



NATURE TRUST
BRITISH COLUMBIA



WILDLIFE O&M PROGRAM

Regional Summary Reports

2016-17

Estuaries and wetlands comprise less than 3% of BC Coastline while providing habitat to over 80% of all coastal fish and wildlife species.

WEST COAST REGION

Ecological Significance

The Vancouver Island West Coast Region contains some of the most diverse and rarest ecosystems in British Columbia and support internationally significant populations of fish and wildlife as well as some of the rarest species found in the Province.

Estuaries, wetlands and riparian areas are among the most diverse and productive ecosystems in the world. The importance of protecting and managing these habitats cannot be understated given their substantial life history functions and benefits not only to fish and wildlife but to the human population as well (e.g. clean water supplies, flood protection, mitigating impacts from climate change). It is estimated that more than 50% of wildlife species in North America rely on access to wetland habitat for at least part of their life-cycles, and almost 35% of all rare, threatened, and endangered wildlife species are dependent on wetland ecosystems (Wetland Action Plan for British Columbia, 2010).



In British Columbia, estuaries and coastal wetlands comprise less than 3% of BC's coastline, while providing habitat to over 80% of all coastal fish and wildlife species. Approximately 500 species of named plants and animals are associated with wetlands and estuaries, and 70 of those species are federally listed as endangered or threatened. Vancouver Island and the Central contain significantly higher ranked estuaries than any other eco-region in the province (CWS Technical Report Series #476, 2007). Of the 8 Class 1 estuaries in BC, 4 are located on Vancouver Island.

Despite their importance and rarity, approximately 43% of the province's estuaries are threatened by coastal development, modification, and pollution; approximately 60% of marsh habitats along the estuaries of the Salish Sea have been lost.

Since 1976, The Nature Trust of BC and the Province of British Columbia has worked together with several partner agencies to secure these critical habitats on Vancouver Island and the Central Coast. From the Cowichan Estuary to the Kingcome Estuary more than 60 conservation properties have been secured protecting over 11,000ha of critical fish and wildlife habitat along with rare ecosystems.

Key Property Complexes

Baynes Sound	Buttertubs Marsh
Cluxewe Estuary	Cowichan Estuary
Dudley Marsh	Filberg Marsh
Kingcome Estuary	Lazo Marsh
Nanaimo Estuary	Orel Lake
Englishman River (PQWMA)	Salmon River Elk Reserve
Salmon River Estuary	Asseek Estuary
Somenos Marsh	Kumdis Slough
Willow Creek	Bella Coola Estuary
Koeve Estuary	Quatse WMA
Tofino Mudflats WMA	

West Coast Region Program Summary 2016-2017

HCTF O&M Funding allocated \$139,000 to the West Coast Region in 2016-17 to support projects focusing on the development & implementation of site specific management/restoration plans; ongoing fish and wildlife inventory; recreational infrastructure (trails, interpretive signs); and the on-going engagement of community groups. In addition to HCTF, partner agencies contributed over \$460,000 to support this work.



Over \$139,000 was invested in the West Coast Region for the 2016/17 fiscal year that greatly assisted the conservation partners in achieving several key land management objectives. Of this funding:

- **\$20,000** was invested in implementing a comprehensive estuarine monitoring program on the Central Coast and Haida Gwaii in partnership with the Nuxalk and Heiltsuk First Nation Coastal Guardian Watchmen Programs and the Council of Haida Nation.
- **\$9,000** was invested in Baynes Sound at several conservation areas that make up the Baynes Sound complex. Projects included: terrestrial invasive species inventory and removals at Fanny Bay and Millard Creek; legal surveys for boundary encroachment in Fanny Bay; 90km of shoreline surveyed for invasive *Spartina* along with 11,000kg of *Spartina* removals;
- **\$3,000** was invested at Buttertubs Marsh Conservation Area. Projects included: updating the management plan; supporting a Natural Capital Initiative with the City of Nanaimo; on going species-at-risk restoration plan implementation for Western Painted Turtle; invasive species management; riparian restoration works.
- **\$3,000** was invested at the Green Mountain Wildlife Management Area to continue the implementation of the "South Scree Slope Habitat Restoration Project" with an expanded area to now include the "Snow Bowl" in partnership with with the Nanaimo Fish and Game Club, Marmot Recovery Foundation and FLNRO. Specific activities included a clearing 4000m² of encroaching vegetation in preparation for fall burns.
- **\$19,000** was invested at the Parksville Qualicum Beach Wildlife Management Area. Projects included: trail and facility maintenance; restoration plan review and development with government and community partners for the Englishman estuary; updated boundary/regulatory signage; coordination of annual migratory bird closures with Conservation Officer Service and Vancouver Island University; implementation of estuarine monitoring program to assess habitat condition, utilization and the impacts of sea-level rise; address foreshore encroachment and on-going trespass management.
- **\$8,700** was invested at the Quatse Wildlife Management Area to support a large restoration project completed in cooperation with Ducks Unlimited Canada and the District of Port Hardy to restore tidal inundation, salt marsh habitat and anadromous fish habitat; and, to implement an estuarine monitoring program to assess habitat condition and utilization.
- **\$5,000** was invested at the Salmon River Estuary Conservation Area. Projects included: implementing a large scale riparian restoration project that resulted in the removal of over 3.5ha of invasive species and the planting of over 700 native trees and shrubs;





breeding bird and owl surveys; and, the implementation of the estuarine monitoring program.



- **\$5,000** was invested at the Nanaimo River Estuary Conservation Area. Projects included: invasive species control, viewing platform and trail maintenance, and the on-going implementation of a multi-year species at risk restoration plan for Vesper Sparrows and Short-eared Owls.
- **\$13,000** was invested at the Cowichan Estuary Conservation Area. Projects included: implementation of an estuarine monitoring program, winter waterfowl surveys, invasive species inventory and removal, the development of restoration plans for Short-eared Owl habitat, maintenance of property signage, trails and viewing platforms and, the seasonal coordination of a resident Canada Goose hunt on Dinsdale Farm.





For additional information, including the pertinent land management objectives and conservation outcomes, please refer to the detailed annual reports.



Goals & Objectives by Property	Activities/Description	Image(s)
Asseek Estuary Conservation Area		
<u>Category:</u> Management	<u>Planned Activity:</u> Work with local contacts in Bella Coola to identify key First Nations; liaise with Marine Use Planning Partnership to further objectives identified in the Central Coast Plan; meet with local stakeholders in Bella Coola to discuss the Asseek property	
<u>Goal:</u> 1,2		
<u>General Descriptor:</u> Stakeholder Engagement		
<u>Activity:</u> Site visit to the Asseek Estuary with the Nuxalk First Nation Coastal Guardian Watchmen and Ducks Unlimited Canada. Installed Surface Elevation Table and Data Logger for long term monitoring.		

Goals & Objectives by Property	Activities/ Description	Image(s)
Baynes Sound Conservation Areas		
<u>Category:</u> Management	<u>Planned Activity:</u> Property inspections and updated inventory of boundary encroachment; liaison with community advocates for homeless; install updated regulatory / interpretive signs at key access points throughout conservation area complex	
<u>Goal:</u> 1, 2		
<u>General Descriptor:</u> Public Safety and Liability		
<u>Completed Activity:</u> Inspecting properties and inventorying all encroachments on boundaries and trespass.		





Goals & Objectives by Property	Activities/Description	Image(s)	
Baynes Sound Conservation Areas			
<u>Category:</u> Inventory	<u>Planned Activity:</u> Coordinate inventory activities for Spartina with the Spartina Working Group; utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database	 	
<u>Goal:</u> 1			
<u>General Descriptor:</u> Invasive Species			
<u>Activity:</u> Mapped and removed Spartina. Partnered with local groups and volunteers.		 	

