement 2011

4. Financial Sustainability:

This property has water control structures, managed by Ducks Unlimited Canada, improving efficiency and cost effectiveness of overall management

5. Partner Recognition:

Informational property signs acknowledge acquisition partners. Future signage, and any press releases, will acknowledge all funding and management partners.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Maintain biodiversity and habitat for fish and wildlife	1: Inspect property for concerns when opportune, and create work plan	1: Property inspection completed and necessary works planned 2:	1: Maintained biodiversity and habitat. 2:
	2: Maintain optimal water levels for habitat	1: Water control structures maintained 2:	1: Water levels maintained for habitat needs. 2:
Goal 2: Public use and safety	1: Ensure that informational signage and facilities, where present, are maintained	1: Signs maintained 2: Facility inspections are completed and deficiencies /risks are	1: Public is informed of habitat values and property goals 2: Balance between public use and habitat protection is maintained



Project File #: _____

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		addressed	
	2:	1: 2:	1: 2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: White Lake Basin Biodiversity Ranch

Region: Thompson Okanagan

PROJECT INFORMATION

Please complete the following:

Name of Property/ Complex:

- a. *Property Name:* **White Lake Basin Biodiversity Ranch**
- b. *CLD Reference:* *White Lake Basin Biodiversity Ranch (not yet listed)*

Habitat Description / Values:

The White Lake Basin Biodiversity Ranch, including the recently acquired Twin Lakes Ranch Conservation Area, encompasses 8,463 hectares of land under varying tenures, including private (fee simple) land, leased land, and crown grazing license. The Nature Trust of B.C., with support from a number of conservation partners, including HCTF, acquired the White Lake Basin Biodiversity Ranch complex of land components in 1996, 1998, and 2012.

The White Lake Basin is one of the largest intact grassland areas in the South Okanagan region. In the 1950's much of the White Lake Basin was purchased by the National Research Council in order to maintain a radio-free zone around the Dominion Radio Astrophysical Observatory, which is located in the basin.

The majority of these lands purchased by NRC are now leased to Clifton Ranch and The Nature Trust of British Columbia and are included in the White Lake Basin Biodiversity Ranch.

The White Lake Basin is a biologically diverse area, consisting of grasslands, sagebrush steppe, rugged terrain, coniferous woodland, riparian, broadleaf woodlands, wetland, seasonally flooded fields, and lakes. Riparian and



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wetland areas on the biodiversity ranch include White Lake, Horn Lake, Nipit Lake, Twin Lakes Marsh, Park Rill Creek, Kearns Creek, a number of alkali ponds, and numerous spring-fed seepage areas.

Provincially designated at-risk ecological communities found on the property include the Red-listed big sagebrush / bluebunch wheatgrass - arrowleaf balsamroot (globally imperiled), big sagebrush / bluebunch wheatgrass (globally imperiled), and bluebunch wheatgrass - arrowleaf balsamroot (globally imperiled) communities, and the Blue-listed ponderosa pine / red three-awn community. Twenty-six Species at Risk Act (SARA) Schedule 1 listed species occur or have occurred in the White Lake Basin.

Guiding Documents:

White Lake Basin Biodiversity Ranch Management Plan, 2000
Weed Management Strategy for White Lake Basin Biodiversity Ranch, 2001
White Lake Grasslands Protected Area Management Direction Statement, 2003
The Biodiversity Ranch Conservation Model: An Assessment, 2004
White Lake – West Vaseux Ecosystem-based Management Plan Phase II, 2004
Revised Agreement for Long Term Agricultural Activities at the White Lake Basin Ranch, 2012
White Lake Basin Biodiversity Ranch Management Plan (Revised), 2013
Range Use Plan for Clifton Ranch, 2013 renewal

Financial Sustainability:

As per the management plan for this property complex, management partners are varied, including the Province; Environment Canada; Clifton Ranch; and the National Research Council. As such, financial sustainability is maximized.

Partner Recognition:

All publications/interpretive/ restorative/ enhancement signage include the logos of funding partners, including HCTF.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

I. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Goal 1: to maintain and restore natural grassland and associated habitat, including wetland and forests, while maintaining a viable ranch operation	1: Objective 1: Manage Invasive species	1: S-T Indic 1- Decreased occurrence of invasive species 2:	1: L-T Indic 1-Biodiversity Maintained and where applicable enhanced 2:
	2: Objective 2: Maintain protective fencing	1: S-T Indic 1- Fences are intact and effective 2:	1: L-T Indic 1-Habitat is protected or maintained. 2:
	Objective 3: Monitor habitat and species	S-T Indic 1- Research programs conducted	L-T Indic 1-Progress of management objectives is evaluated and refined
Goal 2: Goal 2: Provide opportunities for compatible wildlife oriented recreation and interpretation	1: Objective 1: Ensure that informational signage is maintained	1: S-T Indic 1-Signs maintained 2:	1: L-T Indic 1-Public informed of habitat values and property goals L-T Indic 2- Balance between public use and habitat protection is

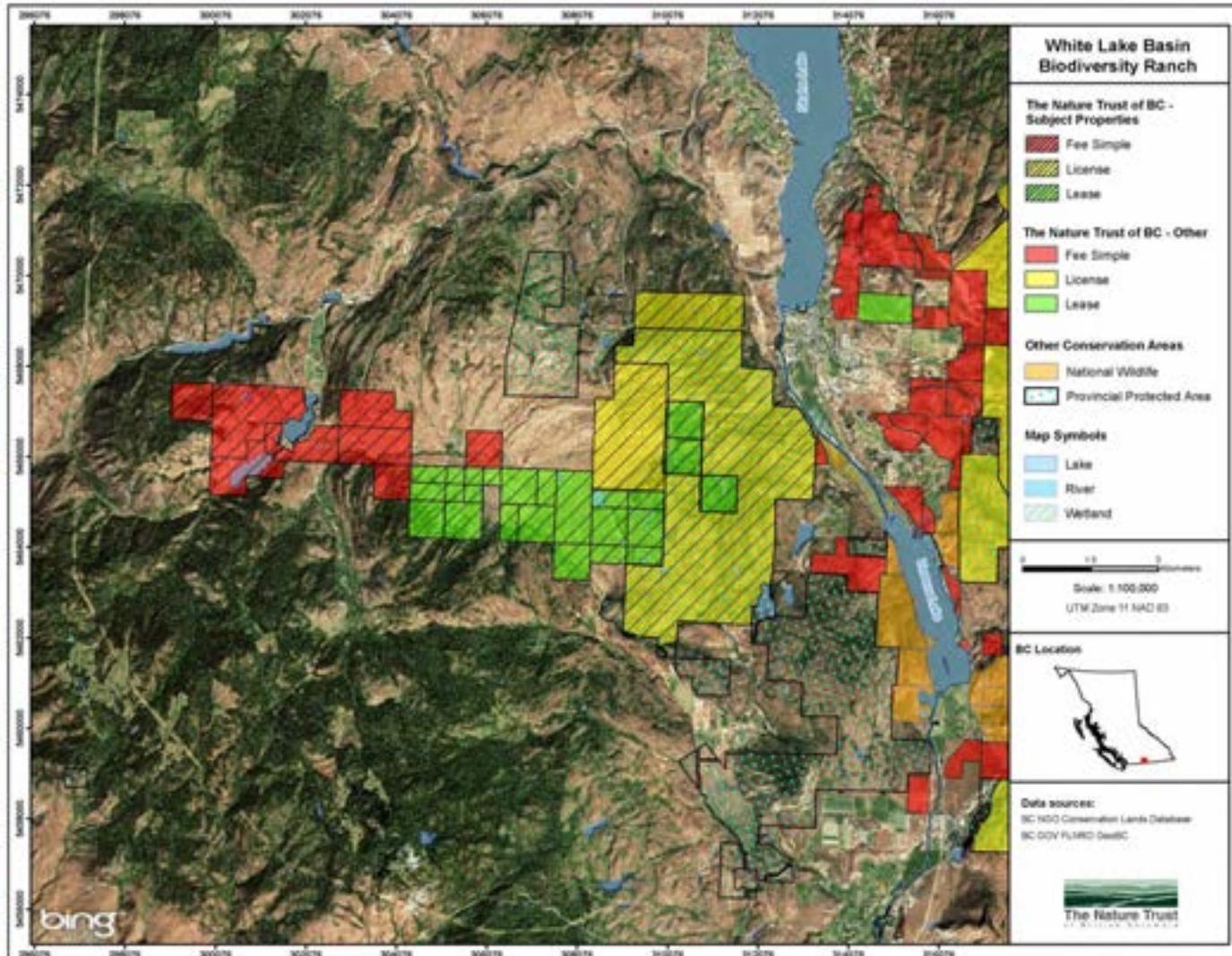


**Wildlife Operations & Management
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			maintained 2:
Goal 3: Public Safety	Objective 1: Annually inspect property for concerns and plan to address	1: S-T Indic 1-Annual property inspection completed and any issues addressed 2:	1: L-T Indic 1- Risk to public safety minimized 2:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016 – 2019

Project Name: Crown Conservation Lands Operations and Maintenance

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

CLD Reference:

- Trepanier Creek (TAC)

2. Habitat Description / Values:

Trepanier Creek (TAC) consists of two parcels ((District Lot (DL) 483, DL 484, and DL 524, Osoyoos Division Yale District (ODYD)) situated on the southwest-facing coniferous forested hillside above the Trepanier Creek valley bottom and separated by approximately 700 m. The northern parcel is 31 ha in area and is located on the southern lower slopes of Mount Miller. Based on orthophoto interpretation, approximately 24% of this parcel has been logged or cleared to accommodate a utility right-of-way that bisects to the parcel in an east-west direction. The southern parcel is 168 ha in area, is located on the southwestern lower slopes of Mount Law and appears to be primarily undisturbed. Administrative control was transferred to the British Columbia Ministry of Forests, Lands and Natural Resource Operations (MFNLRO; previously Ministry of Environment) from the Ministry of Crown Lands in 1988 to (i) enhance critical deer winter range and (ii) to compensate for habitat loss due to construction of the Coquihalla Highway.

Within the North Okanagan Basin (NOB) ecosection, most of the TAC is located within the Very Hot Dry Okanagan variant of the Interior Douglas Fir biogeoclimatic zone (IDFxh1), with the southern portion of the TAC located within the Very Hot Dry Okanagan variant of the Ponderosa Pine zone (PPxh1). Terrestrial Ecosystem Mapping (TEM) has been completed for the entire TAC and suggests that the TAC is dominated by open ponderosa pine (*Pinus ponderosa*; Py) forest in its lower slopes, grading to mixed ponderosa pine and Rocky Mountain Douglas-fir (*Pseudotsuga menziesii* var. *glauca*; Fd) forest, with generally drier to zonal



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ecological communities present (Iverson 2011). Coniferous woodland, riparian forest, mature forest, grassland, and sparsely vegetated ecosystems are mapped to the TAC and surrounding area, and are identified as regionally sensitive ecosystems in the Okanagan Valley (Iverson 2011). Both the IDF and PP biogeoclimatic zones are blue-listed provincially, and many of the communities mapped to the TAC are provincially listed:

- IDFxh1/07 (Fd / Py – common snowberry – birch-leaved spirea): red-listed
- IDFxh1/02 (Fd / Py – bluebunch wheatgrass): red-listed
- IDFxh1/01 (Fd / Py – pinegrass): blue-listed
- IDFxh1/04 (Fd / Py – snowbrush – pinegrass): blue-listed
- IDFxh1/03 (Fd / Py – bluebunch wheatgrass – pinegrass): blue-listed
- PPxh1/02 (Py – red three-awn): blue-listed

Species at risk observed within 2.0 km of the TAC include red-listed American badger (*Taxidea taxus*), red-listed western scree-owl (*Megascops kennicottii macfarlanei*), blue-listed North American racer (*Coluber constrictor*), and common nighthawk, a Special Concern species under the national *Species at Risk Act*. Based on the habitat present, the TAC may also provide habitat for listed species such as western rattlesnake (*Crotalus oreganus*), flammulated owl (*Otus flammeolus*), and Williamson's sapsucker (*Sphyrapicus thyroideus*). Other species observed within 2.0 km of the TAC include moose (*Alces americanus*) and mule deer (*Odocoileus hemionus*).

Management activities within the TAC are governed by the Okanagan-Shuswap Land and Resource Management Plan (LRMP). Based on the LRMP, the TAC is part of the Community Crown Interface Resource Management Zone (RMZ) and Tourism RMZ, as well as a Mule Deer Planning Cell. The TAC is also located within a legal Tourism Area. No invasive plants have been recorded at the TAC, although diffuse knapweed (*Centaurea diffusa*) and Dalmatian toadflax (*Linaria genistifolia* ssp. *dalmatic*) have been recorded in close proximity to both parcels. In addition, the following invasive species have been observed within 2.0 km of the TAC: chicory (*Cichorium intybus*), knapweed (*Centaurea* spp.), hawkweed (*Hieracium* spp.), sulphur cinquefoil (*Potentilla recta*), and common St. John's-wort (*Hypericum perforatum*). Due to the mixed developments located in the Trepanier Creek valley bottom, including several sand and gravel pits, private rural and agricultural properties, and linear utility and transportation corridors, there are likely other invasive species present in the TAC. No records of historical wildfires are present in the TAC.

3. Guiding Documents:



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Guidance for operation and management activities in Trepanier Creek (TAC) include the following documents:

- MFLNRO File No. 39560-25/TRE
- Crown Land File No. 3404070 – Ministerial Order, 1988
- Public Risk Assessment (Bunge 2012)
- Sensitive Ecosystem Inventory: Central Okanagan Gap Areas, 2011 (Iverson 2011)
- Terrestrial Ecosystem Mapping of the Central Okanagan with a Sensitive Ecosystems Inventory (SEI) (Iverson and Cadrin 2003)
- Okanagan-Shuswap Land and Resource Management Plan
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands

4. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by FLNRO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including Trepanier Creek (TAC). As this TAC provides critical ungulate winter range for managed wildlife stocks, the Fish and Wildlife Section of MFLRNO is also a key partner and contributor to this TAC. Due to the remote nature of this parcel, no other partnerships have been identified to generate revenue for this TAC.

5. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including Habitat Conservation Trust Fund (HCTF).



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Management Planning	1: Develop/update/implement management plan	1: Up-to-date management plan in place	1: Property/complex managed following plan
	2: Develop/update/implement monitoring plan including monitoring schedule	1: Up-to-date effectiveness plan in place	1: Property/complex monitored following plan
Goal 2: Protect and Enhance Conservation Values	1: Inventory/research to quantify baseline conservation values and threats	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	2: Determine invasive species presence and vectors for introduction/spread	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	3: Protect important habitat features (e.g., ungulate winter range)	1: Protective measures installed	1: Important habitat features protected
Goal 3: Encourage Public Education and Appropriate Use	1: Limit environmental impacts from inappropriate public/recreational access and use	1: Signage/fencing in place and maintained	1: Balance between public/recreational use and conservation values maintained 2: Improved public conservation awareness



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	2: Survey legal property boundaries where unknown or where trespasses are suspected	1: Legal survey plan available and marked on the ground	1: Suspected trespasses resolved 2: Improved public conservation awareness
Goal 4: Partnerships and Maintain Traditional Uses	1: Develop good relationships with neighbouring properties	1: Partnerships developed/maintained with neighbouring property owners	1: Threats from neighbouring properties reduced 2: Improved conservation awareness
Goal 5: Sustainable Resource Management	1: Limit environmental impacts from forestry activities (e.g., habitat loss/degradation, over extraction, fire suppression)	1: Tenures reviewed for conservation concerns	1: Balance between forestry and conservation values maintained 2: Collaboration between resource ministries and land managers
	2: Limit environmental impacts from utility right-of-ways (e.g., invasive species introduction/spread, fragmentation, habitat degradation/loss)	1: Utility ROW plans reviewed for conservation concerns	1: Balance between utility use and conservation values maintained 2: Improved conservation awareness

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Map – Trepanier Creek (Transfer of Administration)



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

CLD Reference:

- Winfield (TAC) -- Swalwell Lake

2. Habitat Description / Values:

Winfield (TAC) -- Swalwell Lake consists of one 1.13 ha rectangular shaped parcel (District Lot 3998, Osoyoos Division of Yale District (ODYD)) located on the northwestern shore of Swalwell Lake (aka Beaver Lake) approximately 12 km northeast of Lake Country, British Columbia (BC). Administrative control of this property was transferred to Ministry of Forests, Lands and Natural Resource Operations (MFNLRO; previously Ministry of Environment and Parks) from Ministry of Forests and Lands in 1987 for the purposes of environment, conservation, fisheries, and recreation, including fish and wildlife management. Specifically, the property was acquired to provide continued use of a rainbow trout (*Oncorhynchus mykiss*) egg collection station, which has been operational since the 1940s and is now run by the Freshwater Fisheries Society of BC. This station has been the source of more than one million wild eggs annually, which are used to stock between 100 and 150 south-central interior lakes. Echo Creek bisects the TAC and flows south into Swalwell Lake at the southern boundary of the TAC.

Based on orthophoto interpretation, approximately 50% of this TAC appears to have been logged or cleared, while the remainder of the property is gently sloped and vegetated with mature coniferous forest. According to Ministerial Order No. 3402898, the property contained one large cabin, two smaller log cabins, and several small sheds at that time of transfer of administrative control, most or all of which appear to still be present at the TAC. Much of the generally area surrounding the property to the north of Swalwell Lake appears to be forested with some logging, road, and recreational developments present. A large (637 ha) notation of interest for miscellaneous land uses encompasses Swalwell Lake and the surrounding area, including the TAC. Immediately adjacent to the west of the TAC is a 7.1 ha map reserve for environment, conservation, and recreation values.



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Within the North Okanagan Basin (NOB) ecosection, the TAC and surrounding area are located within the Dry Mild Okanagan variant of the Montane Spruce biogeoclimatic zone (MSdm1). Terrestrial Ecosystem Mapping (TEM) has not been completed for the TAC and surrounding area, which appears to be dominated by coniferous species such as hybrid white spruce (*Picea engelmannii x glauca*), supalpine fir (*Abies lasiocarpa*), and lodgepole pine (*Pinus contorta*), with generally zonal to wetter ecological communities present. Wildlife recorded within 2.0 km of the TAC include moose (*Alces americanus*) and four dragonfly species: ringed emerald (*Somatochlora albicincta*), boreal bluet (*Enallagma boreale*), sedge darner (*Aeshna juncea*), and lake darner (*A. eremite*). Ungulate winter range habitat is mapped to the TAC and surrounding area. No species at risk have been observed at or within 2.0 km of the TAC. Both Swalwell Lake and Echo Creek provide habitat for wild naturalized and hatchery production rainbow trout, and Echo Creek is a known spawning stream. Swalwell Lake is a controlled reservoir at the headwaters of Vernon Creek, which supports a valuable kokanee (*Oncorhynchus nerka*) population.

Management activities within the TAC are governed by the Okanagan-Shuswap Land and Resource Management Plan (LRMP). Based on the LRMP, the TAC is part of the Pine Marten High Capability Area, Moose Habitat Resource Management Zone (RMZ), Recreation RMZ, and Tourism RMZ. The TAC is also within a legal Marten Area, legal Intensive Recreation Area, and legal Tourism Area. Based on orthophoto interpretation, abundant large woody debris has accumulated along the shoreline and Echo Creek mouth at the property and the riparian area associated with Echo Creek appears to be disturbed or in a relatively seral stage. Upstream logging operations have led to historical habitat degradation and fish barriers within Echo Creek, and past restoration efforts have included spawning gravel placement and debris removal upstream of the TAC. The current state of Echo Creek at the TAC is not known. No invasive plants have been recorded at the TAC, although Eurasian water-milfoil (*Myriophyllum spicatum*) has been recorded in Swalwell Lake. Other invasive species are likely present due to the land clearing and road developments at and in the general vicinity of the TAC. No records of historical wildfires are present in the TAC.

3. Guiding Documents:

Guidance for operation and management activities in Winfield (TAC) -- Swalwell Lake include the following documents:

- MFLNRO File No. 39560-20
- Crown Land File No. 3402898 – Ministerial Order, 1987
- Public Risk Assessment
- Okanagan-Shuswap Land and Resource Management Plan
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands

4. Financial Sustainability:



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The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including Winfield (TAC) -- Swalwell Lake. As this property includes an important rainbow trout egg collection station, the Fish and Wildlife Section of MFLRNO and the Fisheries Society of BC are also a key partners and contributors to this TAC.

5. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including Habitat Conservation Trust Fund (HCTF).



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Management Planning	1: Develop/update/implement management plan	1: Up-to-date management plan in place	1: Property/complex managed following plan
	2: Develop/update/implement monitoring plan including monitoring schedule	1: Up-to-date effectiveness plan in place	1: Property/complex monitored following plan
Goal 2: Protect and Enhance Conservation Values	1: Inventory/research to quantify baseline conservation values and threats	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	2: Determine invasive species presence and vectors for introduction/spread	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	3: Protect important habitat features (e.g., spawning areas)	1: Protective measures installed	1: Important habitat features protected
Goal 3: Maintain Public Safety	1: Limit risks associated with built hazards (e.g., buildings, sheds)	1: Scheduled inspections completed / risks addressed	1: Risk to public safety at property/complex minimized
Goal 4: Encourage Public Education and Appropriate Use	1: Increase public education of conservation values through signage/facilities	1: Signage/facilities in place and maintained	1: Public informed of property/complex conservation values and goals



Project File #: _____

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Map - Winfield-Swalwell Lake (Transfer of Administration)



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

CLD Reference:

- Vaseux Lake (TAC) -- South

Associated Conservation Lands:

- Vaseux Lake (LEA4) -- Emery
- Vaseux Lake (LEA5) -- Franmar
- Vaseux Lake (LEA9) -- Sub-lot 15

2. Habitat Description / Values:

Vaseux Lake (TAC) -- South consists of one 22.7 ha undeveloped parcel (Block 1, Sub-Lot 58, District Lot 2710, Similkameen Division Yale District (SDYD), Plan 1331) located immediately east of Highway 97 at the southern end of Vaseux Lake between Okanagan Falls and Oliver, British Columbia (BC). Administrative control of this property was transferred to Ministry of Forests, Lands and Natural Resource Operations (MFNLRO; previously Ministry of Environment and Parks) from Ministry of Forests and Lands in 1987 for the purposes of environment, conservation, and recreation, including fish and wildlife management. Specifically, the property was acquired to provide long-term protection for critical bighorn sheep (*Ovis canadensis californiana*) winter range habitat. This species is blue-listed (i.e., special concern) and Priority 3 under Goal 2 (i.e., prevent species and ecosystems from becoming at risk) of the Conservation Framework in BC. This TAC also provides protection for rare ecological communities as well as numerous species at risk.

Within the South Okanagan Basin (SOB) ecoregion, most of the TAC is located within the Very Hot Dry Okanagan variant of the Bunchgrass biogeoclimatic zone (BGxh1), with the eastern higher elevation portion of the TAC located within the Very Hot Dry Okanagan variant of the Ponderosa Pine zone (PPxh1). Both of these zones are provincially at risk, with the BG zone red-listed and PP zone blue-listed. Terrestrial Ecosystem Mapping (TEM) has been completed for the entire TAC and suggests that this property is dominated by antelope-brush (*Purshia tridentata*) steppe and open coniferous woodland ecosystems, both of which are identified as sensitive ecosystems in the Okanagan Valley (Iverson and Haney 2010). Rock dominated sparsely



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vegetated ecosystems are also regionally identified as sensitive ecosystems, and much of the TAC is mapped as rock outcrop, talus, or cliff with low vegetation cover (Iverson and Haney 2010). Two provincially listed communities are present at the TAC:

- BGxh1/02 (antelope-brush – needle-and-thread grass): red-listed
- PPxh1/01 (ponderosa pine / bluebunch wheatgrass – Idaho fescue): blue-listed

Numerous survey records of bighorn sheep and mule deer (*Odocoileus hemionus*) are mapped to the TAC, which is part of the Anarchist ungulate winter range. Other than bighorn sheep, no other species at risk have been surveyed or incidentally observed at the TAC. However, there are numerous survey and incidental species at risk records within 2.0 km of the TAC that may also occur at the TAC based on the habitat present (listed by conservation status):

- Behr's hairstreak (*Satyrium behrii*): red-listed / endangered
- Desert nightsnake (*Hypsiglena chlorophaea*): red-listed / endangered
- White-headed woodpecker (*Picoides albolarvatus*): red-listed / endangered
- American badger (*Taxidea taxus*): red-listed / endangered
- Lewis's woodpecker (*Melanerpes lewis*): red-listed / threatened
- Gopher snake (*Pituophis catenifer deserticola*): blue-listed / threatened
- Western rattlesnake (*Crotalus oreganus*): blue-listed / threatened
- North American racer (*Coluber constrictor*): blue-listed / special concern
- Western skink (*Plestiodon skiltonianus*): blue-listed / special concern
- Western harvest mouse (*Reithrodontomys megalotis*): blue-listed / special concern
- Nuttall's cottontail (*Sylvilagus nuttallii*): blue-listed / special concern
- Spotted bat (*Euderma maculatum*): blue-listed / special concern
- Fringed myotis (*Myotis thysanodes*): blue-listed / data deficient
- Canyon wren (*Catherpes mexicanus*): blue-listed / not at risk
- Townsend's big-eared bat (*Corynorhinus townsendii*): blue-listed
- Western small-footed myotis (*Myotis ciliolabrum*): blue-listed
- California hairstreak (*Satyrium californica*): blue-listed

Management activities within the TAC are governed by the Okanagan-Shuswap Land and Resource Management Plan (LRMP). Based on the LRMP, the ACQ is part of the Bighorn Sheep Habitat Resource Management Zone (RMZ) for summer range, the Community Crown Interface RMZ, as well as a Mule Deer Planning Cell. An undeveloped utility right-of-way held by West Kootenay Power Ltd. traverses the western side of the TAC from its north to south border, and a recreational map reserve located adjacent to Vaseux Lake overlaps the western boundary of the TAC. No other tenures or land uses are recorded at the TAC. This TAC exists within a cluster of other conservation lands and environmentally protected areas, many of which are managed for bighorn sheep and other species and ecosystems at risk protection. The following lands are located within 2.0 km of the TAC:

- Vaseux Lake (LEA4) – Emery: immediately north



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- Vaseux-Bighorn National Wildlife Area: immediately south and east, and 970 km west
- Vaseux Lake (LEA5) – Franmar: 60 m northwest
- Vaseux Lake (LEA9) -- Sub-lot 15: 860 m northwest
- Vaseux Protected Area: 1.4 km east and 1.6 km north
- White Lake Grassland Protected Area: 1.6 km west
- Vaseux Lake Provincial Park: 2.0 km northwest

Threats to bighorn sheep winter range in the South Okanagan Valley include invasive species infestation, tree and shrub encroachment due to fire suppression, and livestock overgrazing. Historical human-caused wildfires have only affected the eastern end of the TAC: approximately 9% of the TAC was burned in 1921 and more recently approximately 6% for the TAC was burned in 2003. This latter fire has led to subsequent exotic species invasions throughout much of the surrounding area. Although there are no Invasive Alien Plant Program (IAPP) records are available for the TAC, 21 different invasive plant species totalling 373 records have been mapped within 2.0 km of the TAC and therefore may also be present or introduced to the TAC. The four most common species collectively make up 71% of the records: Dalmatian toadflax (*Linaria dalmatica*; 21%), diffuse knapweed (*Centaurea diffusa*, 21%), sulphur cinquefoil (*Potentilla recta*, 19%), and butter-and-eggs (*L. vulgaris*, 10%).

3. Guiding Documents:

Guidance for operation and management activities in Vaseux Lake (TAC) -- South include the following documents:

- Crown Land File No. 3403366 – Ministerial Order, 1987
- Public Risk Assessment
- Refined and Updated Ecosystem Mapping for the South Okanagan and Lower Similkameen Valley (Iverson and Haney 2010)
- Okanagan-Shuswap Land and Resource Management Plan
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands

4. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including Vaseux Lake (TAC) -- South. As this TAC provides critical ungulate winter range for managed wildlife stocks, the Fish and Wildlife Section of MFLRNO is also a key partner and contributor to this TAC. This TAC is part of a cluster of properties owned by various private and government organizations (e.g., The Nature Trust, BC Parks, Canadian Wildlife Services) and managed for similar conservation values, which allows for partnership and a collaborated approach to operation and management tasks such as species at risk and invasive species inventories. The



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Okanagan and Similkameen Invasive Species Society (OASISS; previously South Okanagan Invasive Plant Society or SOSIPS) provides integrated and strategic invasive species management throughout the Regional District of Okanagan-Similkameen (RDOS), including the TAC and surrounding conservation lands.

5. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including Habitat Conservation Trust Fund (HCTF).



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Management Planning	1: Develop/update/implement management plan	1: Up-to-date management plan in place	1: Property/complex managed following plan
	2: Develop/update/implement monitoring plan including monitoring schedule	1: Up-to-date effectiveness plan in place	1: Property/complex monitored following plan
Goal 2: Protect and Enhance Conservation Values	1: Inventory/research to quantify baseline conservation values and threats	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	2: Inventory/research to determine species and ecosystems at risk presence	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	3: Determine invasive species presence and vectors for introduction/spread	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	4: Support OASISS in regional invasive species management	1: Involvement in OASISS continued	1: Invasive species effectively managed across the land base



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	5: Protect important habitat features (e.g., ungulate winter range)	1: Protective measures installed	1: Important habitat features protected
Goal 3: Maintain Public Safety	1: Limit risks associated with natural hazards (e.g., steep slopes)	1: Scheduled inspections completed and risks addressed	1: Risk to public safety at property/complex minimized
Goal 4: Sustainable Resource Management	1: Limit environmental impacts from utility right-of-ways (e.g., invasive species introduction/ spread, fragmentation, habitat degradation/ loss)	1: Utility ROW plans reviewed for conservation concerns	1: Balance between utility use and conservation values maintained 2: Improved conservation awareness

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Map - Vaseux Lake – South (Transfer of Administration)



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

CLD Reference:

- Okanagan Falls (ACQ) -- Bourrassa Spring

2. Habitat Description / Values:

Okanagan Falls (ACQ) -- Bourrassa Spring consists of one 3.0 ha undeveloped parcel (Lot A, District Lot 2193, Similkameen Division Yale District (SDYD), Plan 37420) located immediately south and west of Highway 97 approximately 1.0 km north of the Okanagan River bridge in Okanagan Falls, British Columbia (BC). This property was acquired by Ministry of Forests, Lands and Natural Resource Operations (MFLNRO; previously Ministry of Environment and Parks) in 1986, potentially to secure water rights to a property to the northeast of Highway 97. This property is run by the Freshwater Fisheries Society of BC to raise catchable rainbow trout (*Oncorhynchus mykiss*) for distribution to high profile small fishing lakes. Two water licences (No. C123085 and C062902) are held by this society in Bourrassa Spring, one for 0.038 m³/s for a "fish hatchery" and one for 0.037 m³/s for "ponds." A small ungazetted stream ("Bourrassa Creek"), presumably sourced from Bourrassa Spring, is mapped to the northern boundary of the ACQ and flows through the fish ponds into Skaha Lake approximately 300 m northeast of the ACQ.

Within the South Okanagan Basin (SOB) ecosection, the ACQ is located within the Very Hot Dry Okanagan variant of the provincially red-listed Bunchgrass biogeoclimatic zone (BGxh1). Terrestrial Ecosystem Mapping (TEM) has been completed for the entire TAC and suggests that this property is dominated by a dry, open ponderosa pine (*Pinus ponderosa*) overstory with a mixed bunchgrass and antelope-brush (*Purshia tridentata*) understory. The ACQ may be subject to tree encroachment due to fire suppression activities, resulting in a denser than historical tree cover. Both antelope-brush steppe and open coniferous woodlands ecosystems are identified as regionally sensitive ecosystems in the Okanagan Valley (Iverson and Haney 2010). Two provincially listed communities are present at the TAC:

- BGxh1/02 (antelope-brush – needle-and-thread grass): red-listed
- BGxh1/04 (ponderosa pine – antelope-brush – red three-awn): blue-listed



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No survey or incidental records of species at risk are mapped to the ACQ, which is part of the Anarchist ungulate winter range. However, there are numerous survey and incidental species at risk records within 2.0 km of the TAC that may also occur at this property based on the habitat present (listed by conservation status):

- Behr's hairstreak (*Satyrium behrii*): red-listed / endangered
- Desert nightsnake (*Hypsiglena chlorophaea*): red-listed / endangered
- Western screech-owl (*Megascops kennicottii*): red-listed / endangered
- American badger (*Taxidea taxus*): red-listed / endangered
- Lewis's woodpecker (*Melanerpes lewis*): red-listed / threatened
- Great Basin spadefoot (*Spea intermontana*): blue / threatened
- Gopher snake (*Pituophis catenifer deserticola*): blue-listed / threatened
- Western rattlesnake (*Crotalus oreganus*): blue-listed / threatened
- North American racer (*Coluber constrictor*): blue-listed / special concern
- Western skink (*Plestiodon skiltonianus*): blue-listed / special concern
- California hairstreak (*Satyrium californica*): blue-listed
- Immaculate green hairstreak (*Callophrys affinis*): blue-listed
- Bighorn sheep (*Ovis canadensis californiana*): blue-listed
- Western small-footed myotis (*Myotis ciliolabrum*): blue-listed

Management activities within the ACQ are governed by the Okanagan-Shuswap Land and Resource Management Plan (LRMP). Based on the LRMP, the ACQ is part of the Community Crown Interface Resource Management Zone (RMZ) as well as a Mule Deer Planning Cell. The ACQ is bordered to the north and east by Highway 97 and is surrounding by private land in all directions. Notations of interest for fish and wildlife purposes are placed on unencumbered crown land 300 m south and 500 m southwest of the ACQ. Okanagan Falls (NOI3) is located 320 m south of the ACQ. No other tenures or land uses are recorded at the ACQ. There are no Invasive Alien Plant Program (IAPP) records at the ACQ or within 2.0 km of the ACQ. The western third (34%) of the ACQ was affected by human-caused fires in 1932 and in 1944.

3. Guiding Documents:

Guidance for operation and management activities in Okanagan Falls (ACQ) -- Bourrassa Spring include the following documents:

- MFLNRO File No. 76919-20
- Refined and Updated Ecosystem Mapping for the South Okanagan and lower Similkameen Valley (Iverson and Haney 2010)
- Okanagan-Shuswap Land and Resource Management Plan
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands



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4. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including Okanagan Falls (ACQ) -- Bourassa Spring. The Okanagan and Similkameen Invasive Species Society (OASISS; previously South Okanagan Invasive Plant Society or SOSIPS) provides integrated and strategic invasive species management throughout the Regional District of Okanagan-Similkameen (RDOS), including the ACQ and surrounding conservation lands. This ACQ has been recognized as a site of particular interest to Habitat Conservation Trust Fund (HCTF) due to past specific investment.

5. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including HCTF.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Management Planning	1: Develop/update/implement management plan	1: Up-to-date management plan in place	1: Property/complex managed following plan
	2: Develop/update/implement monitoring plan including monitoring schedule	1: Up-to-date effectiveness plan in place	1: Property/complex monitored following plan
Goal 2: Protect and Enhance Conservation Values	1: Inventory/research to quantify baseline conservation values and threats	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	2: Determine invasive species presence and vectors for introduction/spread	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	3: Support OASISS in regional invasive species management	1: Involvement in OASISS continued	1: Invasive species effectively managed across the land base

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Map – Okanagan Falls – Bourassa Spring (Acquisition)



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

CLD Reference:

- Ashnola River (ACQ) -- Crater Cabin

Associated Conservation Lands:

- Ashnola River (MR)
- Ashnola Pullout (MR)

2. Habitat Description / Values:

Ashnola River (ACQ) -- Crater Cabin consists of five separate 64.7 ha parcels: northwest (Lot 2201s, Similkameen Division Yale District (SDYD)), southwest (Lot 2203s, SDYD), northeast (Lot 2204s, SDYD), southeast (2202s, SDYD), and east (Lot 2391s, SDYD). These parcels are located on the southern slopes of Crater Mountain above and including Ashnola River, approximately 15 km southwest of Keremeos, British Columbia (BC). The four most westerly parcels (i.e., northwest, northeast, southwest, southeast) are immediately adjacent to one another and are located on the lower elevation foothills of this mountain, to the west of and including a portion of Crater Creek. The most easterly parcel (i.e., east) is located 1.4 km east of the other four parcels at the confluence of Crater Creek and Ashnola River and includes a portion of this latter stream's valley bottom and adjacent slopes to both the north and south. This ACQ is associated with two other conservation lands: Ashnola Pullout (MR) is a small 1.1 ha area located 3.9 km northeast of the east ACQ parcel and situated immediately east of the Ashnola Road and Ashnola River, and Ashnola River (MR) is a large 5,182.9 ha area encompassing all five ACQ parcels as well as much of the surrounding unoccupied crown land. This ACQ was secured by Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) in 1968 for the purposes of environment, conservation, and recreation, including fish and wildlife management. Specifically, this complex was acquired to create a base of operations for blue-listed bighorn sheep (*Ovis canadensis californiana*) habitat management projects in the Crater Mountain area. This species is Priority 3 under Goal 2 (i.e., prevent species and ecosystems from becoming at risk) of the Conservation Framework in BC. The ACQ includes an A-frame cabin that was built in 1970 to support these projects but that is now infrequently used.



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Most recently, the Keremeos-Cawston Sportsman Association had a two year licence (expired in 2011) of occupation on the portion of the property with the cabin to allow for maintenance and youth outdoor education activities. The grounds near the cabin are still used as a helicopter landing and fueling site for fire suppression activities in Cathedral Provincial Park and Protected Area and Snowy Protected Area. These protected areas and park complement the conservation values associated with the ACQ including protection of a diverse range of ecosystems and a provincially significant bighorn sheep herd.

Within the Okanagan Range (OKR) ecosection, the ACQ comprises an elevation gradient ranging from 560 m above sea level (masl) at the Ashnola River valley bottom to 1770 masl at the mid-slopes of Crater Mountain. The four most westerly properties are located in the Dry Cool Thompson Steep Slope variant of the Interior Douglas-fir biogeoclimatic zone (IDFdk1b), which is typically dominated by mature climax stands of Rocky Mountain Douglas-fir (*Pseudotsuga menziesii* var. *glauca*) with lodgepole pine (*Pinus contorta*) as a seral species and an understory consisting of pinegrass (*Calamagrostis rubescens*), bunchgrasses, and abundant shrubs and/or mosses. These forests are interspersed with bunchgrass-dominated grasslands. The east ACQ parcel is located in the lower elevation and generally drier and warmer Very Dry Hot Okanagan variant of the IDF (IDFhx1), which is typically dominated by open Rocky Mountain Douglas-fir and ponderosa pine (*P. ponderosa*) forest with abundant pinegrass and a low cover of shrubs in the understory. The IDF is provincially blue-listed, and both the IDFhx1 and the IDFdk1 variants contain numerous red-listed and blue-listed ecological communities that may be present within the ACQ. Terrestrial Ecosystem Mapping (TEM) has not been completed for any of the parcels in this ACQ. The ACQ primarily consists of and is surrounded by undeveloped grassland and forested land, all of which is located within Ashnola River (MR). No other tenures or land uses are recorded at the ACQ. Several forestry roads bisect the ACQ, including Ashnola Forest Service Road (FSR) through the east ACQ parcel.

