The Nature Trust
of British Columbia

HABITAT
CONSERVATION TRUST
FOUNDATION

Wildlife O&M Program

Regional Summary Reports

Introduction

The Habitat Conservation Trust Foundation (HCTF)'s Wildlife O&M program provides funding for wildlife operations and maintenance activities taking place on conservations lands. Every three years, the Ministry of Forests, Lands and Natural Resource Operations works together with The Nature Trust of BC to submit a plan to HCTF outlining the land management activities they will complete over the next funding cycle. The money HCTF grants for these activities comes from a number of sources, including annual land management revenue and interest on endowment funds provided by the Province of BC. In 2013-14, HCTF granted over half a million dollars for land management activities on 96 conservation properties under this program. The following regional summary reports (submitted to HCTF by the grant recipients) provide an overview of what was accomplished in 2013-14.

Ministry of Forests, Lands and Natural Resource Operations

The Nature Trust of British Columbia

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.

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	Simpson Farm
Somenos Marsh	Thetis Island
Willow Creek	

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.

Ministry of Forests, Lands and Natural Resource Operations

The Nature Trust of British Columbia

West Coast Region Program Summary 2013-2014

HCTF O&M Funding allocated $132,000 to the West Coast Region in 2013-14 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 $160,000 to support this work.

Over $130,000 was invested in the West Coast Region for the 2013/14 fiscal year that greatly assisted the conservation partners in achieving several key land management objectives. Of this funding:

- **$15,600** was invested in projects focusing on the critical habitat areas of Baynes Sound. Projects included on-going invasive vegetation work with a focus on the invasive cord grass *Spartina;* completion of baseline ecological inventory reports; creation of strategic partnerships with Vancouver Island University; maintenance of facilities including viewing platforms, trails, interpretive and boundary signs.
- **$9,700** was invested at Buttertubs Marsh Conservation Area in Nanaimo. Projects included maintaining trails and infrastructure; inventory for rare and endangered species; the construction of Western Painted Turtle nesting beaches as well as the installation of basking logs; coordination of the review of a management agreement with the City of Nanaimo to assist with trail and infrastructure management.
- **$13,650** was invested at Cowichan Estuary Conservation Area. Projects included: completion of a baseline ecological monitoring report; updated interpretive sign; annual farm management planning; hedgerow planting and invasive weed removals; waterfowl inventory work; annual maintenance per the Dike Maintenance Act.
- **$20,950** was invested at Lazo Marsh NE Comox Wildlife Management Area to support the implementation of a trail remediation/restoration plan; the development of interpretive and boundary signage; inventory for rare and endangered species; invasive weed control; management plan review and advisory committee work; development of wetland enhancement project with Ducks Unlimited Canada; coordination of work regarding amphibian mortality at Lazo Road with the Ministry of Transportation.
- **$4,000** was invested at the Green Mountain Wildlife Management Area to support the implementation of the "South Scree Slope Habitat Restoration Project" with the Marmot Recovery Foundation; to develop new interpretive signage; and, support the expansion of the Wildlife Management Area boundaries to include further critical habitat.
- **$6,600** was invested at the Tofino Mudflats Wildlife Management Area to update boundary signage; investigate/resolve on-going trespass issues; and, to coordinate on-going eelgrass inventory/mapping with the Raincoast Education Society.
- **$10,425** was invested at the Nanaimo River Estuary Conservation. Projects included: on-going implementation of the Coastal Vesper Sparrow habitat restoration project; the removal of invasive weeds; eel grass mapping; completion of a baseline ecological monitoring report; construction of a new interpretive kiosk and signage; upgrade to

interpretive platform; and, on-going involvement in the Nanaimo Estuary Management Committee.