Goals & Objectives by Property	Activities/Description	Image(s)	
Bella Coola Estuary			
<u>Category:</u> Management	<u>Planned Activity:</u> Work with local contacts in Bella Coola to identify key First Nations; liaise with Marine Use Planning Partnership to further objectives identified in the Central Coast Plan; meet with local stakeholders in Bella Coola to discuss the Asseek property		
<u>Goal:</u> 1, 2			
<u>General Descriptor:</u> Stakeholder Engagement			
<u>Activity:</u> Site visit to the Bella Coola Estuary with the Nuxalk First Nation Coastal Guardian Watchmen and Ducks Unlimited Canada. Installed Surface Elevation Table and Data Logger for long term monitoring.			




Goals & Objectives by Property	Activities/ Description	Image(s)	
Buttertubs Marsh			
<u>Category:</u> Restoration Enhancement	<u>Planned Activity:</u> Expand WPT nesting beaches previously constructed; install/anchor further LWD in open water habitats of marsh area for increased basking log habitat		
<u>Goal:</u> 1			
<u>General Descriptor:</u> Enhancement			
<u>Activity:</u> Continuous monitoring through summer season and maintenance on nest beaches. Working with the City of Nanaimo and FLNRO biologists to install 10 new basking logs at optimal locations around the marsh.			



Goals & Objectives by Property	Activities/ Description	Image(s)	
Campbell River Estuary			
<u>Category:</u> Inventory	<u>Planned Activity:</u> Utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database	 	
<u>Goal:</u>			
<u>General Descriptor:</u> Invasive Species			
<u>Activity:</u> Completed estuary survey by boat for Invasive Plants focusing on Spartina species.			

Goals & Objectives by Property	Activities/ Description	Image(s)
Cluxewe Wildlife Management Area		
<u>Category:</u> Monitoring <u>Goal:</u> 1, 2, 3 <u>General Descriptor:</u> Habitat Condition	<u>Planned Activity:</u> Year 1, 2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees, surface elevation tables)	
<u>Activity:</u> Installed Rod Surface Elevation Tables and Data Loggers within the estuary to monitor water quality and overall health of the estuary		





Goals & Objectives by Property	Activities/ Description	Image(s)	
Cowichan Estuary Conservation Area			
<p><u>Category:</u> Management & Restoration Enhancement</p> <p><u>Goal:</u> 1, 3</p> <p><u>General Descriptor:</u> Facility Maintenance & Riparian / Wetland</p>	<p><u>Planned Activity:</u> Annual inspections of viewing platforms, trails, boardwalks; repairs as necessary; inspect/repair fencing as required; inspections and maintenance of water control structures and dikes in accordance with provincial standards and regulations. Riparian habitat assessment; invasive species removal; riparian planting; maintenance; mapping</p>	 	
<p><u>Activity:</u> Inspecting the area throughout the seasons to identify key issues needing attention as required. Riparian wetland monitoring work continued with vegetation transects Surface Elevation Tables and Data Loggers installed.</p>		 	

Goals & Objectives by Property	Activities/Description	Image(s)	
Dudley Marsh			
<u>Category:</u> Management	<u>Planned Activity:</u> Liaise with stakeholder groups on an on-going basis to discuss projects/activities within Conservation Area that assist in meeting management goals for the conservation complex;		
<u>Goal:</u> 1, 2, 3, 4, 5			
<u>General Descriptor:</u> Stakeholder Engagement			
<u>Activity:</u> Work with local stakeholders and volunteers with monitoring water levels and installing silt fence after water control clearing in cooperation with DUCBC.			


Goals & Objectives by Property	Activities/ Description	Image(s)	
Filberg Marsh			
<u>Category:</u> Management	<u>Planned Activity:</u> Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed		
<u>Goal:</u> 1, 2			
<u>General Descriptor:</u> Public Safety & Liability			
<u>Activity:</u> Site visits to note condition of water control (Culvert) and residential “pruning” of trees on conservation lands to increase views.			




Goals & Objectives by Property	Activities/ Description	Image(s)	
Green Mountain Wildlife Management Area			
<u>Category:</u> Restoration Enhancement <u>Goal:</u> 1, 3, 4, 5 <u>General Descriptor:</u> Alpine Meadow	<u>Planned Activity:</u> Year 1-3 mapping, removal, and burning of priority restoration areas in cooperation with FLNRO, MRF		
<u>Activity:</u> Spent 3 days mapping and removing small trees encroaching, and limb (removing all limbs to breast height) in alpine meadows to allow greater line-of-sight for Vancouver Island Marmots against predators			





Goals & Objectives by Property	Activities/ Description	Image(s)	
Koeve River Estuary			
<p><u>Category:</u> Management & Monitoring</p> <p><u>Goal:</u> 1, 2, 3</p> <p><u>General Descriptor:</u> Stakeholder Engagement</p>	<p><u>Planned Activity:</u> Work with local contacts on North Island/Central Coast; liaise with Marine Use Planning Partnership to further objectives identified in the Central Coast Plan; meet with local stakeholders in to discuss property and engage with on the ground land management projects and monitoring</p>		
<p><u>Activity:</u> Visited the Koeve River with help from the QQS and Heiltsuk FN, boated up the river to the Conservation Area. Installed Rod Surface Elevation Table and Data Logger for long term monitoring</p>			
			
			


Goals & Objectives by Property	Activities/ Description	Image(s)
Kumdis Slough Conservation Area		
<u>Category:</u> Management & Monitoring <u>Goal:</u> <u>General Descriptor:</u> Stakeholder Engagement & Habitat Condition	<u>Planned Activity:</u> Liaise with stakeholder groups on an on-going basis to discuss projects/activities within Conservation Area that assist in meeting management goals for the conservation complex; on site meetings.	  
<u>Activity:</u> Visited the Kumdis Slough with members of the Council of the Haida Nation and the Province of BC to inspect site, note issues, and install Rod Surface Elevation Table and Data Logger		



Goals & Objectives by Property	Activities/ Description	Image(s)	
Lazo Marsh NE Comox Wildlife Management Area			
<u>Category:</u> Management	<u>Planned Activity:</u> Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed		
<u>Goal:</u> 1, 2, 3, 4			
<u>General Descriptor:</u> Public Safety & Liability			
<u>Activity:</u> Inspecting property and noting areas of concern becoming negatively impacted by visitors. Mitigation of issues includes updating signage, assessing trail use and closing public access to protect sensitive areas.			

Goals & Objectives by Property	Activities/ Description	Image(s)	
Nanaimo River Estuary			
Category: Management & Restoration Enhancement	Planned Activity: Respond to public inquiries/complaints; review development proposals that may affect conservation areas		
Goal: 1, 2, 3, 4, 5	Riparian habitat assessment; invasive species removal;		
General Descriptor: Facility Maintenance & Riparian / Wetland	riparian planting; maintenance; mapping		
Activity: Installed Rod Surface Elevation Tables, Data Loggers, removed invasive plants (Bur Chervil, Scotch Broom and Himalayan Blackberry), completed Vegetation Transects, maintained facilities (broken gate), installed new signage, and processing of abandoned/derelict vessels.			<div data-bbox="1379 717 1789 1291"><h3>Short-eared Owl (<i>Asio flammeus</i>)</h3><p>A Species at Risk Nanaimo River estuary is an important overwintering habitat for Short-eared Owls. Look for these buff-colored owls from October to April, as they perch in remnant hedgerows or on posts, or hunt in the open habitat. These owls can be recognized by their slow moth-like flight, large facial disks, and black "wrist" marks on their wings.</p><p>Unlike most owls, Short-eared Owls are often active during daytime, flying low over open areas hunting for mice and voles. Habitat loss and disturbance have resulted in serious declines of Short-eared Owls in some parts of North America and BC. They have been designated as Special Concern under Canada's Species At Risk Act.</p><p>Habitat Requirements Short-eared Owls prefer open habitats, including marine foreshores, estuaries, marshes, grasslands, fields and pastures. Nanaimo estuary provides winter roosting sites for owls where they can rest and sleep. Ideal roost sites must be near good hunting areas, and provide protection from the weather, concealment from predators, and have low human disturbance. These owls can be hard to spot when they are roosting in tall grass, shrubs or in hedgerows.</p><p>Restoring Habitat To improve roosting habitat for wintering Short-eared Owls, hedgerow habitat at Nanaimo River estuary is being replanted with native species to provide more places for owls to rest and hide.</p><p>How to Help Short-eared Owls are protected by the BC Wildlife Act. To survive the winter, these owls must conserve energy. Disturbance by people and pets can stress the owls, causing them to waste energy, threatening their survival. Please keep pets on a leash at all times. If you approach and Short-eared Owls take flight, you are too close.</p><p>REPORT VIOLATIONS - Conservation Office 24 Hr Hotline 1-877-952-BAPP (7277) or Call 87277</p><p><small>The species information on this document is for informational purposes only and is not intended to be used for legal or regulatory purposes.</small></p><p>Canada British Columbia Nanaimo River Estuary The Nature Trust</p></div>