Management activities within the ACQ are governed by the Okanagan-Shuswap Land and Resource Management Plan (LRMP). Based on the LRMP, the northern portion of the northwest ACQ parcel is part of the legal bighorn sheep area for winter range. The remainder of the ACQ part of the Bighorn Sheep Habitat Resource Management Zone (RMZ) for summer range and the Mule Deer Planning Cell, with all of this area designated as part of the Ashnola ungulate winter range. All of the ACQ is part of the Mountain Goat Habitat RMZ and all of the ACQ to the north of Ashnola River part of the Grizzly Bear Habitat RMZ. The ACQ is also part of the Tourism RMZ for large backcountry use. Bighorn sheep, mule deer (*Odocoileus hemionus*), and grizzly bear (*Ursus arctos*) have all been surveyed and recorded within the ACQ and surrounding area. In addition, red-listed American badger (*Taxidea taxus*) and northern rubber boa (*Charina bottae*), a Special Concern species under the national *Species at Risk Act*, have been incidentally observed within 2.0 km of the ACQ. Surveys for



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red-listed Hoffman's checkerspot (*Chlosyne hoffmanni*) and red-listed Sonora skipper (*Polites sonora*) were completed within 2.0 km of the ACQ in July 2009 with no presence recorded.

Invasive Alien Plant Program (IAPP) records for diffuse knapweed (*Centaurea diffusa*), burdock species (*Arctium* spp.), hoary alyssum (*Berteroa incana*), and bull thistle (*Cirsium vulgare*) are present within the east ACQ parcel; no IAPP records are present within the four most westerly parcels. IAPP records within 2.0 km of the ACQ also include the following species, all of which may also occur at the ACQ based on the habitat present: Canada thistle (*Cirsium arvense*), Dalmatian toadflax (*Linaria genistifolia* ssp. *dalmatic*), common hound's-tongue (*Cynoglossum officinale*), great mullein (*Verbascum thapsus*), sulphur cinquefoil (*Potentilla recta*), scentless chamomile (*Matricaria perforata*), and spotted knapweed (*Centaurea stoebe* ssp. *micranthos*). A southern area (0.14 ha) of the east ACQ parcel was affected by a person-cause wildfire in 1931 and a northern area (1.07 ha) of the northwest ACQ parcel was affected by a person-cause wildfire in 1973. Five small (<0.01 ha) person-caused nuisance fires have been recorded within the east ACQ parcel along the Ashnola FSR between 2002 and 2011.

3. Guiding Documents:

Guidance for operation and management activities in Ashnola River (ACQ) -- Crater Cabin include the following documents:

- MFLNRO File No. 39560-25/ASH-CRA
- Proposal to Establish the Ashnola Wildlife Management Area (BC Environment 1994)
- Okanagan-Shuswap Land and Resource Management Plan
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands

4. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including Ashnola River (ACQ) -- Crater Cabin. The Okanagan and Similkameen Invasive Species Society (OASISS; previously South Okanagan Invasive Plant Society or SOSIPS) provides integrated and strategic invasive species management throughout the Regional District of Okanagan-Similkameen (RDOS), including this ACQ and surrounding conservation lands. As this ACQ provides ungulate winter range for managed wildlife stocks, the Fish and Wildlife Section of MFLRNO is also a key partner and contributor to this ACQ. This ACQ has been recognized as a site of particular interest to Habitat Conservation Trust Fund (HCTF) due to past specific investment.

5. Partner Recognition:



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Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including HCTF.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

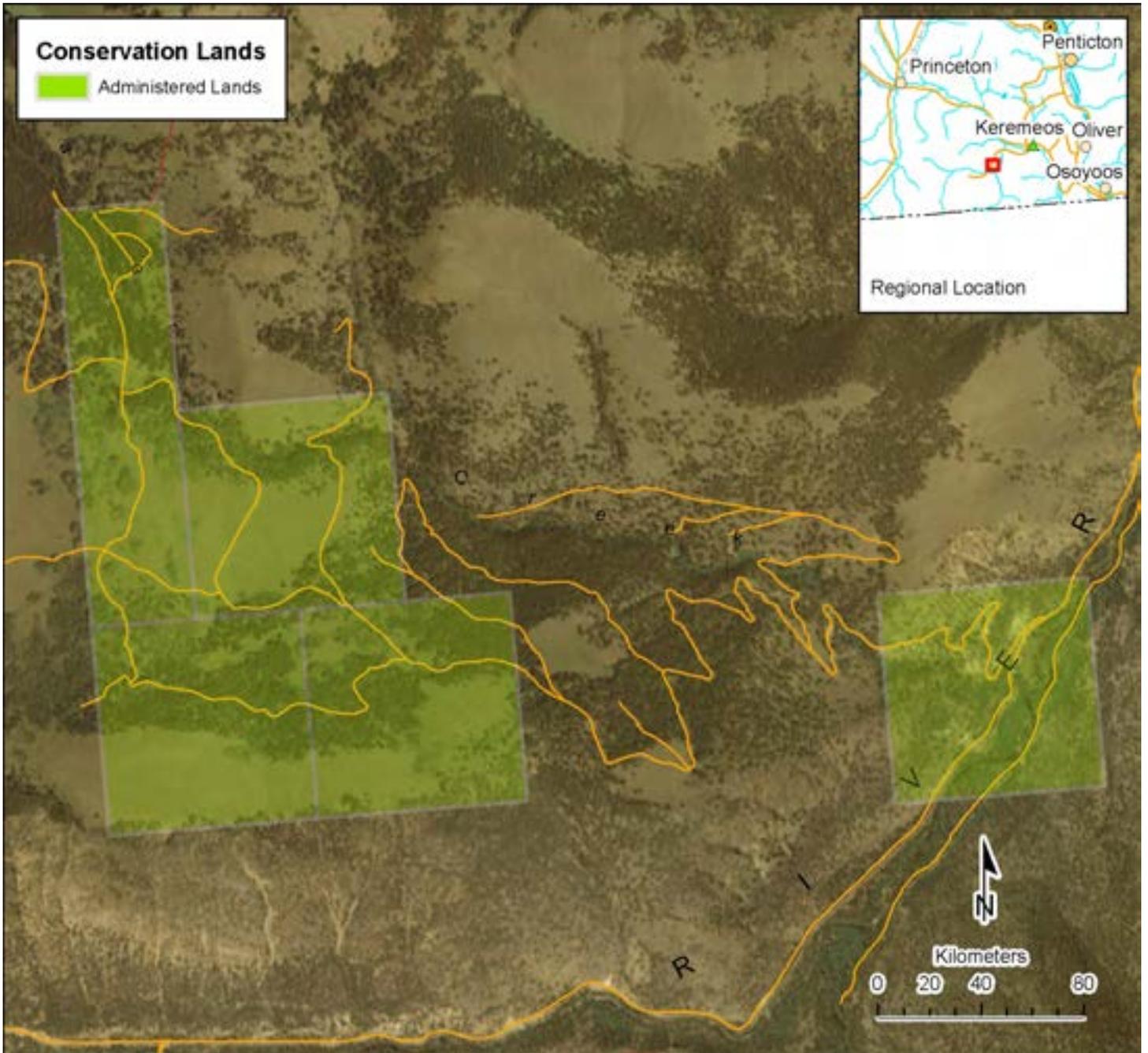
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Management Planning	1: Develop/update/implement management plan	1: Up-to-date management plan in place	1: Property/complex managed following plan
	2: Develop/update/implement monitoring plan including monitoring schedule	1: Up-to-date effectiveness plan in place	1: Property/complex monitored following plan
Goal 2: Protect and Enhance Conservation Values	1: Inventory/research to quantify baseline conservation values and threats	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	2: Inventory/research to determine species and ecosystems at risk presence	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	3: Determine invasive species presence and vectors for introduction/spread	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	4: Support OASISS in regional invasive species management	1: Involvement in OASISS continued	1: Invasive species effectively managed across the land base



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	5: Protect important habitat features (e.g., ungulate winter range)	1: Protective measures installed	1: Important habitat features protected
Goal 4: Maintain Public Safety	1: Limit risks associated with built (e.g., buildings, roads)	1: Scheduled inspections completed and risks addressed	1: Risk to public safety at property/complex minimized

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Map – Ashnola River – Crater Cabin (Acquisition)



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

Complex Name:

- Antlers Saddle Complex

CLD Reference:

- Antlers Saddle (ACQ1)
- Antlers Saddle (ACQ2) -- Garnet Valley
- Antlers Saddle (TAC)

Associated Conservation Lands:

- Summerland North (MR1)

2. Habitat Description / Values:

Antlers Saddle Complex consists of three conservation lands: Antlers Saddle (ACQ1), Antlers Saddle (ACQ2) -- Garnet Valley, and Antlers Saddle (TAC). Both ACQ1 and TAC consist of the same two grouped parcels (District Lot (DL) 2898A and DL 2898 except Part included on Plan 5093, Osoyoos Division Yale District (ODYD)); 118.9 ha and collectively referred to here as ACQ1/TAC) with the exception that ACQ1 is mapped as also including the Highway 97 right-of-way. ACQ1/TAC was secured by the Province in 1974 through the *Greenbelt Act* purchase initiative and transferred in 1985 to Ministry of Forests, Lands and Natural Resource Operations (MFLNRO; previously Fish and Wildlife Branch, Ministry of Environment). ACQ2 also consists of two grouped parcels (DL 2896 except Plans M66 and B12625, and DL 3312 except Plans B4572 and part on Plan B12625, ODYD; 251.8 ha) located approximately 265 m southeast of ACQ1/TAC. This parcel group was purchased by the Habitat Conservation Fund and transferred to MFLNRO in 1982. Both parcel groups in this Complex were acquired for the purposes of environment, conservation, and recreation, including fish and wildlife management. Specifically, the Complex was acquired to provide protection and management for ungulate winter range habitat and shrub-grassland communities. This Complex is associated with Summerland North (MR1), a map



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reserve located immediately north of ACQ1/TAC for the purposes of environment, conservation, and recreation, specifically fish and wildlife management.

ACQ1/TAC consists of an east-facing forested slope between 400 and 700 m above sea level (masl) in elevation located approximately 12 km northwest of Summerland, British Columbia (BC). This parcel group is bordered by private land use and Okanagan Lake to the east, with undeveloped crown land to the north, south, and west. Meadow Valley Road bisects the northwest corner of this parcel group, which also contains numerous off-road trails. Known built structures include an old irrigation flume and a pipeline right-of-way, both of which were identified as not a hazard to public safety (Bunge 2012). A utility right-of-way also bisects the centre of this parcel group in an east-west direction. Deer fencing is present along the eastern boundary of this parcel group adjacent to Highway 97. ACQ2 is located at an elevation between 640 and 840 masl between Mount Eneas to the south and its adjacent unnamed peak to the north. This parcel is more heavily treed than ACQ1/TAC and contains several wetland and drainage features. Garnet Lake crosses the western portion of this parcel group but is not included within ACQ2. Eneas Creek flows into Garnet Lake at the northwest corner of ACQ2. Meadow Valley Road also bisects this parcel, which contains numerous well-established roads and off-road trails. ACQ2 is bordered by private and municipal land to the south and undeveloped crown land to the north, east, and west. This Complex is accessed from Garnet Valley Road then Meadow Valley Road from Summerland. No land tenures other than the right-of-ways are present at the Complex.

Within the North Okanagan Basin (NOB) ecosection, most of the Complex is located within the Very Hot Dry Okanagan variant of the Ponderosa Pine biogeoclimatic zone (PPxh1), with the higher elevation eastern portion of ACQ2 located within the Very Hot Dry Okanagan variant of the Interior Douglas Fir zone (IDFxh1). Terrestrial Ecosystem Mapping (TEM) has been completed for the northern portion of ACQ1/TAC and suggests that this parcel group is dominated by open ponderosa pine (*Pinus ponderosa*; Py) and Rocky Mountain Douglas-fir (*Pseudotsuga menziesii* var. *glauca*; Fd) forest interspersed with bunchgrass grassland and rock outcrop features (Iverson 2011). Grassland, coniferous woodland, old growth forest, riparian forest, and sparsely vegetated ecosystems are all mapped to the Complex and are identified as regionally sensitive ecosystems in the Okanagan Valley (Iverson 2011). Both the PP and IDF biogeoclimatic zones are blue-listed provincially, and many of the communities mapped to the Complex are provincially listed:

- PPxh1/07 (Fd / Py – snowberry – birch-leaved spirea): red-listed
- PPxh1/06 (Fd / Py – snowberry – pinegrass): red-listed
- PPxh1/05 (Py – bluebunch wheatgrass – rough fescue): blue-listed
- PPxh1/01 (Py – bluebunch wheatgrass – Idaho fescue): blue-listed
- PPxh1/02 (Py – red three-awn): blue-listed

Species at risk observed at the Complex include red-listed Great Basin spadefoot (*Spea intermontana*) and blue-listed flammulated owl (*Otus flammeolus*). Other species recorded at the Complex include great-horned owl



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(*Bubo virginianus*), mule deer (*Odocoileus hemionus*), pale snaketail (*Ophiogomphus severus*), and alkali bluet (*Enallagma clausum*). Species at risk observed within 2.0 km of the Complex that may also occur at this parcel group based on the habitat present include the following species:

- American badger (*Taxidea taxus*): red-listed / endangered
- Lewis's woodpecker (*Melanerpes lewis*): red-listed / threatened
- Western screech-owl (*Megascops kennicottii macfarlanei*): red-listed / threatened
- Gopher snake (*Pituophis catenifer deserticola*): blue-listed / special concern
- Western toad (*Anaxyrus boreas*): blue-listed / special concern
- Painted turtle (*Chrysemys picta* pop. 2): blue-listed / special concern

Management activities within the Complex are governed by the Okanagan-Shuswap Land and Resource Management Plan (LRMP). Based on the LRMP, the southern portion of ACQ1/TAC and the eastern portion of ACQ2 are part of the Mountain Goat Habitat Resource Management Zone (RMZ) for summer range. All of Antlers Saddle Complex is located within a mule deer planning cell, with all of this area designated as part of the Trout ungulate winter range. Mule deer has been recorded throughout the Complex, and other ungulate species recorded within 2.0 km of the Complex include white-tailed deer (*Odocoileus virginianus*), mountain goat (*Oreamnos americanus*), and moose (*Alces americanus*). All of ACQ1/TAC, and most of ACQ2 are part of the Community Crown Interface RMZ. In addition, all of ACQ2 is located within a legal intensive recreation area for summer motorized/shared use and a Recreation RMZ for summer motorized/shared use. The Complex is used extensively for recreational activities including hiking, mountain biking, horseback riding, and motorized vehicle use (i.e., ATV, dirt bike).

Current management issues within the Complex include environmental damage from unauthorized motorized activity (e.g., mud bogging), which has likely resulted in invasive species introduction and spread, soil erosion, and vegetation and wildlife disturbance. Invasive Alien Plant Program (IAPP) records for Dalmatian toadflax (*Linaria genistifolia* ssp. *dalmatic*), diffuse knapweed (*Centaurea diffusa*), common hound's-tongue (*Cynoglossum officinale*), and butter-and-eggs (*Linaria vulgaris*) are present within the Complex. Diffuse knapweed has also been treated within a northern area of ACQ2. IAPP records within 2.0 km of the Complex also include the following species, all of which may also occur at the Complex based on the habitat present: burdock (*Arctium* spp.), chicory (*Cichorium intybus*), field bindweed (*Convolvulus arvensis*), spotted knapweed (*Centaurea stoebe* ssp. *micranthos*), and common tansy (*Tanacetum vulgare*). A small portion of the Complex (4%) at the northern end of ACQ2 was affected by a lightning-caused fire in 1930 and much of the Complex (68%) was affected by a person-caused fire in 1932. Numerous small (<1 ha) natural and person-caused fires have burned within the Complex between 1963 and 2010.

3. Guiding Documents:

Guidance for operation and management activities in Antlers Saddle Complex include the following documents:



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- MFLNRO File No. 39560-25/ANT
- Crown Land File No. 0344023 and No. 3402141
- Public Risk Assessment (Bunge 2012)
- Sensitive Ecosystem Inventory: Central Okanagan Gap Areas, 2011 (Iverson 2011)
- Okanagan-Shuswap Land and Resource Management Plan
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands

4. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including Antlers Saddle Complex. As this Complex provides ungulate winter range for managed wildlife stocks, the Fish and Wildlife Section of MFLRNO is also a key partner and contributor to this Complex. The Okanagan and Similkameen Invasive Species Society (OASISS; previously South Okanagan Invasive Plant Society or SOSIPS) provides integrated and strategic invasive species management throughout the Regional District of Okanagan-Similkameen (RDOS), including the Complex and surrounding lands. This Complex has been recognized as a site of particular interest to Habitat Conservation Trust Fund (HCTF) due to past specific investment.

5. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including HCTF.



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6. Goals, Objectives and Performance Indicators

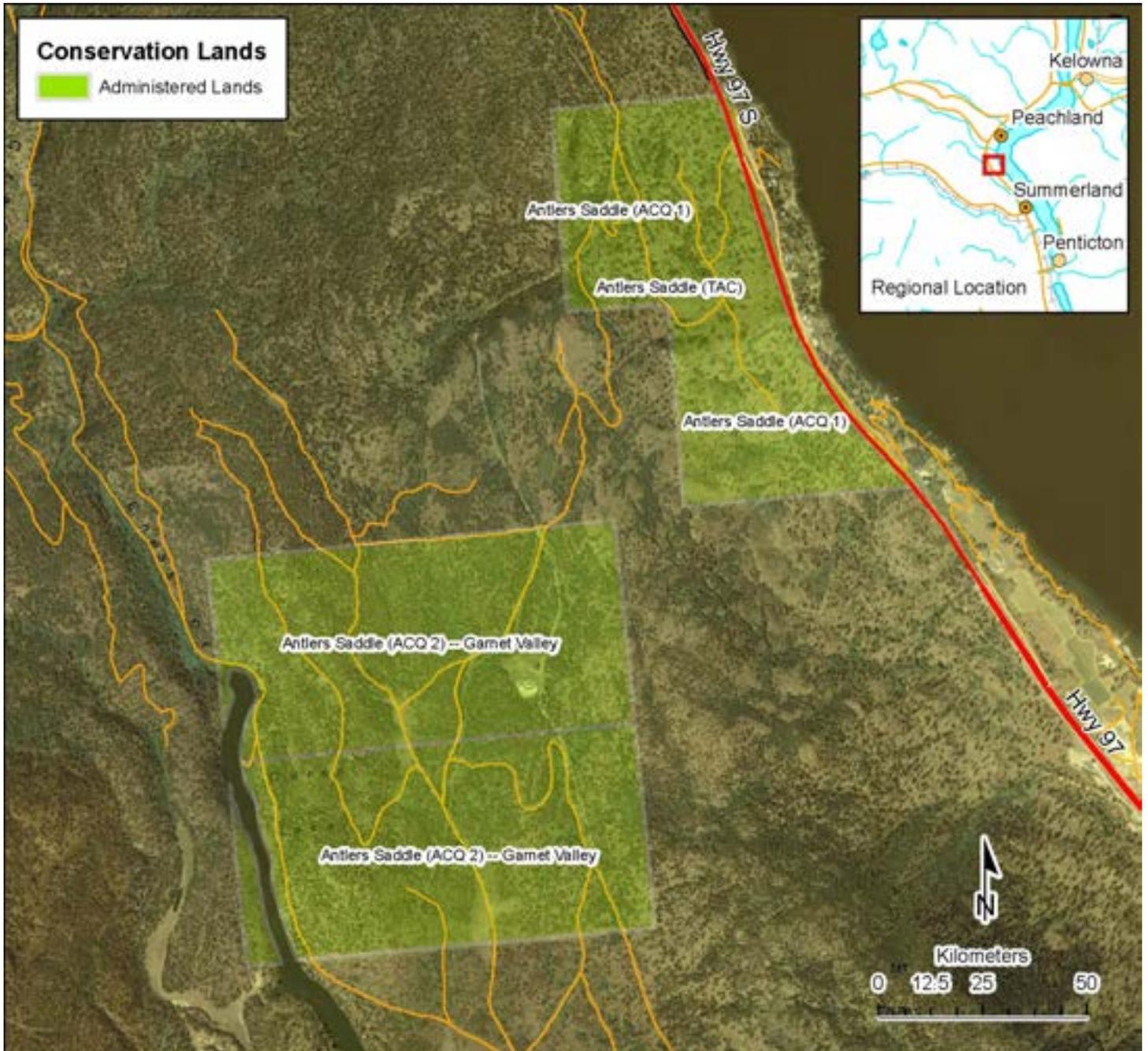
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Goal 2: Protect and Enhance Conservation Values	1: Inventory/research to quantify baseline conservation values and threats	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	2: Inventory/research to determine species and ecosystems at risk presence	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	3: Determine invasive species presence and vectors for introduction/spread	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
	4: Support OASISS in regional invasive species management	1: Involvement in OASISS continued	1: Invasive species effectively managed across the land base
	5: Protect important habitat features (e.g., ungulate winter range)	1: Protective measures installed	1: Important habitat features protected



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Goal 3: Habitat Restoration	1: Limit risks associated with built (e.g., buildings, roads)	1: Inventory/research completed	1: Results from inventory/research incorporated into relevant plans
Goal 4: Encourage Public Education and Appropriate Use	1: Increase public education of conservation values through signage/facilities	1: Signage/facilities in place and maintained	1: Public informed of property/complex conservation values and goals
	1: Limit environmental impacts from inappropriate public/recreational access and use	1: Signage/fencing in place and maintained	1: Balance between public/recreational use and conservation values maintained 2: Improved public conservation awareness
Goal 5: Sustainable Resource Management	2: Limit environmental impacts from utility right-of-ways	1: Utility ROW plans reviewed for conservation concerns	1: Balance between utility use and conservation values maintained 2: Improved conservation awareness

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Map - Antlers Saddle - (Acquisition)



**Wildlife Operations & Management
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Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

1. Name of Property / Complex:

Complex Name:

- South Okanagan WMA Complex

CLD Reference:

- South Okanagan WMA
- SOWMA addition (MR 1)
- SOWMA addition (MR 2)
- SOWMA addition (MR 3)
- SOWMA addition (MR 4)
- SOWMA addition (MR 5)
- SOWMA addition (MR 6)
- SOWMA addition (MR 7)
- SOWMA addition (MR 8)
- SOWMA addition (MR 9)
- SOWMA addition (MR 10)
- SOWMA addition (MR 11)
- SOWMA addition (MR 12)
- SOWMA addition (MR 13)
- SOWMA addition (MR 14)
- SOWMA addition (MR 15)

2. Habitat Description / Values:

The South Okanagan Wildlife Management Area (461 hectares), consisting of multiple discrete parcels, stretches from north of Oliver to the inlet of Osoyoos Lake near the town of Osoyoos. To the east of the WMA lies the 12,950 hectare Osoyoos Indian Band reserve. The WMA is between 260 metres and 360 metres elevation, and is situated within the Okanagan Very Dry Hot Bunchgrass biogeoclimatic zone (BGxh1) and the Southern Okanagan Basin ecosection.

The WMA is integrally tied to the Okanagan River as the majority of the WMA's discrete parcels are floodplain and remnant oxbow areas. These areas were cut off from the main channel as a result of large scale



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straightening and diking project for flood control purposes in the 1950's. Vegetation found within the WMA boundaries ranges from dense riparian thickets, cat-tail marshes and low-lying pastures to dry sloped sage and antelope-brush dominated benchlands. Dense deciduous thickets, which exist as primarily narrow bands bordering Okanagan River remnant oxbows, are interspersed by water birch, alder, willow, black cottonwood and trembling aspen.

Locally, the WMA is an integral component of a larger suite of conservation lands and designations. The Haynes' Lease Ecological Reserve (101 hectares) is immediately southeast of the largest WMA parcel. Conservation properties adjacent to the southern portion of the WMA include holdings owned by Ducks Unlimited Canada, the Nature Conservancy of Canada and The Nature Trust of British Columbia. The internationally designated Osoyoos Oxbows Important Bird Area, established to protect important Yellow-breasted Chat breeding habitat, encompasses the large southern portion of the WMA, the above-mentioned adjacent conservation lands and other adjacent private land holdings.

The South Okanagan WMA consists of one core area and several smaller discrete parcels protecting multiple distinct habitat types ranging from arid upland benches dominated by antelope-brush communities to floodplain cattail marshes and riparian fringes of remnant Okanagan River oxbows. The lower portions of several small creeks and multiple remnant Okanagan River oxbows are protected within the SOWMA boundaries including Park Rill and Shippet, Winters, Janssen, Thompson, 'W1' (west) and 'E1' (east) oxbows. SOWMA has been grouped into three "blocks". "Block A," the northernmost section of the WMA consists of two contiguous, paralleling sections. "Block A" contains deciduous riparian tree stands with a mixture of black cottonwoods and water birches. A host of non-native tree species can also be found here, specifically willow and Russian Elm.

"Block B" consists of multiple, largely isolated, remnant oxbow sections of the Okanagan River bounded by riparian birch woodlands, cottonwood and non-native trees. Also within "Block B" is a discrete upland parcel that is dominated by antelope-brush and needle-and-thread grass. This parcel was impacted by wildfire in 2004.

"Block C" consists of several large parcels with habitat that varies from open cattail marshes, sandbars, cultivated pastures and dense riparian thickets with wild rose and red-osier dogwood understories to dry hillside areas dominated by sagebrush, native grasses and cactus. The south eastern boundary of the WMA abuts Haynes' Lease Ecological Reserve. Much of this area is within an active range tenure, and supports grazing and some hay-cutting at certain times of the year.



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Additions to the Wildlife Management Area

The 2001 Okanagan-Shuswap Land and Resource Management Plan (OSLRMP) provides direction that specific Crown land parcels within the Okanagan River valley bottom, which stretches from north of the Town of Oliver to the head of Osoyoos Lake, be added to the South Okanagan WMA (Figure 2). To meet this LRMP direction the province is in the final stages of completed a cabinet submission for additional SOWMA designations that total 512 ha. The additions to SOWMA are characterized dry shrub-steppe ecosystems dominated by antelope brush and associated dry grassland vegetation and wildlife species, with many species and ecosystems at risk present on the lands.

Management issues and priorities in the SOWMA are:

- Maintaining and recovering species and ecosystems at risk.
- Invasive plants and wildlife
- Effects of livestock grazing
- Impacts along private land interface
- Fostering stewardship of SOWMA users and adjacent landowners
- Okanagan river restoration initiative
- Maintaining cultural values

3. Guiding Documents:

- Okanagan-Shuswap Land and Resource Management Plan
- South Okanagan Wildlife Management Area – Management Plan (Draft). BC Parks, Okanagan Region 2011.
- Okanagan River Restoration Initiative
- Peatt, A. and Anthea Bryan 1990 - The South Okanagan Wildlife Management Area: A Management Plan, B.C. Environment, Wildlife Branch, 107 pp.
- Order-in-Council 0493/94
- Halladay, D.R., J. Bone and D.R. Hurn (1972) A Commitment to the Future II, Dept. of Recreation and Conservation, Fish and Wildlife Branch, 16 pp.

4. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands the South Okanagan Wildlife Management Area. As this provides critical ungulate winter range, fish habitat, and habitat for species at risk, the Fish and Wildlife Section of MFLRNO is also a key partner and contributor to this WMA. This WMA is part of a cluster of properties owned by various private and government organizations (The Nature Trust, BC Parks,



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Ducks Unlimited Canada, the Nature Conservancy of Canada) and managed for similar conservation values, which allows for partnership and a collaborated approach to operation and management tasks such as species at risk and invasive species inventories. The Okanagan and Similkameen Invasive Species Society (OASISS; previously South Okanagan Invasive Plant Society or SOSIPS) provides integrated and strategic invasive species management throughout the Regional District of Okanagan-Similkameen (RDOS), including the WMA and surrounding conservation lands.

5. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including HCTF.



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6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
1. Management Planning	1. Develop/update/implement management plan	Up-to-date management plan in place	Property/complex managed following plan
	2. Develop/update/implement monitoring plan, including monitoring schedule	Up-to-date effectiveness plan in place	Property/complex monitored following plan
2. Protect and Enhance Conservation Values	1. Inventory/research to quantify baseline conservation values and threats	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	2. Inventory/research to determine species and ecosystems at risk presence	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	3. Determine invasive species presence and vectors for introduction/spread	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	4. Support OASISS in regional invasive species management	Involvement in OASISS continued	Invasive species effectively managed across the land base
	5. Protect important habitat features (e.g., wildlife trees, spawning areas, lambing areas, ungulate winter range)	Protective measures installed	Important habitat features protected
	6. Maintain optimal water levels for habitat	Water control structures maintained	Water levels managed for habitat needs
3. Habitat Restoration	1. Restore important habitat features (e.g., wildlife trees, spawning areas, lambing areas, ungulate winter range)	Increase in important habitat features	Increase in important habitat features



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	2. Remove/control invasive species	Decrease in invasive species diversity/impact	Decrease in invasive species diversity/impact
	3. Inventory/research to determine suitable areas for restoration	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	4. Restore natural processes (e.g., seasonal flooding, fire regime)	Natural processes are restored	Natural processes are restored
4. Maintain Public Safety	1. Increase public awareness of safety concerns through signage/facilities	Signage in place and maintained	Risk to public safety at property/complex minimized
	2. Limit risks associated with built hazards (e.g., buildings, roads, wells)	Scheduled inspections completed and risks addressed	Risk to public safety at property/complex minimized
	3. Limit risks associated with natural hazards (e.g., wildlife trees, steep slopes)	Scheduled inspections completed and risks addressed	Risk to public safety at property/complex minimized
5. Encourage Public Education and Appropriate Use	1. Increase public education of conservation values through signage/facilities	Signage/facilities in place and maintained	Public informed of property/complex conservation values and goals
	2. Limit environmental impacts from inappropriate public/recreational access and use (e.g., vegetation trampling, wildlife disturbance, disease introduction/spread from domestic animals, invasive species introduction/spread, erosion, trail creation)	Signage/fencing in place and maintained	Balance between public/recreational use and conservation values maintained; improved public conservation awareness
	3. Survey legal property boundaries where unknown or where trespasses are suspected	Legal survey plan available and marked on the ground	Suspected trespasses resolved; improved public conservation awareness
	4. Pursue compliance enforcement action against known trespasses (e.g., dumping, encroachment)	Scheduled inspections completed and known trespasses referred to Compliance and Enforcement	Known trespasses resolved; improved public conservation awareness
6. Develop Local Partnerships and Maintain	1. Develop/maintain good relationships with local communities and First Nations	Partnerships developed/maintained with local communities and First Nations	Stewardship of the area led/sustained by local communities and First Nations



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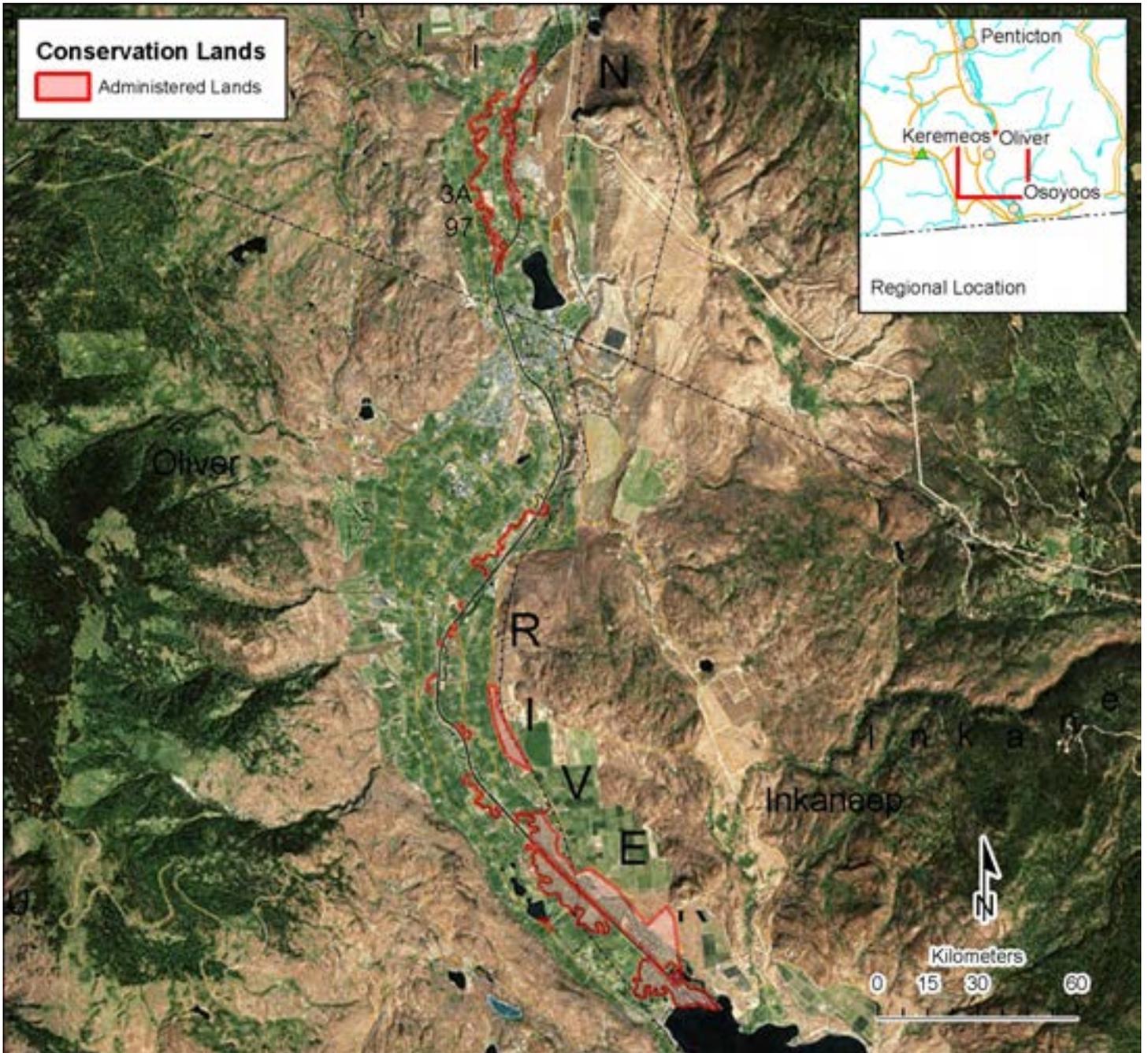
Traditional Uses	2. Develop/maintain good relationships with neighbouring properties	Partnerships developed/maintained with neighbouring property owners	Threats from neighbouring properties reduced; improved conservation awareness
	3. Maintain traditional use of native plants, fish, and wildlife	Known traditional uses maintained	Traditional uses documented and incorporated into management plan
	4. Maintain archaeological values	known archaeological values maintained	Archaeological sites/values documented and incorporated into management plan
7. Sustainable Resource Management	1. Limit environmental impacts from cattle/agricultural activities (e.g., trampling, overgrazing, invasive species introduction/spread)	Perimeter fencing/cattle guards in place and maintained	Balance between agricultural use and conservation values maintained; collaboration between resource ministries and land managers
	2. Limit environmental impacts from forestry activities (e.g., habitat loss/degradation, over extraction, fire suppression)	Tenures reviewed for conservation concerns	Balance between forestry and conservation values maintained; collaboration between resource ministries and land managers
	3. Limit environmental impacts from mining and mineral extraction (e.g., habitat loss/degradation, environmental contamination, wildlife disturbance)	Tenures reviewed for conservation concerns	Balance between mining and conservation values maintained; collaboration between resource ministries and land managers
	4. Limit environmental impacts from fishing and hunting (e.g., over extraction, invasive species introduction/spread)	Signage in place and maintained	Balance between fishing/hunting opportunities and conservation values maintained; improved conservation awareness
	5. Limit environmental impacts from utility right-of-ways (e.g., invasive species introduction/spread, fragmentation, habitat degradation/loss)	Utility ROW plans reviewed for conservation concerns	Balance between utility use and conservation values maintained; improved conservation awareness



Project File #: _____

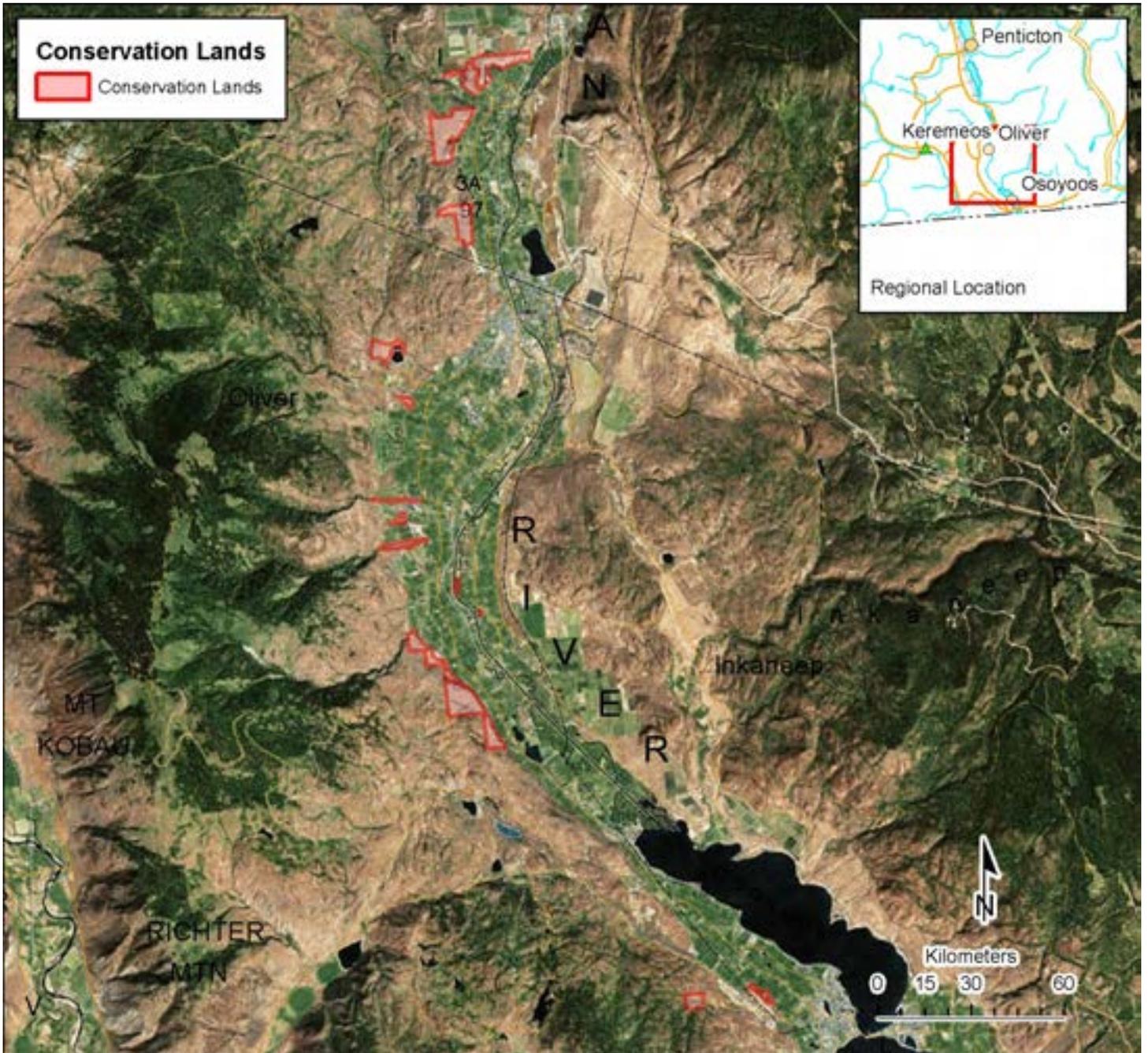
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Map – South Okanagan Wildlife Management Area

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Map – South Okanagan WMA Additions



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name:

Region: Thompson - Okanagan

PROJECT INFORMATION

7. Name of Property/ Complex:

McTaggart-Cowan Wildlife Management Area

8. Habitat Description / Values:

The wildlife management area (WMA) is approximately 6,373 ha. and resides immediately east of the City of Penticton and lie adjacent to Skaha Bluffs Provincial Park. It includes the The Nature Trust BC Skaha Eastside complex.