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)
Baynes Sound		
Goal # 1 Objective 1	1.1 Invasive species removal - targeted species include Japanese Knotweed, Spartina, Gorse, Knapweed. *Spartina densiflora removal work in cooperation with CISC at Ship's Point, adjacent to Fanny Bay Conservation Area.*	

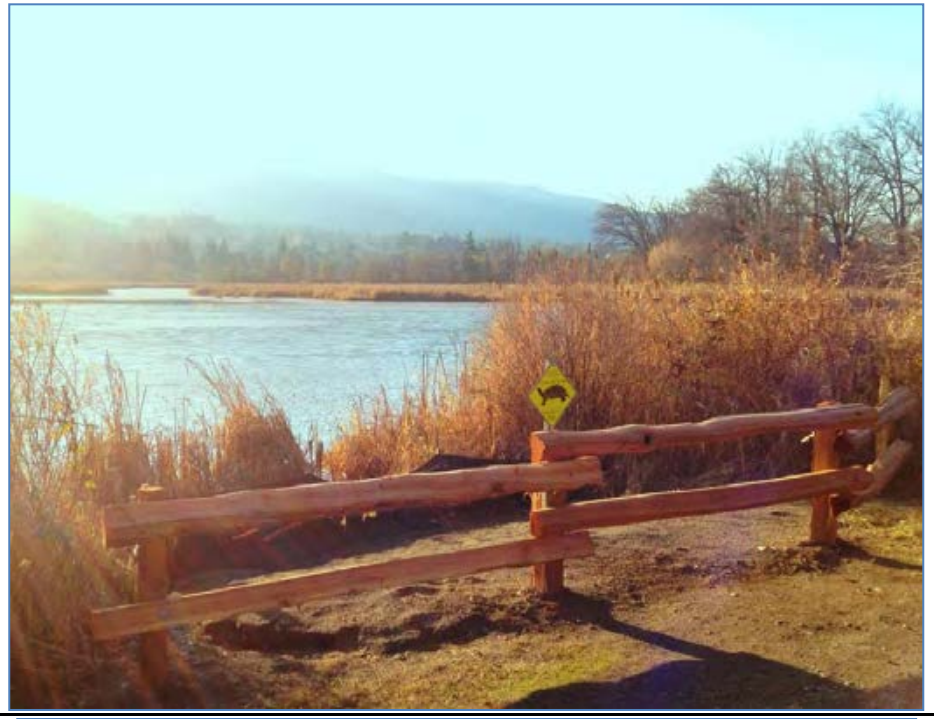
1.1 Invasive species removal - targeted species include Japanese Knotweed, Spartina, Gorse, Knapweed. *Spartina densiflora removal work in Baynes Sound in cooperation with CISC.*	

1.1 Invasive species removal - targeted species include Japanese Knotweed, Spartina, Gorse, Knapweed. *Spartina patens shade trial test plot in cooperation with CISC in Comox Estuary and on Sandy Island (pictured).*	

	1.1 Invasive species removal - targeted species include Japanese Knotweed, Spartina, Gorse, Knapweed. *Ivy removals in Coal Creek Conservation Area – Before (left) and After (right).*	 
Goal # 2 Objective 1:	2.1 Trail maintenance and resurfacing; development and installation of boundary and regulatory signage. *New boundary sign at Fanny Bay Conservation Area*	

Goal # 1 Objective 1	1.4 Develop and implement plan to address trespass issues identified under activity 1.3. *No motorized vehicles signs installed at Coal Creek to address unauthorized ATV access.*	
Buttertubs Marsh		
Goal #4 Objective 1	4.1 Annual inspection and reporting completed of viewing platforms, trails, gates and water control structure. *Looking out towards the marsh from a viewing platform on the east side of the marsh.*	

Goal #1 Objective 1	1.2 Continue implementation of Western Painted Turtle habitat recovery plan (basking log installation; construction of nesting platforms; fencing; signage). *Clearing the site for construction of two WPT nest beaches in cooperation with City of Nanaimo.*	
	1.2 Continue implementation of Western Painted Turtle habitat recovery plan (basking log installation; construction of nesting platforms; fencing; signage). *Backfilling sediment for the Construction of two WPT nest beaches in cooperation with the City of Nanaimo.*	