Goals & Objectives by Property	Activities/ Description	Image(s)	
Orel Lake			
<u>Category:</u> Management & Monitoring	<u>Planned Activity:</u> Conduct amphibian and salmonid trapping; examine extent of invasive species utilization. Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed	 	
<u>Goal:</u> <u>1.2</u>			
<u>General Descriptor:</u> Public Safety & Liability			
<u>Activity:</u> Open water surveys for Western Painted Turtles and amphibian trapping. Boundary survey for signs of trespass.			

Goals & Objectives by Property	Activities/ Description	Image(s)	
Parksville Qualicum Beach WMA			
<p><u>Category:</u> Management & Restoration Enhancement</p> <p><u>Goal:</u> 1, 2, 3, 4, 5</p> <p><u>General Descriptor:</u> Public Safety & Liability Restoration</p>	<p><u>Planned Activity:</u> Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed; undertake legal surveys as required. work with partner groups to implement restoration activities</p>		
<p><u>Activity:</u> Working with affiliated agencies (Conservation Officer Service) and local volunteer groups to identify and remove illegal camps. Installing Rod Surface Elevation Tables and Data loggers, completing Vegetation Transects. Working with local elementary school groups for educational field trips including estuarine animal identification.</p>			

Goals & Objectives by Property	Activities/ Description	Image(s)
Quatse Wildlife Management Area		
<p><u>Category:</u> Management</p> <p><u>Goal:</u> 1, 2, 3</p> <p><u>General Descriptor:</u> Public Safety & Liability</p>	<p><u>Planned Activity:</u> Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed</p>	
<p><u>Activity:</u> Inspections on dikes and facilities including sourcing solutions for ageing infrastructure. Installing Rod Surface Elevation Tables and Data Loggers and completing Vegetation Transects.</p>		

Goals & Objectives by Property	Activities/ Description	Image(s)	
Salmon River Estuary Conservation Area			
<u>Category:</u> Restoration Enhancement Inventory <u>Goal:</u> 1, 2 <u>General Descriptor:</u> Riparian / Wetland Invasive Species	<u>Planned Activity:</u> Riparian habitat assessment; invasive species removal; riparian planting; maintenance; mapping. Utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database		
<u>Activity:</u> Identified areas inundated with invasive plants (predominately Scotch Broom) and removed approximately 3.5 hectares. Area was replanted with 700 trees and shrubs. A small pond was identified as potential amphibian habitat and was enhanced with woody debris and aquatic plants. Rod Surface Elevation Tables and Data Loggers were installed and vegetation transects were completed.			

Goals & Objectives by Property	Activities/ Description	Image(s)	
Somenos Marsh Conservation Area			
<u>Category:</u> Restoration Enhancement <u>Goal:</u> 1, 3, 4, 5 <u>General Descriptor:</u> Invasive Species Removals	<u>Planned Activity:</u> Work with partner groups to implement restoration activities		
<u>Activity:</u> Continuing monitoring and working with the province of BC, Municipality of North Cowichan, Cowichan Tribes and local agencies to plant restorative actions on removing invasive parrots' feather within Somenos Marsh. Continuing restoration plans for Tall Wooleyheads by maintaining habitat and counting. Working with Cowichan Tribes to remove invasive plants (Scotch Broom) from Ye'yumnuts culturally significant areas.			

Goals & Objectives by Property	Activities/ Description	Image(s)
Willow Creek Conservation Area		
<p><u>Category:</u> Management</p> <p><u>Goal:</u> 1, 2, 3, 4, 5</p> <p><u>General Descriptor:</u> Public Safety & Liability</p>	<p><u>Planned Activity:</u> Property inspections and updated inventory of boundary encroachment; liaison with community advocates for homeless; install updated regulatory signs at key access points throughout conservation area complex</p>	   
<p><u>Activity:</u> Inspecting facilities, trails, and infrastructure. Noting new trails and mountain bike jumps being constructed within boundaries of conservation area. Monitoring boundary infractions and neighbouring construction works having negative impacts on forests, streams, and trails.</p>		

Region: South Coast**Ecological Significance of the Region:**

The majority of Lower Mainland Region conservation projects focus on the Fraser River and its tributaries. One of the largest rivers in the world, the Fraser flows from the Rocky Mountains south and west to the Fraser-Puget lowland, and into the Pacific Ocean at the Strait of Georgia. The Fraser Basin watershed drains one quarter of the province. Sand and silt eroded from glacial terraces along its path are deposited as a delta in the Strait of Georgia. This delta is highly productive from an agricultural and human habitation perspective, making the Lower Mainland the socio-economic centre of the province.

The confluence of the Fraser and the Pacific Ocean results in delta marshes, estuaries, and an incredible level of diversity in fish and wildlife populations. The Fraser is the world's largest salmon river, while its estuaries provide critical resting areas for salmon migrating from salt to fresh water. Important year-round habitat for many bird species, the Fraser estuary is also a vital link in the Pacific Flyway, supporting over 1.5 million birds from three continents and 20 countries. The Boundary Bay, Sturgeon Bank and South Arm Marshes Wildlife Management Areas have been designated as Western Hemisphere Shorebird Reserve Network sites. The estuary supports the largest wintering shorebird and waterfowl populations in Canada. The area also provides habitat for significant numbers of raptors and marine mammals.

The South Coast Region contains 12 Conservation Land complexes, administered regionally, including a number of properties owned by The Nature Trust of British Columbia.

Summary Statement of Regional Investment:

In 2016-17 \$97,090.00 was invested in 16 Conservation Lands in the South Coast region, to assist regional staff and partners in achieving management objectives.

Not all of the funds granted by HCTF were invested this year. \$18,454.98 (primarily from the CLOA fund) was returned to HCTF unspent. This was due to delays and uncertainty related to the demolition of the old dyke house in the Pitt-Addington WMA, which was a priority for this fiscal. Quotes estimated the cost of demolition to be between \$64,000 and \$124,000, which required us to hold back on a large portion of funding from HCTF until the final cost of the demolition was known. It was hoped that the cost would be much lower, but until bids had been submitted from contractors, it was impossible to know. Preparation for demolishing the house included additional testing for hazardous materials and submitting demolition permits to the municipality. The greatest delay was due to the fact the house, and the land it sat on, was owned by The Nature Trust of BC and leased to the province. This led to much uncertainty regarding the province's responsibility for the building and which part of government was going to take on the project. After a number of false starts, an Invitation to Tender was finally posted on BC BID in December. This process led to much more competitive bids and a contract was signed for

\$33,200, much lower than the earlier quotes. The final cost of the demolition was \$39,200. The project is not yet complete however. Some soil contamination was detected at two sites where above-ground oil storage tanks were located. This contamination and revegetation of the site will be completed in fiscal year 2017-18.