The name of the WMA honors the legacy of Ian McTaggart-Cowan (1910- 2010) a prominent figure in the field of wildlife management in British Columbia.

The WMA was identified and recommended by the Okanagan Shuswap LRMP and the establishment of this WMA was a high priority for the province.

The current mapped area of the WMA includes the Derenzy Bighorn Sheep Habitat RMZ a subset of the larger Bighorn Sheep Habitat RMZ (Resource Management Zone). The goals of the Derenzy Bighorn Sheep Habitat RMZ are as follows:

- To maintain and enhance wildlife and their habitats to ensure an abundant, diverse and self-sustaining wildlife resource throughout this RMZ.
- To maintain, enhance and promote opportunities to appreciate, study and view bighorn sheep in their habitats.
- To maintain, enhance and promote recreational opportunities to hunt game species, including bighorn sheep in their habitats.

The area ranges in elevation from 700 metres to 1260 metres and is within the BGxh1, PPxh1, IDFxh1 and IDFdm1 biogeoclimatic zones. Topographically, the area is characterized by rock outcrops, steep cliffs, interspersed grasslands, open Douglas-fir and ponderosa pine forests at the lower elevations, and lodgepole pine and larch forests in the upper elevations, and a mixture of cottonwood and water birch stands within riparian areas. The WMA has importance for species at risk and their habitats in the south Okanagan and this is based on its large area of contiguous habitat and its generally un-roaded



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

condition, which is uncommon in the region. Important habitat requirements for Bighorn Sheep (a blue-listed species) within the WMA, include lambing areas, escape terrain, winter and spring foraging areas. There are several geographical locations named after Gordon Derenzy, (e.g., Derenzy Creek, Derenzy Lake) who was an operator/manager of a prominent orchard near Gillies Creek in the early part of the 1900's. The LRMP adopted the name (i.e., the Derenzy Sheep WMA).

In addition to Bighorn Sheep, the WMA provides winter habitat for Mule Deer, Elk, and Mountain Goat. Predators, such as Cougar and Coyote, are fairly common because of the year round presence of the variety of ungulates. Also, because of the variety of habitat types, the area provides habitat for a variety of smaller wildlife species including raptors, songbirds, small mammals, reptiles and amphibians. The area has significant value for species and ecosystems at risk.

9. Guiding Documents:

- Okanagan-Shuswap Land and Resource Management Plan
- McTaggart Cowan Management Area Proposal (BC Parks 2011)
- The British Columbia Conservation Lands Program Part II: Draft Management Guidelines for Conservation Lands
- Terrestrial Ecosystem Mapping of the Central Okanagan with a Sensitive Ecosystems Inventory (SEI) (Iverson and Cadrin 2003)
- Sensitive Ecosystem Inventory: Central Okanagan Gap Areas, 2011 (Iverson 2011)

10. Financial Sustainability:

The Ecosystems Section is responsible for managing the conservation lands administered by MFLRNO (i.e., wildlife management areas, acquisitions, transfers of administrative control). This section dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands including this WMA. As the WMA provides critical ungulate winter range for managed wildlife stocks, the Fish and Wildlife Section of MFLRNO is also a key partner and contributor to the WMA. The Okanagan and Similkameen Invasive Species Society (OASISS; previously South Okanagan Invasive Plant Society or SOSIPS) provides integrated and strategic invasive species management throughout the Regional District of Okanagan-Similkameen (RDOS), including the WMA and surrounding conservation lands. There are currently Forest and Range, Guide Outfitter and Trapper tenures in the WMA. Revenue collected from these tenures contributes to the Land Management Revenue Account.



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There is potential for additional tenure revenue from future tenures provided they are consistent with the management objectives of the WMA.

11. Partner Recognition:

Future press releases, publications, and interpretive signage will acknowledge all funding and management partners including Habitat Conservation Trust Fund (HCTF)



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12. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
1. Management Planning	1. Develop/update/implement management plan	Up-to-date management plan in place	Property/complex managed following plan
	2. Develop/update/implement monitoring plan, including monitoring schedule	Up-to-date effectiveness plan in place	Property/complex monitored following plan
2. Protect and Enhance Conservation Values	1. Inventory/research to quantify baseline conservation values and threats	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	2. Inventory/research to determine species and ecosystems at risk presence	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	3. Determine invasive species presence and vectors for introduction/spread	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	4. Support OASISS in regional invasive species management	Involvement in OASISS continued	Invasive species effectively managed across the land base
	5. Protect important habitat features (e.g., wildlife trees, spawning areas, lambing areas, ungulate winter range)	Protective measures installed	Important habitat features protected
	6. Maintain optimal water levels for habitat	Water control structures maintained	Water levels managed for habitat needs
3. Habitat Restoration	1. Restore important habitat features (e.g., wildlife trees, spawning areas, lambing areas, ungulate winter range)	Increase in important habitat features	Increase in important habitat features
	2. Remove/control invasive species	Decrease in invasive species diversity/impact	Decrease in invasive species diversity/impact



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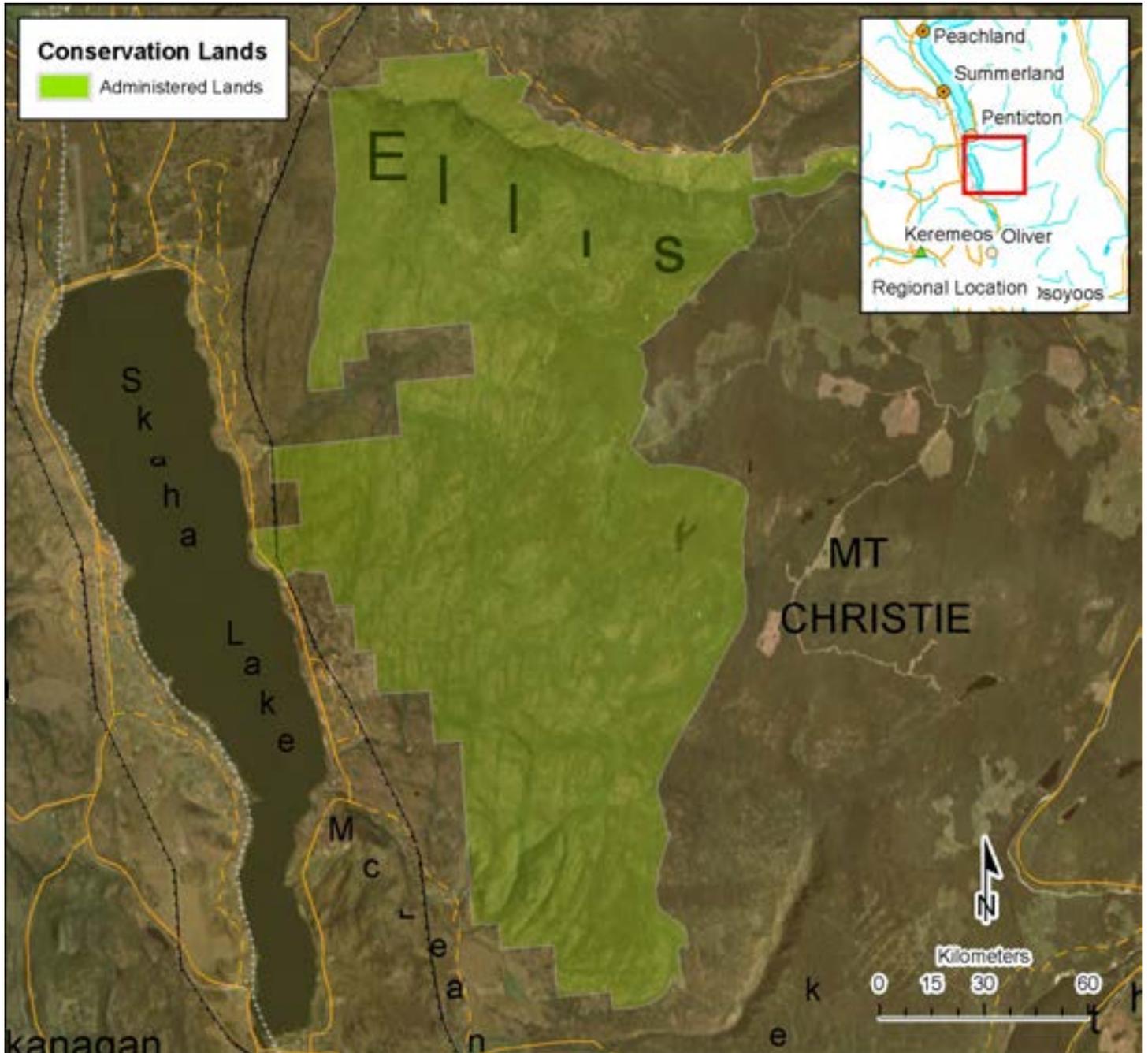
	3. Inventory/research to determine suitable areas for restoration	Inventory/research completed	Results from inventory/research incorporated into relevant plans
	4. Restore natural processes (e.g., seasonal flooding, fire regime)	Natural processes are restored	Natural processes are restored
4. Maintain Public Safety	1. Increase public awareness of safety concerns through signage/facilities	Signage in place and maintained	Risk to public safety at property/complex minimized
	2. Limit risks associated with built hazards (e.g., buildings, roads, wells)	Scheduled inspections completed and risks addressed	Risk to public safety at property/complex minimized
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	3. Survey legal property boundaries where unknown or where trespasses are suspected	Legal survey plan available and marked on the ground	Suspected trespasses resolved; improved public conservation awareness
	4. Pursue compliance enforcement action against known trespasses (e.g., dumping, encroachment)	Scheduled inspections completed and known trespasses referred to Compliance and Enforcement	Known trespasses resolved; improved public conservation awareness
6. Develop Local Partnerships and Maintain Traditional Uses	1. Develop/maintain good relationships with local communities and First Nations	Partnerships developed/maintained with local communities and First Nations	Stewardship of the area led/sustained by local communities and First Nations
	2. Develop/maintain good relationships with neighbouring properties	Partnerships developed/maintained with	Threats from neighbouring properties reduced; improved



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		neighbouring property owners	conservation awareness
	3. Maintain traditional use of native plants, fish, and wildlife	Known traditional uses maintained	Traditional uses documented and incorporated into management plan
	4. Maintain archaeological values	known archaeological values maintained	Archaeological sites/values documented and incorporated into management plan
7. Sustainable Resource Management	1. Limit environmental impacts from cattle/agricultural activities (e.g., trampling, overgrazing, invasive species introduction/spread)	Perimeter fencing/cattle guards in place and maintained	Balance between agricultural use and conservation values maintained; collaboration between resource ministries and land managers
	2. Limit environmental impacts from forestry activities (e.g., habitat loss/degradation, over extraction, fire suppression)	Tenures reviewed for conservation concerns	Balance between forestry and conservation values maintained; collaboration between resource ministries and land managers
	3. Limit environmental impacts from mining and mineral extraction (e.g., habitat loss/degradation, environmental contamination, wildlife disturbance)	Tenures reviewed for conservation concerns	Balance between mining and conservation values maintained; collaboration between resource ministries and land managers
	4. Limit environmental impacts from fishing and hunting (e.g., over extraction, invasive species introduction/spread)	Signage in place and maintained	Balance between fishing/hunting opportunities and conservation values maintained; improved conservation awareness
	5. Limit environmental impacts from utility right-of-ways (e.g., invasive species introduction/spread, fragmentation, habitat degradation/loss)	Utility ROW plans reviewed for conservation concerns	Balance between utility use and conservation values maintained; improved conservation awareness

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Map – McTaggart Cowan WMA



**Wildlife Operations & Management
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Funding Cycle: 2016-2019

Project Name:

Region: Thompson/Okanagan

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex:

Dewdrop-Rosseau Creek Wildlife Management Area

2. Habitat Description / Values:

The WMA was established under the Wildlife Act in 1987. It encompasses an area of 4240 hectares on the north shore of Kamloops Lake.

The area is largely a south-facing slope with rolling topography, exposed rock outcrops and some flatter benchlands. Vegetation ranges from sagebrush/grassland at lower elevations to open ponderosa pine and Douglas fir forests at higher elevations. The area is very dry, with the little surface water that is available being intermittent in nature, or present as scattered springs and ponds.

Previous management focus was on bighorn sheep and mule deer, with some additional effort on chukar and blue grouse. The area also contains numerous species considered at risk such as spadefoot and rattlesnake, and the potential for red listed plants such as Silvery orache, Scarlet globe-mallow and Oregon checker mallow.

Activities that occur within the wildlife management area include grazing, trapping, and various recreation activities (hiking, mountain biking, wildlife viewing, orienteering, hunting). The area contains sites of archaeological and historic interest.

The role of the Dewdrop-Rosseau Creek Wildlife Management Area is to:

1. Act as a benchmark for representation of the dry grassland habitat type.
2. Protect and enhance the productivity and diversity of native habitats and species



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with an emphasis on the maintenance and enhancement of identified species of concern.

3. Public use and enjoyment of wildlife (hunting, viewing).

3. Guiding Documents:

- Bryan, A. and C. MacNaughton. 1998a. Management Plan for the Dewdrop-Rosseau Creek Wildlife Management Area. Draft. BC Environment, Wildlife Program, Kamloops, B.C. 89 pp.
- Bryan, A. and C. MacNaughton. 1998b. Management Plan for the Battle Bluffs Habitat Resource Management Zone. Draft. BC Environment, Wildlife Program, Kamloops, B.C. 68 pp.
- Morrow, B. 1993. Dew Drop Fire Management Plan. Kamloops Forest District Protection. Kamloops, B.C. 22 pp. + appendices and maps
- LRMP. 1995. Kamloops Land and Resource Management Plan. Government of British Columbia. 150 pp.

4. Financial Sustainability:

Plans to work with the Southern Interior Weed Management Committee, the mountain bike association in Kamloops .

5. Partner Recognition:

Southern Interior Weed Management Committee and HCTF will be on educational and instructional signage in the WMA.



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6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Ensure a natural diversity of ecosystems and habitats, together with the species that they support	Objective 1: To increase understanding of the CA by providing baseline data, species inventory, and research studies on vegetation, birds, fish, reptiles, and amphibians,	S-T Ind 1- inventories completed for rare plant occurrences S-T Ind 2 –inventories of vegetation species completed in CA S-T Ind 3 rattlesnake, and amphibian and bat inventories completed	1: maintain or increase existing populations of rare plants and wildlife species on CA
	Objective 2: Manage exotic, invasive plant and animal species	S-T Ind 1- invasive plant inventory complete	1: reduction of invasive plants and an increase of native species
Goal 2 To preserve and enhance sensitive habitats	Objective 1. Maintain fencing around sensitive shrub and mesic	S-T Ind 1 - Inventory of fencing requirements	1: Increase in bird amphibian



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	sites	completed	and reptile population
Goal 3: Provide for compatible public recreational and educational use of the area	<p>Objective 1: Manage public access, reduce illegal firewood cutting</p> <p>Objective 2: Provide public education opportunities</p>	<p>1: S-T Ind 1 Increased number and maintenance of fencing and signage</p> <p>2: S-T Ind 2 – Interpretive kiosks and signs are maintained</p>	<p>1: Activities detracting from the CA’s habitat value regulated.</p> <p>2: Trespasses and unpermitted uses minimized.</p>
Goal 4: Increase habitat for Lewis’s Woodpecker and rare bat species	Objective 1. Increase nesting habitat and roosting habitat for these species	S-T– Ind -1 number of bird and bat boxes constructed	1: Increase in population numbers for these species



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Map – Dewdrop-Rosseau WMA

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2016-2019

Project Name: Swan Lake Wildlife Management Area (proposed)

Region: Thompson Okanagan

PROJECT INFORMATION

13. Name of Property/ Complex:

Swan Lake Wildlife Management Area (proposed)
 Swan Lake Section 16 MR
 Swan Lake - (TNTBC LEA)

14. Habitat Description / Values:

Swan Lake and its foreshore (approximately 416 hectares) is proposed for establishment as a Wildlife Management Area (WMA). WMA establishment is a priority project of the Crown Land Securement Partner Program (CLSPP). This property includes a 3.9 ha The Nature Trust of BC lease property and is adjacent to North Okanagan Regional District parklands and DUC conservation lands. Swan Lake is one of the most important wetland habitats in the south central interior of British Columbia. The foreshore of Swan Lake contain extensive areas of marsh, cattails, reeds and sedges with high biodiversity values.

Regionally, wetlands are an endangered habitat type due to encroachment and degradation brought about by human settlement and land development. The lake is a resting and feeding stop for migratory birds in the spring and fall. Over 200 bird species occur at the lake. In the past, Swan Lake was nationally recognized for its value to staging and breeding waterfowl and contained a rare nesting colony of Western Grebe, which has now disappeared but may be recoverable with proper management and long-term protection. The conservation history of Swan Lake dates back to 1922 when this unique wetland was proposed to become a bird sanctuary. The lake and surrounding upland have local significance for small mammal, reptilian and amphibian production.



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15. Guiding Documents:

Swan Lake Wildlife Sanctuary Proposal, 1999

Okanagan Shuswap Land and Resource Management Plan, 2001

Vegetation Survey 2006 Nature Reserve and Adjoining Acreage South End of Swan Lake, Vernon

TNT/Province Lease Agreement, 1993

TNT/Province Management Agreement, 2011

North Okanagan Regional District Parks Plan

16. Financial Sustainability:

The Thompson Okanagan Resource Management group is responsible for managing the conservation lands administered by MFLNRO. This group dedicates substantial staff time to the planning, inventory, assessment, and restoration of these lands. Thompson Okanagan regional staff work closely with the partners of the CLSPP (CWS, TNTBC, DUC, NCC, HCTF and FLNRO) and this site is one of their top BC priority areas to support the Province to designate and manage this proposed WMA. The CLSPP will provide substantial support towards the establishment of this WMA and towards planning and implementation of land management and habitat restoration in the future. Ducks Unlimited Canada and the North Okanagan Regional District own 61 ha of conservation/park lands along the west end of Swan Lake and are strong proponents of the WMA proposal.

Thompson Okanagan Resource Management staff will continue to work collaboratively with existing conservation partners and local groups like the North Okanagan Regional District, City of Vernon and the North Okanagan Naturalists' Club.

17. Partner Recognition:

The CLSPP partners (FLNRO, CWS, DUC, TNTBC, NCC, and HCTF) fully support this WMA and will be recognized for their contributions towards the success of this project.



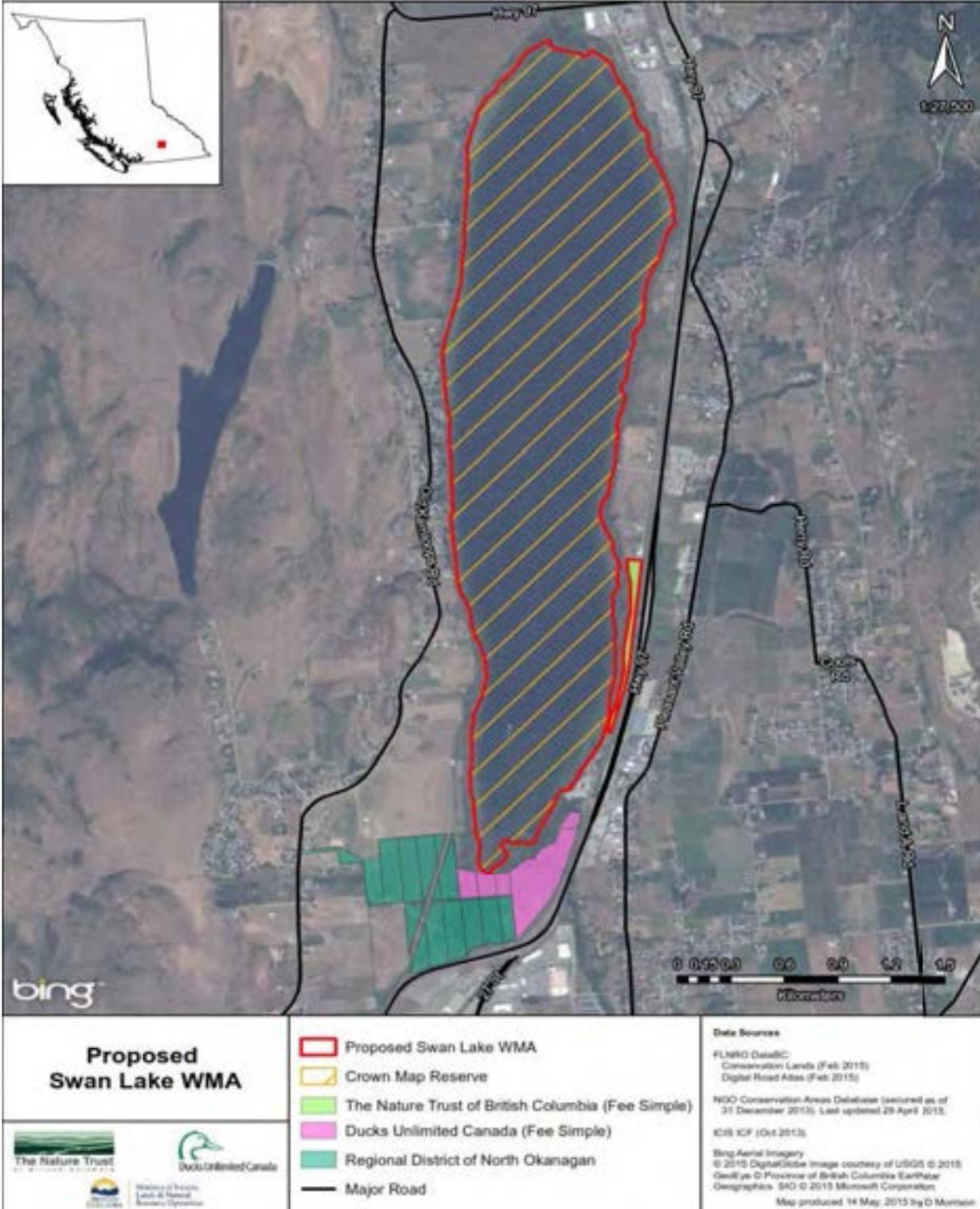
Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

18. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Establish a Wildlife Management Area over the Swan Lake conservation lands	<ol style="list-style-type: none"> 1. Amend existing S. 16 MR to include riparian foreshore to private shoreline (plus 150 ha) 2. Garner support from First Nations, partners, local governments, community stewards and stakeholders for the protection of these regionally significant conservation lands 	<ol style="list-style-type: none"> 1. S. 16 MR includes lake fringe habitat 2. WMA in place 2017 3. Formalize land management partnerships with NORD, DUC, Swan Lake Nature Society and TNTBC 4. Access annual HCTF O&M Funding support 	<ol style="list-style-type: none"> 1. WMA designation in place 2. Effective land management support building on the expertise of natural resource specialists within FLNRO and partners 3. Continued partner support and funding
Goal 2: Management Planning	1: Develop a Management Direction Statement to protect high wildlife values	1: Up-to-date management direction statement in place	1: Property/complex managed following plan
	2: Develop/update/implement monitoring plan including monitoring schedule	1: Up-to-date effectiveness plan in place	1: Property/complex monitored following plan
Goal 3: Encourage Public Education and Appropriate Use	<ol style="list-style-type: none"> 1. Limit environmental impacts from inappropriate public/recreational access and use 2. Increase public education of conservation values through signage/facilities 	1. Information signage/kiosks in place and maintained	<ol style="list-style-type: none"> 1. Public informed of property/complex conservation values and goals 2. Balance between public/ recreational use and conservation values maintained



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN



KOOTENAY-BOUNDARY



Kootenay Region Property/Complexes Included in Plan

2017-18:

Please list the property/complexes listed in the budget spreadsheet for year 2 of your plan.

Big Ranch/Grave Prairie Conservation Complex (Rankin/ Musil/ Big Ranch)

Bull River Complex (FLNRO- Neilson)

Bull River Complex (TNT BC- Armstrong)

Bummers Flats (FLNRO- Zirnhelt)

Bummers Flats Cherry Creek Complex (TNT BC- Madison/ Pighn North Bummers)

Columbia Lake East (TNT BC- Hilterman & Lemaster)

Columbia Lake East WMA

Columbia Lake West

Creston Valley WMA

Gold Creek Game Reserve (TNT BC- Strauss)

Grand Forks (FLNRO- Gilpin)

Newgate -40 (FLNRO- Earl/ Smith)

Pend D'Oreille (FLNRO- ACQ)

Premier Ridge Complex (FLNRO- Wolf Bush/ 3 Sons/ Pommier)

Sheep Mountain Complex (TNT BC- Cutts and FLNRO- Starr)

Wasa Slough Complex

Wigwam Flats Complex (TNT BC- LEA 1-5 and FLNRO- ACQ 1-3)

Wycliffe Corridor Complex

**Green text indicates property/complexes new for this cycles*

Kootenay Region Property/Complexes Included in Plan

2016-17

Please list the property/complexes listed in the budget spreadsheet for year 1 of your plan.

Big Ranch/Grave Prairie Conservation Complex (Rankin/ Musil/ Big Ranch)

Bull River Complex (TNT BC- Armstrong)

Bull River Complex (FLNRO- Neilson)

Bummers Flats (FLNRO- Zirnhelt)

Bummers Flats Cherry Creek Complex (TNT BC- Madison/ Pigihn North Bummers)

Columbia Lake East (TNT BC- Hilterman & Lemaster)

Columbia Lake East WMA

Columbia Lake West

Creston Valley WMA

Duncan Flats (TNT BC- Lardeau LEA 1/2/3)

Elizabeth Lake

Grand Forks (FLNRO- Gilpin)

Gold Creek Game Reserve (TNT BC- Strauss)

Premier Ridge Complex (FLNRO- Wolf Bush/ 3 Sons/ Pommier)

Redfish Creek (TNT BC- LEA 1&2)

Sheep Mountain Complex (TNT BC- Cutts and FLNRO- Starr)

Newgate -40 (FLNRO- Earl/ Smith)

Kootenay Region Property/Complexes Included in Plan

2018-19:

Please list the property/complexes listed in the budget spreadsheet for year 3 of your plan.

Big Ranch/Grave Prairie Conservation Complex (Rankin/ Musil/ Big Ranch)

Bull River Complex (TNT BC- Armstrong)

Bull River Complex (FLNRO- Neilson)

Bummers Flats (FLNRO- Zirnhelt)

Bummers Flats Cherry Creek Complex (TNT BC- Madison/ Pighn North Bummers)

Columbia Lake East (TNT BC- Hilterman & Lemaster)

Columbia Lake East WMA

Columbia Lake West

Creston Valley WMA

Elizabeth Lake

Grand Forks (FLNRO- Gilpin)

Gold Creek Game Reserve (TNT BC- Strauss)

Premier Ridge Complex (FLNRO- Wolf Bush/ 3 Sons/ Pommier)

Waldie Island



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Arrow Lakes

Arrow Lakes (ACQ)- 308 parcels

2. Habitat Description / Values:

Construction of the Hugh Keenleyside Dam near Castlegar, BC in 1967 resulted in the inundation of approximately 111km² of valley bottom habitat containing some of the most productive habitat for wildlife, particularly deer, in the Arrow Basin. A wildlife compensation proposal for these losses was developed and presented to BC Hydro by the BC Ministry of Environment in 1985. A major component of this compensation program was land purchase, and the subsequent management of acquired land for maintenance and enhancement of wildlife values. A total of 308 parcels were acquired on the Arrow Lakes system and as such, land values and management objectives vary. The properties are situated in either the Interior Douglas-fir or Interior Cedar-Hemlock biogeoclimatic zones.

3. Guiding Documents:

Coleman Ranch Management Plan
Broadwater Wildlife Management Plan
Hamlin Creek Wildlife and Wildlife Habitat Plan
Deer Creek Wildlife Management Plan
Deer Creek Ecosystem Restoration Prescription

4. Financial Sustainability:

To date, the Fish and Wildlife Compensation Program: Columbia Basin (FWCP) have partnered on many ecosystem enhancement projects and have initiated land management planning and species inventories on behalf of BC Hydro and MFLNRO. With the dissolution of the FWCP program, funding may still be available for land management initiatives but the expertise and manpower to implement such projects will need to be directed through FLNRO.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

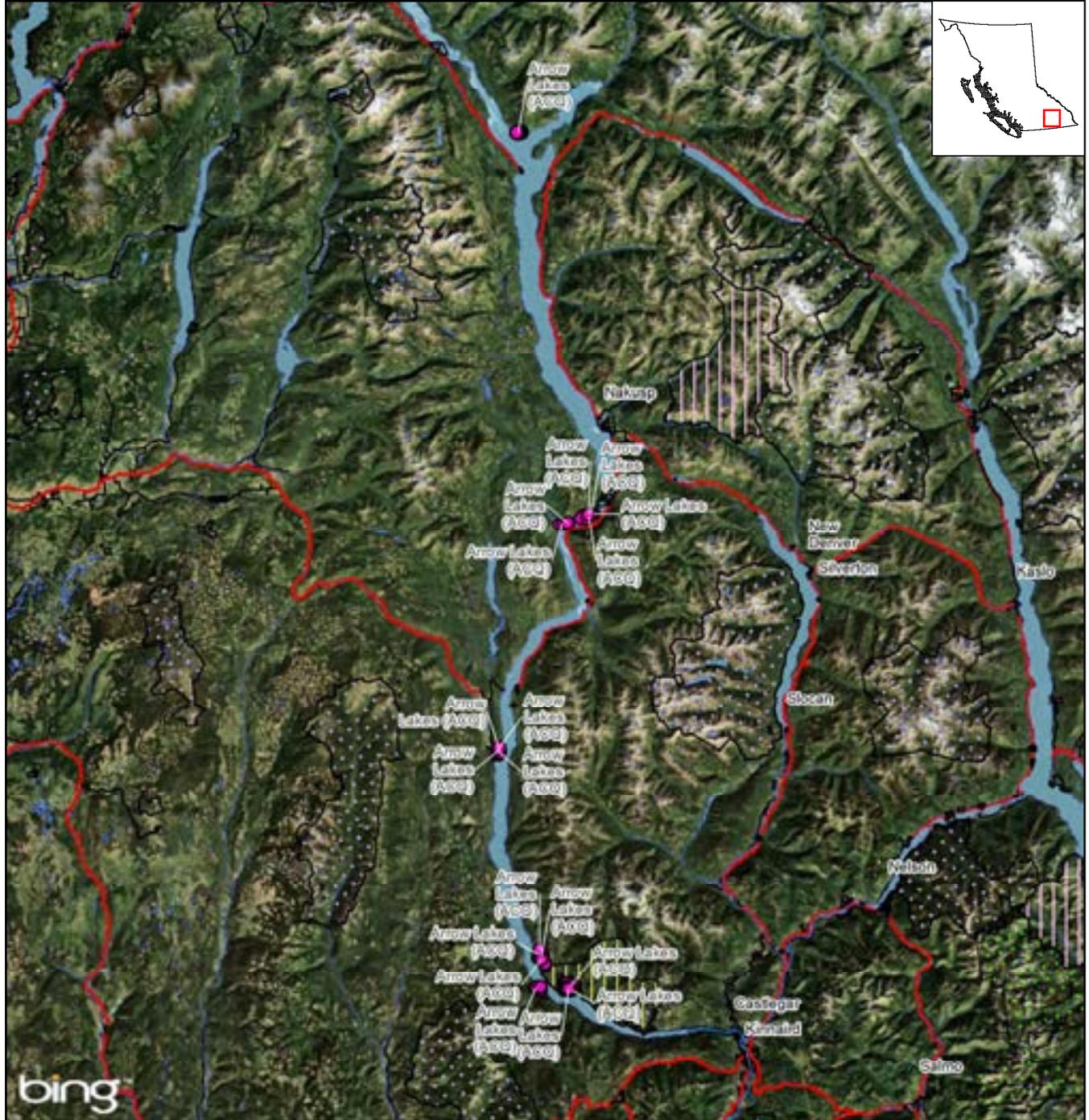
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	1: Develop coordinated land management plans for property complexes that currently lack plans.	1: Completion of land management plans.	1: Improved long-term management of the conservation properties.
	2: Manage the diversity of riparian, grassland and forest habitat through ecosystem restoration and enhancement initiatives.	1: Restoration projects are identified and implemented. 2: No loss in existing habitat values.	1: Increased habitat values and species utilization.
	3: Conduct inventories for red and blue-listed species and plant communities.	1: Inventory activities are completed.	1: Improved knowledge and long-term management of the conservation lands.
	4: Monitor and control invasive plant species using cultural, mechanical and chemical control methods.	1: Invasive plant density and distribution is reduced.	1: Suitable habitat values are restored.
Goal 2: Access Management	1: Motorized access is supported on gazetted roads only	1: Signage and gates are installed at appropriate, predetermined locations.	1: Public use is maintained and stewardship of the Arrow Lakes conservation properties increases.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	2: Where conservation and access issues conflict, conservation values come first.	1: Acceptable uses are determined and managed.	1: Conservation values are upheld.
	3: Public use and enjoyment is supported.	1: Acceptable uses are determined and managed.	1: Conservation values are upheld.
Goal 3: To foster ongoing Relationships for the betterment of the conservation lands and to bring additional resources to assist with the management initiatives.	1: Work cooperatively with local groups/organizations and governments on securing resources for land management activities.	1: Greater collaboration between interest groups and stakeholders.	1: Continued strong partnership approach to land management. 2: Increased in-kind and cash contributions to the management of the Arrow Lakes Conservation properties.
Goal 4: Ensure that management actions protect all known and potential archaeological sites on the property.	1: Archaeological Overview Assessments (AOA) maps are obtained from the Ministry of Forests, Lands and Natural Resource Operations.	1: Archaeological sites are identified and protected during land management activities.	1: Known and potential archaeological sites are conserved.
	2: An archaeological impact assessment and consultation with First Nations is conducted prior to land management activities that may involve ground disturbance.	1: Archaeological sites are identified and protected during land management activities.	1: Known and potential archaeological sites are conserved.

7.0 Map



Arrow Lakes Overview



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- Wetland
- River
- Highway
- Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)

BCGS Map Sheet(s): 82L, 82K, 82E, 82F

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Bull River

Bull River (ACQ)- Neilson
Bull River (LEA)- Armstrong

2. Habitat Description / Values:

Historically considered as one of the most significant wildlife habitat sites in the East Kootenay, these lands in the Bull River area were originally purchased or designated for conservation with a resource protection emphasis for wildlife and fisheries. The properties are locally, regionally and provincially important with respect to their capability to support Rocky Mountain bighorn sheep, whitetail deer, mule deer and elk through the winter season. The area also supports a number of rare plant and animal species. The natural complex of dry grass, shrub, riparian and forest habitat is important for provincial representation of the Kootenay Dry Mild Interior Douglas-fir subzone Variant (IDFdm2), a dry forested biogeoclimatic (BEC) subzone variant that has grassland components and is only found in the East Kootenay. The Bull River Complex encompasses several important riparian areas including the Kootenay River floodplain, Norbury Creek, Little Bull Creek and the Bull River.

According to the Conservation Data Center (CDC) occurrence mapping, six species-at-risk occurrences have been identified on the Bull River complex including badger, western painted turtle (alkaline lake adjacent to the woodlot), and little bluestem (located to the west of the complex), Sandberg's desert parsley, Meadow arnica, and Scarlet gaura.