One unanticipated, but beneficial source of expenditure this year was due to an infrastructure in-kind contribution from Telus. This year Telus decommissioned a cell phone tower it had been operating in the Hwy 99 ROW adjacent to the Serpentine WMA. A large, steel shed that had housed the electronics associated with the tower became surplus and Telus offered to give it to FLNRO and relocated the shed on the WMA property. FLNRO accepted the offer because storage facilities for the Conservation Lands Program equipment and materials was lacking. DUC had a storage shed within the WMA, but it was not secure and had experienced break-ins in the past. The shed provided by Telus was constructed of steel with tamper-proof doors and locks. Relocation of the shed required FLNRO to provide a foundation and other infrastructure that was not part of the budget for the year.

Project Highlights:

\$3,488 invested in Bert Brink Wildlife Management Area for property inspection, invasive plant management and removal, and rubbish removal.

\$4,878 invested in Boundary Bay Wildlife Management Area for property inspections, rubbish removal, plant management, sampling of soil for contamination and sign maintenance.

\$4881.00 invested in Camp Slough conservation area for property inspection, invasive species management, rubbish removal, and restoration of disturbed areas. Over 250 native plants were established through volunteer restoration events. Trees that posed a threat to neighbouring properties were removed.

\$1,725.00 invested in the Wells Sanctuary conservation area for property inspections, invasive plant removal, rubbish removal, and signage. Over 80 native plants were established in disturbed areas through a volunteer planting event.

\$2,450.00 invested in the Chilliwack River conservation area for property inspection, rubbish removal, documentation of ecological attributes and concerns, and maintenance of property information signage.

\$1,952 invested in the newly designated L'halt – Harrison Chehalis Wildlife Management Area complex for property inspection, rubbish removal, invasive species management, and maintenance of property information signage.

\$28258.00 invested in the Pitt-Addington Wildlife Management Area to assess land management needs and ecological values, maintain informational signage, maintenance of public access trails and facilities, enhancement of habitat for wildlife and demolition of the old dyke house.

\$500.00 invested in the Surrey Bend conservation area for property inspections, boundary identification, and rubbish removal.

\$7,345.00 invested in the Silverhope Creek conservation area for ecological assessment, inspection for land management needs, public information sign installation, rubbish removal, and boundary identification. Over 90 native plants were established in areas of ecological disturbance.

\$2900.00 invested in Coquitlam River Wildlife Management Area to manage invasive black berry, remove fallen tree debris, repair the boundary fence.

\$1377.00 invested in Roberts Bank Wildlife Management Area to remove and control invasive plants such as yellow flag iris and maintain signs.

\$12640.00 invested in Serpentine Wildlife Management Area for garbage removal, grass mowing and vegetation removal. Action to combat invasive Parrot Feather was not needed as reduction of water levels in the wetlands last year appear to have been successful at reducing the extent of the plant. Removal of the old storage barn was deferred to next year. Funds were invested into preparation of a foundation for a storage shed donated and relocated by Telus.

\$2610.00 invested in South Arm Marshes Wildlife Management Area to clear trails of trees brought down during windstorms this past winter. Funds were also invested into ongoing trials to establish a new population of streambank lupine (*Lupinus rivularis*) at a site that was discovered on Kirkland Island. Streambank lupine is a red-listed plant species with only a few stable populations in the region. Initial attempts were not successful, nor were attempts last year. Seeding transplants did not survive the growing season due to the presence of an insect pest and none of the seeds planted last year germinated this spring. If no plants sprout and survive this year, future attempts will not be made.

\$223.00 invested in Sturgeon Bank Wildlife Management Area. Very little action was necessary in Sturgeon Bank WMA this year. Sturgeon Bank WMA benefits from stewardship of, and proactive action by, the City of Richmond with respect to management of invasive species, vegetation management and removal of garbage along the dyke trail that is adjacent to the WMA. Funds invested this year were to print signs acknowledging partner support. The signs will be installed in year 2.

\$776.00 invested in Squamish Estuary Wildlife Management Area to print signs acknowledging partner support and develop guidelines for commercial paddling activities in the WMA.

\$2611.00 invested in Forslund-Watson conservation land for removal and control of invasive black berry, maintenance of infrastructure (primarily repair of vandalism to the perimeter fence and gate), garbage removal and trimming and mowing of vegetation around the pond.

Conservation Outcomes:

The 2016-17 field season resulted in the completion of a variety of critical land management activities on a number of Conservation Lands within the South Coast Region. Assessments of the ecological attributes and issues specific to each property form the basis for activity planning for current and future field seasons.

Restoration and enhancement of conservation lands for habitat values ensures that these lands are optimal for use by fish and wildlife that depend on them. Informational signage, indicating property ownership and management partners, serves to demarcate boundaries and to provide the public with the means to contact a land manager to discuss management concerns and issues. Maintenance of access points and facilities on conservation lands ensures that public access will be safe.

Additional and Partner Funding:

Over **\$241,107** of funding and in-kind contributions were provided by TNTBC, FLNRO, DUC and their partners:

1. \$115,211 from Ducks Unlimited Canada for land management activities in WMAs and non-designated conservation lands.
2. \$22,855 from FLNRO for lead leachate testing and demolition of the old dyke house in Pitt-Addington WMA.
3. \$57,600 raised by the Squamish Watershed Restoration Society, including:
 - a. \$5,000 from the TD Canada Trust Grant for Education Outreach Wildlife Enhancement Project
 - b. \$4,000: BCIT Summer Student intern program/monitoring
 - c. \$5,000: TD Canada Trust Grant for Education
 - d. \$43,000: National Wetland Conservation Fund Wildlife Enhancement and wetland restoration (mostly associated with WestBarr restoration site)
 - e. \$5,000: West Barr riparian planting funds (as part of original signing off of transfer from West Barr back to Province)
 - f. \$800.00: HCTF Purple martin bird boxes.
4. \$190,500 from the Vancouver-Fraser Port Authority, Environment and Climate Change Canada, HCTF, FLNRO and BCIT to support research investigating the cause of the marsh recession within Sturgeon Bank WMA.
5. \$43,000 from The Nature Trust of British Columbia, EcoAction Community Funding Program, Canada Summer Jobs Program, and TD Friends of the Environment Foundation to support Conservation Youth Crew land management activities and habitat restoration events.

6. \$2,441 from FLNRO and Sts'ailes FN to host a celebration of the designation of the L'halt - Harrison-Chehalis WMA.
7. In-kind contribution from Telus for donation and relocation of a storage shed at the Serpentine WMA.

Region: South Coast

Photographs:



1. **Boundary Bay Wildlife Management Area** – property assessed for habitat values and management needs; photographic monitoring point established; garbage removed by Conservation Youth Crew and volunteers.



2. **Wells Sanctuary** – property assessed for management needs; boundary signage maintained; restoration events held to establish native plants in disturbed areas.



3. **Silverhope Creek** – property assessed for management needs; signage maintained; extensive rubbish removed. Planting of native species in areas disturbed by trespass camping.



4. **Camp Slough** – property assessed for management needs; signage and fences maintained; rubbish removed. Planting of native species in disturbed areas. Pole planted for barn owl nesting box placement.



5. **Pitt-Addington WMA** – demolition of the Dyke House at Addington Point. The garage, decking and additions to the house have already been demolished and removed. Demolition of the original structure has begun.



6. **Serpentine WMA** - The shed donated by Telus being moved to its new location. The shed used to house communications equipment for a cell phone tower adjacent to the WMA.



7. **Serpentine WMA** - The new shed donated by Telus in its final location. The shed will be used for storage of equipment and materials in support of the South Coast Conservation Lands Program.

Region: Thompson Okanagan**Ecological Significance of the Region:**

The Thompson Okanagan Region has a dry, continental climate, as it lies in the rain shadow of the Coast and Cascade Mountain ranges. Vegetation varies from Engelmann spruce and lodgepole pine at subalpine elevations, Douglas-fir at lower elevations, and ponderosa pine, bunchgrass, and sagebrush at the valley bottom. These vegetation zones are in relatively close proximity to one another, resulting in extremely rich biological diversity in a small area.