3. Guiding Documents:

Bull River Conservation Lands Complex Strategic Management Plan
Ecosystem Restoration Prescription
American Badger Habitat Capability Model
License Agreement for Restoration Activities



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Fire-maintained Ecosystem Restoration in B.C.'s Rocky Mountain Trench (Blueprint for Action – 2006)

Ecological Restoration Guidelines for British Columbia

Integrating Ecosystem Restoration into Forest Management

Ecosystem Restoration Program NDT4 Five Year Plan

Ungulate Winter Range Habitat Management Objectives and Best Management Practices

Kootenay Boundary Land Use Plan-Implementation Strategy

An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench

Ground Work – Basic Concepts of Ecological Restoration in British Columbia

Bull River property DL 2960 vegetation Monitoring Report

4. Financial Sustainability:

There are limited partnership opportunities to generate the additional revenue required to manage these properties.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

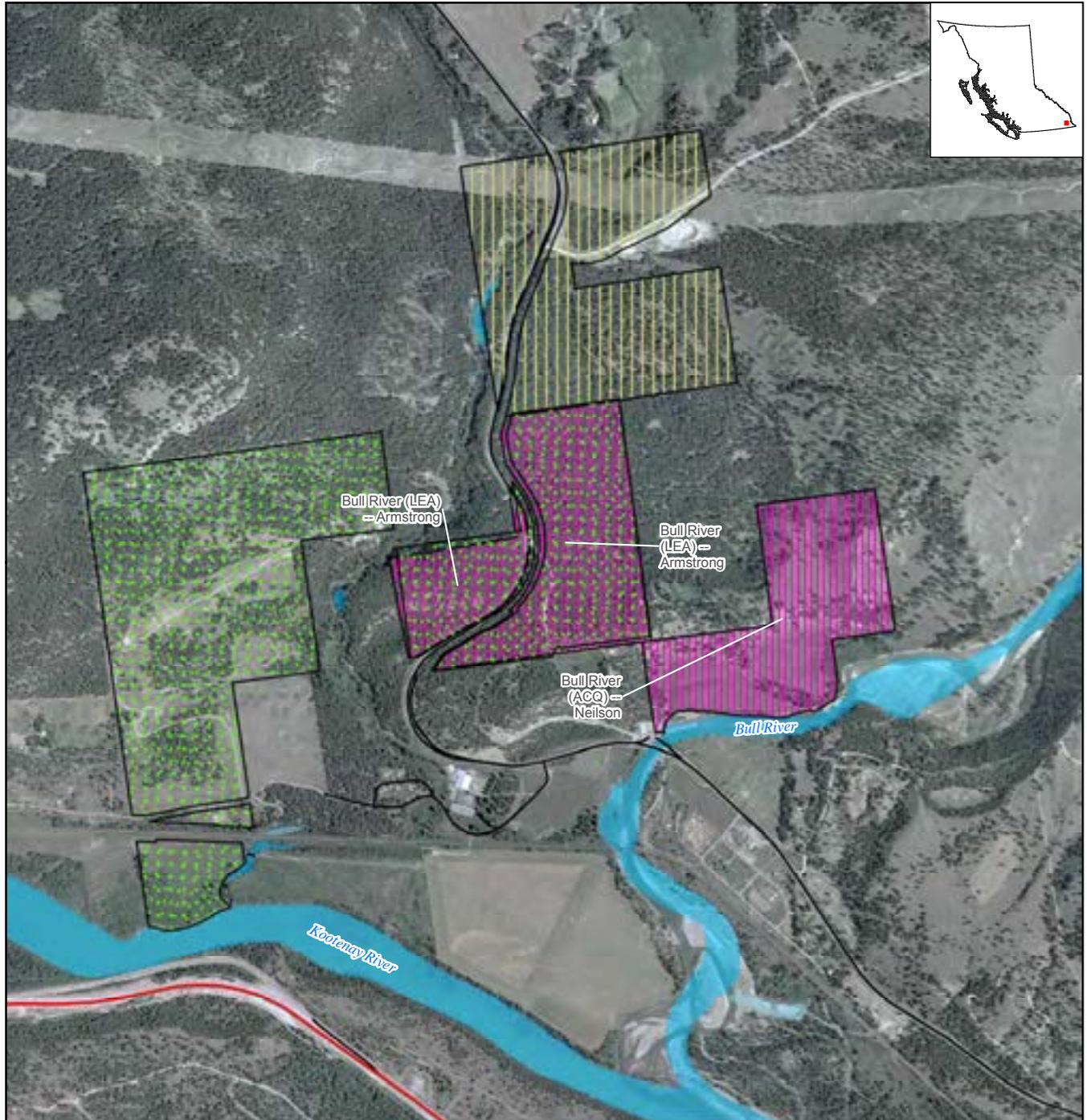
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	1: Identify species that occur or historically occurred in the Bull River Landscape	1: Inventories completed for wildlife species and ecological communities.	1: Increased habitat values and species utilization.
	2: Identify critical wildlife habitats in the Bull River Complex and coordinate their management with the other management plans for the Bull River Complex (Ecosystem restoration, access management, fire management, etc).	1: Inventories completed for wildlife species and ecological communities.	1: Improved knowledge and long-term management of the conservation complex.
	3: Ensure those ecosystems, their structure and function and connective habitats are not disrupted or impaired in the Bull River Landscape.	1: No loss in existing habitat value.	1: Increased habitat values and species utilization.
	4: Ensure that hunting and fishing seasons are compatible with conservation values of the Bull River Complex.	1: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives of the properties.



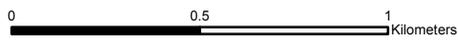
**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	5. Monitor and control invasive plant species using cultural, mechanical and chemical control methods.	1: Invasive plant density and distribution is reduced.	1: Suitable habitat values are restored.
Goal 2: Recover and sustain deteriorated grasslands, seral shrub lands and open forest range and protect remnants of these from livestock use.	1: Protect sensitive areas from livestock use through the installation of control structures.	1: Inspections and maintenance activities are undertaken and completed.	1: Habitat values are maintained/ enhanced.
	2: Terminate or renegotiate grazing agreements where range is overgrazed.	1: Grazing agreements are reviewed and renegotiated accordingly.	1: Habitat values are maintained/ enhanced.
	3: Exclude livestock from conservation lands owned by TNT and MOFLNRO.	1: Cattle are excluded from the conservation lands.	1: Habitat values are maintained/ enhanced.
Goal 3: Restore the forest habitat to an ecologically appropriate fire-maintained condition.	1: Reduce tree density, increase tree age and size, and achieve a tree species composition that falls within the historical range of variability.	1: Restoration projects identified and implemented	1: Site monitoring indicates increased biodiversity and vegetation production on restoration sites.
Goal 4: Develop an appreciation for the conservation values of the Bull River Complex and reduce adverse environmental impacts from human activities.	1: Educate the public about management issues and the importance of proper management and integration with activities and values on the landscape.	1: Identify opportunities for stewardship projects to engage the community. 2: Partnerships developed with local community.	1: Engaged stewardship community.

7.0 Map



Bull River



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation
- National Wildlife
- National Parks
- Provincial Protected

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82G.043

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Bummers Flats

Bummers Flats (LEA 1)- Cherry Creek/ Pighin
Bummers Flats (LEA 2)- Cherry Creek
Bummers Flats (ACQ)- Zirnhelt
Bummers Flats (TAC)

2. Habitat Description / Values:

The Bummer's Flats- Cherry Creek Wildlife conservation complex is situated on both sides of the Kootenay River between the communities of Ft. Steele, and Wasa in the south-east corner of British Columbia. It is a valuable waterfowl staging and nesting area and also provides habitat for elk, white-tailed deer and a variety of other bird and mammal species. As one of the few lowland protected sites in the Rocky Mountain Trench, it has a crucial role to play in maintaining habitat types, especially riverain habitat types that have been seriously altered or destroyed by agricultural development and reservoir construction throughout much of the East Kootenay.

The Bummer Flats properties are located on the dry, mild Interior Douglas-fir (IDFdh2) and dry, hot Ponderosa Pine (PPdm2) biogeoclimatic subzones. These ecosystems represent some of the most biologically diverse areas in the province and support an impressive diversity of flora and fauna. The Conservation Data Center (CDC) species occurrences on these properties include the red-listed American Badger and the blue-listed American Bittern.

Fire suppression has extended fire return intervals in IDF and PP ecosystems by as much as 60 years, resulting in excessive tree recruitment in open forest (forest in-growth) and tree establishment in previously un-treed openings (forest encroachment). Periodic treatment of selective harvesting, thinning, slashing, and prescribed fire to rehabilitate lands impacted by forest in-growth and encroachment have been occurring.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

3. Guiding Documents:

Madison Property Acquisition Report
The Bummer's Flats- Cherry Creek Wildlife Property Management Plan
Cherry Creek Ecosystem Restoration Monitoring Plan
Cherry Creek Property Wildlife Area Hayfields Report
Cherry Creek Property Vegetation Monitoring Report
Baseline Biodiversity Inventory for the Cherry Creek Property
Cherry Creek Property Ecosystem Restoration Prescription
Cherry Creek Property Wildlife Tree Inventory
Cherry Creek Property Vegetation Monitoring Report
Cherry Creek Wildlife Area Wildfire Monitoring Survey
North Bummer's Flats Forage Management Plan
Cherry Creek Property Vegetation Monitoring Report
Cherry Creek Property Vegetation Monitoring Report
Northern Leopard Frog Reintroductions on Bummer's Flats

4. Financial Sustainability:

Partnerships between Ducks Unlimited, the Provincial Ministry of Forests, Lands and Natural Resource Operations and The Nature Trust of BC exist. These partners offer in-kind contributions to the land management activities on the conservation lands. Financial contributions are largely opportunistic and inconsistent.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

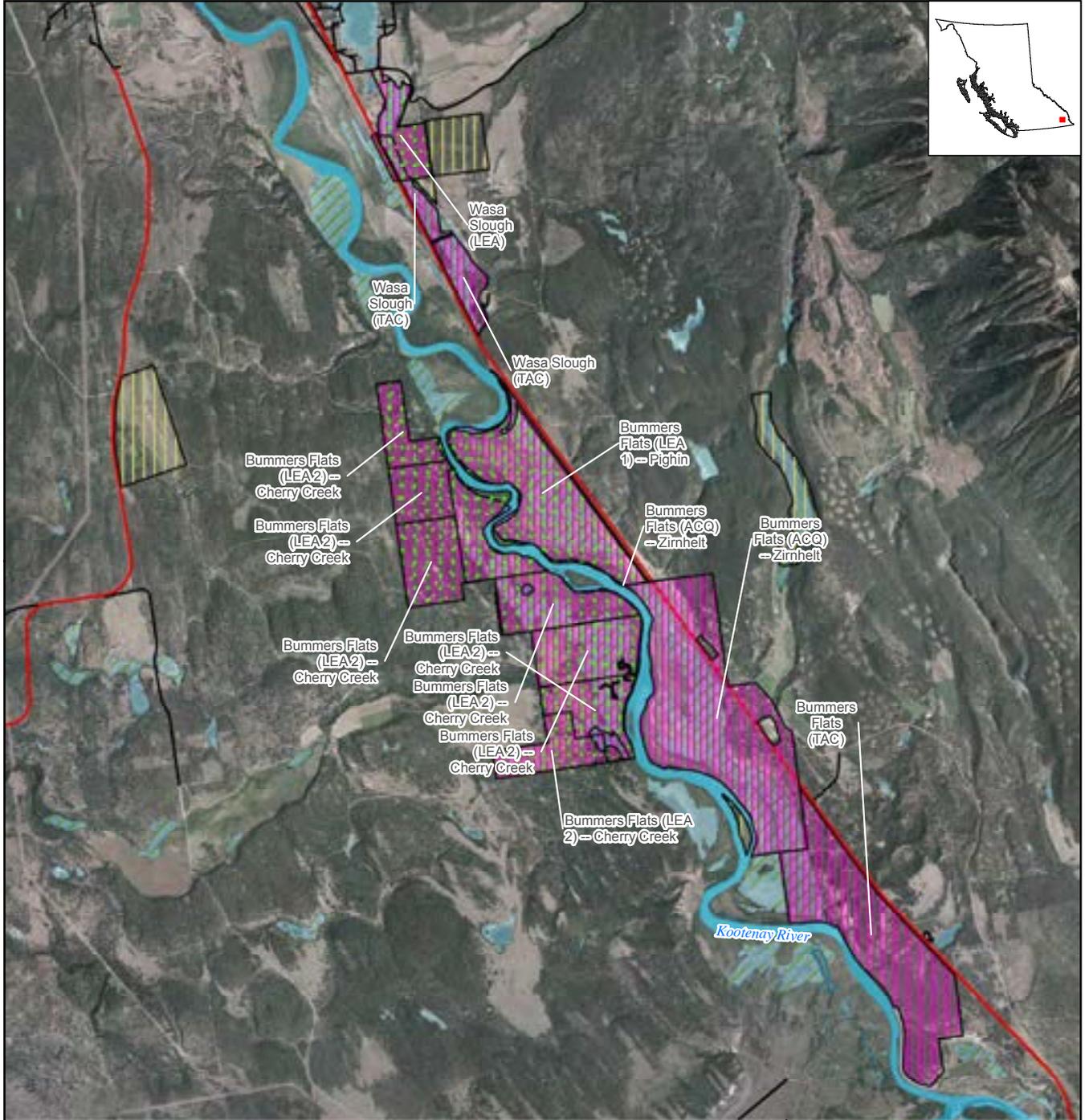
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	1: Manage the natural complex of grasslands, shrubs, marshes, riparian, and forest habitat in a way that continues to support the wide spectrum of wildlife and plant species that currently inhabit the area.	1: No loss in existing habitat value.	1: Increased habitat values and species utilization
	2: Compile and update vegetative and wildlife species inventory data.	2: Inventories completed for wildlife species and ecological communities.	1: Increased knowledge and improved long-term management.
	3: Maintain target species population/ abundance counts.	1: No loss in existing species populations/ abundance.	1: Maintained or increased species populations/ abundance.
Goal 2: Restore the forest habitat to an ecologically appropriate fire-maintained condition.	1: Reduce tree density, increase tree age and size, and achieve a tree species composition that falls within the historical range of variability.	1: Restoration projects identified and implemented.	1: Site monitoring indicates increased biodiversity and vegetation production on restoration sites.
Goal 3: Access Management.	1: Restrict motorized vehicle access using physical barriers, signs and public communication.	1: Acceptable uses are managed and enforced.	1: Ongoing recreational use for wildlife viewing and hunting.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	2: Continue to support provincial access management legislation implemented under the Wildlife Act.	1: Acceptable uses are managed and enforced.	1: Ongoing recreational use for wildlife viewing and hunting.
Goal 4: Optimize habitat conditions for migrating waterfowl.	1: Maintain the area as a staging and nesting area for waterfowl.	1: Continued use by waterfowl.	1: Increased habitat values and species utilization.
	2: Continue to work with Ducks Unlimited Canada staff to ensure suitable water levels are maintained.	1: Continued use by waterfowl.	1: Increased habitat values and species utilization.

7.0 Map



Bummers Flats



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)
- British Columbia Imagery WMS
 - bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82G.071, 82G.072
82G.061, 82G.062

FLNRO Region: Kootenay/Boundary

Wildlife O&M 3-year Application – COLUMBIA LAKE EASTSIDE

SITE DESCRIPTIONS / ACTIVITIES

1. Name of property:

- a. *Complex Name:* **Columbia Lake Eastside Conservation Area**
- b. *CLD Reference:* East Side Columbia Lake WMA (LEA 1)
East Side Columbia Lake WMA (LEA 2) – LeMaster

2. Habitat Description / Values

The Columbia Lake Eastside conservation area provides extremely important winter range for ungulates such as Bighorn Sheep, Elk, Mule and White-tailed Deer. The properties are situated within the East Side Columbia Lake Wildlife Management Area (WMA) and they also contribute to a connectivity corridor between important habitat south and north of the lake. The area is also important for Grizzly Bear, Black Bear, Cougar, Coyote, American Badger, rare Flammulated Owls, Bald Eagle, Golden Eagle, Osprey and Red-tailed Hawk. Species dependent upon grassland or open forest habitat types at low elevations include Prairie Falcon, Townsend's Big-eared Bat, and Rubber Boa. The north end of the lake is a waterfowl sanctuary and the south end is an important staging area for waterfowl, especially swans. There is a significant Burbot spawning site in a spring-fed creek at the south end of the lake.

The Columbia Lake East properties are situated in the Dry mild Interior Douglas-fir (IDFdm2) biogeoclimatic zone and are classified as Natural Disturbance Type 4 (fire-maintained).

3. Guiding Documents

Elk Management Plan for the East Kootenay

Land Management Strategy for Wildlife in the East Kootenay Trench

Fire-maintained Ecosystem Restoration in B.C.'s Rocky Mountain Trench (Blueprint for Action – 2006)

Ecological Restoration Guidelines for British Columbia

Integrating Ecosystem Restoration into Forest Management

Ecosystem Restoration Program NDT4 Five Year Plan-2009

Ungulate Winter Range Habitat Management Objectives and Best Management Practices

Kootenay Boundary Land Use Plan-Implementation Strategy-1997

An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench

Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators	
		Short Term	Long Term
Goal 1: Protect archaeological sites	<p>Objective 1: Ensure that management actions protect all known and potential archaeological sites on the property.</p> <p>Objective 2: Obtain the archaeological overview assessment (AOA) for the property and consult First Nations regarding the locations of any known sites.</p>	<p>S-T Indic 1- AOA maps are obtained from the Rocky Mountain Ministry of Forests, Lands and Natural Resource Operations</p> <p>S-T Indic 2- An archaeological impact assessment and consultation with First Nations is conducted prior to land management activities that may involve ground disturbance</p>	L-T Indic 1- Known and potential archaeological sites are conserved
Goal 2: Assess the ecosystem health and the success of habitat restoration and enhancement initiatives	<p>Objective 1: Complete and implement treatments that will restore the ecosystem function of fire.</p> <p>Objective 2: Implement the bighorn sheep enhancement plan created for the WHA.</p>	S-T Indic 1- restoration projects identified and implemented	L-T Indic 1- site monitoring indicates increased biodiversity and vegetation production on restoration sites
Goal 3: To foster ongoing relationships for the betterment of the conservation area complex and to bring additional resources to assist with the management initiatives	Objective 1: Coordinate species and habitat activities with Ministry of Forests, Lands, and Natural Resource Operations staff projects on the adjacent East Columbia Wildlife Management Area (WMA).	S-T Indic 1- stakeholders and interest groups are engaged in stewardship activities	<p>L-T Indic 1- – strong partnership approach to land management activities</p> <p>L-T Indic 2 – increased in-kind and cash contributions to the management of the conservation property.</p>
Goal 2: Access Management	<p>Objective 1: Public use and enjoyment is supported</p> <p>Objective 2: Continue to support provincial access management legislation implemented under the Wildlife Act.</p>	<p>S-T Indic 1- Acceptable uses are determined and managed</p> <p>S-T Indic 2- Signage and gates are</p>	L-T Indic 1- Ongoing recreational use for both wildlife viewing and hunting

	Objective 3: Where conservation and access issues conflict, conservation values are the priority.	installed at appropriate, predetermined locations	
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5. Financial Sustainability

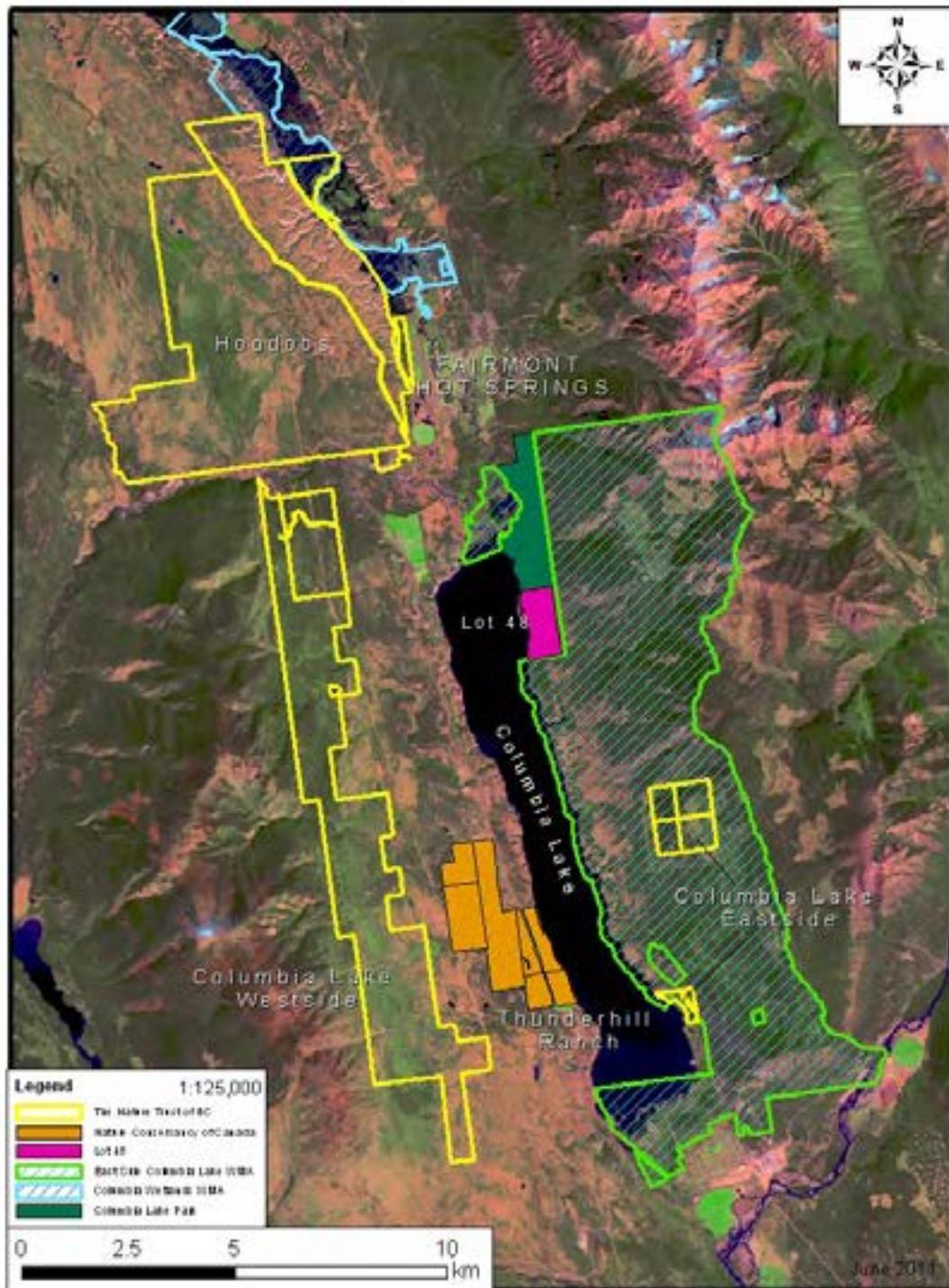
Due to the remoteness of these conservation areas there are limited partnership opportunities to generate additional revenue for the area, though in-kind support from the MFLNRO to coordinate activities with the WMA are likely.

6. Partner Recognition

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

7. Map

Map #4: East Kootenay Landscape - Columbia Lake



Wildlife O&M 3-year Application – COLUMBIA LAKE WESTSIDE CONSERVATION AREA

SITE DESCRIPTIONS / ACTIVITIES

1. Name of property:

- a. *Complex Name:* **Columbia Lake Westside Conservation Area**
- b. *CLD Reference:* Columbia Lake (LEA) -- West

2. Habitat Description / Values

The West-Side Columbia Lake property is located on the margin of the Dry Cool Montane Spruce (MSdk) biogeoclimatic subzone and the Kootenay Dry Mild Interior Douglas-fir (IDFdm2) subzone/variant.

Considering the property's large size and proximity to other Nature Trust of BC and Nature Conservancy of Canada conservation lands, the West-Side Columbia Lake property contributes to biodiversity conservation at a landscape level in this area.

Small portions of the property support red-listed badger, blue-listed Lewis' Woodpecker and blue-listed White-throated swift. The property also provides spring, fall and winter habitat for Rocky Mountain elk as well as seasonal habitat for white-tailed deer, mule deer, and moose. Large free-roaming carnivores include wolves, cougars, coyotes, Black bear, and Grizzly Bear.

3. Guiding Documents

Biophysical Habitat Analysis of the Columbia Lake Wildlife Area, 1989

West-Side Columbia Lake Management Plan, 2007

A Preliminary Ecological Assessment of the Presence of Mountain Pine Beetle on the West Columbia Lake Property, 2002

A Short Term Forest Management Strategy and Operational plan to Address Rocky Mountain Pine Beetle Infested Lodgepole Pine stands on the Columbia Lake West property, 2004

Elk Management Plan for the East Kootenay

Land Management Strategy for Wildlife in the East Kootenay Trench

Fire-maintained Ecosystem Restoration in B.C.'s Rocky Mountain Trench (Blueprint for Action – 2006)

Ecological Restoration Guidelines for British Columbia

Integrating Ecosystem Restoration into Forest Management

Ecosystem Restoration Program NDT4 Five Year Plan-2009

Ungulate Winter Range Habitat Management Objectives and Best Management Practices

Kootenay Boundary Land Use Plan-Implementation Strategy-1997

An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench

Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators	
		Short Term	Long Term
Goal 1: Maintain the integrity of the ecosystems on the property in manner that is consistent and coordinated with other conservation initiatives in the region	<p>Objective 1: Complete baseline inventory for wildlife, vascular plants and ecological communities at risk</p> <p>Objective 2: Manage for late successional forests that will provide habitat for late succession wildlife species across the dry interior/montane ecological gradient.</p> <p>Objective 3: Actively control invasive plants on all roads, landings and logging trails recently constructed then fully rehabilitate and re-vegetate all the structures.</p> <p>Objective 4: Actively restore the stream diversion in the Marion Creek water basin to its original channel</p> <p>Objective 5: Assess and actively create wildlife trees that will maintain the presence of primary cavity nesters.</p> <p>Objective 6: Reduce tree density, increase tree age and size, and achieve a tree species composition that falls within the historical range of variability in IDFdm2.</p>	<p>S-T Indic 1- inventories completed for wildlife species and ecological communities</p> <p>S-T Indic 2- Restoration activities achieve the desired landscape target conditions.</p> <p>S-T Indic 3- The spread of invasive species is eliminated, infestations are reduced in size, and the threat of invasion by new species is eliminated.</p> <p>S-T Indic 4- Conduct field assessments for surface hydrology patterns, water quality and water quantity and obtain required approvals for works in and about a stream under the Water Act.</p>	<p>L-T Indic 1 – No further degradation of habitats</p> <p>L-T Indic 2 – increased habitat diversity and species utilization</p> <p>L-T Indic 3- comprehensive species/ecosystem inventory database available</p> <p>L-T Indic 4 – Land management activities guided by results of monitoring program</p>
Goal 2: Protect archaeological sites	<p>Objective 1: Ensure that management actions protect all known and potential archaeological sites on the property.</p> <p>Objective 2: Obtain the archaeological overview assessment (AOA) for the property and consult First Nations</p>	<p>S-T Indic 1- AOA maps are obtained from the Rocky Mountain Ministry of Forests, Lands and Natural Resource Operations</p>	<p>L-T Indic 1- Known and potential archaeological sites are conserved</p>

	regarding the locations of any known sites.	S-T Indic 2- An archaeological impact assessment and consultation with First Nations is conducted prior to land management activities that may involve ground disturbance	
Goal 3: Access Management	Objective 1. Restrict human and motor and non-motorized vehicle access using physical barriers, signs and public communication. Objective 2: Continue to support provincial access management legislation implemented under the Wildlife Act.	S-T Indic 1- Acceptable uses are determined and managed	L-T Indic 1- Ongoing recreational use for both wildlife viewing and hunting

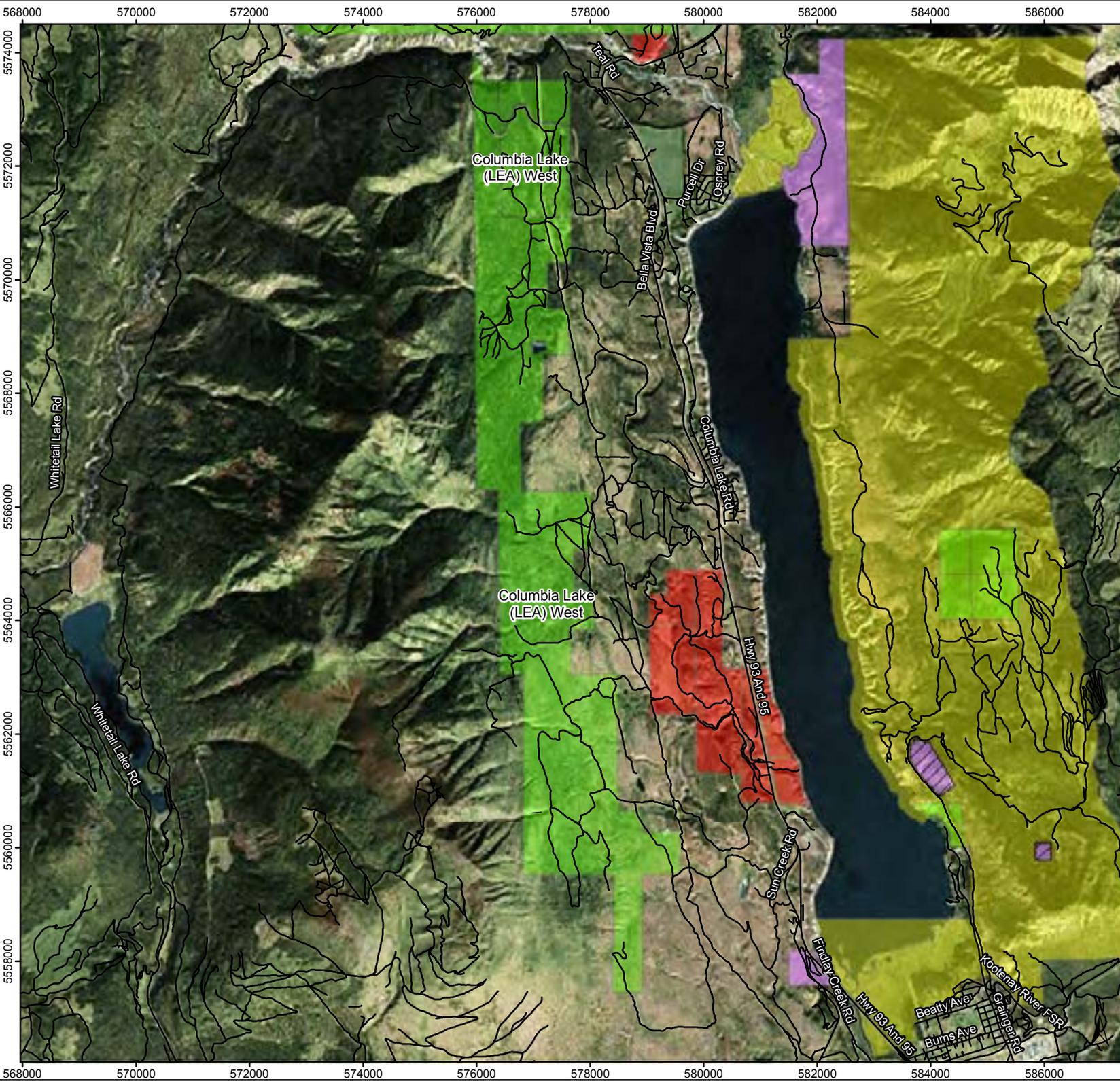
5. Financial Sustainability

The Nature Trust and the Ministry of Forests, Lands, and Natural Resource Operations co-manage the West-Side Columbia Lake property through the lease agreement between the Nature Trust and the Ministry. The West-Side Columbia Lake property encompasses a wide range of interests and technical knowledge from the various conservation partners as well as the local communities such as Canal Flats, Fairmont and Invermere. Community in-kind supporters include Lake Windermere Rod & Gun Club, Canal Flats Wilderness Club, Ducks Unlimited Canada, and the Nature Conservancy of Canada who own the adjacent Marion Creek conservation property.

6. Partner Recognition

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

7. Map



Columbia Lake Westside



Conservation Areas

- The Nature Trust
- Nature Conservancy of Canada
- Provincial Ecological Reserve
- Provincial Park
- Wildlife Management Area

Map Symbols

- Road

0 500 1,000 2,000 3,000 Meters

Scale: 1:90,000

UTM Zone 11 NAD 83



Data sources:

- BC NGO Conservation Lands Database
- BC GOV FLNRO GeoBC
- Bing Maps Aerial

Map produced by:

April 2012



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Columbia Wetlands WMA

Columbia Wetlands WMA
Columbia Wetlands (ACQ)- Feldman
Columbia Wetlands (ACQ)- Bergenham

2. Habitat Description / Values:

The Columbia Wetlands is one of the largest contiguous systems of wetland habitats in North America and is designated as a world RAMSAR site. Geographically, the Columbia Wetlands are situated between the communities Fairmont Hot Springs and Donald in the Rocky Mountain Trench in south-eastern British Columbia. They extend over a distance of 180 km and encompasses over 13,800 hectares. The Columbia Wetlands provide a regionally unparalleled diversity of 16 habitats and 216 species (RAMSAR, 2012).

The Columbia wetlands are a vital component of the Pacific Flyway; providing feeding and nesting sites which are used extensively by waterfowl during spring and fall migrations. Canada geese nest in the wetlands as do a variety of dabbling and diving ducks. The deciduous and mixed forest communities that occur near the wetlands are of special importance to cavity nesting ducks and great blue herons. The river and larger water bodies support abundant populations of coarse fish that provide food for mergansers, loons, grebes, osprey, herons, kingfishers and bald eagles. Marsh vegetation, such as cattails and other emergents, provides over-water nesting and feeding habitat for some duck species, marsh wrens and blackbirds. The deciduous forest communities in the WMA provide important habitat for songbirds and cavity nesters. White-tailed deer, elk and moose make extensive use of the Columbia Wetlands in winter. Beaver and muskrat are common throughout the Columbia Wetlands, and the area is of importance to local mink and otter populations. It is also an important area for several species of amphibians and reptiles.

Two species, the Northern Leopard Frog and the White Sturgeon (Columbia River population) are listed as "critically imperilled" for this area. However, there is little evidence that either species presently occurs in the wetlands.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

The Columbia Wetlands properties are located in the Interior Douglas-fir (IDF), Interior Cedar-Hemlock (ICH) or the Montane Spruce (MSdk) biogeoclimatic zones.

3. Guiding Documents:

Management Plan for Columbia Wetlands Wildlife Management Area
A Proposal to Prepare an Operational Plan for the Columbia Wetlands Wildlife Management Area,
The RAMSAR Convention on Wetlands
Wildlife Management Areas Regulation of the Wildlife Act B.C. reg. 118/98

4. Financial Sustainability:

The WMA is a large area and a major responsibility for the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO). Since there are also other government agency responsibilities in the wetlands, the option exists for developing a cooperative funding strategy (i.e. with the Canadian Wildlife Service). Funding for specific habitat monitoring and enhancement projects is pursued through several funding agencies including: BC Hydro Fish and Wildlife Compensation Program, Habitat Conservation Trust Foundation, Columbia Basin Trust, Wildlife Habitat Canada, Ducks Unlimited, and Friends of the Columbia Wetlands.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: To maintain self-sustaining populations of indigenous fish, wildlife and plant species in the Columbia Wetlands.	1: Establish baseline data on wetland and riparian vegetation.	1: Baseline inventory activities are completed. 2: No loss in existing habitat value.	1: Increased habitat values and species utilization.
	2: Establish baseline data fish and wildlife populations.	1: Baseline inventory activities are completed. 2: No loss in existing habitat value.	1: Increased habitat values and species utilization.
	3: Document the ecological and human history of the wetlands.	1: Improved understanding of historical ecological conditions.	1: Improved long-term management of the Columbia Wetlands.
	4: Management of cross-valley movement corridors.	1: Maintain access to winter range.	1: Increased habitat values and species utilization.
	5: Monitor water quality.	1: Acceptable water quality is maintained.	1: Increased habitat suitability and waterfowl utilization.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

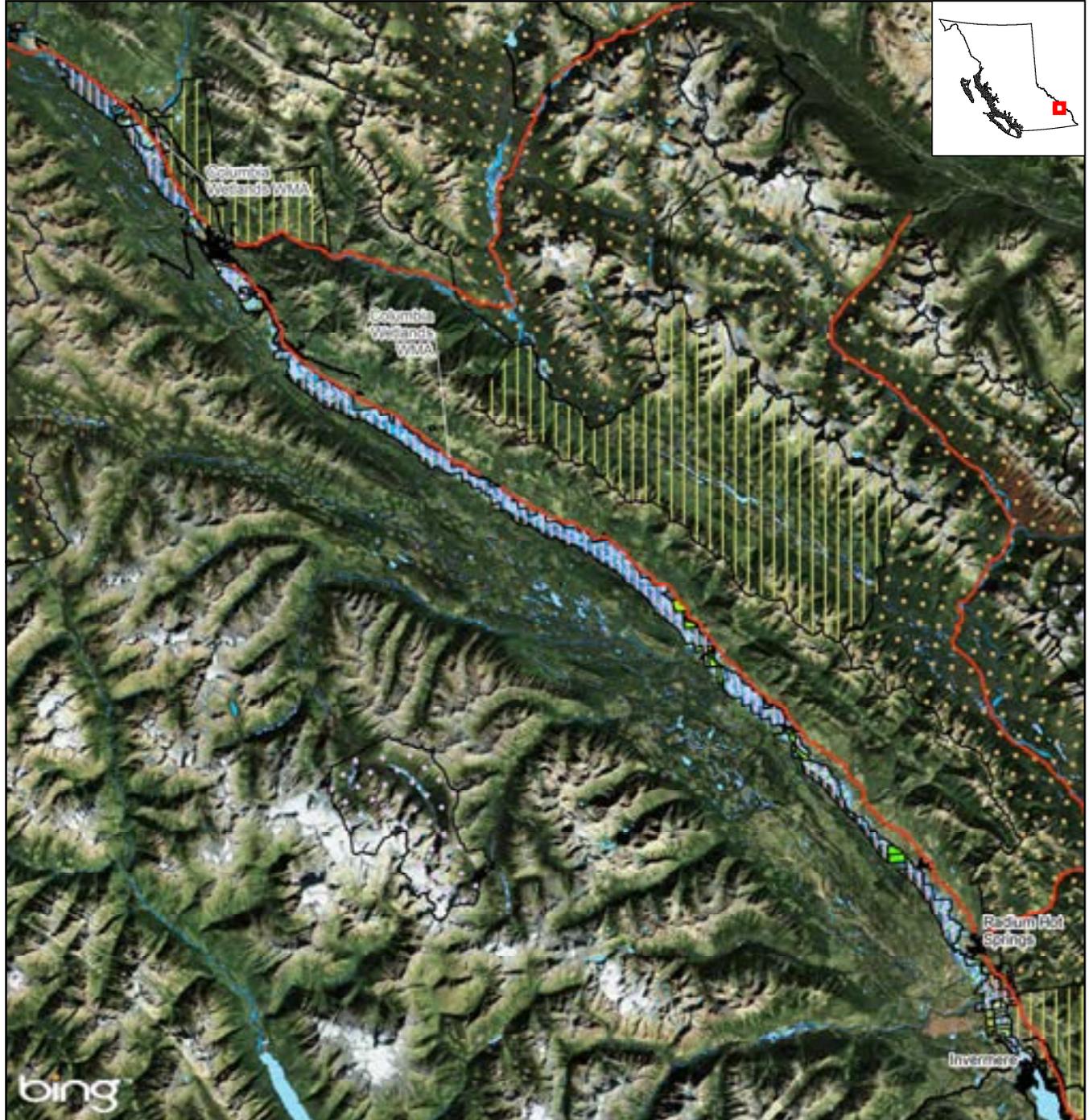
	6: Install nest boxes for cavity nesting birds and goose nesting platforms.	1: Nesting structures are utilized by birds.	1: Increased habitat suitability and species utilization.
	7: Assess the feasibility of rejuvenating browse through slashing and burning.	1: Assessments are completed and restoration work is initiated accordingly.	1: Browse availability and species utilization increases.
	8: Maintain and improve spawning areas on the major tributaries with a focus on Burbot and Bull trout populations.	1: Enhancement initiatives are completed.	1: Increased habitat values and species utilization.
Goal 2: Manage human use of the wetlands.	1: Maintain a sense of wildness and solitude.	1: Acceptable uses are determined and managed.	1: Sense of wilderness and solitude is preserved.
	2: Maintain the aesthetic quality of the wetlands.	1: Aesthetics are maintained.	1: Tourism and community enjoyment are maintained/enhanced.
	3: Provide opportunities for First Nations people to carry on their traditional uses of the area.	1: First Nations use continues.	1: Opportunities for traditional use are maintained in perpetuity for future generations.
	4: Permit opportunities for commercial tourism operations that encourage their clients to appreciate study and view natural landscapes and wildlife in their natural habitats.	1: Operations provide a positive or neutral impact on wildlife values.	1: Tourism and community enjoyment are maintained/enhanced.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	5: Manage and regulate extractive resource use to be consistent with the vision, goals and guiding principles of the WMA.	1: Resource extraction is conducted in a manner consistent with these goals and objectives.	1: Conservation values are upheld.
	6: Provide opportunities for scientific study that will contribute to the understanding of the function and dynamics of the wetlands.	1: Research is conducted in a manner consistent with these goals and objectives to increase knowledge of wetland function.	1: Improved long –term management of the Columbia Wetlands.
	7: Provide opportunities for the education of the public about the ecological processes at work in the wetlands and the goals and programs of the WMA.	1: Educational opportunities are provided.	1: Increased public knowledge and stewardship of the Columbia Wetlands.

7.0 Map



Columbia Wetlands WMA



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
 BC Albers
 BC GOV FLNRO Data BC:
 Provincial Parks, Ecological Reserves, Recreation
 Areas & Protected Areas (September 2012)
 National Parks (September 2012)
 Crown Designations (July 2012)
 Freshwater Atlas (2012)
 Digital Road Atlas (2012)

Canadian Wildlife Service
 National Wildlife Areas (June 2012)
 BC NGO Conservation Areas Database (January 2012)

BCGS Map Sheet(s): 82M, 82O, 82J, 82K

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2016-2019

Project Name: Creston Valley Wildlife Management Area Operations & Maintenance

Region: Kootenay (4)

PROJECT INFORMATION

Please complete the following:

1. **Name of Property/ Complex:** Creston Valley Wildlife Management Area (CVWMA).

2. **Habitat Description / Values:** The CVWMA was established in 1968 by an act of the BC legislature. Under the Creston Valley Wildlife Act, 6,885 ha (17,000 acres) of the Kootenay River floodplain were protected for "wildlife conservation, management and development... and, in particular, as a waterfowl Management Area" (Province of British Columbia 1974).

The CVWMA area is located south of Kootenay Lake and north of the Canada – US border, nestled between the Selkirk and Purcell Mountain ranges. The area encompasses a substantial portion of the Kootenay River floodplain (~530 m elevation) and consists primarily of dyked marshland, lakes, sloughs, agricultural fields, and adjacent river terraces. The CVWMA is located within the very dry warm variant of the Interior Cedar-Hemlock (ICHxw) biogeoclimatic subzone, and experiences very hot dry summers and very mild winters with light snowfall of short duration. These climatic conditions combined with an abundance of wetland and riparian habitat make the Creston Valley a critical breeding, staging and wintering area for a broad diversity of wildlife species.

With assistance from Ducks Unlimited and BC Hydro, a system of dykes, water control structures, and pumps was constructed in the CVWMA in the early 1970's. The resulting wetland compartments could be managed to enhance wildlife production during flood and drought cycles, and to prevent habitat losses associated with management of the Kootenay River system for hydroelectric power generation and flood control. Management of the water levels within these compartments maintains a rich diversity of habitat types. These habitats



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

support an estimated 385 vertebrate species (300 bird, 56 mammal, 6 reptile, 6 amphibian and 16 fish; Van Damme 2002; CVWMA 2003), as well as thousands of plant species, invertebrates and other biota, many of which are considered rare or endangered. The abundance of fish and wildlife makes the CVWMA an important site for anglers and hunters.

Sections of the CVWMA also act as critical “east-west wildlife corridors” between the Selkirk and Purcell Mountains for species such as grizzly bear and mountain caribou.

3. Guiding Documents:

- Creston Valley Wildlife Act [RSBC 1996, c.84];
- Creston Valley Wildlife Management Area - Management Plan 2015-2025 (being drafted)
- Creston Invasive Plant Management Area (IPMA) – Operational Framework 2012-2017
- Northern Leopard Frog Recovery Strategy - Rocky Mountain Population;
- Columbia Basin Riparian and Wetlands Action Plan – Draft; Fish & Wildlife Compensation Program.
- Columbia Basin Species of Interest Action Plan – Draft; Fish & Wildlife Compensation Program.

4. Financial Sustainability: The CVWMA makes all efforts possible to raise funds where it can e.g. through grazing permits, membership and user fees, but due to the size of the property, its location far from large urban centers and its nature, funds raised through these means are not sufficient to maintain and operate the area. External sources of funding (grants) are sought annually to implement projects necessary to the suitable maintenance and operation of the site.

5. Partner Recognition: The CVWMA is very grateful to HCTF for the O&M funding it has provided in the past several years and promotes HCTF as much as it can through newsletters, presentation, donor recognition board and signage, by including the HCTF logo and appropriate text, as required by the HCTF agreement.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect Existing Dike Infrastructure in Leach Lake Unit	1: Address erosion problem along Summit Creek downstream from service bridge.	1: Immediate protection of 100-150m of external dike and prevention of catastrophic flooding of the Leach Lake Unit. 2: Protection of additional water management infrastructure, i.e. water controls and dikes within the Leach Lake Unit	1: Maintain habitat for optimal wildlife use, e.g. prevent flooding of waterfowl and waterbird nests 2: Maintain safe access for staff and public use
Goal 2: Maintain existing water management infrastructure in safe operational conditions.	1: Remove rodent burrows in dike(s) in Leach Lake Unit.	1: Refurbish 1500m of dike	1: Prevent leakage through dike and further deterioration 2: Maintain safe access for staff and public use
Goal 3: Optimize habitat conditions for wildlife use in 14 managed wetland compartments.	1: Manage water levels for wildlife use in 14 managed wetland compartments.	1: Water levels are recorded and seasonal targets are	1: Water flow is continuous within and between wetland



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

		achieved 2: Channels and water controls are free of organic material impeding the management of water levels;.	compartments
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Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Duncan Flats

Duncan Flats (LEA 1)- Lardeau
Duncan Flats (LEA 2)- Lardeau
Duncan Flats (LEA 3)- Lardeau
Duncan Flats (TAC)
Meadow Creek (ACQ)

2. Habitat Description / Values:

The Duncan delta is the first large wetland environment on Kootenay Lake north of Creston flats and is used consistently by many species of migrating waterfowl. The richness and diversity of habitat on the properties supports a wide spectrum of waterfowl, songbirds, and mammals such as beaver, river otter, coyote, bear, and cougar. The properties are used extensively as winter range for elk and white-tailed deer, while the wetland component contributes significantly to critical spring breeding habitat for amphibians such as Pacific chorus frogs, and Columbia spotted frogs.

The complex of wetlands, sedge meadows and riparian forest support a variety of at-risk species such as the western painted-turtle, Townsend's big eared bat, grizzly bear, and bobolink. Provincially blue-listed Bull trout reside in Duncan River and mountain goats can be seen on the Lardeau bluffs west of the Conservation Properties. Meadow Creek provides excellent spawning habitat for Kokanee and the nearby man-made spawning channel produces approximately 75 percent of Kokanee fry for Kootenay Lake. The Gerrard rainbow trout are the largest rainbow trout in the world and each spring this unique fish returns to the Lardeau River to spawn.

The properties are within the Southern Interior Mountain (SIM) Ecoprovince, North Columbia Mountains (NCM) Ecoregion and Central Columbia Mountains (CCM) Ecosection. The majority of the properties are within the Interior Cedar-Hemlock moist, warm biogeoclimatic subzone (ICHmw2), the southern and eastern portions of several properties include the drier ICHdw1.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

3. Guiding Documents:

Lower Duncan River Conservation properties Land Management Plan, 2012
Archaeological Overview Assessment and Stewardship Plan for the Lower Duncan Conservation Property Complex, 2009
Lower Duncan Strategic Management Plan: Fire Management Planning, 2009
Letter of Understanding between Ducks Unlimited Canada, Nature Trust of British Columbia, and Nature Conservancy of Canada Re: Mosquito Control in BC Wetlands
Duncan Properties Wildlife Management Plan, 1999
Protected Areas Strategy: Goal 2
Lardeau River Watershed Planning Initiative
Duncan Dam Water Use Plan and Monitoring Activities

4. Financial Sustainability:

Co-operative funding and co-ordination with the Central Kootenay Invasive Plant Committee, Columbia Basin Trust, and the Regional District of Central Kootenay is being pursued. Implementing habitat restoration prescriptions will require stand-alone project budgets that will ensure successful implementation and long-term maintenance. The Fish and Wildlife Compensation Program remains committed to providing land management funds for conservation properties in this area.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
<p>Goal 1: Biodiversity Conservation- To manage the properties for eight biodiversity targets [Two habitat-based targets (Forest Habitat; Non Forest Habitat), and 6 species-based targets (Grizzly bear, bobolink, kokanee, elk, waterfowl, Western painted turtle)].</p>	<p>1: Forest Area: Recruit new forest to increase total forest cover on properties Structural Classes: Re-establish forest structural class distribution to within the natural range of variability Structural Elements: Increase large diameter wildlife trees within mature and old forest sites Forest Understory: Maintain productive native vegetation communities in forest understory</p>	<p>1: New forest recruited (ha)</p>	<p>1: Site monitoring indicates increased biodiversity and vegetation production on restoration sites.</p>
	<p>2: Shrub: Increase area occupied by riparian shrub communities along streams and wetlands Grass/Forb: Maintain/improve condition of natural grass/forb communities Wetland: Maintain existing wetland distribution and function; and enhance/create, where possible wetland area Agricultural Field Area: Reduce total area of agricultural fields by restoring forest or native shrub cover on selected sites</p>	<p>1: New shrub habitat recruited (ha) 2: Grass/forb habitat restored (ha) 3: Agricultural field area reduced (ha) 4: Invasive plant cover/distribution decreased</p>	<p>1: Site monitoring indicates increased biodiversity and vegetation production on restoration sites.</p>



**Wildlife Operations & Management
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	<p>Agricultural Field Condition: Maintain and where possible improve conditions on managed fields by reducing invasive plant cover and vigor Agricultural Field Use: provide opportunities for local groups to use of hay on selected fields where appropriate</p>		
	<p>3: Manage a portion of the old agriculture fields to produce early spring forage for elk Increase mature/old forest cover to provide snow interception during mid and late winter Treat selected grass/forb sites experiencing shrub invasion to maintain winter foraging habitat at the head of the lake Provide opportunities for elk/deer hunting where safe to do so</p>	<p>1: Elk distribution in relation to treated areas.</p>	<p>1: Increased habitat values and species utilization.</p>
	<p>4: Maintain abundance and distribution of spring bear food plants, and kokanee in concert with bear-human conflict goals Reduce bear-human conflict in the area by supporting better management of attractants Improve bear-human conflict management at the Meadow Creek spawning channel Maintain or improve viability of cross-valley linkage by managing access on Lower Duncan River Conservation properties</p>	<p>1: Number of grizzly bear incidents and problem bears shot.</p>	<p>1: Bear-human conflict is reduced/ eliminated. 2: Species utilization is maintained.</p>



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

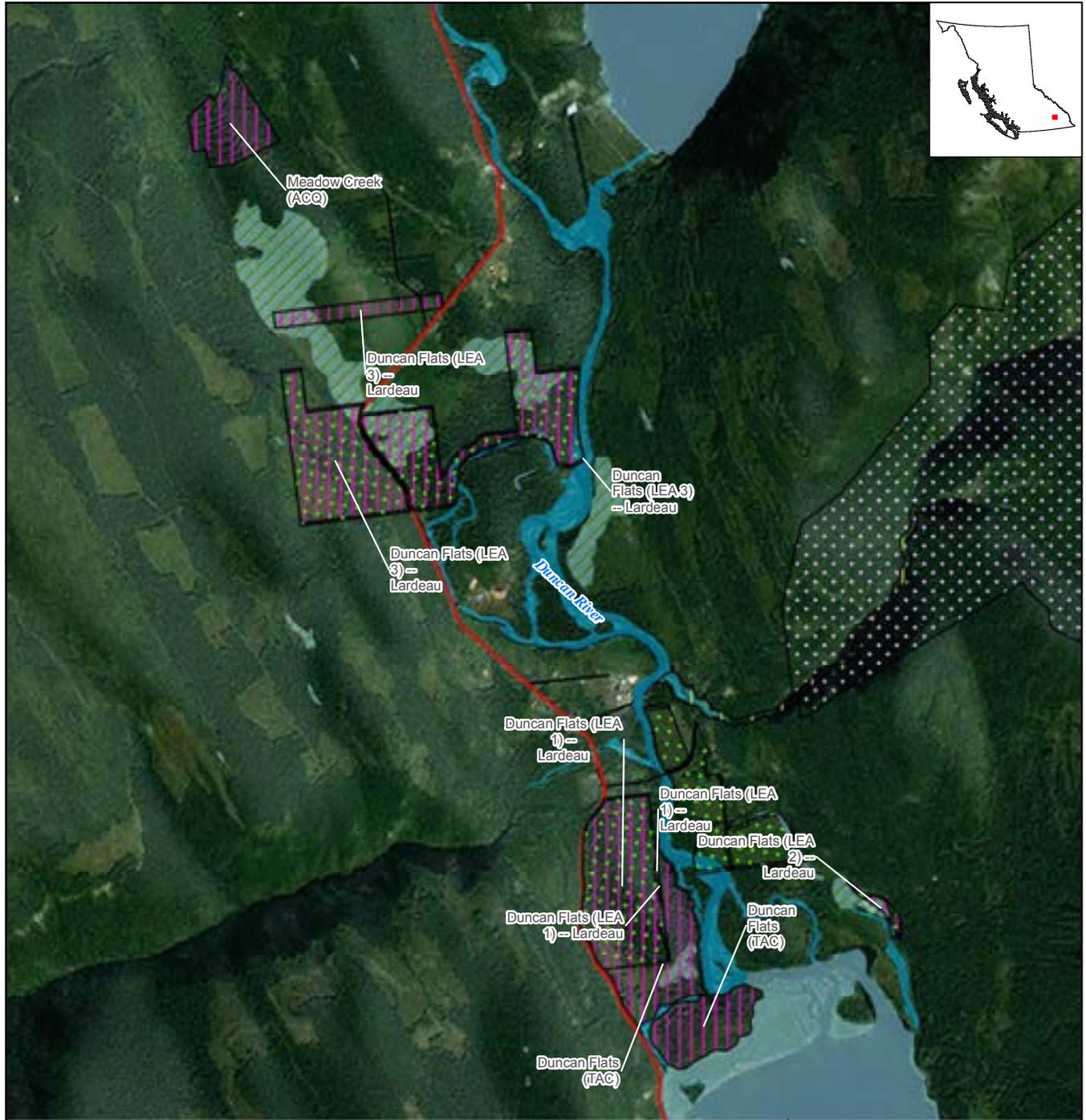
	5: Maintain suitable nesting cover within old agricultural fields.	1: Presence and distribution of bobolink in area.	1: Increased habitat values and species utilization.
	6: Maintain functional nesting areas Improve conditions in shallow water wetlands to enhance turtle use.	1: Number, location and success of nests.	1: Increased habitat values and species utilization.
	7: Improve migratory stopover habitat condition at the head of Kootenay lake and maintain/improve existing waterfowl breeding habitat.	1: Area of grass/forb fen restored. 2: Presence of breeding waterfowl species.	1: Increased habitat values and species utilization.
	8: Maintain kokanee spawner access to Meadow Creek. Restore natural streamside vegetation where necessary.	1: Kokanee access to Meadow Creek maintained.	1: Increased habitat values and species utilization.
Goal 2: Access Management	1: Public use and enjoyment is supported.	1: Acceptable uses are determined and managed.	1: Ongoing recreational use for wildlife viewing and hunting.
	2: Hunting access is supported where safe to do so.	1: Acceptable uses are determined and managed.	1: Ongoing recreational use for wildlife viewing and hunting.
	3: Motorized access is supported on gazetted roads only.	1: Signage and gates are installed at appropriate, predetermined locations.	1: Ongoing recreational use for wildlife viewing and hunting.
	4: Where conservation and access issues conflict, conservation values come first.	1: Acceptable uses are determined and managed.	1: Conservation values are upheld.



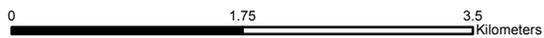
**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

<p>Goal 3: To foster ongoing relationships for the betterment of the conservation area complex and to bring additional resources to assist with the management initiatives.</p>	<p>1: Work cooperatively with local groups/organizations and governments on securing resources for land management activities where goals/objectives align with the Strategic Management Plan.</p>	<p>1: Greater collaboration between interest groups and stakeholders.</p>	<p>1: Continued strong partnership approach to land management.</p> <p>2: Increased in-kind and cash contributions to the management of the Duncan-Lardeau Conservation Complex.</p>
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7.0 Map



Duncan Flats



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

ESRI World Imagery

BCGS Map Sheet(s): 82K.025, 82K.026,
82K.015, 82K.016

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: East Side Columbia Lake

East Side Columbia Lake Wildlife Management Area (WMA)

East Side Columbia Lake (ACQ 1)- Wilder

East Side Columbia Lake WMA (ACQ 2)- Wilks

East Side Columbia Lake WMA (LEA 1)

East Side Columbia Lake WMA (LEA 2) – LeMaster

Columbia Lake (ACQ)

2. Habitat Description / Values:

The 7,195 ha Columbia Lake Eastside conservation area provides extremely important winter range for ungulates such as Bighorn sheep, elk, Mule and White-tailed deer. The properties are situated within the East Side Columbia Lake Wildlife Management Area (WMA) and contribute to a connectivity corridor between important habitat south and north of the lake.

The WMA retains a significant component of native grasslands and is integral in supplying winter range for Rocky Mountain bighorn sheep. The Canada Land Inventory depicts the entire east side of Columbia Lake as representing the largest contiguous Class 1 ungulate winter range in the Upper Columbia sub-region, and one of the least impacted of the low elevation Class1 Rocky Mountain bighorn sheep winter ranges in British Columbia.

The area is also important for Grizzly Bear, Black Bear, Cougar, Coyote, American Badger, rare Flammulated owls, Bald eagle, Golden eagle, Osprey and Red-tailed hawk. Species dependent upon grassland or open forest habitat types at low elevations include Prairie Falcon, Townsend's Big-eared bat, and Rubber boa. The north end of the lake is a waterfowl sanctuary and the south end is an important staging area for waterfowl, especially swans. There is a significant Burbot spawning site in a spring-fed creek at the southwest end of the lake.

The Spirit Trail (also known as the Fairmont Trail and the Plains of Nativity) passes through the WMA. This transportation route was used by First Nations and early European explorers (e.g.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

David Thompson and Father De Smet) as a means to travel along the length of Columbia Lake. Indigenous peoples included the Spirit Trail as one of their favorite routes to points east of Canal Flats, namely Whiteswan Lake, and into Kananaskis country. Today the WMA contains a provincially significant number of registered archaeological sites and traditional use sites.

Also unique to the area are deposits of “tufa”. This regionally important geological feature that is associated with limestone strata and calcium rich springs provides essential habitat for many rare flora species.

The East Side Columbia Lake complex contains 3 biogeoclimatic subzones/ variants. Lower elevations are IDFdm2 (Kootenay Dry Mild Interior Douglas-fir), mid elevations are MSdk (Dry Cool Montane Spruce), while higher slopes are ESSFdk (Dry Cool Englemann Spruce).

3. Guiding Documents:

Species-at-Risk Assessment for the “Source of the Columbia” Community Walkway and Interpretive Preserve, Canal Flats, British Columbia
“Source of the Columbia” interpretive Walkway impact Assessment and Planning Document
A Stage 1 preliminary Site Investigation for the “East Columbia Lake Property”.
Elk Management Plan for the East Kootenay
Land Management Strategy for Wildlife in the East Kootenay Trench
Fire-maintained Ecosystem Restoration in B.C.’s Rocky Mountain Trench (Blueprint for Action – 2006)
Ecological Restoration Guidelines for British Columbia
Integrating Ecosystem Restoration into Forest Management
Ecosystem Restoration Program NDT4 Five Year Plan-2009
Ungulate Winter Range Habitat Management Objectives and Best Management Practices
Kootenay Boundary Land Use Plan-Implementation Strategy-1997
An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench
Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Financial Sustainability:

Due to the remoteness of these conservation areas there are limited partnership opportunities to generate additional revenue for the area.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

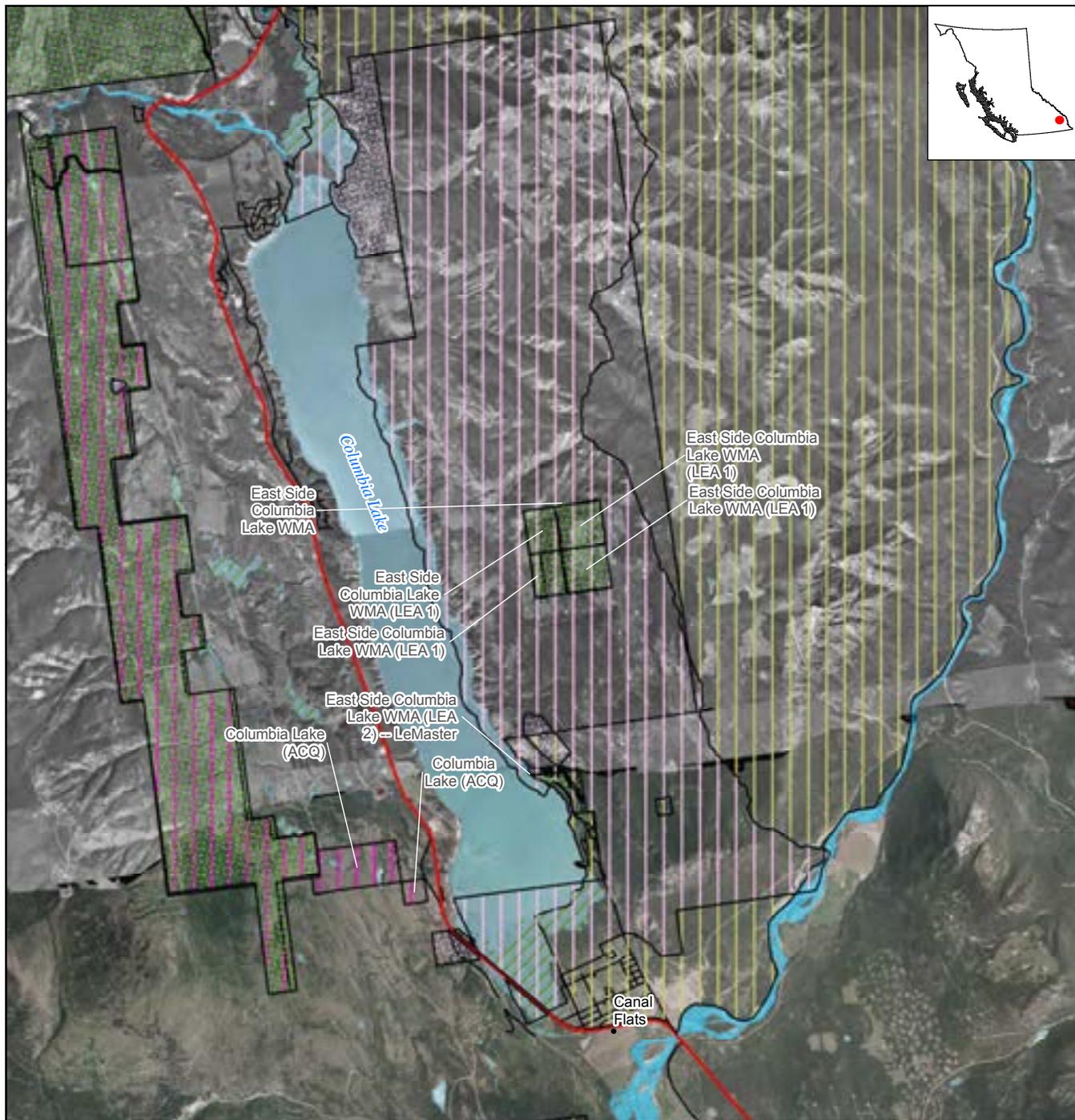
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Ensure that management actions protect all known and potential archaeological sites in the WMA.	1: Archaeological Overview Assessments (AOA) maps are obtained from the Ministry of Forests, Lands and Natural Resource Operations.	1: Archaeological sites are identified and protected during land management activities.	1: Known and potential archaeological sites are conserved.
	2: An archaeological impact assessment and consultation with First Nations is conducted prior to land management activities that may involve ground disturbance.	1: Archaeological sites are identified and protected during land management activities.	1: Known and potential archaeological sites are conserved.
Goal 2: Assess the ecosystem health and the success of habitat restoration and enhancement initiatives.	1: Complete and implement treatments that will restore the ecosystem function of fire.	1: Restoration projects identified and implemented.	1: Site monitoring indicates increased biodiversity and vegetation production on restoration sites.
	2: Implement the bighorn sheep enhancement plan created for the WHA.	1: Restoration projects are identified and implemented.	1: Increased habitat values and species utilization.



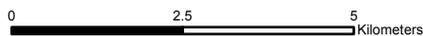
**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

<p>Goal 3: To foster ongoing relationships for the betterment of the conservation area complex and to bring additional resources to assist with the management initiatives.</p>	<p>1: Coordinate species and habitat activities with Ministry of Forests, Lands, and Natural Resource Operations, The Nature Trust of BC and The Nature Conservancy of Canada.</p>	<p>1: Stakeholders and interest groups are engaged in stewardship activities.</p>	<p>1: Strong partnership approach to land management activities. 2: Increased in-kind and cash contributions to the management of the conservation property.</p>
<p>Goal 4: Access Management</p>	<p>1: Public use and enjoyment is supported.</p>	<p>1: Acceptable uses are determined and managed.</p>	<p>1: Ongoing recreational use for wildlife viewing and hunting.</p>
	<p>2: Continue to support provincial access management legislation implemented under the Wildlife Act.</p>	<p>1: Acceptable uses are managed and enforced.</p>	<p>1: Access violations no longer occur.</p>
	<p>3: Provide opportunities for First Nations people to carry on their traditional uses of the area.</p>	<p>1: First Nations use continues.</p>	<p>1: Opportunities for traditional use are maintained in perpetuity for future generations.</p>

7.0 Map



East Side Columbia Lake



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
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Data Sources:

North American Datum (NAD 83)
 BC Albers

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 Areas & Protected Areas (September 2012)
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 Crown Designations (July 2012)
 Freshwater Atlas (2012)
 Digital Road Atlas (2012)

Canadian Wildlife Service
 National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
 bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82J.031, 82J.032,
 82J.021, 82J.022,
 82J.011, 82J.012

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Elizabeth Lake

Elizabeth Lake (ACQ)

Elizabeth Lake (LEA)- Scriver

2. Habitat Description / Values:

The Elizabeth Lake conservation complex is located within the Kootenay Dry Mild Interior Douglas-fir variant (IDFdm2) and is comprised of both Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO) administered and non-administered lands. There are four properties, totalling just less than 106 hectares, three of which are crown land, and one leased land which is owned by The Land Conservancy of Canada (TLC). The main body of the wetland complex is a Land Act Map Reserve. Further, the complex is designated as an Access Management Area under Schedule 1 (Motor Vehicle Closed Areas) of the provincial Wildlife Act.

The properties support many conservation values and recreation/education opportunities including an established trail network. It provides a scenic wetland which serves as an important resting area for many species of waterfowl including mallard, teal, ring-neck, scaup, redhead, bufflehead, golden-eye and ruddy ducks. Canada geese, black terns, yellow-headed blackbirds and many other birds nest on the wetland complex. Mammals within the area include Mule and White-tailed deer, elk, moose, and muskrat. A colony of Giant Copper butterfly, previously unknown in British Columbia, was recorded in the early 1990's; this may be the only known site in BC. Additional listed species observed on the conservation lands include the great blue heron (blue-listed) and painted turtles (blue-listed) which have an enhanced gravel nesting site.

There are two registered archaeological sites located within the Land Act Map Reserve.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Guiding Documents:

Management Agreement with Ducks Unlimited
Schedule 1 (Motor Vehicle Closed Areas) of the Wildlife Act (Motor Vehicle Prohibition Regulations
B.C. Reg. 196/99 O.C. 732/99.
Confederation Park Wildlife Viewing Development Plan
Waterfowl Habitat Management Plan for Elizabeth Lake
Elizabeth Lake Wildlife Assessment Report
Painted Turtle Crossing Assessment, Elizabeth Lake

3. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for this property. The Rocky Mountain Naturalists, a local stewardship group, have played an active role in helping maintain and preserve wildlife habitat. Ducks Unlimited Canada and the Fish and Wildlife Compensation Program: Columbia Basin have contributed to habitat enhancement projects in the past.

4. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

5. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Optimize habitat conditions for migrating waterfowl.	1: Initiate waterfowl habitat enhancement projects.	1: Enhancement projects are identified and implemented. 2: Continued use by waterfowl.	1: Site monitoring indicates increased habitat values and species utilization.
	2: Continue protocol agreement with Ducks Unlimited Canada to promote water level/ flow management regimes that minimize impacts and improve habitats for dependent species.	1: Acceptable water levels are maintained. 2: Continued use by waterfowl.	1: Increased habitat suitability and waterfowl utilization.
	3: Liaise with Environmental Protection Division in MOE to determine if water contamination from former sawmill site is of concern (Parcel A of Plan 4061).	1: Sources of contamination are removed and site cleanup is initiated.	1: Contaminants are reduced or eliminated to acceptable levels and no longer pose a threat to public health and safety or wildlife.
Goal 2: Minimize impacts of trail users and other recreational users on wildlife and their habitats.	1: Designate and enforce acceptable uses and rules for trail use.	1: Educational, acceptable access and bylaw signage for pet control are installed. 2: Human/wildlife conflicts are reduced/eliminated.	1: Recreational opportunities are maintained.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

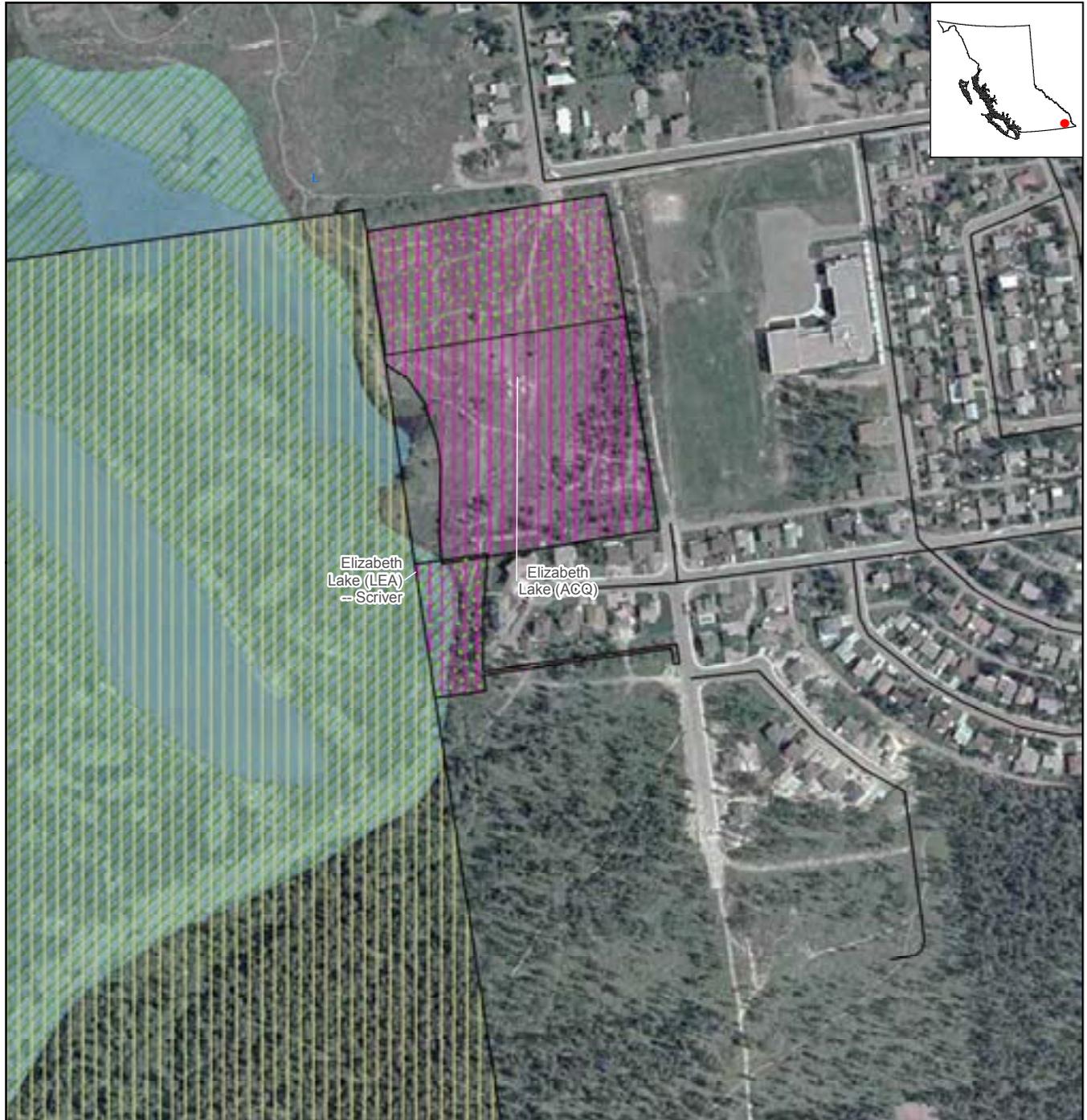
	<p>2: Maintain all infrastructures to provide a safe opportunity for users to enjoy the attributes of the property from designated trails and viewing locations.</p>	<p>1: Infrastructure is maintained. 2: Acceptable uses and location are determined and managed.</p>	<p>1: Recreational opportunities are maintained.</p>
<p>Goal 3: Access Management</p>	<p>1: Continue to monitor and enforce Access Management Area regulations as stated in the Wildlife Act.</p>	<p>1: Acceptable uses are managed and enforced.</p>	<p>1: Access violations no longer occur. 2: Recreational use is maintained.</p>
<p>Goal 4: Invasive Plant Management</p>	<p>1: Monitor and control invasive plant species using cultural, mechanical and chemical control methods.</p>	<p>1: Invasive plant density and distribution is reduced.</p>	<p>1: Suitable habitat values are restored.</p>
	<p>2: Re-establish native vegetation.</p>	<p>1: All invasive plant treatments are immediately reseeded or planted with the appropriate native plant species.</p>	<p>1: Suitable habitat values are restored.</p>
<p>Goal 5: To foster ongoing relationships with stewardship groups for the betterment of the conservation lands complex.</p>	<p>1: Work cooperatively with local groups/organizations on securing resources for land management activities where goals are aligned with this document.</p>	<p>1: Greater collaboration between interest groups and stakeholders.</p>	<p>1: Continued partnership approach to land management. 2: Increased in-kind and cash contributions to the management of the Elizabeth Lake complex.</p>



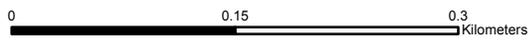
**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

Goal 6: Ensure that known and potential archaeological sites are protected.	1: Archaeological Overview Assessments (AOA) maps are obtained from the Ministry of Forests, Lands and Natural Resource Operations.	1: Archaeological sites are identified and protected during land management activities.	1: Known and potential archaeological sites are conserved.
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7.0 Map



Elizabeth Lake



Legend

Crown Designations

-  Administered Lands
-  Reserve Lands
-  Wildlife Management Areas

Other Conservation Lands

-  NGO Conservation Areas
-  National Wildlife Areas
-  National Parks
-  Provincial Protected Areas

Map Symbols

-  Lake
-  River
-  Wetland
-  Highway
-  Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82G.042

FLNRO Region: Kootenay/Boundary

Wildlife O&M 3-year Application – GOLD CREEK GAME RESERVE

SITE DESCRIPTIONS / ACTIVITIES

1. Name of property:

- a. *Complex Name:* Gold Creek Game Reserve
- b. *CLD Reference:* Gold Creek Game Reserve (LEA) – Strauss

2. Habitat Description / Values

The Strauss property at Newgate, encompassing 33ha, was purchased by The Nature Trust of BC and leased to the province in 1987. It was acquired to protect and maintain high capability winter range habitat for elk, mule deer and white-tailed deer in an area heavily impacted by the Libby Reservoir.

The property is located at the mouth of Gold Creek, where it meets Lake Kooconusa on the west bank of the Libby Reservoir. The property, which is in the dry subzone of the Interior Douglas-fir biogeoclimatic zone, is composed primarily of a north-south ridge dominated by a mixed-age stand of Douglas-fir. On the property there is a CDC documented species occurrence of Lewis's Woodpecker nests.

3. Guiding Documents

Elk Management Plan for the East Kootenay

Land Management Strategy for Wildlife in the East Kootenay Trench

Fire-maintained Ecosystem Restoration in B.C.'s Rocky Mountain Trench (Blueprint for Action – 2006)

Ecological Restoration Guidelines for British Columbia

Integrating Ecosystem Restoration into Forest Management

Ecosystem Restoration Program NDT4 Five Year Plan-2009

Ungulate Winter Range Habitat Management Objectives and Best Management Practices

Kootenay Boundary Land Use Plan-Implementation Strategy-1997

An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench

Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	Objective 1: Implement resource inventory programs to determine if enhancement projects are warranted	S-T Indic 1- no loss in existing habitat value. S-T Indic 1- restoration projects identified and implemented	L-T Indic 1- increased habitat values and species utilization
Goal 2: Access Management	Objective 1. Restrict human and motor and non-motorized vehicle access using physical barriers, signs and public communication.	S-T Indic 1- Acceptable uses are determined and managed	L-T Indic 1- Ongoing recreational use for both wildlife viewing and hunting
Goal 3: Invasive plant management	Objective 1: Control the spread of invasive plant species.	S-T Indic 1- Invasive plant density and distribution is reduced	L-T Indic 1- suitable habitat values are restored through a reduction in invasive plant density and distribution.

5. Financial Sustainability

Due to the remoteness of this conservation area complex there are limited partnership opportunities to generate additional revenue or in-kind support for the area.

6. Partner Recognition

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

7. Map



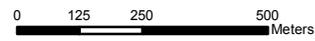
Gold Creek Game Reserve

Conservation Areas

 The Nature Trust

Map Symbols

 Road



Scale: 1:15,000

UTM Zone 11 NAD 83

BC Location



Data sources:

BC NGO Conservation Lands Database
BC GOV FLNRO GeoBC
Bing Maps Aerial

Map produced by:



April 2012



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Please complete a separate plan for each property/complex within your region. See "Instructions for Wildlife O & M Part 1" for assistance in completing this form.

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay-Boundary

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Grand Forks

2. Habitat Description / Values:

The Grand Forks Property is a 193-hectare low elevation grassland near Grand Forks, BC. These parcels consist of open range that is contained within the Gilpin Deer Winter/Spring Range. The properties vary from benchland to steep grassy slopes with rock outcrops and bluffs. The area is representative dry interior grassland/Douglas fir/Ponderosa pine habitat with some aspen groves on the properties. Both white-tail and mule deer inhabit the property with the occasional sighting of elk within the boundary. This property is important winter and spring range for ungulate species as well as being utilized by upland birds, songbirds, and waterfowl. The area supports a number of rare flora and fauna including sweet-marsh butterweed, California bighorn sheep, with the capability of hosting other listed species including Lewis's Woodpecker, and Brewer's Monkey flower.