The Thompson portion of the region is one of the most biophysically diverse regions in the province. The landscape has more than 200 lakes, sage-dressed hills, vast rolling grasslands, tumbleweeds, looming mountains and alpine valleys. The grassland areas north of Kamloops Lake are recognized for their importance to wildlife, primarily California bighorn sheep, mule deer and many species at risk. The Dewdrop-Rosseau Creek WMA, the Lac du Bois Grasslands Protected Area, the Tranquille Ecological Reserve and the Tranquille WMA provide for a contiguous area of relatively undisturbed sensitive grassland ecosystem and provide uninterrupted habitat for associated species.

The Dewdrop-Rosseau Creek WMA in the Thompson ranges in elevation from 340m at Kamloops Lake to 1450m at the upper reaches of the WMA. 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 hot and dry, with the little surface water available being intermittent in nature, or present as scattered springs and ponds.

The Okanagan portion of the region, especially in the south, contains large numbers of unique flora and fauna, as it is the northern extension of the Columbia Plateau. Analysis has shown that the South Okanagan is both the top biotic rarity hotspot and the top species richness hotspot in British Columbia. It has more federally listed species at risk than any other area of the province, and more provincially Red-listed and Blue-listed species than elsewhere. Furthermore, with some 303 species of birds recorded from the Okanagan, and similar richness in other animals and plants, many species are found here and nowhere else in Canada (Geoff Scudder, 2006).

Human development over the past century has resulted in dramatic reductions in native habitat. Grasslands, and in particular the antelope-brush ecosystem, have been greatly impacted. Over the past 15 years, the antelope-brush ecosystem has been reduced in area by over 65%, with current loss estimated at 2% per year. Channelization of the Okanagan River for flood control in the 1950's reduced its associated marshland by 85 to 90%, seriously impacting riparian habitat viability in the region. With population expected to double in the next 25 years, habitat in the Okanagan will become increasingly endangered over time.

The Nature Trust has been working in the Okanagan area since 1971. To date, 18 properties have been secured with the help of many funding partners, totalling over 4,250 hectares (10,500 acres). These conservation holdings are particularly contiguous, providing habitat corridors on a landscape scale.

Summary Statement of Regional Investment:

Over \$85,625 was invested in the Thompson Okanagan Region for the 2016-2017 year, and this greatly assisted the conservation partners in addressing key land management objectives.

Project Highlights:

- **\$2,600** was invested at Duck Meadows in protecting wetland and associated upland habitat through annual inspection; sign installation; invasive species inventory and control; and rubbish removal.
- **\$7,850** was invested at the Keremeos Creek property. Primary tasks included site visits; fence maintenance and new construction; boundary and information signage produced and installed; and invasive plant management.
- **\$2,850** was invested at the Salmon Arm Bay property. Primary tasks included site visits; review, input and participation in disturbance monitoring working group; assisted with restoration planning for foreshore habitat enhancement; review of the District of Salmon Arms sewer replacement project and mitigation plans; boundary and information signs produced and installed
- **\$4,370** was invested at the Vaseux Lake-Schneider property. Primary tasks included site visits; planning for invasive plant management to protect this high integrity grassland habitat; perimeter fence assessed and repaired; and continuation of the photographic monitoring program; review and discussions with RDOS staff and contractors regarding monitoring well placement and installation on the property to assess potential impacts from neighbouring landfill.
- **\$4,220** was invested at the Vaseux Lake – Emery & Franmar complex. Primary tasks included site visits; maintenance of fences; invasive plant management including surveys, mechanical control seeding and mowing; and continuation of the photographic monitoring program.
- **\$8,300** was invested at the Vaseux Lake – Brock & Thomas complex. Primary tasks included site visits; invasive species management including survey and mechanical removal; fence repairs and sign development and installation; review of utility right of way holder plans.
- **\$6,000** was invested at the Okanagan Falls Biodiversity Ranch. Primary tasks included site visits; invasive species management including survey and mechanical removal; fence repairs; and continuation of the photographic monitoring program.
- **\$6,000** was invested at the White Lake Basin Biodiversity Ranch. Primary tasks included site visits; invasive species management including survey and mechanical removal; fence repairs; and continuation of the photographic monitoring program

- **\$7,000** in Partnership funding (FLNR) was invested into the Dewdrop WMA for the deactivation of unauthorized trails and installation of signage. As well, funding was spent on the construction and installation of 27 pygmy nuthatch and 6 Lewis' woodpecker bird boxes.
- **\$16,145** was invested in the South Okanagan WMA properties. Fine-scale plant community mapping and assessment of ecosystem health in the WMA helped refine management strategies and restoration priorities. Additionally, the kiosk roof was replaced, the parking area was re-graded and the surrounding native plant garden was maintained.
- **\$1,808** was invested in McTaggart-Cowan WMA for new informational signage to increase public and resource users' knowledge of WMA values on this property.
- **\$11,798** was invested on the Antlers Saddle complex. Activities included conifer thinning and shrub coppicing to improve habitat for mule deer, and blocking illegal roads and trails to maintain balance between public/recreational use and conservation values.

Conservation Outcomes:

The 2016-2017 field season resulted in site assessments being conducted on a number conservation properties in the Thompson Okanagan Region. Each property has distinct management needs and objectives that reflect the unique landscape and ecology of the area. The assessments are multifaceted and include evaluation of conservation values and issues which assist in addressing land management concerns and updating work plans.

Land management staff continued to build upon previous years efforts to update boundary and information sign at key access and high traffic points across the entire Thompson Okanagan region. Over 40 hectares of TNTBC conservation lands was surveyed and/or mechanically treated for invasive species. All of the sites that were mechanically treated were also seeded with an approved grass seed mix. Approximately 20 km of boundary and range fence was surveyed and maintained. Ongoing communication with conservation partners, utility right of way holders, and neighbouring property owners contributed to a successful field season.

Maintenance of fences, blocking of illegal roads and installation of informational signage in several conservation lands helped decrease impacts to grassland and other sensitive habitat from recreational use. Signage also helped increase public awareness of the presence and function of conservation lands in the Thompson Okanagan region. Conifer thinning and other habitat treatments increased the quality of habitat for mule deer and other ungulates. Nesting for pygmy nuthatches and Lewis' woodpeckers was enhanced in the Dewdrop WMA and management objectives and restoration priorities for the South Okanagan WMA were refined through research and inventory.

Photographs

Vaseux Lake-Brock Thomas- Mowing of fallow field



Invasive Plant control



Kilpoola Lake-- Property Assessment and rubbish removal.



Vaseux Lake East, West, North-- Invasive plant survey.



Gate/access and signage installation.



Vaseux Lake- Schneider -- Site Visit with RDOS contractor assessing potential monitoring well locations.



Okanagan Falls Biodiversity Ranch -- Photographic monitoring.



White Lake Basin Biodiversity Ranch-- Property assessment and invasive plant surveys.



Dewdrop-Rosseau Creek WMA—Lewis's woodpecker nest box.



South Okanagan WMA—Kiosk getting a new roof.



Antlers Saddle—Conifer thinning.



THE KOOTENAYS

Ecological Significance

The Kootenay region is world renowned for its scenic beauty and biological diversity. Forest, shrub, grassland and wetland ecosystems provide habitat for a wide variety of plant and animal species including over 215 species at risk.

From the heights of the Rocky Mountain Range there are vantage points where you can overlook the entire expanse of the East Kootenay region of south-eastern British Columbia. The western horizon, viewed from these vantage points, is profiled by the Purcell Mountain range which is separated from the Rocky Mountains by an enormous valley known as the Rocky Mountain Trench. Two great rivers begin here; the Kootenay flowing south through dry grasslands, with signs of historic wildfires, and the Columbia flowing north through a series of long valley-bottom lakes and lush wetlands. This great river eventually swings south at Boat Encampment and continues south between the Monashee and Selkirk Mountain ranges in the West Kootenay and into the state of Washington at Waneta. Another important river, the Elk, begins its journey in the eastern Rocky Mountains and winds its way along towering cottonwoods to join the Kootenay immediately south of the small community of Baynes Lake.