3. Guiding Documents:

TNT/Province Lease Agreement, 1974
TNT/Province Management Agreement 2011

4. Financial Sustainability:

Close proximity to city of Grand Forks and Provincial conservation holdings provide opportunities for cost sharing partnerships and collaborations.

5. Partner Recognition:

Boundary and regulatory signs include the Province's logos. All publications/interpretive/ restorative/ enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Please use these Goals and Objective numbers in Wildlife O & M Part 2: Application Table.

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: To sustain the natural habitats of the Gilpin Deer winter/spring range	1: Preserve and protect wildlife habitats associated with low elevation grassland.	1:Inventories completed for wildlife and ecological communities	1:Biodiversity maintained
	2: Compile and update vegetative and wildlife species inventory data	1:Inventories completed for wildlife and ecological communities	1:Biodiversity maintained
	4: Manage Invasive species	1:Inventories completed for wildlife and ecological communities	1:Biodiversity maintained

Wildlife O&M 3-year Application – BIG RANCH CONSERVATION AREA

SITE DESCRIPTIONS / ACTIVITIES

1. Name of property:

- a. *Complex Name:* **Big Ranch Conservation Area**
- b. *CLD Reference:* Grave Prairie (LEA 1) -- Big Ranch
Grave Prairie (LEA 2) -- Musil

2. Habitat Description / Values

The Big Ranch Conservation Area contains a diverse range of plant communities and seral stages from old growth black cottonwood- spruce forests to open grassland habitat. This diversity of habitats contributes to the conservation value as ungulate winter range and utilization by many other wildlife species ranging from raptors to the red-listed badger. Rocky Mountain elk are the most abundant ungulates using the property and estimates of their number vary between 200-700 animals with a trend to increasing population size. The bordering Elk River is a regionally significant fish-bearing river that contains populations of Westslope cutthroat trout, rainbow trout and the blue-listed bull trout.

The properties are within the Montane Spruce dry cool subzone variant (MSdk1) which is characterized by warm dry summers and cold winters with light snowfall.

3. Guiding Documents

Wildlife Habitat Enhancement Plan for the Musil Estate & Big Ranch Property in the Elk Valley, 2001

An ecosystem approach to managing a Mountain Pine beetle outbreak on the Big Ranch property, 2002

Elk Management Plan for the East Kootenay

Land Management Strategy for Wildlife in the East Kootenay Trench

Ecological Restoration Guidelines for British Columbia

Integrating Ecosystem Restoration into Forest Management

Ungulate Winter Range Habitat Management Objectives and Best Management Practices

Kootenay Boundary Land Use Plan-Implementation Strategy-1997

Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	<p>Objective 1: Identify species that occur or historically occurred on the Big Ranch properties.</p> <p>Objective 2: Provide a diversity of habitats for the full range of wildlife species that are known to inhabit or may inhabit the property for any portion of the year and coordinate their management (Ecosystem restoration, access management, etc).</p> <p>Objective 3: Ensure those ecosystems, their structure and function and connective habitats are not disrupted or impaired.</p> <p>Objective 4: Restore Aspen communities on the property.</p>	<p>S-T Indic 1- inventories completed for wildlife species and ecological communities</p> <p>S-T Indic 2- restoration projects identified and implemented</p> <p>S-T Indic 3- no loss in existing habitat value.</p>	<p>L-T Indic 1- increased habitat values and species utilization</p> <p>L-T Indic 2- site monitoring indicates increased biodiversity on restoration sites</p>
Goal 2: Access Management	<p>Objective 1: Public use and enjoyment is supported</p> <p>Objective 2; Hunting and fishing access is supported where safe to do so</p> <p>Objective 3: Continue to support provincial access management legislation implemented under the Wildlife Act.</p> <p>Objective 4: Where conservation and access issues conflict, conservation values are the priority.</p>	<p>S-T Indic 1- Acceptable uses are determined and managed</p> <p>S-T Indic 2- Signage and gates are installed at appropriate, predetermined locations</p>	<p>L-T Indic 1- Ongoing recreational use for both wildlife viewing and hunting</p>
Goal 3: To foster ongoing relationships for the betterment of the conservation area complex and to bring additional	<p>Objective 1: Work cooperatively with local groups/organizations on securing resources for land management activities where goals/objectives align with the Strategic Management Plan.</p>	<p>S-T Indic 1- greater collaboration between interest groups and stakeholders</p>	<p>L-T Indic 1 – continued strong partnership approach to land management</p> <p>L-T Indic 2 – increased in-kind and cash contributions to the management of the conservation properties.</p>

resources to assist with the management initiatives			
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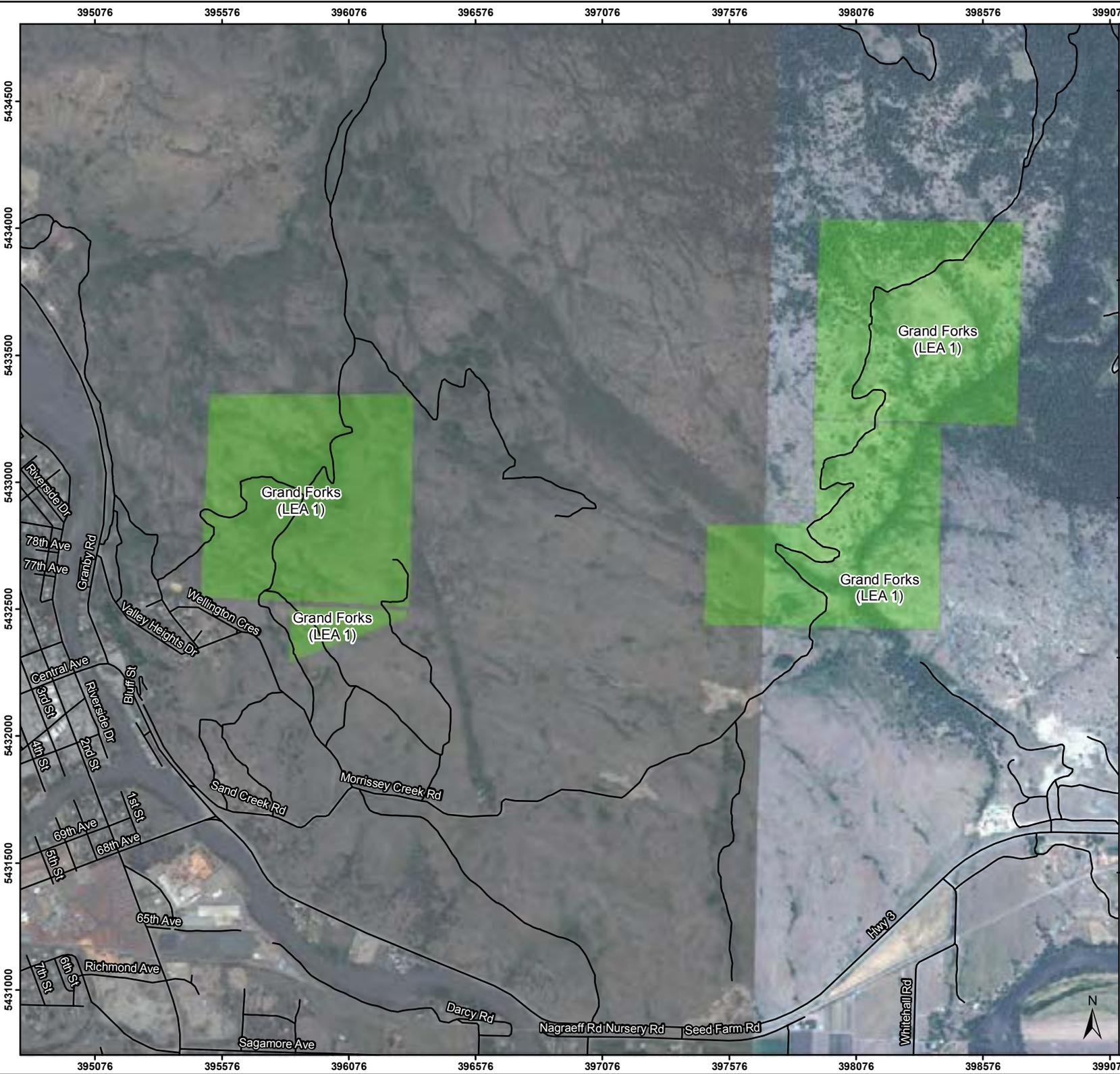
5. Financial Sustainability

Community in-kind supporters include the Sparwood District Fish and Game Association, and the Elkford Rod and Gun Club. Financial contributions are largely opportunistic and inconsistent and implementing habitat restoration prescriptions often require stand-alone project budgets.

6. Partner Recognition

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

7. Map



Grand Forks

Conservation Areas

 The Nature Trust

Map Symbols

 Road



Scale: 1:20,000

UTM Zone 11 NAD 83

BC Location



Data sources:

BC NGO Conservation Lands Database
 BC GOV FLNRO GeoBC
 Bing Aerial

Map produced by:





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Hamling Lakes Wildlife Management Area (WMA)

Hamling Lakes WMA

2. Habitat Description / Values:

Hamling Lakes WMA is a 30,572 ha area located approximately 10 km east of Nakusp in the Kootenay Region of Southeast BC. It lies adjacent to the southeast boundary of Goat Range Provincial Park. The wildlife management area provides complimentary habitat to the adjacent Goat Range Provincial Park by providing lower elevation habitats that are essential for the seasonal migration of some wildlife species.

The WMA is in the Central Columbia Mountains ecosection and is situated predominantly in the Engelmann Spruce/ Subalpine-fir and Interior Cedar-Hemlock biogeoclimatic zones. The WMA includes a variety of ecosystems and wildlife habitats including old growth valley bottoms, alpine lake complexes, riparian habitats, avalanche tracks, talus slopes and vegetation/soil associations from valley bottom to ridgetop. Additionally, the high-capability forests as well as high-elevation lands are suited to hunting and recreational activities.

The Hamling Lakes WMA covers a critical portion of the range of the red-listed Central Selkirk mountain caribou population. This herd is attracted to the low elevation old growth forest and a significant portion of the herd winter in the Hamling Lakes area. Additionally, it provides movement corridors and habitat for various blue-listed species including Grizzly Bear, Wolverine, Bald Eagle, Great Blue Heron, American Bittern, American Avocet, Lark Sparrow and Lewis' Woodpecker.

3. Guiding Documents:

Kootenay- Boundary Land Use Plan (KBLUP)
Hamling Lakes Wildlife Management Area Operational Management Plan
Wildlife Management Areas Regulation of the Wildlife Act B.C. reg. 118/98
Forest Practices Act



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

4. Financial Sustainability:

The WMA is largely the responsibility of the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO) whom also have a legal responsibility for forestry tenures and a heli-skiing company in the WMA. Revenues from these licensees should be redirected into the management of the WMA. Currently, however, there are limited opportunities to generate additional revenue for this area.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

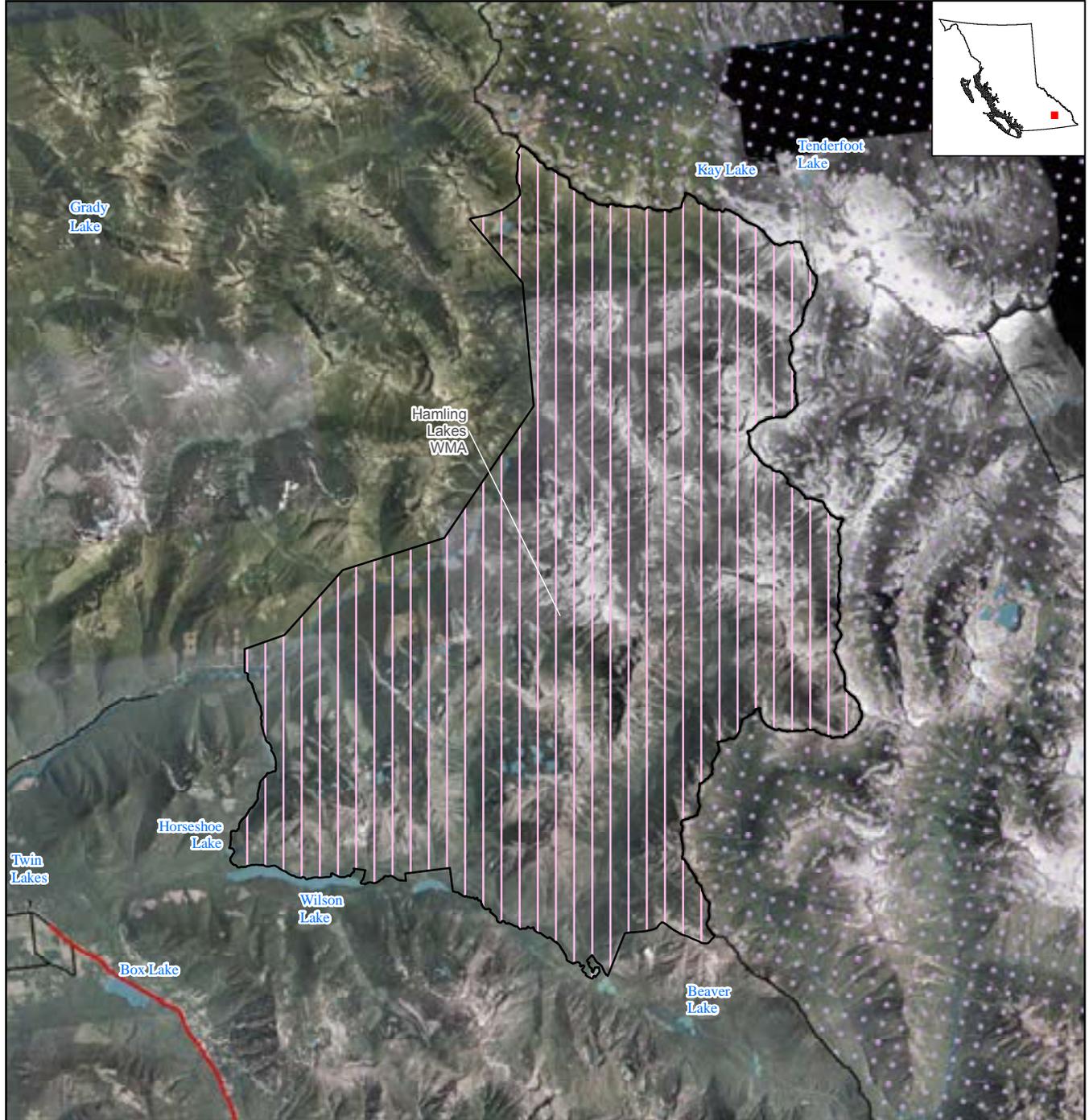
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	1: Retain adequate supply of undisturbed early and late caribou winter habitat such that the distribution of caribou, and use of habitats, is similar or expands in the future.	1: Habitat is excluded from logging activities during these periods as per the KBLUP Higher Level Plan.	1: Increased habitat values and species utilization.
	2: Minimize disturbance to grizzly bears during spring while they are using low elevation avalanche chutes.	1: Traffic is limited on roads that traverse low elevation avalanche chutes through May and June.	1: Habitat values are maintained/ enhanced.
	3: Increase the production of forage for mountain goats in late winter areas. Maintain snow interception cover interspersed with open canopy forage cover.	1: Habitat enhancement projects are identified and implemented.	1: Increased habitat values and species utilization.
	4: Maintain Bull Trout use of lower Kuskanax Creek for spawning.	1: Water quality and flow levels for Kuskanax Creek are maintained.	1: Habitat values are maintained/ enhanced.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

Goal 2: Human Use Management	1: Minimize the impact of forestry on caribou and grizzly bears.	1: Licensees adhere to habitat guidelines.	1: Conservation values are upheld.
	2: Minimize the impact of mining on caribou and grizzly bears.	1: Licensees consider habitat guidelines in their exploration permit applications.	1: Conservation values are upheld.
	3: Allow for increased recreational use of the WMA while minimizing disturbance to caribou during late winter and grizzly bears during spring.	1: The effect of recreational use on wildlife is monitored.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives of the WMA.
	4: Retain high quality hunting, trapping and fishing opportunities in the WMA.	1: Public use of wildlife is managed at sustainable levels based on the Provincial Wildlife Management Policy.	1: Opportunities for traditional uses are maintained.
	5: Discourage livestock husbandry in the WMA.	1: No grazing occurs in the WMA.	1: Habitat values are maintained/ enhanced.
	6: Meet water quality objectives for the Kuskanax Creek watershed.	1: Forest Practices Code and Riparian Areas and Community Watersheds guidelines are being met.	1: Water quality is maintained/ enhanced.

7.0 Map



Hamling Lakes



Legend

Crown Designations

-  Administered Lands
-  Reserve Lands
-  Wildlife Management Areas

Other Conservation Lands

-  NGO Conservation Areas
-  National Wildlife Areas
-  National Parks
-  Provincial Protected Areas

Map Symbols

-  Lake
-  River
-  Wetland
-  Highway
-  Paved Road

Data Sources:

North American Datum (NAD 83)
 BC Albers

BC GOV FLNRO Data BC:
 Provincial Parks, Ecological Reserves, Recreation
 Areas & Protected Areas (September 2012)
 National Parks (September 2012)
 Crown Designations (July 2012)
 Freshwater Atlas (2012)
 Digital Road Atlas (2012)

Canadian Wildlife Service
 National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
 bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82K.042, 82K.043, 82K.044,
 82K.032, 82K.033, 82K.034,
 82K.022, 82K.023, 82K.024,
 82K.012, 82K.013, 82K.014

FLNRO Region: Kootenay/Boundary

Wildlife O&M 3-year Application – LARDEAU/DUNCAN CONSERVATION AREA

SITE DESCRIPTIONS / ACTIVITIES

1. Name of property:

- a. *Complex Name:* **Lardeau/Duncan Conservation Area**
- b. *CLD Reference:* Lardeau/Duncan Flats (LEA 1)
Lardeau/Duncan Flats (LEA 2)
Lardeau/Duncan Flats (LEA 3)

2. Habitat Description / Values

The Duncan delta is the first large wetland environment on Kootenay Lake north of Creston flats and is used consistently by many species of migrating waterfowl. The richness and diversity of habitat on the properties provide for a wide spectrum of waterfowl, songbirds, and mammals such as beaver, river otter, coyote, bear, and cougar. The properties are used extensively as winter range for elk and white-tailed deer, while the wetland component contributes significantly to critical spring breeding habitat for amphibians such as Pacific chorus frogs, and Columbia spotted frogs.

The complex of wetlands, sedge meadows and riparian forest support a variety of at-risk species such as the western painted-turtle, Townsend's big eared bat, grizzly bear, and bobolink. Provincially Blue-listed bull trout reside in Duncan River and mountain goats can be seen on the Lardeau bluffs west of the Conservation Properties. Meadow Creek provides excellent spawning habitat for kokanee and the nearby man-made spawning channel produces approximately 75 percent of kokanee fry for Kootenay Lake. The Gerrard rainbow trout are the largest rainbow trout in the world and each spring this unique fish returns to the Lardeau River to spawn.

The properties are within the Southern Interior Mountain (SIM) Ecoprovince, North Columbia Mountains (NCM) Ecoregion and Central Columbia Mountains (CCM) Ecoregion. The majority of the properties are within the Interior Cedar-Hemlock moist, warm biogeoclimatic subzone (ICHmw2), the southern and eastern portions of several properties include the drier ICHdw1.

3. Guiding Documents

Lower Duncan River Conservation properties Land Management Plan, 2012

Archaeological Overview Assessment and Stewardship Plan for the Lower Duncan Conservation Property Complex, 2009

Lower Duncan Strategic Management Plan: Fire Management Planning, 2009

Letter of Understanding between Ducks Unlimited Canada, Nature Trust of British Columbia, and Nature Conservancy of Canada Re: Mosquito Control in BC Wetlands

Duncan Properties Wildlife Management Plan, 1999

Protected Areas Strategy: Goal 2

Lardeau River Watershed Planning Initiative

Duncan Dam Water Use Plan and Monitoring Activities

4. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators	
		Short Term	Long Term
<p>Goal 1: Biodiversity Conservation- To manage the properties for eight biodiversity targets [Two habitat-based targets (Forest Habitat; Non Forest Habitat), and 6 species-based targets (Grizzly bear, bobolink, kokanee, elk, waterfowl, Western painted turtle)].</p>	<p>Objective 1: Forest Area: Recruit new forest to increase total forest cover on properties Structural Classes: Re-establish forest structural class distribution to within the natural range of variability Structural Elements: Increase large diameter wildlife trees within mature and old forest sites Forest Understory: maintain productive native vegetation communities in forest understory</p> <p>Objective 2: Shrub: Increase area occupied by riparian shrub communities along streams and wetlands Grass/Forb: Maintain/improve condition of natural grass/forb communities Wetland: Maintain existing wetland distribution and function; and enhance/create, where possible wetland area Agricultural Field Area: Reduce total area of agricultural fields by restoring forest or native shrub cover on selected sites Agricultural Field Condition: Maintain and where possible improve conditions on managed fields by reducing invasive plant cover and vigor Agricultural Field Use: provide opportunities for local groups to use of hay on selected fields where appropriate</p> <p>Objective 3: Manage a portion of the old agriculture fields to produce early spring forage for elk Increase mature/old forest cover to provide snow interception during mid and late winter Treat selected grass/forb sites experiencing shrub invasion to maintain winter foraging habitat at the head of the lake</p>	<p>S-T Indic 1- New forest recruited (ha)</p> <p>S-T Indic 2- New shrub habitat recruited (ha); Grass/forb habitat restored (ha); Agricultural field area reduced (ha); Invasive plant cover/distribution decreased</p> <p>S-T Indic 3- Elk distribution in relation to treated areas</p>	<p>L-T Indic 1- site monitoring indicates increased biodiversity and vegetation production on restoration sites</p>

	<p>Provide opportunities for elk/deer hunting where safe to do so</p> <p>Objective 4: Maintain abundance and distribution of spring bear food plants, and kokanee in concert with bear-human conflict goals Reduce bear-human conflict in the area by supporting better management of attractants Improve bear-human conflict management at the Meadow Creek spawning channel Maintain or improve viability of cross-valley linkage by managing access on Lower Duncan River Conservation properties</p> <p>Objective 5: Maintain suitable nesting cover within old agricultural fields</p> <p>Objective 6: Maintain functional nesting areas Improve conditions in shallow water wetlands to enhance turtle use</p> <p>Objective 7: Improve migratory stopover habitat condition at the head of Kootenay lake Maintain/improve existing waterfowl breeding habitat</p> <p>Objective 8: Maintain kokanee spawner access to Meadow Creek Restore natural streamside vegetation where necessary</p>	<p>S-T Indic 4- Number of grizzly bear incidents and problem bears shot</p> <p>S-T Indic 5- Presence and distribution of bobolink in area</p> <p>S-T Indic 6- Number, location and success of nests</p> <p>S-T Indic 7- Area of grass/forb fen restored Presence of breeding waterfowl species</p> <p>S-T Indic 8- Kokanee access to Meadow Creek maintained</p>	
<p>Goal 2: Access Management</p>	<p>Objective 1: Public use and enjoyment is supported</p> <p>Objective 2; Hunting access is supported where safe to do so</p> <p>Objective 3: Motorized access is supported on gazetted roads only</p> <p>Objective 4: Where conservation and access issues conflict, conservation</p>	<p>S-T Indic 1- Acceptable uses are determined and managed</p> <p>S-T Indic 2- Signage and gates are installed at appropriate, predetermined locations</p>	<p>L-T Indic 1- Ongoing recreational use for both wildlife viewing and hunting</p>

	values come first		
Goal 3: To foster ongoing relationships for the betterment of the conservation area complex and to bring additional resources to assist with the management initiatives	Objective 1: Work cooperatively with local groups/organizations and governments on securing resources for land management activities where goals/objectives align with the Strategic Management Plan.	S-T Indic 1- greater collaboration between interest groups and stakeholders	L-T Indic 1 – continued strong partnership approach to land management L-T Indic 2 – increased in-kind and cash contributions to the management of the Duncan-Lardeau Conservation Complex.

5. Financial Sustainability

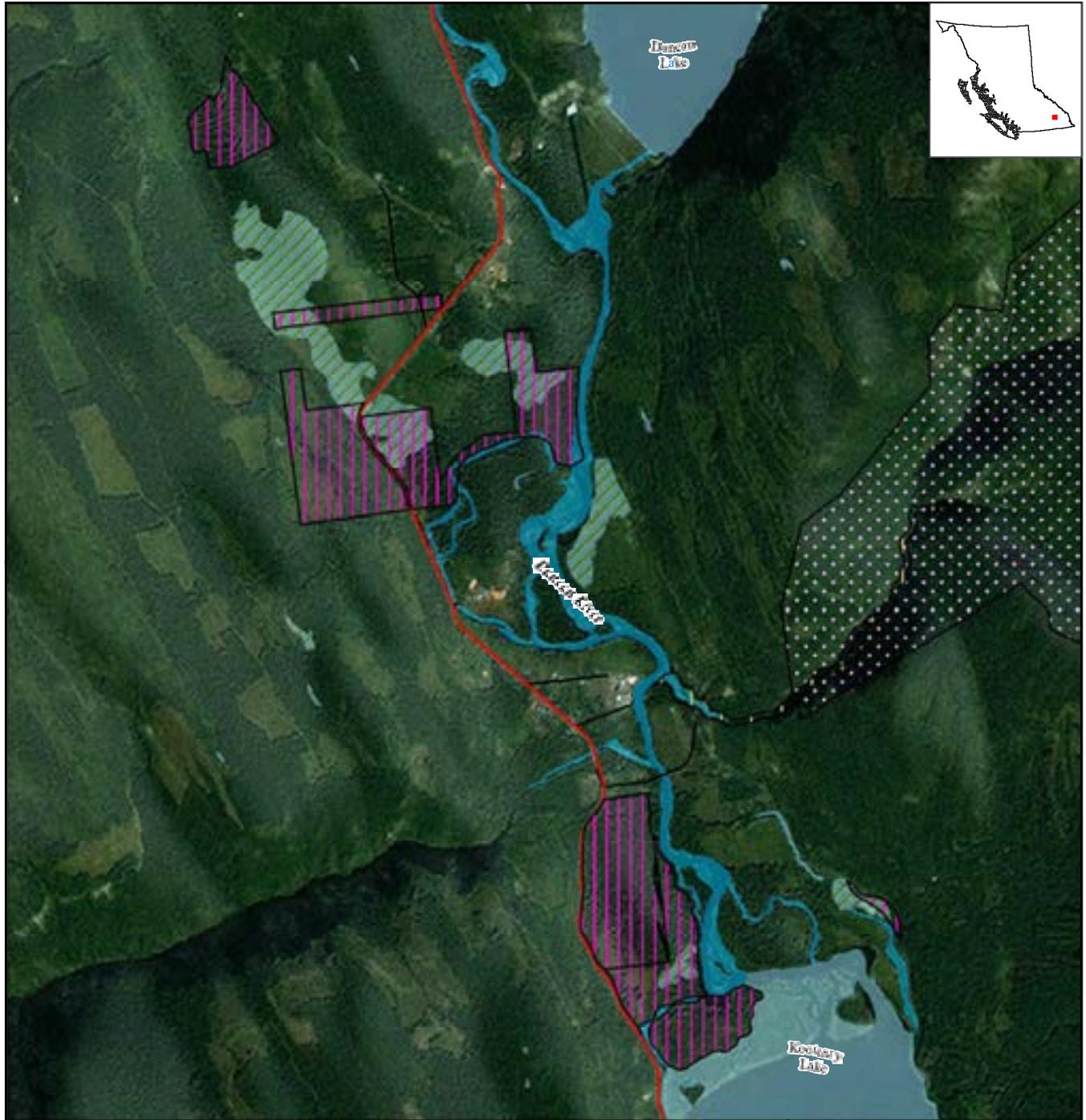
Co-operative funding and co-ordination with the Invasive Plant Committee, CBT, and RDCK is being pursued. Implementing habitat restoration prescriptions will require stand-alone project budgets that will ensure successful implementation and long-term maintenance.

6. Partner Recognition

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

7. Map

7.0 Map



Duncan Flats



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

ESR: World imagery

BCGS Map Sheet(s): 82K.025, 82K.026,
82K.015, 82K.016

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Marsden Face

Marsden Face (LEA 1)
Marsden Face (LEA 2)
Marsden Face (TAC)

2. Habitat Description / Values:

The Marsden properties are an important, low-elevation, contiguous parcel of class 1 ungulate winter range. The properties are located in the Dry Warm Interior Cedar-Hemlock (ICHdw1) biogeoclimatic (BEC) subzone which is the most diverse subzone in the province in terms of tree species. A considerable area of the properties are forested with young to mature stands of Douglas-fir and Ponderosa pine with small areas of Trembling aspen, Lodgepole pine, Western larch, Western hemlock, Western red cedar and Paper birch are scattered throughout. Black cottonwood is very rare on the properties and is restricted to wet gullies. Approximately half of the properties are non-forested shrubland. A portion of this property lies above 760m and provides habitat for elk, Mule deer and White-tailed deer. Other mammals include Grizzly bear, coyote, cougar, marten, Snowshoe hare and Red squirrel. Herptiles include Western skinks, Pacific treefrogs and Columbian spotted frogs while Rubber boas are also likely to occur. The area also provides habitat for songbirds, cavity nesters and raptors.

Marsden face has a provincially legislated motor vehicle closed area effective Dec. 1- April 15th each year.

3. Guiding Documents:

Marsden Wildlife Management Plan
TNT/Province Lease Agreement, 2002
BC Wildlife Act- Motor Vehicle Closed Area legislation
Forest & Range Practices Act of BC



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

4. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for this property.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect wildlife species and maintain suitable habitat conditions.	1: Older, intact areas of Natural Disturbance Type 3 should be maintained to provide forest habitat, snow interception and thermal cover for ungulates.	1: No loss in existing habitat value.	1: Increased habitat values and species utilization.
	2: Selectively harvest portions of Lot 10427 to manage for the production of a mature Douglas-fir dominated forest.	1: Restoration projects are identified and implemented.	1: Increased habitat values and species utilization.
	3: Maintain palatable shrub species close to cover.	1: Restoration projects are identified and implemented.	1: Increased habitat values and species utilization.
	4: Monitor noxious weed populations.	1: Invasive plant infestations are monitored and, where possible, treated.	1: Invasive plant density and distribution is reduced.
	5: Conduct inventories for red and blue-listed species and plant communities.	1: Inventory activities are completed.	1: Improved knowledge and long-term management of the conservation lands.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	6: Install nest boxes or platforms.	1: Nesting structures are utilized by birds.	1: Increased habitat suitability and utilization.
Goal 2: Access Management	1: Public use and enjoyment is supported.	1: Acceptable uses are determined and managed.	1: Recreational use is maintained.
	2: Hunting and fishing access is supported where safe to do so.	1: Acceptable uses are determined and managed.	1: Recreational use is maintained.
	3: Continue to support provincial access management legislation implemented under the Wildlife Act.	1: Signage and gates are installed at appropriate, predetermined locations. 2: Acceptable uses are managed and enforced.	1: Access violations no longer occur.
	4: Where conservation and access issues conflict, conservation values are the priority.	1: Acceptable uses are determined and managed.	1: Conservation values are upheld.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Flathead

Flathead (LEA)- McDougall Wildlife Sanctuary

2. Habitat Description / Values:

The McDougall Wildlife Sanctuary is a 7-8 ha property located immediately adjacent to old oil drilling activity (D.L. 7335) on the North side of Sage Creek in the Flathead Valley. The well continues to spill mineral laden water and, over the years has become an extraordinary lick used intensively by all ungulates- mule deer, moose, elk and white-tailed deer. The property has operated under a Special Use Permit (S.U.P.) within the Provincial Forest.

Upon completion of exploration by the oil industry, Joe McDougall acquired the area and improvements for the purpose of guide outfitter and fishing camp. After the passing of Mr. McDougall, his wife decided to sell the improvements and transfer the S.U.P. The improvements were purchased by the National Second Century Fund of British Columbia (NSCFBC), which later became The Nature Trust of BC and was leased back to the province for management purposes. A larger area surrounding the S.U.P. was designated as a wildlife sanctuary by the Ministry of Environment. Legislated under the Wildlife Act, the wildlife sanctuary is afforded protection from hunting, trapping, the discharge of firearms or the operation of motor vehicles.

3. Guiding Documents:

British Columbia Hunting Regulations
Special Use Permit

4. Financial Sustainability:

Due to the remoteness of this conservation area, there are limited partnership opportunities to generate additional revenue for operations and maintenance activities.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Maintain sanctuary designation under the Wildlife Act.	1: Continue to monitor and enforce wildlife sanctuary regulations as stated in the Wildlife Act.	1: Acceptable uses are managed and enforced.	1: The area remains an essential sanctuary for wildlife.
	2: Install boundary, permissible use and interpretive signage.	1: Appropriate signage is installed. 2: Educational opportunities are provided.	1: Increased public knowledge and stewardship of the McDougall Wildlife Sanctuary.
Goal 2: Protect mineral lick.	1: Maintain well casing stub that emits the mineral laden water.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Midge Creek Wildlife Management Area (WMA)

Midge Creek WMA

2. Habitat Description / Values:

Midge Creek WMA is located on the West side of the south arm of Kootenay Lake between the lake and West Arm Park. It is located in the Southern Columbia Mountains ecosection and includes old growth forests, riparian habitats, small lake and wetland complexes, avalanche tracks, talus slopes and vegetation/soil associations from valley bottom to ridgetop. The WMA is a critical component to maintaining biological diversity in the West Arm Wilderness Park because of the diversity of biogeoclimatic (BEC) zones [Englemann Spruce- Sublapine –fir (ESSF) and Interior Cedar-Hemlock (ICH) variants] and habitat types that complement the wildlife habitat in the Park. It includes wildlife migration corridors to the lakeshore of Kootenay Lake and to low elevation habitat that is critical winter feeding areas for ungulates.

Cougar, grizzly bear, black bear, bobcat, deer, elk, Interior Townsend's big-eared bat, Western Grebe, White-headed Woodpecker, American Bittern, American Avocet and Columbian red-tailed chipmunk are species of interest that inhabit Interior Cedar-Hemlock forests in the Southern Columbia Mountains ecosection. Additionally, the South Selkirk woodland caribou herd is internationally significant and, although no caribou have been documented using the Midge Creek area for many years, the area contains level one caribou habitat. This habitat connects to level 2 and level 3 habitat outside the WMA boundaries, and the Midge Creek WMA could contribute to supporting a viable population of woodland caribou.

Midge Creek is designated as a class two fisheries stream and both commercial and sport fishing are prohibited as part of management for adfluvial stock to produce large sport fish for Kootenay Lake. Kokanee salmon and rainbow trout use the lower reaches of Midge Creek while Bull trout utilize critical spawning and rearing habitat near the headwaters.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

3. Guiding Documents:

Midge Creek Wildlife Management Area Management Executive Summary

4. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for the Hamling Lakes WMA; it is largely the responsibility of the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO) whom also have a legal responsibility for forestry and mining tenures in the area.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF

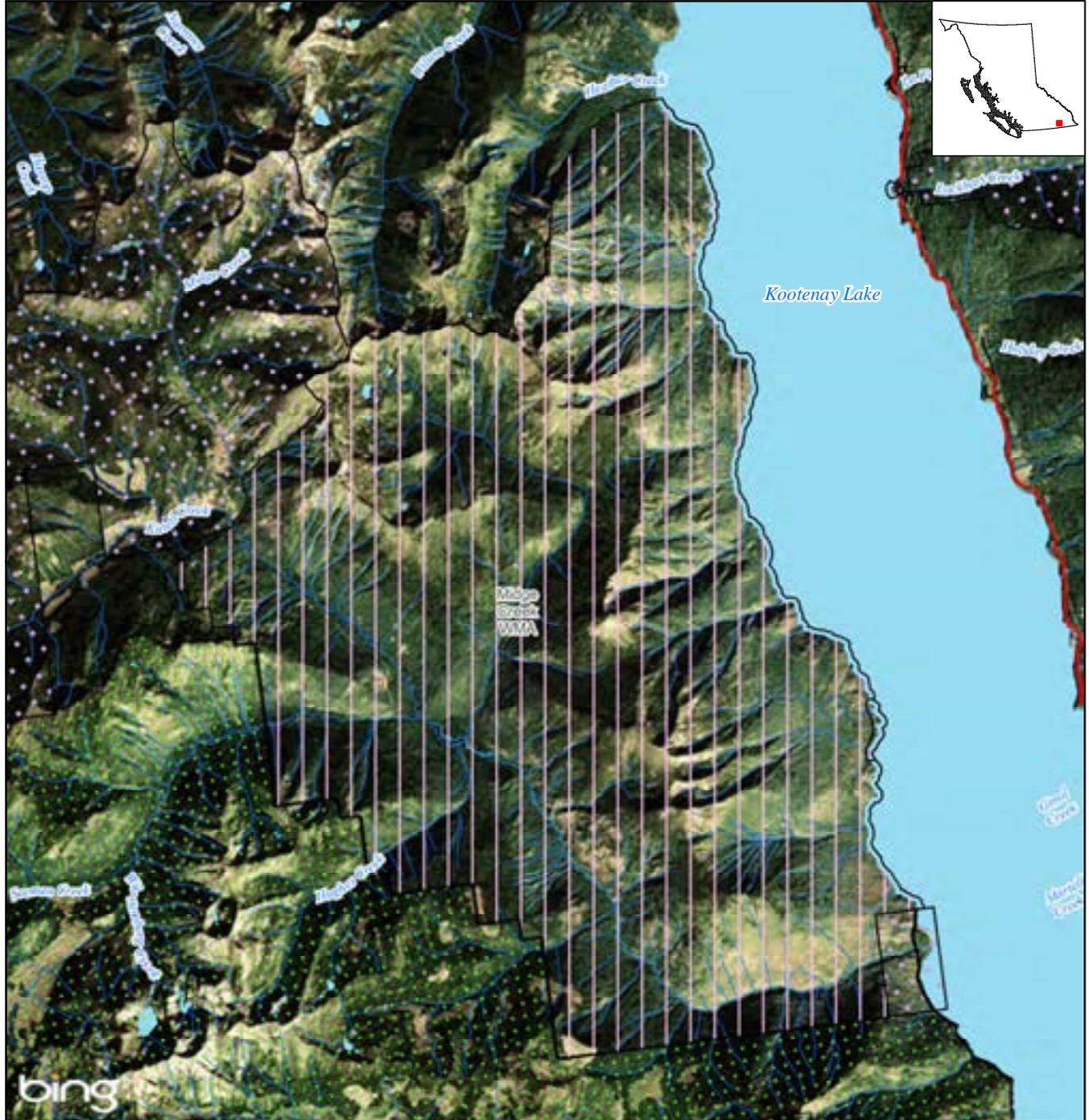


**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Manage the WMA for ecosystem and habitat attributes.	1: Preserve old growth forest attributes.	1: Habitat is excluded from logging activities.	1: Increased habitat values and species utilization.
	2: Maintain or develop a sequence of forest seral stages that produce both forage and shelter for wildlife species.	1: Habitat enhancement projects are identified and implemented.	1: Increased habitat values and species utilization.
	3: Use silvicultural techniques, logging and prescribed burning to mimic natural disturbances and maintain wildlife habitat on a landscape level.	1: Habitat enhancement projects are identified and implemented.	1: Increased habitat values and species utilization.