The geographic diversity of the Kootenay landscape along with wide variations in climate has created conditions and habitats that support rare plant life, productive aquatic systems, and abundant populations of elk, deer, Rocky Mountain bighorn sheep, mountain goat and moose. Such abundant animal life naturally attracts predators and consequently wide-ranging carnivores are still common in the Kootenays. Additionally, over 270 species of birds make use of the region. With such a variety and abundance of wildlife species and natural habitat values it is no wonder the Kootenay region is considered an area of regional, national and global wildlife significance.

Key Property Complexes

Bull River	RCMP Flats
Bummers Flats	Redfish Creek
Columbia Lake East	Sheep Mountain
Columbia Lake West	Slocan Lake
Gold Creek Game Reserve	Waldie Island
Grave Prairie	Walter Clough
Hoodoo/Hofert	Wasa Slough
Lardeau-Duncan	Wigwam Flats
Marsden Face	

From a rare species perspective, the grasslands, dry forests, montane forests, scattered wetlands, and cottonwood habitats in the Kootenay region provide unique habitats that support some of the region's rarest species such as the badger, Swainson's hawk, Leopard frog, long-billed curlew, Lewis' woodpecker and Wild licorice.

However, there is concern that as the low elevation valleys in the Kootenays, which provide some of the most important habitat for a wide spectrum of wildlife, continue to be developed and attract increased levels of human settlement, the list of plants and animals at risk is growing as is the list of species at risk that are no longer found here. To address this issue, The Nature Trust of BC and its partners have worked to conserve ecologically significant habitats. Currently, 37 conservation properties have been secured in the Kootenay region. These properties, when combined with those secured by partnering land trust organizations and agencies, have resulted in a significant area of the Kootenay landscape being preserved in perpetuity.

2016-2017 Summary Report:

To provide regional staff and conservation partners with the financial resources required to achieve operational and maintenance land management objectives, \$113,064.00 was allocated to 17 conservation properties in the Kootenay region

Project Highlights:

- **\$3,547.13** was invested into the Big Ranch conservation land complex which is comprised of The Nature Trust of B.C.'s Pigat, Musil and Rankin properties. With the goal of enhancing biodiversity, capital investment was directed towards the planting of 107 coniferous and deciduous plant species around the three wetlands constructed in 2015.
- **\$6,600.00** was invested into the Columbia Lake West, Columbia Lake East, Cherry Creek Big Ranch, Armstrong and Neilson conservation properties to inventory invasive plant species and deployment and hand pull where required (Neilson and Cherry Creek).
- **\$4,596.41** was invested into the installation of kiosks and signage on the Columbia Lake East WMA. This was a cooperative initiative involving input from First Nations, a local Rod and Gun Club, TNTBC, NCC and FLNRO.
- **\$4,518.48** was invested into the Grand Forks conservation property complex to restore habitat damaged through unauthorized ORV use.
- **\$2,000.00** was invested into the repair of perimeter fences.
- **\$7,323.65** (other funds provided through TNTBC sources) was invested into the installation of 2,666 meters of new fence on the western boundary of the Sheep Mountain conservation property. This was a necessary action as the old fences were not constructed on the legal boundary of the property and, when the AUM's on the adjacent Crown range are reallocated, the problem of domestic livestock trespass will be avoided.
- **\$17,434.85** was invested in the Newgate conservation property to develop baseline survey and determine management priorities and install control structure required to protect property values.
- **\$10,000** was invested into the Creston Wildlife Management Area for the installation of signage, water level monitoring, and maintenance of wetland compartments.

Conservation Outcomes:

Nesting habitat for painted turtles at Elizabeth Lake was enhanced through the application of fine gravel material and the perimeter fence around the nesting habitat was repaired and extended to ensure turtles did not migrate across the adjacent highway.

Seeding was conducted concurrently with invasive weed removal projects or mechanically disturbed sites in an effort to prevent the establishment of weed species and to re-establish native species and return the affected sites to a more functional and suitable condition.

Information kiosks and associated signage was installed on the Sheep Mountain and Columbia Lake East properties and WMA. Signage is an important element of the land management program as it not only establishes a footprint but provides a venue to provide information relative to the ecological

values and characteristics of the properties to the public, relate what recreational activities are permitted or appropriate and, through the inventory segment, establish future signage requirements.

The installation of new fencing on the Sheep Mountain conservation property ensured that domestic livestock on the adjacent Crown lands are prevented from entering the property. This action was required to reduce the probability trespass and damage to the existing water sources on the Sheep Mountain property.

Invasive weed issues are rampant on some conservation lands and consequently invasive weed removal and control is an important component of the Kootenay HCTF O&M program. Herbicide control measures were implemented on 3 properties in the Bull River complex and one on the Grand Forks conservation complex.

Infestations of burdock were removed from riparian habitats situated within a number of conservation properties which will improve the suitability of this important habitat type for a wide variety of wildlife species.

Kootenay Region - Wildlife O & M Project Photographs 2016-2017

Newgate: Goal 2/Objective 2-Tree Removal on New Fence Line



Cherry Creek: Goal 2/ Objective 2- Burdock Removal



Elizabeth Lake: Goal 1/Objective 2 - Repairing and Re-staining a Duck Blind



Elizabeth Lake: Goal 1/Objective 1 - Painted Turtle Fencing Improvement Project



Big Ranch: goal 4/Objective 4 - Protective Cage Installation Around New Riparian Plantings



Big Ranch; Goal 3/Objective 3 – GPS Invasive Plant Infestations



Sheep Mountain: Goal 1/Objective 1 - Information Kiosk Installation



Elizabeth Lake: Goal 1/Objective 1 - Painted Turtle Nesting Habitat Improvement



Columbia Lake West: Goal 1/Objective 1 – Fence Repair



Cherry Creek: Goal 1/Objective 1 – Fence Repair



Region: Cariboo**Ecological Significance of the Region:**

The Cariboo Region is a diverse landscape, ranging from coastal inlets, to the vast dry grasslands of the Chilcotin Plateau, to the interior rainforest of the Cariboo Mountains. These varied terrains and conditions result in an equally varied diversity of fish and wildlife.

The Cariboo Region contains 6 Conservation Land complexes, administered regionally, including a number of properties owned by The Nature Trust of British Columbia.

Summary Statement of Regional Investment:

In 2016-17 \$32,630.00 was allocated to the 6 properties in the Cariboo, to assist regional staff and partners in achieving management objectives. See outcomes report for additional money secured.

Project Highlights:

\$8,617 was invested in the Chilanko Marsh conservation area for fence construction and property inspections for safety and ecological concerns. A 150m log fence was constructed and 4 cattleguards installed, to complete the fencing project initiated in 2015-16. The fencing project was necessary to protect habitat values from livestock access. Additional funds were invested in this project from the National Wetland Conservation Fund.

\$20,504 was invested in the Chilcotin Lake & Marshes conservation area for fence construction, property inspections for safety and ecological concerns, and maintenance of property information signage. A 4.8km log fence was constructed on the perimeter of the marsh portion of the conservation area, to protect habitat values from livestock access. Two aluminum 4x8ft signs were purchased and ready for content to be added this new fiscal. Additional funds were invested in this project from Wildlife Habitat Canada and the National Wetland Conservation Fund.

\$500.00 invested in the Dale Lake conservation area for property inspections for safety and ecological concerns, and maintenance of property information signage.

\$500.00 invested in the Tautri Creek conservation area for property inspections for safety and ecological concerns, and maintenance of property information signage.

\$638 was invested in the Knife Creek Creek conservation area for a contractor to conduct routine fence maintenance on the perimeter fence. Where required, trees were bucked off the fenceline, top rails replaced, and wire strands repaired.

Conservation Outcomes:

The 2016-17 field season resulted in important land management activities on a number of Conservation Lands within the Cariboo Region. Fence construction and maintenance serves to protect sensitive habitat areas from inappropriate use. Assessments of the ecological attributes and issues specific to each property form the basis for activity planning for the following field seasons.

Informational signage, indicating property ownership and management partners, with contact information was posted on properties where appropriate. This serves to demarcate boundaries and to provide the public with the means to contact a land manager to discuss management concerns and issues.

Region: Cariboo**Photographs:**

1. **Chilanko Marsh** – property assessed for habitat values and management needs. 150 m of fencing, and 4 cattle guards and gates were installed to prevent livestock access into wetlands.



2. **Chilcotin Lake & Marshes** – property assessed for habitat values and management needs. 4.8 km of fencing constructed to prevent livestock trespass into wetlands.



3. **Dale Lake** – property assessed for management needs and safety issues; boundary signage installed.



4. **Tautri Creek** – property assessed for management needs and safety issues; boundary signage installed.

Region: Skeena**Ecological Significance of the Region:**

The Skeena Region covers approximately one third of the province of British Columbia. It is a highly varied landscape, characterised by mountainous terrain, interspersed with large plateaus, a multitude of lakes and several of the province's largest rivers including the Skeena, the Nass and the Stikine.

The Skeena Region includes BC's North Coast from the Coast Mountains to the Pacific Ocean. This area is rich in biological diversity and noted for the Pacific Flyway, an important migration corridor for birds. Large rivers, such as the Nass and the Skeena, flow into the Pacific Ocean, providing critical estuarine habitats. The Skeena Region's extensive wilderness areas provide habitat for a wide variety of wildlife. Both Black and Grizzly Bears occur here, and salmon are abundant in the major rivers and tributaries.

The Skeena Region contains 8 Conservation Land complexes, administered regionally, including a number of properties owned by The Nature Trust of British Columbia, a Wildlife Management Area, and a Wildlife Habitat Management Area.

Summary Statement of Regional Investment:

In 2016-17 \$29,204.00 was allocated to 7 properties in the Skeena, to assist regional staff and partners in achieving management objectives.

Project Highlights:

\$4,553.44 invested in the Alice Arm conservation area for property inspection and invasive plant mapping and treatment.

\$1,600.00 invested in the Kitsumkalum Lake – Nelson River conservation area for property inspection, survey of invasive plants, access and safety evaluation, and maintenance of property information signage.

\$1,600.00 invested in The Lakelse Lake – Mullers Bay conservation area for property inspection, review of industrial referrals, boundary sign maintenance, and rubbish removal.

\$2,097.00 invested in The Lakelse River conservation area for property inspection, trail maintenance, engagement with local stewardship club, and boundary sign maintenance.

\$2,907.00 invested in the Nadina River Valley – Owen Lake conservation area for property inspection, maintenance of signage, invasive plant surveys, and treatment of invasive sow thistle.

\$7,970.86 invested in the Hubert Hill conservation area for fence repair, invasive plant removal, habitat restoration, and info kiosk construction.

\$8,475.70 invested in Todagin WMA for camp garbage removal with helicopter support, and access trail assessment (minor am't of \$).

Conservation Outcomes:

The 2016-17 field season resulted in the assessment of a number of Conservation Lands within the Skeena Region, each with tremendous, unique habitat values. These assessments, including evaluation of the ecological attributes and issues specific to each property, guide activity planning for ongoing land management.

Informational signage, indicating property ownership and management partners, with contact information was posted and maintained on properties where appropriate. This serves to demarcate boundaries to protect habitat values from inappropriate public usage, and to provide the public with the means to contact a land manager to discuss management concerns and issues.

Work commenced on Todagin WMA, the largest WMA in the province of British Columbia with respect to site assessments and a focus on old camp garbage removal. This work will continue into future years.

Site restoration of Hubert Hill, near Telkwa, is ongoing. Success is being achieved with re-introduction of native species, preventing further site damage, and educational outreach via an information kiosk on site. Restoration activities have been subject to a learning curve given the nature of juniper and wild cherries, as well as an increase in snowshoe hare browsing this past winter.

Region: Skeena**Photographs:**

1. **Alice Arm** – Highly productive estuary and grizzly bear habitat assessed for conservation concerns. Invasive plants mapped. Invasive burdock plants removed.



2. **Kitsumkalum Lake – Nelson River** – property assessed for habitat values, public usage, and management needs. Signs maintained. Degraded bracken fern community continues to improve.



3. **Lakelse Lake – Mullers Bay** – property assessed for management needs; signage maintained; rubbish removed.



4. **Nadina River Valley – Owen Lake** – property assessed for safety and conservation issues; signage maintained as needed; invasive plants assessed; sow thistle treated.

Region: Omineca**Ecological Significance of the Region:**

The Omineca Region encompasses a large portion of northern British Columbia, with a diversity of landscapes ranging from the broad flat pine forests of the Central Plateau to the rugged peaks of the central Rocky Mountains. This Region includes the highest mountain in the Canadian Rockies, Mount Robson (3954 m).

The Omineca Region encompasses the headwaters, or portions of the headwaters, of several provincially important rivers, including the: Fraser, Nechako, Pine, Findley, Parsnip and Stuart. Within the drainages of these rivers lie several regionally important lakes and the Province's largest reservoir, Williston Lake which lies behind the W.A.C. Bennett Dam. The rivers and their tributaries provide spawning grounds for Chinook, Coho, and Sockeye Salmon. Arctic Grayling, White Sturgeon, Rainbow, Bull and Lake Trout, as well as several species of whitefish, suckers, minnows and Burbot, all live within the Omineca Regions lakes and streams. One of the highest valued recreational rainbow trout fisheries is in the Stellako River, which in 2013 became the Omineca Regions first Wildlife Management Area. Clear, cold mountain streams provide necessary habitat for Blue Listed Bull trout in the Omineca and the large meandering Nechako and Fraser Rivers are home to Red Listed White Sturgeon.

Regionally important wetlands, such as those on the Hominka and in the Cranberry Marsh / Starratt WMA, provide much needed rest and refueling stops for a number of migratory birds. Populations of American White Pelicans nest on some of the regions lakes and White Swans winter on several rivers. The northern extent of Sharptailed Grouse range occurs on southwest facing meadows in the southern portion of the region and in the agricultural lands local breeding groups of Long-billed Curlews and Sandhill cranes can be found in the spring.

The largest herds of Mountain Caribou left in the Province reside in the mountains on the eastern side of the region, and in the north populations of Northern Caribou still roam. Throughout the Omineca region there are Moose, Grizzly bear, Black Bear, Fisher, Marten, Lynx, Wolf, Mountain Goat, and Mule Deer, with local populations of Stone Sheep, Elk and White Tail Deer and Cougar where snow packs are thinner. Rare plant associations, ecosystems and habitats are scattered across the Omineca bolstering regional biological diversity, including the northern extent of Whitebark pine and Douglas fir, and the largest population of Haller's Apple moss in the world as well as the only known locations of Crumpled Tar Paper Lichen.

Given the highly diverse and geographically large area that the Omineca region covers it contains relatively few Conservation Lands. Only 5 such areas are administered regionally and they cover a small selection of the habitats that can be found regionally.

Summary Statement of Regional Investment:

In 2016-17 \$36,964.00 was allocated to 6 conservation properties in the Omineca, to assist regional staff and partners in achieving management objectives.

Project Highlights:

\$17,855.04 invested in the Cranberry Marsh / Starratt WMA. Ongoing activities include Boundary identification, update of interpretive signs to reflect current land designation and replace signs that are in disrepair, community engagement, management planning, trail assessment, minor repair of trail infrastructure, invasive plant signage, implementation of invasive plant management plans, and seasonal inspections. Additionally, a reduced mobility trail project has been initiated, and a purchase of geotechnical material for trail resurfacing occurred. The project is to be completed in late summer 2017

\$3893.58 invested in The Stellako River WMA for invasive species removal, invasive plant signage, management planning, updated signage and seasonal inspections that identified trail issues and monitored invasive species. Boundary signage was installed and habitat values assessed for potential impacts from adjacent land use. Additional boundary signage needs were identified for 2017-18.