7.0 Map



Midge Creek



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Stream
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

BCGS Map Sheet(s): 82F.055, 82F.056, 82F.057,
82F.045, 82F.046, 82F.047,
82F.035, 82F.036, 82F.037

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region:

PROJECT INFORMATION

Please complete the following:

1. Name of Property/ Complex: Newgate

Newgate (ACQ 1)- Gordon Earl
Newgate (ACQ 2)- Smith

2. Habitat Description / Values:

In the early 1970's, prior to the damming of the Kootenay River at Libby Montana, an ambitious initiative by the Fish and Wildlife Branch sought to secure land that would counter the loss of vital wildlife habitat inundated by flooding. The 428 hectare Gordon Earl property was purchased as it possessed significant deer winter range west of the future reservoir. The small intervening 4.19 hectare Smith parcel of land was later purchased with Habitat Conservation Trust Foundation funds.

The properties are predominantly situated within the Kootenay Dry Mild Interior Douglas-fir (IDFdm2) biogeoclimatic zone; however, a small portion lies within the Dry Hot Ponderosa Pine Variant (PPdh2).

The Newgate properties contain upland habitat that is used by mule deer, whitetail deer, wolf, elk, Black bears, occasionally Grizzly bear and moose. Muskrat, beaver, coyotes and various raptors and song birds also frequent the area. The property is noted for its abundant waterfowl, including mallard, lesser scaups, ring-necks, barrow's golden-eye and buffleheads. Two small creeks on the property (Linklater and Gardiner), are known to contain endangered Westslope cutthroat trout and introduced Eastern brook trout.

A marsh located on the western fringes of the property, that at one time was drained to increase hay production, has been re-established and enhanced for waterfowl by Ducks Unlimited (i.e. construction of a stop log for spillway control, diversion weir, inlet diversion ditch and nest structures).



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

3. Guiding Documents:

Negate Coordinated Resource Management Plan
Management Alternatives for the Gordon Earl Ranch
Protocol Agreement with Ducks Unlimited Canada
Falls within the Linklater Creek Access Management Area and is described in Schedule 1- Section 2 (Motor Vehicle Closed Areas) of the Wildlife Act (Motor Vehicle Prohibition Regulations B.C. Reg. 196/99 O.C. 732/99).

4. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for this property. Ducks Unlimited Canada contributes to habitat enhancement projects related to their protocol agreement.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

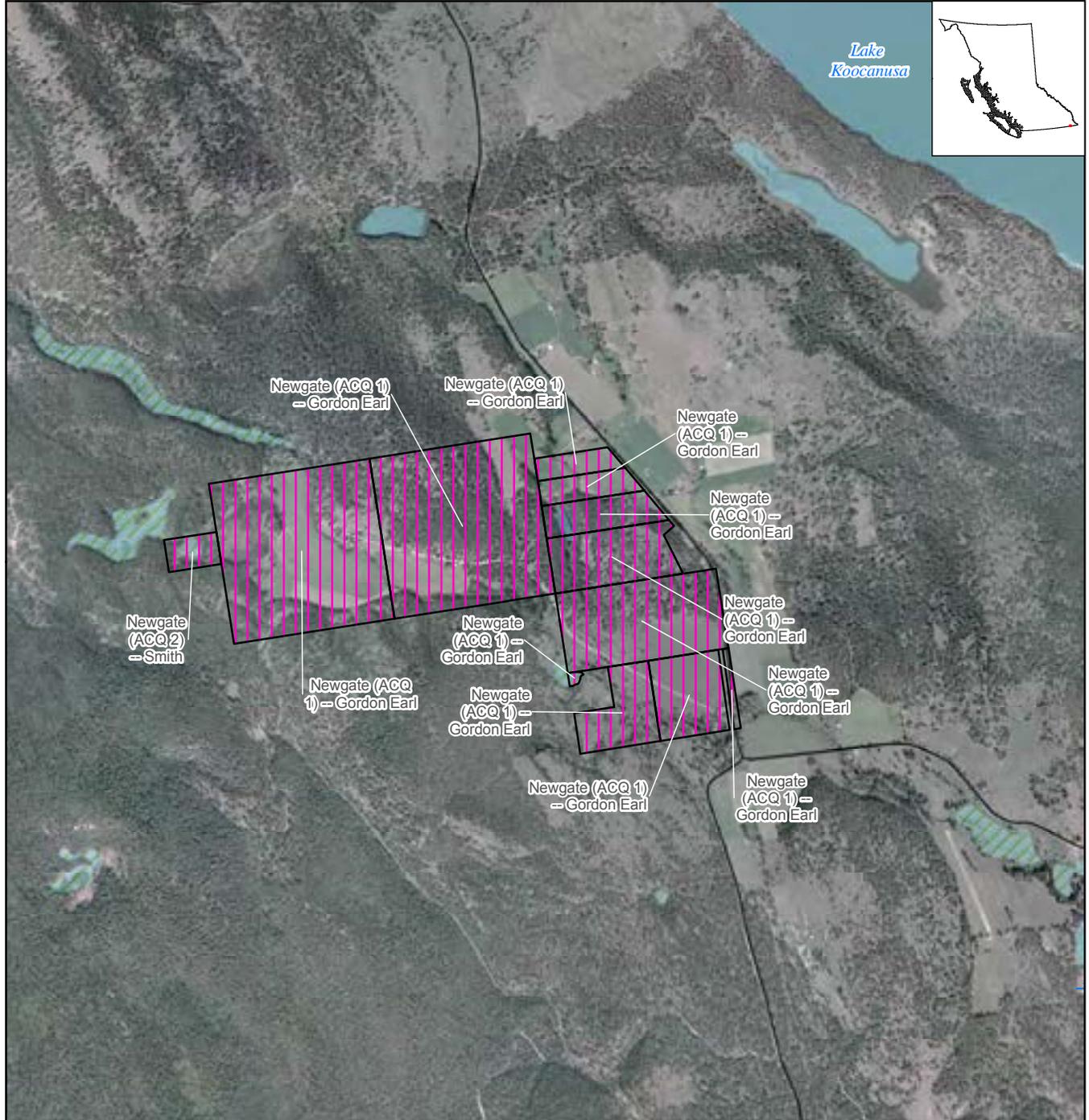
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect and enhance ecosystem and wildlife values.	1: Continue protocol agreement with Ducks Unlimited Canada to promote water level management of the marsh to improve habitats for dependent species.	1: Acceptable water levels are maintained. 2: Continued use by fish and waterfowl.	1: Increased habitat suitability and species utilization.
	2: Exclude livestock from the conservation property through the use of control infrastructure including fences and gates.	1: Control infrastructure is maintained and constructed as required.	1: Habitat values are maintained/ enhanced.
	3: Assess the feasibility of reseeded pastures to provide winter and spring forage.	1: Assessments are completed and management is initiated.	1: Habitat values are maintained/ enhanced.
	4: Reduce tree density, increase tree age and size, and achieve a tree species composition that falls within the historical range of variability.	1: Restoration projects are identified and implemented.	1: Site monitoring indicates increased biodiversity and vegetation on restoration sites.
Goal 2: Access Management	1: Continue to monitor and enforce Access Management Area regulations as stated in the Wildlife Act.	1: Acceptable uses are managed and enforced.	1: Access violations no longer occur.



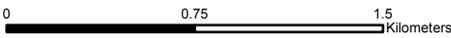
**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

<p>Goal 3: Invasive Species Management</p>	<p>1: Monitor and control invasive plant species using cultural, mechanical and chemical control methods.</p>	<p>1: Invasive plant density and distribution is reduced.</p>	<p>1: Suitable habitats are restored.</p>
	<p>2: Monitor effects of introduced eastern brook trout species and determine a management strategy.</p>	<p>1: Impact assessments are completed and management is initiated.</p>	<p>1: Native species at risk are protected and populations are maintained.</p>
<p>Goal 4: Maintain all administration pursuant to the property.</p>	<p>1: Finalize Transfer of Administration with Ministry of Agriculture and Lands</p>	<p>1: Property is transferred to MFLNRO, so that both administration and management are conducted by one Ministry.</p>	<p>1: Management of the conservation lands is achieved in a collaborative manner but by one delivery agent.</p>
	<p>2: Maintain water licences; evaluate use and whether change of purpose to wildlife use is necessary.</p>	<p>1: Water is available on the property for conservation purposes.</p>	<p>1: Habitat values are maintained/ enhanced.</p>
	<p>3: Maintain tenancy and house insurance agreements and review on an annual basis.</p>	<p>1: Infrastructure and facilities are maintained and insured as per agreements.</p>	<p>1: A stewardship presence is maintained on the land.</p>

7.0 Map



Newgate



Legend

Crown Designations

-  Administered Lands
-  Reserve Lands
-  Wildlife Management Areas

Other Conservation Lands

-  NGO Conservation Areas
-  National Wildlife Areas
-  National Parks
-  Provincial Protected Areas

Map Symbols

-  Lake
-  River
-  Wetland
-  Highway
-  Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)
- British Columbia Imagery WMS
 - bc_bc_xc1m_bcalb_1995_2004
- BCGS Map Sheet(s):** 84G.004, 84G.005
- FLNRO Region:** Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Pend d'Oreille

Pend d'Oreille (ACQ 1)- Atco
Pend d'Oreille (ACQ 2)- BC Hydro
Pend d'Oreille (ACQ 3)- BC Hydro
Pend d'Oreille (ACQ 4)- Berukoff
Pend d'Oreille (ACQ 5)- Buckley
Pend d'Oreille (ACQ 6)- Fitzpatrick
Pend d'Oreille (ACQ 7)- Imperial Pacific
Pend d'Oreille (ACQ 8)- Pend d'Oreille Enterprises
Pend d'Oreille (ACQ 9)- Pend d'Oreille Farms
Pend d'Oreille (ACQ 10)- Remac
Pend d'Oreille (ACQ 11)- Valiquet
Pend d'Oreille (ACQ 12)- Wild

2. Habitat Description / Values:

The 1488 ha of crown land owned by the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) includes valley bottom and upland areas on the North side of the Pend d'Oreille River. All of the Pend d'Oreille acquisitions were to mitigate the impacts of the BC Hydro Seven Mile Dam Project.

The climate, predominantly south-facing aspects, and interspersed seral vegetation communities within the Pend d'Oreille Valley (POV) provide high capability ungulate winter range for White-tailed and Mule deer, Rocky Mountain elk, and moose. Much of the area lies within the very dry, warm Interior Cedar-Hemlock (ICHxw) biogeoclimatic subzone that is found exclusively in the West Kootenay. This ecosystem was historically maintained by high frequency low-intensity fires, however persistent fire suppression has altered its composition, structure and function.



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

A total of 205 terrestrial vertebrate species are known to use these habitats, which represents approximately 50% of all terrestrial vertebrate species occurring in the Columbia River Basin. Eleven of the vertebrate species are considered at risk in BC, and additional listed taxa include six vascular plant species and six butterfly species. Based on its unique ecosystems and high species diversity and abundance, the POV is arguably one of the most important wildlife habitat areas in the Southern Interior of British Columbia.

3. Guiding Documents:

Pend d'Oreille Valley Wildlife Management Plan
Kootenay-Boundary Land Resource Management Plan
Wildlife Management Plan, Pend d'Oreille Valley
Pend d'Oreille Valley noxious weed pest management plan 2004-2009.
Wildlife viewing plan for the Pend d'Oreille Valley
Ungulate winter habitat use in the Pend d'Oreille
Movement survival and mortality of White-tailed deer in the Pend d'Oreille River Valley
A summary of bat research in the Pend d'Oreille Valley in Southern British Columbia
Pend d'Oreille Wildlife Management Plan

4. Financial Sustainability:

The Pend d'Oreille is a large area and a major responsibility for the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO). Since there are also other government and non-government agency responsibilities in the Pend d'Oreille (BCTC, Fortis BC, CPC, ATCO, BCTS, Teck Cominco) the option exists for developing a cooperative funding strategy.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: To maintain and enhance habitat quality in the POV for the benefit of its native wildlife populations.	1: Restore the open forest habitat to an ecologically appropriate fire-maintained condition.	1: Restoration projects are identified and implemented.	1: Increased habitat values and species utilization.
	2: Allow managed forests to succeed to old growth conditions.	1: Lower existing deficit of old growth in the POV landscape.	1: Late seral habitat conditions are improved for wildlife.
	3: Maintain or create snags and other wildlife trees.	1: Snags are maintained and utilized by cavity nesters.	1: Increased habitat suitability and species utilization.
	4: Maintain or enhance coarse woody debris (CWD) through the retention of existing CWD, retention of large-sized snags, and creation of hollow logs.	1: No loss in existing habitat value.	1: Increased habitat values and species utilization.
	5: Improve vigor of the shrub understory.	1: Enhancement initiatives are completed.	1: Improved shrub communities benefit ungulate and other shrub-dependent wildlife populations.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	6: Retain all broadleaf stands.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	7: Maintain natural gap dynamics within conifer stands such that broadleaf species can establish in canopy gaps or early seral patches.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	8: Maintain open-fields that have received active management (through plowing, seeding, and weed control) as herb-dominated communities and allow unmanaged open-fields to succeed to forest.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	9: Prevent erosion along the margins of the reservoir.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	10: Protect riparian habitats important to sensitive aquatic vertebrates such as the red-listed Western Grebe.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	11: Protect the water regime and habitat elements at Limpid Creek Waterfall for blue-listed Coeur d'Alene Salamander.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

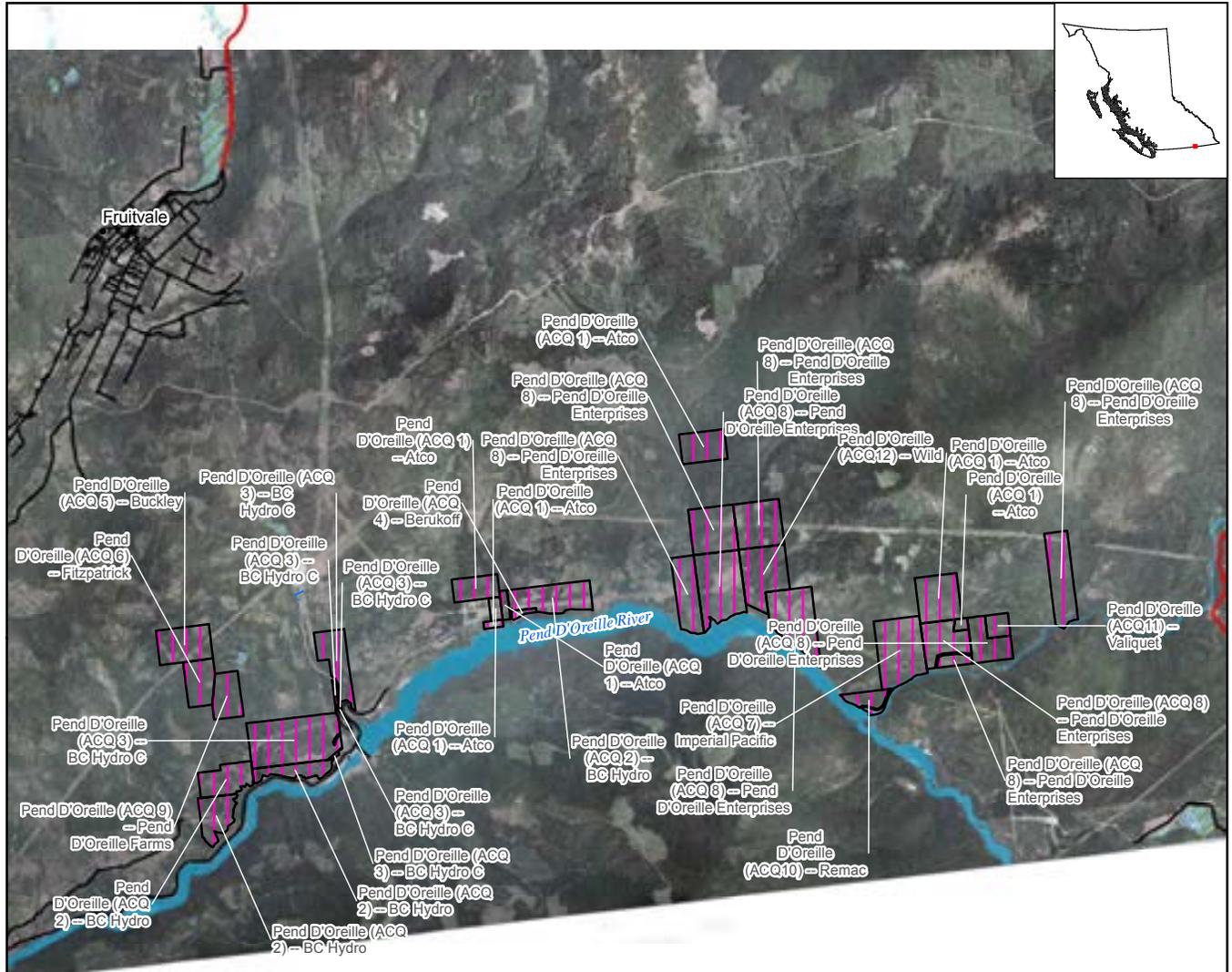
	12: Protect seeps and springs from disturbance during logging and other planned development or treatment activities.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	13: Create rocky habitat elements in fields.	1: Enhancement initiatives are completed.	1: Increased habitat values and species utilization.
	14: Protect mineral licks.	1: No loss in existing habitat value.	1: Maintained or increased habitat values and species utilization.
	15: Monitor and manage for the conservation of species at risk.	1: Baseline inventory activities are completed. 2: No loss in existing species at risk populations/abundance.	1: Maintained or increased species populations/abundance.
	16: Restrict livestock access from conservation lands through cooperative agreements with livestock owners.	1: Cattle are excluded from the conservation lands.	1: Habitat values are maintained/ enhanced.
Goal 2: To provide a well-managed area for recreational users and visitors such that the habitat quality of the area is not compromised.	1: Restrict motorized access through road deactivation, signage, gates and other access barriers.	1: Infrastructure is installed at appropriate, predetermined locations.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives of the properties.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	2: Develop an access management plan.	1: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives of the properties.
	3: Conduct recreational use surveys during summer and fall months; repeat at 2-3 year intervals.	1: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives of the properties.
	4: Install educational/ interpretive signage.	1: Educational opportunities are provided.	1: Increased public knowledge and stewardship of the Pend d'Oreille Valley.
	5: Conduct site cleanup for high use areas.	1: Debris is removed and aesthetics are maintained.	1: Tourism and community enjoyment are maintained/ enhanced.

7.0 Map



Pend D'Oreille



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)
- British Columbia Imagery WMS
 - bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82F.013, 82F3014, 82F.003, 82F.004

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Premier Ridge

Premier Ridge (ACQ 1)- Pommier
Premier Ridge (ACQ 2)- Three Sons

2. Habitat Description / Values:

Logging activity in 1931 created a seral-shrub complex which improved the suitability of the area for ungulate winter range values. Today this geographical area situated in the Dry Hot Ponderosa Pine (PPdh2) biogeoclimatic zone is one of the most important winter ranges for ungulates in the East Kootenay Trench and provides winter habitat for blue-listed Rocky Mountain bighorn sheep as well as White-tailed deer, Mule deer, and elk.

Other species in the immediate area include Black bear, Mountain lion, coyote, bobcat and lynx as well as the blue-listed Grizzly bear. Numerous bird species abound and successfully nest in the Premier Ridge area especially upland game birds and it is not uncommon to observe ruffed grouse, Franklin grouse and blue grouse. Fishery values in the contiguous Kootenay River are significant; the two neighbouring tributaries, the Lussier River and Wolf Creek support spawning populations of endangered Westslope cutthroat trout and Bull trout (both blue-listed).

Both the Pommier and the Three Sons properties were purchased by the Wildlife Branch in 1974 via the Greenbelt Protection Fund. Currently, cattle grazing occurs on the Three Sons property.

3. Guiding Documents:

Management Proposals for the Three Sons Property
Premier Ridge Coordinated Resource Management Plan
Schedule 1- Section 2 (Motor Vehicle Closed Areas) of the Wildlife Act (Motor Vehicle Prohibition Regulations B.C. Reg. 196/99 O.C. 732/99).



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

4. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for this property. A small amount of revenue is generated from the ranching licences.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

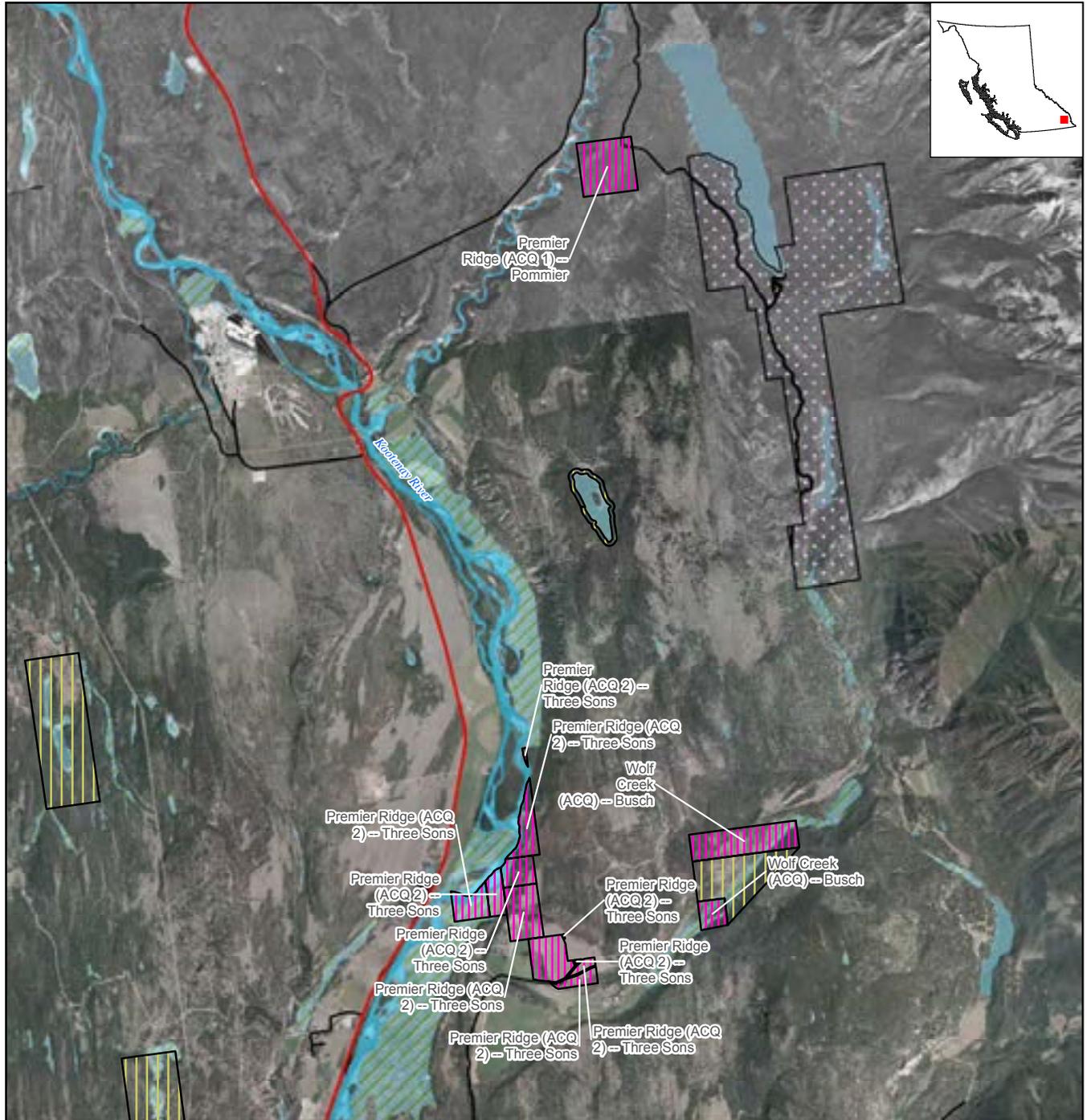
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect fish/ wildlife species and maintain suitable habitat conditions.	1: Monitor floodplain and riparian habitats and manage for natural vegetative succession, exclusion of cattle, and channel relocation and erosion issues.	1: Restoration projects are identified and implemented.	1: Increased habitat values and species utilization.
	2: Protect and ensure unencumbered access to Premier Ridge for ungulates migrating across Skookumchuck Prairie to critical winter range on the east side of the Trench.	1: An east-west migration corridor to Premier Ridge is maintained.	1: Maintained or increased species utilization.
	3: Finalize Transfer of Administration with Ministry of Agriculture.	1: Property is transferred to Ministry of Forests, Lands and Natural Resource Operations, so that both administration and management are conducted by one Ministry.	1: Management of the conservation lands is achieved in a collaborative manner but by one delivery agent.
Goal 2: Restore the forest habitat to an ecologically appropriate fire-maintained condition.	1: Reduce tree density, increase tree age and size, and achieve a tree species composition that falls within the historical range of variability.	1: Restoration projects are identified and implemented.	1: Site monitoring indicates increased biodiversity on restoration sites.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

<p>Goal 3: Recover and sustain deteriorated grasslands, seral shrub lands and open forest range and protect remnants of these from livestock use.</p>	<p>1: Protect sensitive areas from livestock use through the installation of control structures.</p>	<p>1: Inspections and maintenance activities are undertaken and completed.</p>	<p>1: Habitat values are maintained/ enhanced.</p>
	<p>2: Terminate or renegotiate grazing agreements where range is overgrazed.</p>	<p>1: Grazing agreements are reviewed and renegotiated accordingly.</p>	<p>1: Habitat values are maintained/ enhanced.</p>
<p>Goal 4: Invasive Plant Management</p>	<p>1: Monitor and control invasive plant species using cultural, mechanical and chemical control methods.</p>	<p>1: Invasive plant density and distribution is reduced.</p>	<p>1: Suitable habitat values are restored.</p>
<p>Goal 5: Access Management</p>	<p>1: Continue to monitor and enforce Access Management Area regulations as stated in the Wildlife Act.</p>	<p>1: Acceptable uses are managed and enforced.</p>	<p>1: Access violations no longer occur.</p>
<p>Goal 6: Ensure that management actions protect all known and potential archaeological sites.</p>	<p>1: Archaeological Overview Assessments (AOA) maps are obtained from the Ministry of Forests, Lands and Natural Resource Operations.</p>	<p>1: Archaeological sites are identified and protected during land management activities.</p>	<p>1: Known and potential archaeological sites are conserved.</p>
	<p>2: An archaeological impact assessment and consultation with First Nations is conducted prior to land management activities that may involve ground disturbance.</p>	<p>1: Archaeological sites are identified and protected during land management activities.</p>	<p>1: Known and potential archaeological sites are conserved.</p>

7.0 Map



Premier Ridge



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)
- British Columbia Imagery WMS
 - bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82G

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Redfish Creek

Redfish Creek (ACQ 1)
Redfish Creek (ACQ 2)
Redfish Creek (LEA 1)
Redfish Creek (LEA 2)

2. Habitat Description / Values:

Redfish Creek is a relatively small watershed which flows south and enters the West Arm of Kootenay Lake approximately 15 miles east of Nelson, BC. The 52.3 ha Redfish Creek conservation complex is located in the Dry Warm Interior Cedar- Hemlock (ICHdw1) biogeoclimatic zone.

Redfish Creek is a critical spawning stream for West Arm Kokanee and also supports migratory Rainbow trout, though the numbers are presently unknown. It is known that the lower reaches of Redfish Creek are very important for rearing juvenile trout. Historically, Redfish Creek was also used by spawning Dolly Varden. The presence of exceptionally large Kokanee once made the West Arm of Kootenay Lake the site of the most intensive sports fishery in British Columbia. Short delta sections of streams tributary to the lake provide the only spawning areas for Kokanee. In recent years, dyking and channeling have drastically reduced survival of eggs and fry. Poor stream production coupled with overfishing, reduced Kokanee production and forced closure of the West Arm fishery. Spawning channels easily surpass natural streams in production of Kokanee fry. The Redfish Creek spawning channel was constructed with uniform gravel of ideal size, and controlled flow. The serpentine shape greatly increases spawning habitat within a restricted land area. This channel was built to accommodate up to 5000 spawning fish and produces between 0.25 - 1.2 million fry with a mean egg-to-fry survival rate of 35.5 %.



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PART 1. PROPERTY / COMPLEX PLAN**

3. Guiding Documents:

TNT/Province Lease Agreement, 2002

Ecological Concepts, Principles and Applications to Conservation, 2007

4. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for this property.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

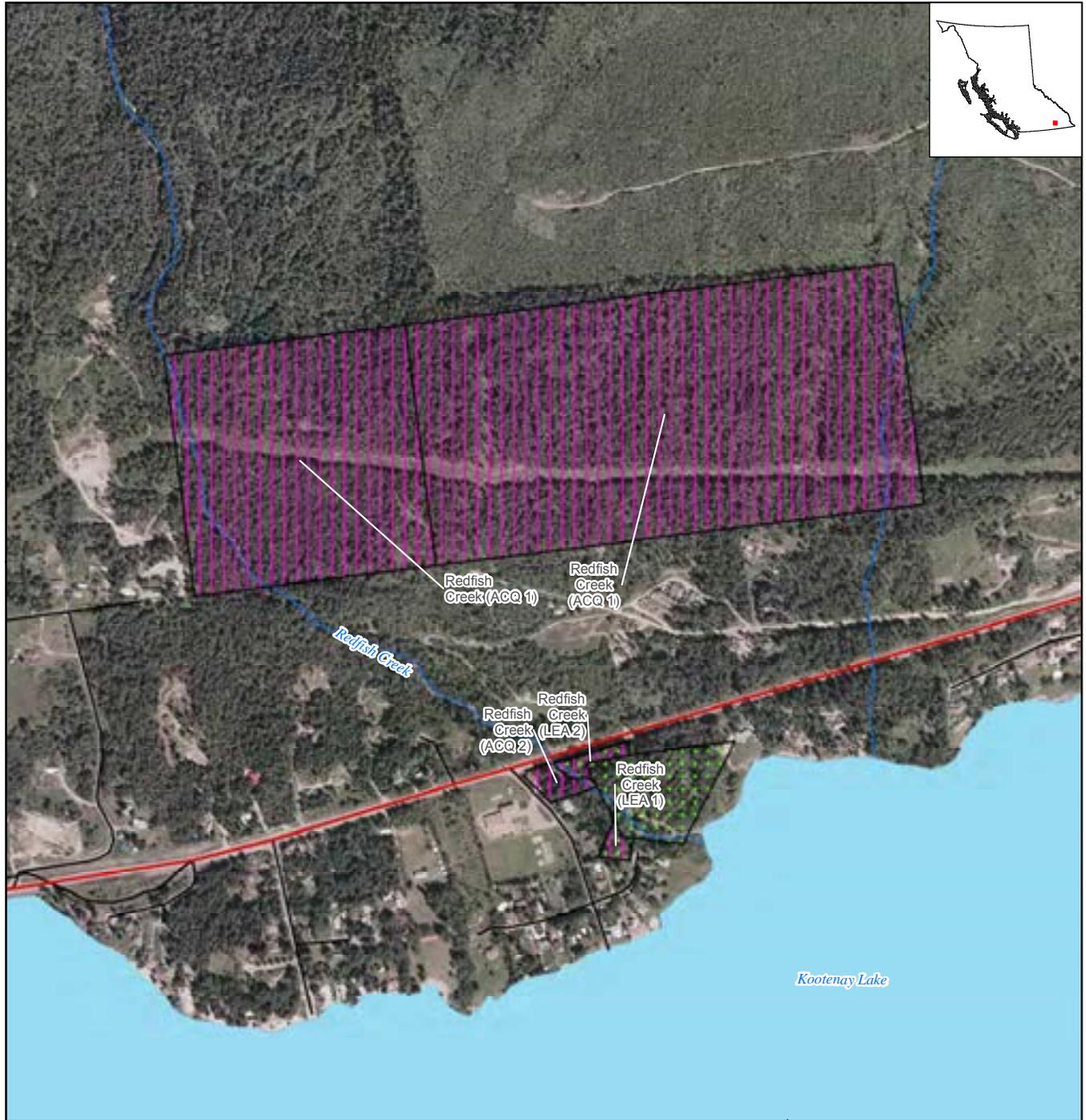


**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

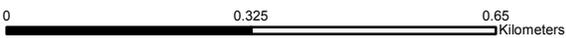
6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: To manage the spawning channel to accommodate spawning fish and fry production	1: Control water flows, construct proper slopes, and place suitable sized gravels to duplicate ideal Kokanee spawning habitat.	1: The spawning channel is maintained in ideal condition.	1: Increased habitat suitability and fish utilization.
	2: Monitor the annual abundance of spawning fish utilizing the channel and mean egg-to-fry survival rate.	1: Monitoring activities are completed for spawning fish and fry.	1: Improved management and long-term sustainability of the fishery.
	3: Maintain target fish population/abundance.	1: No loss in existing spawning habitat value.	1: Improved management and long-term sustainability of the fishery.
Goal 2: To provide educational, viewing, and recreational opportunities for the public.	1: Protect the resources of the spawning channel while providing opportunities for public.	1: Recreational use is maintained. 2: Acceptable uses are determined and managed.	1: Ongoing recreational opportunities are provided. 2: Engaged stewardship community.
	2: Maintain all infrastructures to provide a safe opportunity for users to enjoy the attributes of the property from designated trails and viewing locations.	1: Infrastructure is maintained. 2: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained.

7.0 Map



Redfish Creek



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82F.065

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Sheep Mountain

Sheep Mountain (LEA)- Cutts
Sheep Mountain (ACQ)- Starr

2. Habitat Description / Values:

The Sheep Mountain conservation properties are situated on the eastern border of the Rocky Mountain Trench, occurring in the Kootenay Dry Mild Interior Douglas-fir (IDFdm2) and Kootenay Dry Hot Ponderosa Pine (PPdh2) subzone variants. They are characterized by uneven aged stands of Douglas fir and large, open areas of vegetation dominated by shrubs and grasses creating a mosaic of habitat types. Natural fires have played a major role in the evolution of these habitats.

Sheep Mountain provides important winter range for Rocky Mountain bighorn sheep, elk, white-tailed deer and mule deer. In early winter, large numbers of these wild ungulates move west from the mountainous summer habitats of the Wigwam and Lodgepole drainages seeking the milder environments of lower elevations. In these areas, combinations of slope and exposure create tolerable snow depths and the mosaic of trees and open vegetation fulfill the requirements for shelter and food. Few areas in BC host the diversity and size of wintering ungulate populations like the Sheep Mountain area. The area also provides habitat for other wildlife including the red-listed badger a variety of raptors and predators such as wolves, coyote and cougar.

3. Guiding Documents:

Sheep Mountain Wildlife Management Area Plan (Not Approved-Draft)-1991
Biophysical Analysis of the Sheep Mountain Wildlife Area-1990
TNT/Provincial Lease Agreement-1984
Sheep Mountain Access Management Area (AMA designation).
(Vehicle access is subject to regulations described in Schedule 1-Section 2 of the *Wildlife Act*)



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Fire-maintained Ecosystem Restoration in B.C.'s Rocky Mountain Trench (Blueprint for Action – 2006)

Ecological Restoration Guidelines for British Columbia

Integrating Ecosystem Restoration into Forest Management

Sheep Mountain Purpose Statement

Ecosystem Restoration Program NDT4 Five Year Plan-2009

Ungulate Winter Range Habitat Management Objectives and Best Management Practices

Kootenay Boundary Land Use Plan-Implementation Strategy-1997

An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench

Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Financial Sustainability:

Considering that there is a life estate agreement with the vendors on the TNT property and the fact that an operational ranching business continues to be conducted (currently a three year moratorium is in place following the death of Jack Cutts -2012) on the property, there are limited opportunities to generate revenue or in-kind support for habitat enhancement or rehabilitation initiatives.

5. Partner Recognition:

Partners on the Sheep Mountain (Cutts) property include The Habitat Conservation Trust Foundation and Wildlife Habitat Canada. Recognition of their contribution towards the acquisition of this property will be displayed on any information kiosks or in any media correspondence.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

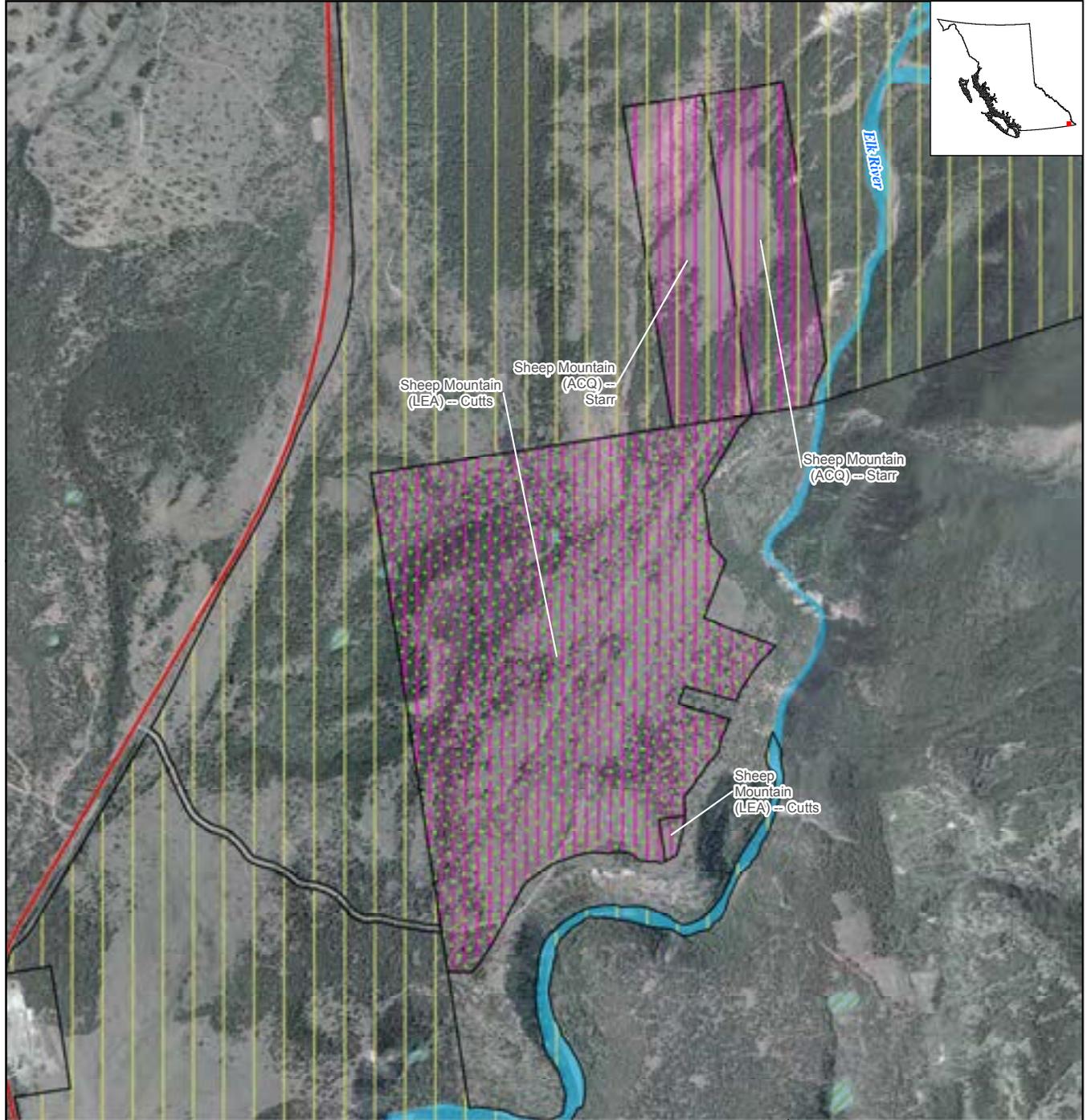
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Develop a land management plan and establish a Wildlife Management Area (WMA) over the Sheep Mountain conservation properties owned by The Nature Trust and the Ministry of Forests, Lands, and Natural Resource Operations.	1: Through the direction provided in the management plan and the establishment of a WMA, protect, manage and prioritize wildlife and wildlife habitat values.	1: Completion of the land management plan.	1: Priority management activities identified in the management plan are implemented.
Goal 2: Maintain suitable habitat conditions	1: Manage the natural complex of grasses, shrubs and forest habitat in a way that continues to support the wide spectrum of wildlife species that currently inhabit the area.	1: Inventories for wildlife species and ecological communities are completed. 2: No loss in existing habitat value.	1: Increased habitat values and species utilization.
	2: Reduce tree density, increase tree age and size and achieve a tree species composition that falls within the historical range of variability.	1: Restoration projects are identified and implemented.	1: Site monitoring indicates increased biodiversity and vegetation production on restoration sites.
	3: Control the spread of invasive plant species.	1: Invasive plant density and distribution are reduced.	1: Increased habitat values and species utilization.