\$1201.20 invested in the Joanne Lloyd property for invasive species control and removal, infrastructure maintenance and seasonal inspection

\$1450.04 invested in the Nechako River conservation property to assess property condition, needs, and public usage. Perimeter signage was installed and maintained as needed.

\$2,800.00 invested in the Mount Robson Ranch property to assess property condition, needs, and public usage. Perimeter signage was installed at access points and maintained as required.

\$0.00 invested in the Natasha Boyd property as Government staff time was all that was required for property assessments and signage.

Conservation Outcomes:

Invasive plant management continues to be a focus on priority areas of concern. Implementing invasive plant management plans is ongoing, in conjunction with the Northwest Invasive Plant Council. In partnership with community groups and the Village of Valemound funding for resurfacing 2km of trail in the Cranberry Marsh in the Summer of 2017 has been received. Maintenance of infrastructure, installation of signage, site visits and trail maintenance were undertaken by The Nature Trust of British Columbia and FLNRO staff.

Region: Omineca

Photographs:



1. **Stellako River WMA** – property assessed for safety and needs; rubbish removed from public access area, signage installed at access points and maintained, fish habitat assessment.



2. **Nechako River Property** – property assessed for public usage and management needs; signage maintained.

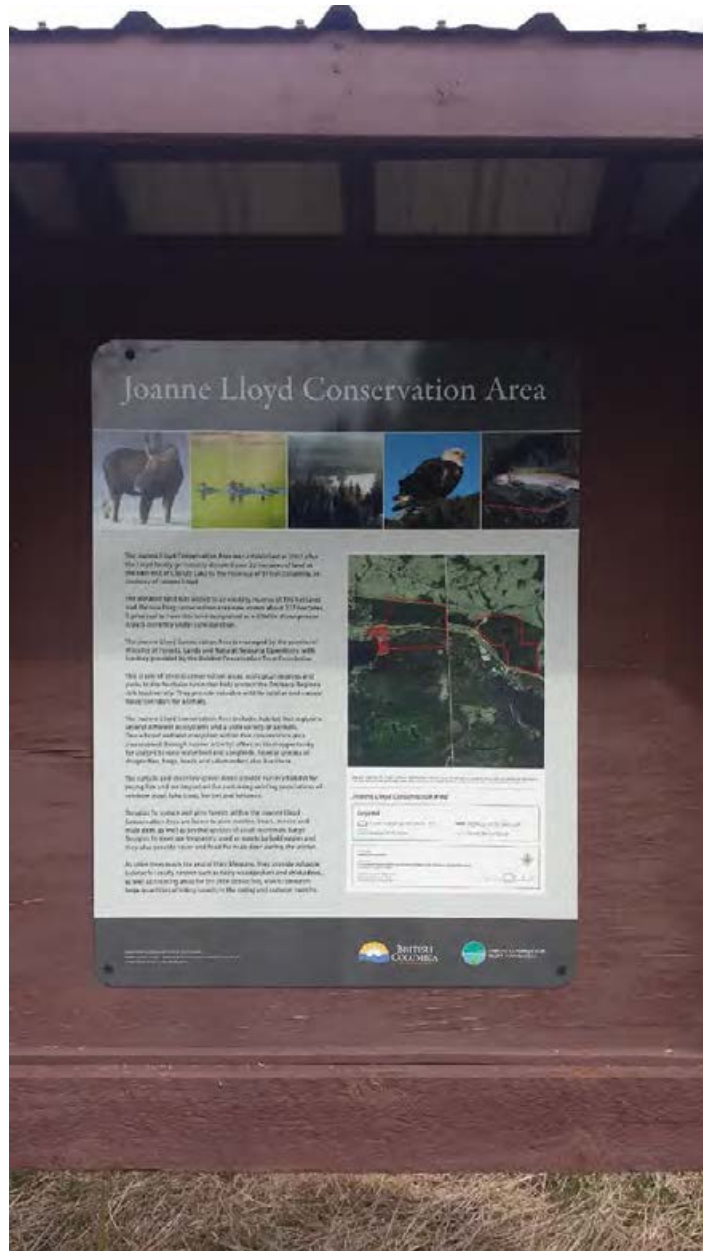




3. **Cranberry Marsh WMA** – property assessed for public usage; management needs; signage maintained. Invasive plants inventoried and treated.



4. **Mount Robson Ranch Property** – property assessed for safety, conservation concerns, and management needs; signage installed and maintained.



5. Joanne Lloyd – Signage maintained, invasive plants treated, property assessed.

Region: Northeast

Ecological Significance of the Region:

The Northeast Region of British Columbia is located between the Rocky Mountain foothills and the Alberta Plains.

This region consists of the Peace River and Liard River drainages of the Arctic watershed, featuring plateaus, plains, prairies, and lowlands lying east of the Rocky Mountains. Areas at higher altitudes are poorly drained, resulting in extensive muskeg areas. The region is characterised by boreal forest with critical wetlands and lakes interspersed throughout.

Since the 1950's, the Northern Region has experienced rapid development of oil and natural gas resources, resulting in increased fragmentation of this landscape. A number of Class 1 wetlands provide critical habitat for numerous waterfowl.

The Northeast Region contains 6 Conservation Land complexes owned by The Nature Trust of British Columbia.

Summary Statement of Regional Investment:

In 2016-17 \$32,154.00 was allocated to 6 project areas in the Northeast, to assist regional staff and partners in achieving management objectives.

Project Highlights:

\$6,829.00 invested in the Boundary Lake conservation area for property inspection, management of invasive plants, maintenance of water control structures, and maintenance of property signage.

\$5,310.00 invested in the Comstock Marsh conservation area for property inspection, management of invasive plants, and maintenance of water control structures. Boundary signage was installed and public access areas maintained for safety.

\$3,150.00 invested in the Dunlevy Creek conservation area for property inspection, property information sign installation and maintenance, and assessment of forest ingrowth in grassland areas to maintain elk foraging habitat.

\$2,916.00 invested in the Fort St. John Potholes conservation area for property inspection, maintenance of water control structures, and property boundary signage.

\$7,759.00 invested in the McQueen Slough conservation area for property inspections, management of invasive plants, and maintenance of water control structures. This conservation area regularly hosts elementary school children for an outdoor learning area.

\$6,190.00 invested in the Worth Marsh conservation area for property inspections, assessment of invasive plants, maintenance of property boundary signage, and review of oil and gas industry activities adjacent to the conservation area.

Conservation Outcomes:

The 2016-17 field season resulted in a wide range of critical land management needs being addressed on conservation lands in the Northeast Region. These activities, including habitat restoration and maintenance of public facilities and structures, ensure that habitat values are maintained or enhanced, and that public access to these conservation lands is safe and appropriate.

Informational signage, indicating property ownership and management partners, with contact information, was posted and maintained where appropriate and required. This serves to demarcate boundaries to protect habitat values from inappropriate usage, and to provide the public with the means to contact a land manager to discuss management concerns and issues.

Property assessments, including evaluation of the ecological attributes and issues specific to each property, form the basis for activity planning for the following field seasons.

Region: Northeast

Photographs:



1. **Dunlevy Creek** –Elk foraging habitat assessed for maintenance needs. Signage installed.



2. **Fort St. John Potholes** – Property assessed for habitat values and management needs. Water control structure maintained to sustain optimal water levels in this important wetland complex. Invasive plants (Canada thistle and sow thistle) treated.



3. **McQueen Slough** – property assessed for management needs; boardwalk and public facilities maintained. Boundary signage and water control structure maintained. Invasive plants (Canada thistle and sow thistle) treated.



4. **Boundary Lake** – property assessed for management needs, informational signage maintained; invasive plants (Canada thistle) treated, access points and water control structure maintained.