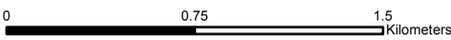
**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

	4: Renegotiate livestock license through cooperative agreements with livestock owners.	1: Cattle are managed on conservation lands.	1: Habitat values are maintained.
Goal 3: Develop an appreciation for the conservation values of the Sheep Mountain complex and reduce adverse environmental impacts from human activities.	1: Educate the public about management issues and the importance of proper management and integration with activities on the landscape.	1: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives.
	2: Designate and enforce acceptable use using signage and physical barriers as necessary.	1: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives.

7.0 Map



Sheep Mountain



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)
- British Columbia Imagery WMS
 - bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82G.025

FLNRO Region: Kootenay/Boundary

Wildlife O&M 3-year Application – WALDIE ISLAND CONSERVATION AREA

SITE DESCRIPTIONS / ACTIVITIES

1. Name of property:

- a. *Property Name:* **Waldie Island Conservation Area**
- b. *CLD Reference:* Waldie Island (LEA)

2. Habitat Description / Values

Waldie Island is a small 2 acre (0.8 Ha) island in the Columbia River near Castlegar. This property is located in the West Kootenay Dry Warm Interior Cedar – Hemlock BEC subzone variant (ICHdw1). As the only treed island on the Arrow Lakes system, Waldie Island supports a unique mix of habitat types within an urban interface. The latter include mixed cottonwood riparian groves, dense shrublands, a seasonal marsh, shallow open water, and extensive sand and gravel bars.

The island is a critical late fall and winter refuge for blue-listed great blue herons and it provides important wintering, breeding and roosting habitat for a variety of waterfowl, songbirds, raptors, and other birds. A number of mammal, amphibian and reptile species also seek shelter on the island and use the adjacent mainland foreshore and seasonal marsh for breeding and foraging purposes. A minimum of 157 vertebrate species have been confirmed using the area, including 10 species currently red- or blue-listed in British Columbia.

Waldie Island has been designated as a reserve for great blue herons, and public access is not permitted on the island.

3. Guiding Documents

TNT/Province Lease Agreement, 2002
Management Plan for Waldie Island (Draft), 2004

4. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators	
		Short Term	Long Term
Goal 1: Maintain and protect Waldie Island for use as a wintering and breeding site for herons.	<p>Objective 1: Prohibit access to Waldie Island and Breakwater Island.</p> <p>Objective 2: Minimize disturbance to herons in the overall Waldie area.</p> <p>Objective 3: Protect key habitat attributes for herons.</p> <p>Objective 4: Promote public awareness of and sensitivity to herons and their habitat.</p>	<p>S-T Indic 1- great Blue Heron populations are maintained.</p> <p>S-T Indic 2- no loss in existing habitat value.</p>	L-T Indic 1- increased habitat values and species utilization
Goal 2: Maintain populations of listed species and overall wildlife species diversity of the area.	<p>Objective 1: Minimize disturbance to wildlife and their habitats in all areas.</p> <p>Objective 2: Undertake preliminary studies to determine local status and habitat use of other listed species populations (emphasis should be placed on year-round resident species such as western painted turtle and western skink, for example).</p>	<p>S-T Indic 1- no loss in existing habitat value.</p> <p>S-T Indic 2- inventories completed for wildlife species</p>	L-T Indic 1- increased habitat values and species utilization
Goal 3: Maintain existing habitats represented on Waldie Island and the mainland foreshore.	<p>Objective 1: Prevent beaver damage to mature mixed forest, cottonwood riparian groves, and existing trees at the site.</p> <p>Objective 2: Prevent further spread of noxious weeds in all open areas (trail, open grassy meadow, sand and gravel bars).</p>	<p>S-T Indic 1- inspections and maintenance activities are undertaken and completed</p> <p>S-T Indic 2- Invasive plant density and distribution is reduced</p>	L-T Indic 1- increased habitat values and species utilization
Goal 4: Promote water level/flow management regimes that minimize impacts and improve habitats for dependent species.	Objective 1: Continue to evaluate the implications of water level/flow management regimes on herons, other sensitive wildlife species and their habitats. Explore options for alternative water level/flow management regimes.	S-T Indic 1- Acceptable water levels are maintained	L-T Indic 1- increased habitat values and species utilization
Goal 5: Protect existing archeological values on Waldie Island.	Objective 1: Prohibit access to Waldie Island.	S-T Indic 1- There is an absence of human disturbance on the island.	L-T Indic 1- Known and potential archaeological sites are conserved

Goal 6: Minimize impacts of trail users and other recreational users on wildlife and their habitats.	Objective 1: Designate and enforce acceptable uses and rules for trail use.	S-T Indic 1- Acceptable uses and locations are determined and managed	L-T Indic 1- Ongoing recreational use for both wildlife viewing and walking is maintained.
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5. Financial Sustainability

There are limited partnership opportunities to generate additional revenue for this property. Community in-kind conservation partners include Ducks Unlimited Canada, Columbia Basin Trust, Castlegar Friends of Parks and Trails Society, West Kootenay Naturalists, Columbia Basin Fish and Wildlife Conservation Program.

6. Partner Recognition

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

7. Map

8. Map





Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Wasa Slough

Wasa Slough (TAC)

Wasa Slough (LEA)

2. Habitat Description / Values:

The Wasa Slough complex has been established as a waterfowl sanctuary by an Order-In-Council. The properties provide an important waterfowl staging and migration area for numerous species of ducks and Canada Geese. The area also has some breeding values for early nesting species such as mallards and Canada geese; however, seasonal flooding limits waterfowl nesting success for other species. Wasa Slough is also an important stop-over for several species of shorebirds, songbirds, and raptors. Small mammals including beaver, river otter, and muskrat use the conservation complex as well.

This property consists of a 194 acre complex of properties owned by both The Nature Trust of BC (TNT) and the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO). It is comprised of marsh, lake and forested upland habitat. It is situated within the Kootenay Dry Hot Ponderosa Pine (PPdh2) biogeoclimatic subzone and is classified as Natural Disturbance Type 4 (fire-maintained).

3. Guiding Documents:

Lease agreement between The Nature Trust and the Province of B.C

Master agreement between Ducks Unlimited Canada and the Province of B.C.

Wasa Slough Wildlife Assessment Report

4. Financial Sustainability:



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

As the property was not secured with funds provided by CBT or the Fish and Wildlife Compensation Program, there are limited partnership opportunities to generate revenue required for operations and maintenance activities.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

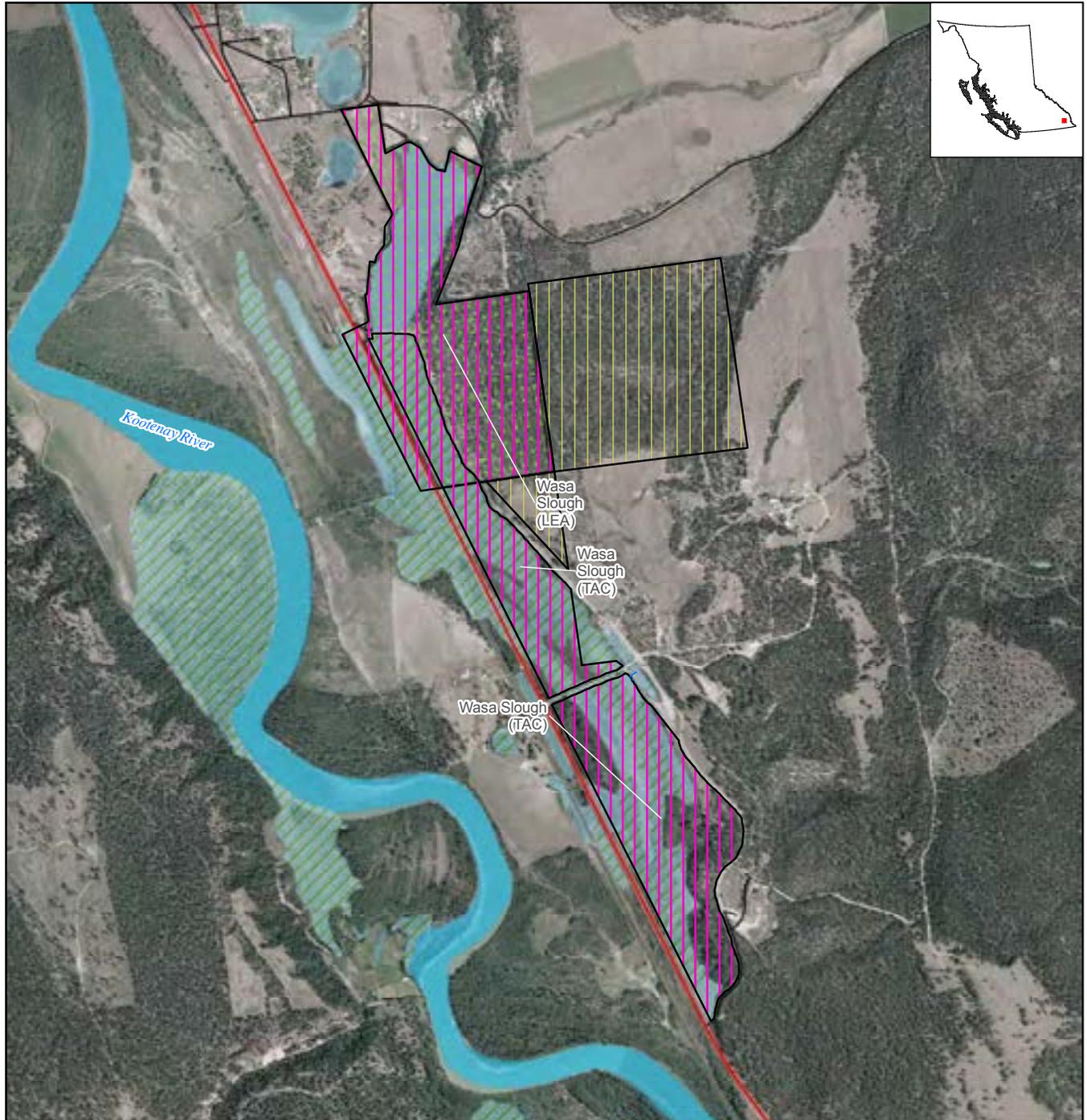


**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Water management	1: Ensure that appropriate volumes of water from Lewis Creek are maintained to provide suitable habitat for migrating and nesting waterfowl, shorebirds, reptiles, amphibians and raptors as well as beaver, muskrat and river otter.	1: Acceptable water levels are maintained.	1: Increased habitat values and species utilization.
Goal 2: Invasive Plant Management	1: Control knapweed growth along the perimeter of Cameron Slough.	1: Knapweed density and distribution is reduced.	1: Suitable habitat values are restored through a reduction in knapweed density and distribution.
Goal 3: Develop a land management plan for conservation properties owned by TNT and the MFLNRO.	1: Through the direction provided in the management plan protect, manage and prioritize wildlife and wildlife habitat values.	1: Completion of the land management plan.	1: Priority management activities identified in the management plan are implemented.
Goal 4: To foster ongoing relationships for the betterment of the conservation area complex.	1: Continue to work with Ducks Unlimited Canada staff to ensure suitable water levels are maintained.	1: Greater collaboration between interest groups and stakeholders.	1: Continued strong partnership approach to land management.
	2: Promote public awareness regarding the significance and purpose of the conservation lands through educational/ interpretive signage installation.	1: Signage is developed and installed.	1: Increased public knowledge and stewardship of the Wasa Slough complex.

7.0 Map



Wasa Slough



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
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BCGS Map Sheet(s): 82G.072

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Wigwam Flats

Wigwam Flats (ACQ 1)
Wigwam Flats (ACQ 2)- Tregilges
Wigwam Flats (LEA 1)
Wigwam Flats (LEA 2)
Wigwam Flats (LEA 3)

2. Habitat Description / Values:

The Wigwam Flats conservation area is designated as Class 1 winter range for Rocky Mountain elk, Mule deer and blue-listed Rocky Mountain bighorn sheep as well as Class 2/3 for White-tailed deer. Consequently it is considered one of the most important ungulate winter habitat areas in the East Kootenay.

In concert with the adjacent landscape, which includes Rocky Ridge and Mount Broadwood, the Wigwam Flats conservation area is a critical component of the areas used by Rocky Mountain bighorn sheep during the annual fall rut and for lambing in the spring. It also comprises a significant component of the winter/spring wildlife migration corridor from the Lower Elk River to the Wigwam River and Lodgepole Creek watersheds.

Other wildlife species of note that inhabit the Wigwam Flats area include the red-listed badger and predators such as cougar, wolf and coyote.

Ecologically, the Wigwam Flats area falls within the Kootenay Dry Mild Interior Douglas-fir BEC subzone variant (IDFdm2).



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

3. Guiding Documents:

TNT/Provincial Lease Agreements-1978, 1979 and 2008
Sheep Mountain Access Management Area (AMA designation).
(Vehicle access is subject to regulations described in Schedule 1-Section 2 of the Wildlife Act)
Fire-maintained Ecosystem Restoration in B.C.'s Rocky Mountain Trench (Blueprint for Action – 2006)
Ecological Restoration Guidelines for British Columbia
Integrating Ecosystem Restoration into Forest Management
Sheep Mountain Purpose Statement
Ecosystem Restoration Program NDT4 Five Year Plan-2009
Ungulate Winter Range Habitat Management Objectives and Best Management Practices
Kootenay Boundary Land Use Plan-Implementation Strategy-1997
An Effectiveness Monitoring Plan for NDT4 Ecosystem restoration in the East Kootenay Trench
Ground Work – Basic Concepts of Ecological Restoration in British Columbia

4. Financial Sustainability:

As several Wigwam Flats conservation properties were not secured with funds provided by the Fish and Wildlife Compensation Program, funding opportunities are generally restricted to CBT or the Regional District East Kootenay Invasive Plant Committee.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.

With respect to the Nature Trust of B.C.'s obligations to the Tregilges family, as part of the purchase agreement, The Nature Trust (TNT) has fulfilled its commitment to recognize the mother of the family by preparing and installing a memorial plaque in her memory. TNT also recognized the donations made by the Sparwood and District Fish and Wildlife Association and the Lake Windermere Rod and Gun Club towards the purchase of a property located in the Wigwam Flats conservation area, TNT provided coverage in The Nature Trust's spring 2008 "Natural Legacy" newsletter.

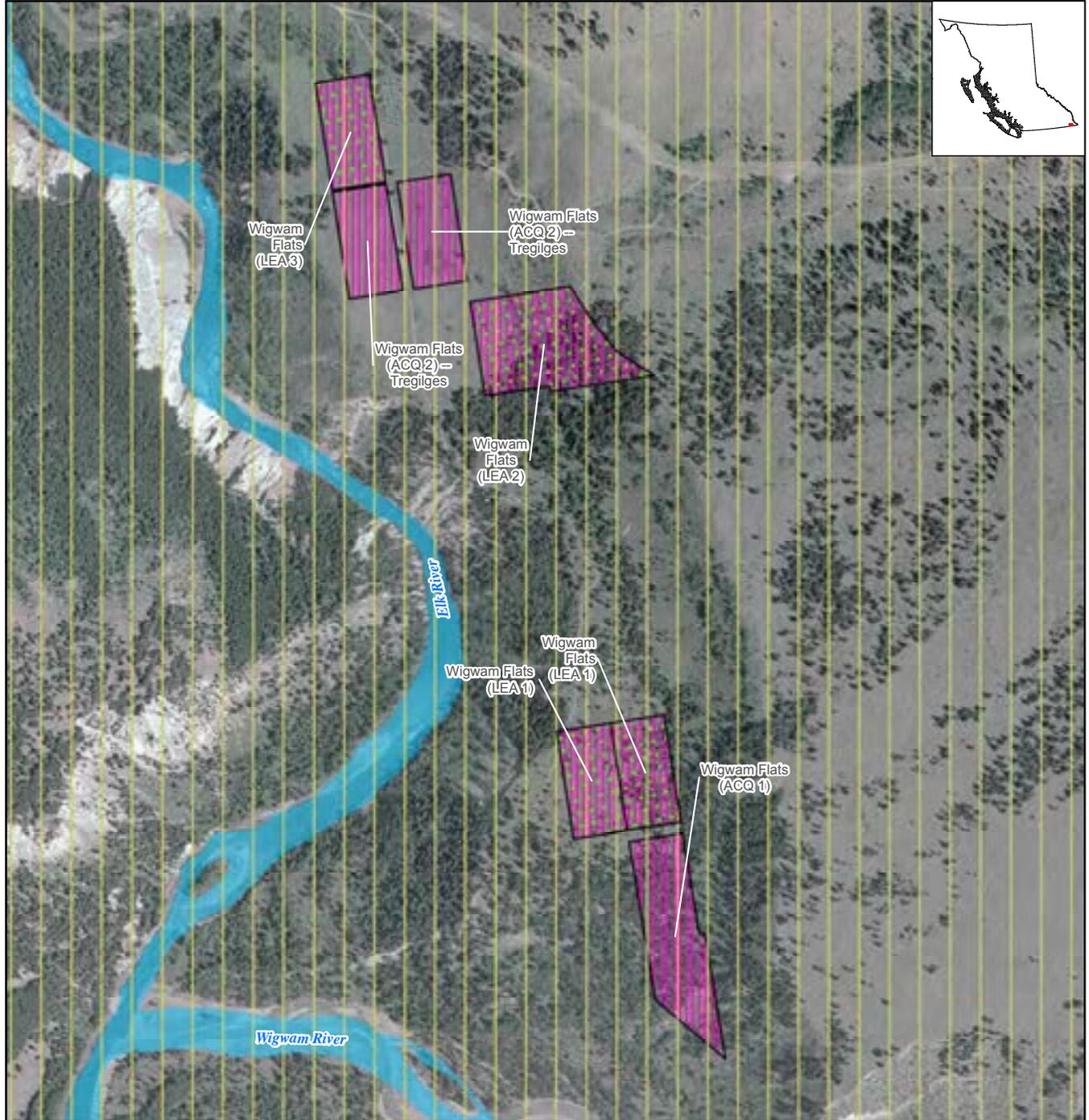


**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Develop a land management plan and establish a Wildlife Management Area (WMA) over all the conservation properties owned by TNT and the Ministry of Forests, Lands, and Natural Resource Operations.	1: Through the direction provided in a management plan and the establishment of a WMA, protect, manage and prioritize wildlife and wildlife habitat values.	1: Completion of the land management plan.	1: Priority management activities identified in the management plan are implemented.
Goal 2: Maintain suitable habitat conditions.	1: Manage the natural complex of grasses, shrubs and forest habitat in a way that continues to support the wide spectrum of wildlife species that currently inhabit the area.	1: Inventories are completed for wildlife species and ecological communities. 2: No loss in existing habitat value.	1: Increased habitat values and species utilization
	2: Control the spread of invasive plant species.	1: Invasive plant density and distribution are reduced.	1: Increased habitat values and species utilization.
Goal 3: Access Management	1: Continue to support provincial access management legislation implemented under the Wildlife Act.	1: Acceptable uses are determined and managed.	1: Ongoing recreational use for both wildlife viewing and hunting.

7.0 Map



Wigwam Flats



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

- North American Datum (NAD 83)
- BC Albers
- BC GOV FLNRO Data BC:
 - Provincial Parks, Ecological Reserves, Recreation Areas & Protected Areas (September 2012)
 - National Parks (September 2012)
 - Crown Designations (July 2012)
 - Freshwater Atlas (2012)
 - Digital Road Atlas (2012)
- Canadian Wildlife Service
 - National Wildlife Areas (June 2012)
- BC NGO Conservation Areas Database (January 2012)
- British Columbia Imagery WMS
 - bc_bc_xc1m_bcalb_1995_2004

BCGS Map Sheet(s): 82G.025

FLNRO Region: Kootenay/Boundary



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Winlaw Creek

Winlaw Creek (ACQ)

2. Habitat Description / Values:

The Winlaw Creek Corridor was acquired in February 1997 through funding provided by the B.C. Habitat Conservation Trust Foundation to protect fish habitat in Winlaw Creek. The main function of the riparian corridor is to serve as a source of large organic debris for the creek ecosystem. Secondary functions include providing creekside brush cover, and providing riparian ecosystem habitat for a variety of birds, mammals and plant species.

3. Guiding Documents:

Stream Register Report
Winlaw Creek Riparian Property DH 2008 Report
Winlaw Watershed Committee documents

4. Financial Sustainability:

There are limited partnership opportunities to generate additional revenue for this property.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

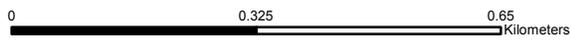
6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Maintain natural riparian conditions within the corridor.	1: Identify unlicensed access and work towards restorative justice solutions.	1: Access violations are identified. 2: Compensation/ remediation are negotiated.	1: Conservations values are upheld. 2: Violations no longer occur.
	2: Restore riparian areas degraded by water and utility corridors by re-establishing native plants.	1: Restoration/ enhancement activities are identified and implemented.	1: Increased riparian habitat values.
	3: Ensure any future water licences issued and works developed are in consultation with Ministry of Forests, Lands, and Natural Resource Operations staff.	1: Water remains available for conservation purposes and Winlaw Creek is not oversubscribed.	1: Conservations values are upheld.
Goal 2: Human Use	1: Educate the public about the land, its conservation status and value.	1: Acceptable uses are determined and managed.	1: Ongoing recreational use is maintained.
	2: Work cooperatively with local groups/organizations on securing resources for land management activities.	1: Greater collaboration between interest groups and stakeholders.	1: Renewed partnership approach to land management. 2: Increased contributions to management activities.

7.0 Map



Winlaw Creek



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Highway
- Paved Road

Data Sources:

North American Datum (NAD 83)
BC Albers

BC GOV FLNRO Data BC:
Provincial Parks, Ecological Reserves, Recreation
Areas & Protected Areas (September 2012)
National Parks (September 2012)
Crown Designations (July 2012)
Freshwater Atlas (2012)
Digital Road Atlas (2012)

Canadian Wildlife Service
National Wildlife Areas (June 2012)

BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
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BCGS Map Sheet(s): 82F.063

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region:

PROJECT INFORMATION

1. Name of Property/ Complex: Wolf Creek

Wolf Creek (ACQ)- Busch

2. Habitat Description / Values:

The Busch property is a 166 hectare (401 acre) property located on the southern extremity of Premier Ridge, which is one of the most important winter ranges in S.E. British Columbia. The western portion of the property is situated in the Dry Hot Ponderosa Pine (PPdh2) biogeoclimatic (BEC) zone while the eastern portion is characterized by the Kootenay Dry Mild Interior Douglas-fir BEC zone.

The Wolf Creek conservation property complex supports Rocky Mountain bighorn sheep, elk, Mule deer, White-tailed deer as well as numerous small mammals and upland birds. The Busch property is characterized by grassland, forest and marshland habitat, which contributes to the richness of the area.

The area is extremely picturesque and easily accessible. Hiking, wildlife viewing, particularly bird watching and nature appreciation opportunities are significant. Hunting and fishing are historic activities.

3. Guiding Documents:

Protocol Agreement with Ducks Unlimited
Schedule 1- Section 2 (Motor Vehicle Closed Areas) of the Wildlife Act (Motor Vehicle Prohibition Regulations B.C. Reg. 196/99 O.C. 732/99.
Busch Property Wildlife Assessment Report

4. Financial Sustainability:



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

There are limited partnership opportunities to generate additional revenue for this property. Ducks Unlimited Canada contributes to habitat enhancement projects related to their protocol agreement.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

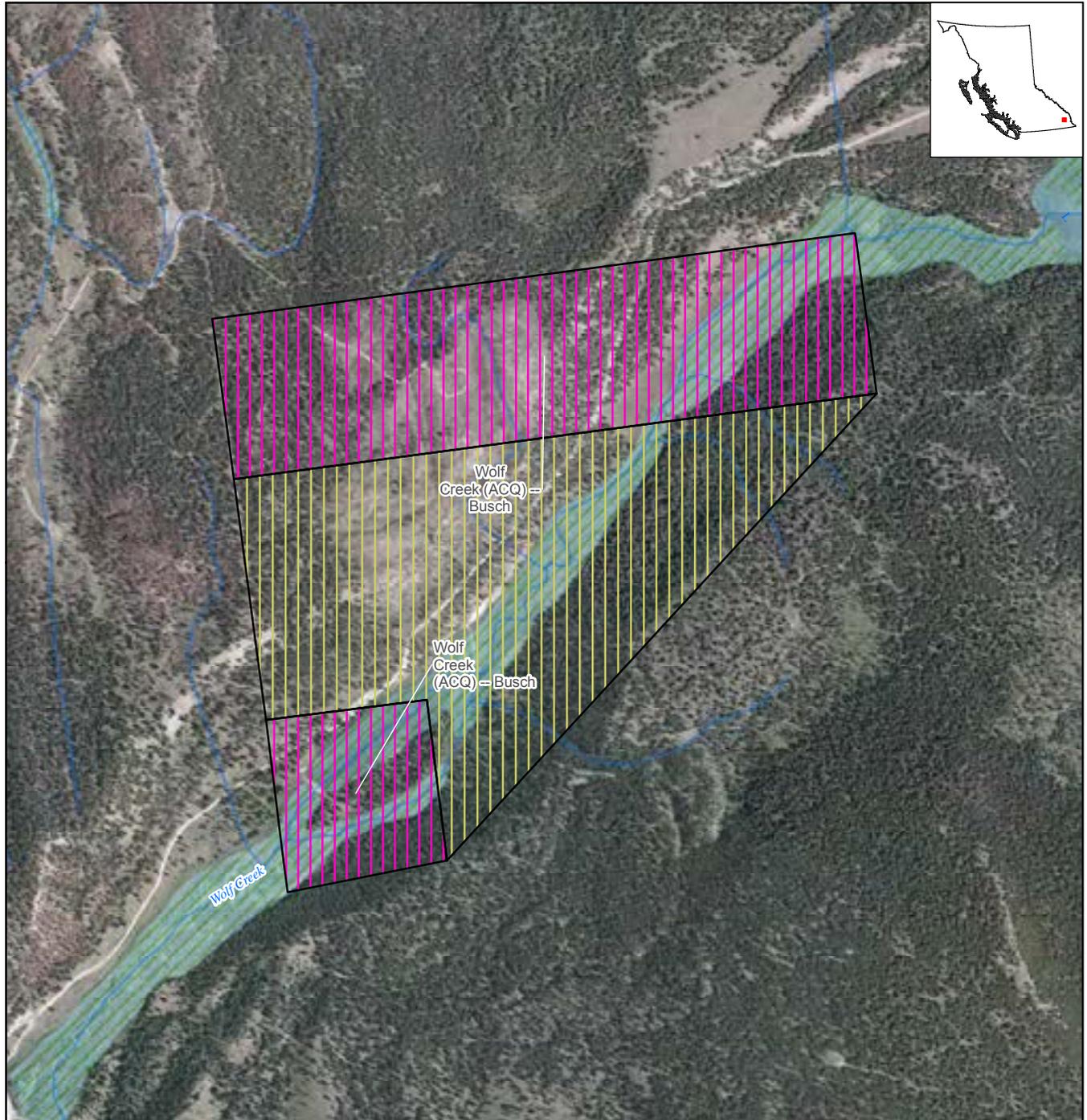
Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: Protect and enhance ecosystem and wildlife values.	1: Determine the feasibility of restoring Wolf Creek to the original channel and develop a Stream Restoration Plan.	1: A Stream Restoration Plan is developed. 2: Restoration projects are implemented.	1: Increased habitat suitability and species utilization.
	2: Continue protocol agreement with Ducks Unlimited Canada to promote water level/ flow management regimes that minimize impacts and improve habitats for dependent species.	1: Acceptable water levels are maintained. 2: Continued use by fish and waterfowl.	1: Increased habitat suitability and species utilization.
	3: Exclude livestock from the conservation property through the use of control infrastructure including fences and gates.	1: Control infrastructure is maintained and constructed as required.	1: Habitat values are maintained/ enhanced.
	4: Finalize Transfer of Administration with Ministry of Agriculture and Lands.	1: Property is transferred to the Ministry of Forests, Lands and Natural Resource Operations, so that both administration and management are conducted by one Ministry.	1: Management of the conservation lands is achieved in a collaborative manner but by one delivery agent.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

Goal 2: Access Management	1: Continue to monitor and enforce Access Management Area regulations as stated in the Wildlife Act.	1: Acceptable uses are managed and enforced.	1: Access violations no longer occur.
	2: Maintain all infrastructure including fences, signage and gates to ensure respectful use by the public.	1: The public is informed of the conservation values.	1: Recreational use is maintained.
Goal 3: Invasive Plant Management	1: Monitor and control invasive plant species using cultural, mechanical and chemical control methods.	1: Invasive plant density and distribution is reduced.	1: Suitable habitats are restored.

7.0 Map



Wolf Creek



Legend

Crown Designations

- Administered Lands
- Reserve Lands
- Wildlife Management Areas

Other Conservation Lands

- NGO Conservation Areas
- National Wildlife Areas
- National Parks
- Provincial Protected Areas

Map Symbols

- Lake
- River
- Wetland
- Stream
- Highway
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BC Albers

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Canadian Wildlife Service
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BC NGO Conservation Areas Database (January 2012)

British Columbia Imagery WMS
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BCGS Map Sheet(s): 82G.082

FLNRO Region: Kootenay/Boundary



Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

Funding Cycle: 2013-2016

Project Name:

Region: Kootenay

PROJECT INFORMATION

1. Name of Property/ Complex: Wycliffe Corridor

Wycliffe Corridor (TAC)

2. Habitat Description / Values:

The Wycliffe Corridor is a 267 ha narrow strip of three district lots running northward from the St. Mary's River to the peak of Lone Pine Butte southeast of Marysville, BC. In the mid 1990's The City of Kimberley and Teck- Cominco were actively developing Kimberley- West (now Forest Crown) and Bootleg Gap Golf Course. Some crown land was involved with each of these projects, and both areas had inherently high ungulate winter range values. As mitigation, the long time owner Teck- Cominco traded the Wycliffe Corridor to offset the loss of winter range. Both The Land Conservancy and The Nature Conservancy own adjacent conservation lands, creating the Wycliffe Conservation complex.

The principal management objective for the Wycliffe complex is to maintain and conserve a significant component of dry, low-elevation open forests and grassland habitats and protect an essential wildlife migration corridor extensively used by Mule deer, White-tailed deer and elk. Three rare and endangered species have been observed on the property including the red-listed badger, red-listed Lewis' woodpecker and the red-listed Wild licorice. The properties are situated in the Dry Hot Ponderosa Pine (PPdh2) biogeoclimatic subzone.

3. Guiding Documents:

Wycliffe Conservation properties Ecosystem Restoration Plan
Wycliffe Corridor Conservation Property: Preliminary Field Assessment Final Report



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

4. Financial Sustainability:

Partnership opportunities may exist with both The Land Conservancy and The Nature Conservancy for cost sharing with respect to specific habitat monitoring and enhancement projects in addition to land management planning.

5. Partner Recognition:

As per the HCTF agreement, all publications/interpretive/restorative/enhancement signage includes the logos of all funding partners including HCTF.



**Wildlife Operations & Management
PART 1. PROPERTY / COMPLEX PLAN**

6. Goals, Objectives and Performance Indicators

Conservation & Property Management Goals	Land Management Objectives	Performance Indicators:	
		Short Term	Long Term
Goal 1: To maintain and enhance habitat quality of the Wycliffe conservation lands for the benefit of its native wildlife populations.	1: Develop a coordinated management plan and implementation strategy with all involved conservation organizations.	1: A management plans for the Wycliffe complex is completed. 2: Partners work diligently to implement strategy.	1: Improved long-term management of the Wycliffe conservation complex.
	2: Improve grassland condition by reducing invasive plant cover and vigor.	1: Invasive plant infestations are monitored and treated.	1: Invasive plant density and distribution is reduced.
	3: Restrict livestock access from conservation lands through boundary surveys, and the construction and maintenance of boundary fences.	1: Surveys and infrastructure activities are completed as necessary.	1: Habitat values are maintained/ enhanced.
	4: Restore the open forest habitat to an ecologically appropriate fire-maintained condition.	1: Restoration projects are identified and implemented.	1: Increased habitat values and species utilization.
Goal 2: Human Use Management	1: Apply for Access Management Designation (Motor Vehicle Closed Area) under the Wildlife Act.	1: Acceptable uses are managed and enforced.	1: Access violations no longer occur.

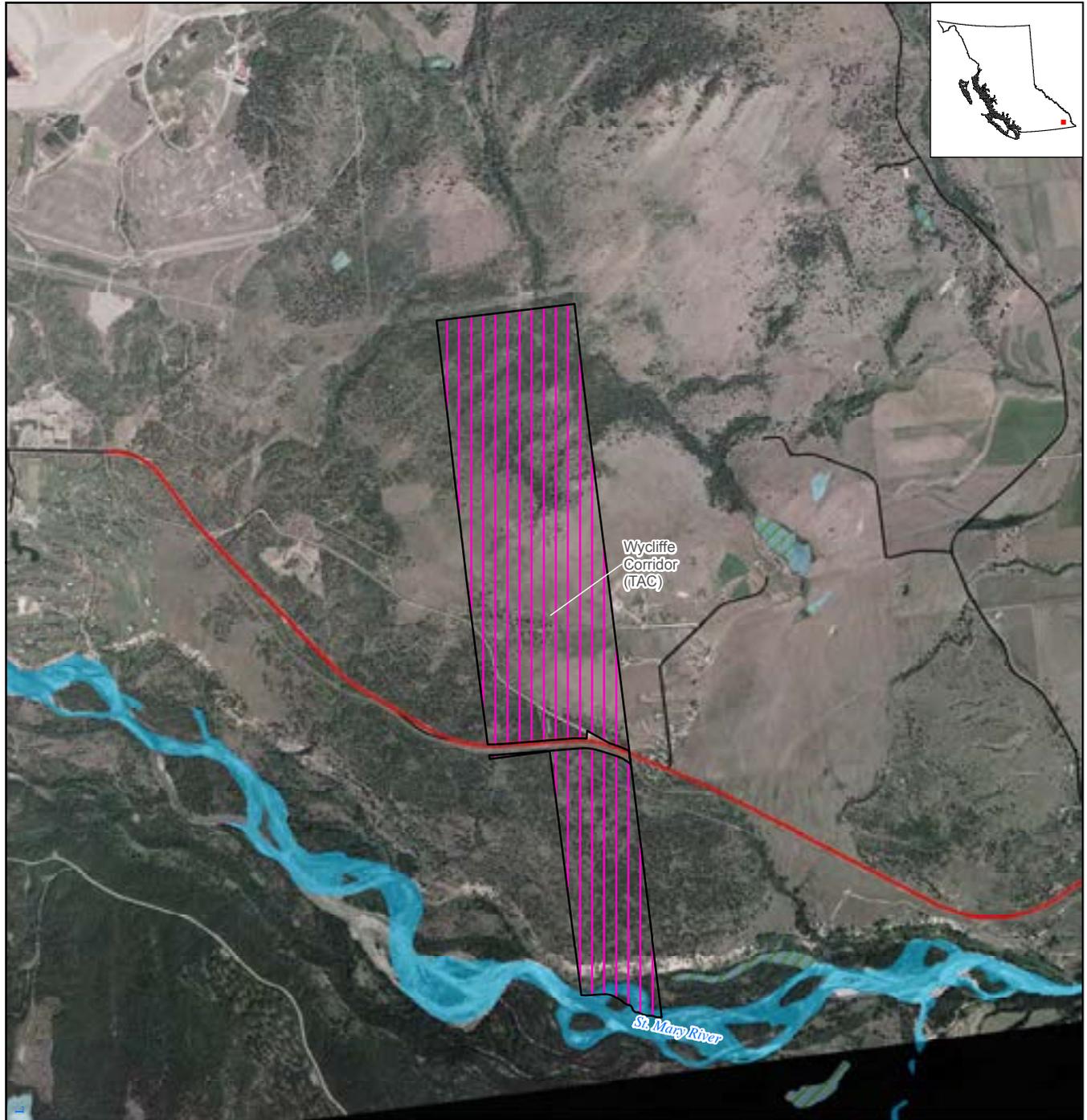


Project File #: _____

Wildlife Operations & Management PART 1. PROPERTY / COMPLEX PLAN

	2: Designate and enforce acceptable uses and rules for trail use.	1: Acceptable uses are determined and managed.	1: Recreational opportunities are maintained in a manner consistent with the management goals and objectives.
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7.0 Map



Wycliffe



Legend

Crown Designations

-  Administered Lands
-  Reserve Lands
-  Wildlife Management Areas

Other Conservation Lands

-  NGO Conservation Areas
-  National Wildlife Areas
-  National Parks
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British Columbia Imagery WMS
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BCGS Map Sheet(s): 82G.051, 82G.061

FLNRO Region: Kootenay/Boundary