	1.2 Continue implementation of Western Painted Turtle habitat recovery plan (basking log installation; construction of nesting platforms; fencing; signage). *Completed Nest Beach Site #1*	
	1.2 Continue implementation of Western Painted Turtle habitat recovery plan (basking log installation; construction of nesting platforms; fencing; signage). *Completed Nest Beach Site #2*	

	1.2 Continue implementation of Western Painted Turtle habitat recovery plan (basking log installation; construction of nesting platforms; fencing; signage). *Basking log installation in the West Marsh*	
Goal #3 Objective 1	3.1 Painted turtle inventory. *A Western Painted Turtle surfacing onto one of the newly installed basking logs in the West Marsh.*	

Goal # 1 Objective 1	1.2 Continue implementation of Western Painted Turtle habitat recovery plan (basking log installation; construction of nesting platforms; fencing; signage). *New Western Painted Turtle interpretive signs.*	
Goal # 1 Objective 1	1.1 Maintain water control structure to ensure operational function and optimal water levels (including control clean up of beaver debris). *Regular cleanup of accumulated beaver debris.*	 

Goal #1 Objective 2	1.4 Invasive vegetation control. *Spurge-laurel (Daphne laureola) GIS inventory data collected -* *Key:* *A = <1m²* *B = 1 to 5m²* *C = >5m²*	

Goal #1 Objective 2	1.4 Invasive vegetation control. *English holly (Ilex aquifolium) GIS inventory data collected -* *Key:* *A = <1m²* *B = 1 to 5m²* *C = >5m²*	

Cluxewe WMA		
Goal # 3 Objective 1	3.1 Property inspections. *Air photo taken during North Island helicopter trip.*	

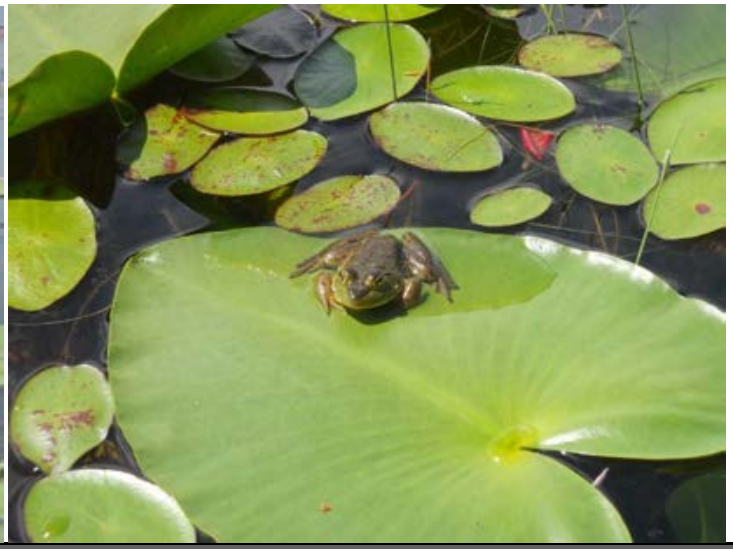
Cowichan Estuary		
Goal # 2 Objective 1	2.1 Maintain dike trails, viewing platforms, signs and gates. *Updated interpretive signage on three kiosks.*	
Goal #3 Objective 1	3.1 Complete report on baseline vegetation data and continue to collect migratory waterfowl information. *American Wigeon amd Green-winged Teal - Waterfowl counts in cooperation with MFLNRO staff (photos by Jenna Cragg)*	

	3.1 Complete report on baseline vegetation data and continue to collect migratory waterfowl information. *Trumpeter swans on Dinsdale farm field*	
	3.1 Complete report on baseline vegetation data and continue to collect migratory waterfowl information. - *Waterfowl counts in cooperation with MFLNRO staff (photos by Jenna Cragg)*	

Goal #4 Objective 1	4.1 Conduct annual dike and water control structure inspection and complete Dike Maintenance Act reporting requirements. *Dinsdale Dike safety field inspection*	
Goal #4 Objective 1	4.2 Vegetation maintenance on Dinsdale Farm Dike. *Mowing work under contract to Midnight Oil Ag Services.*	

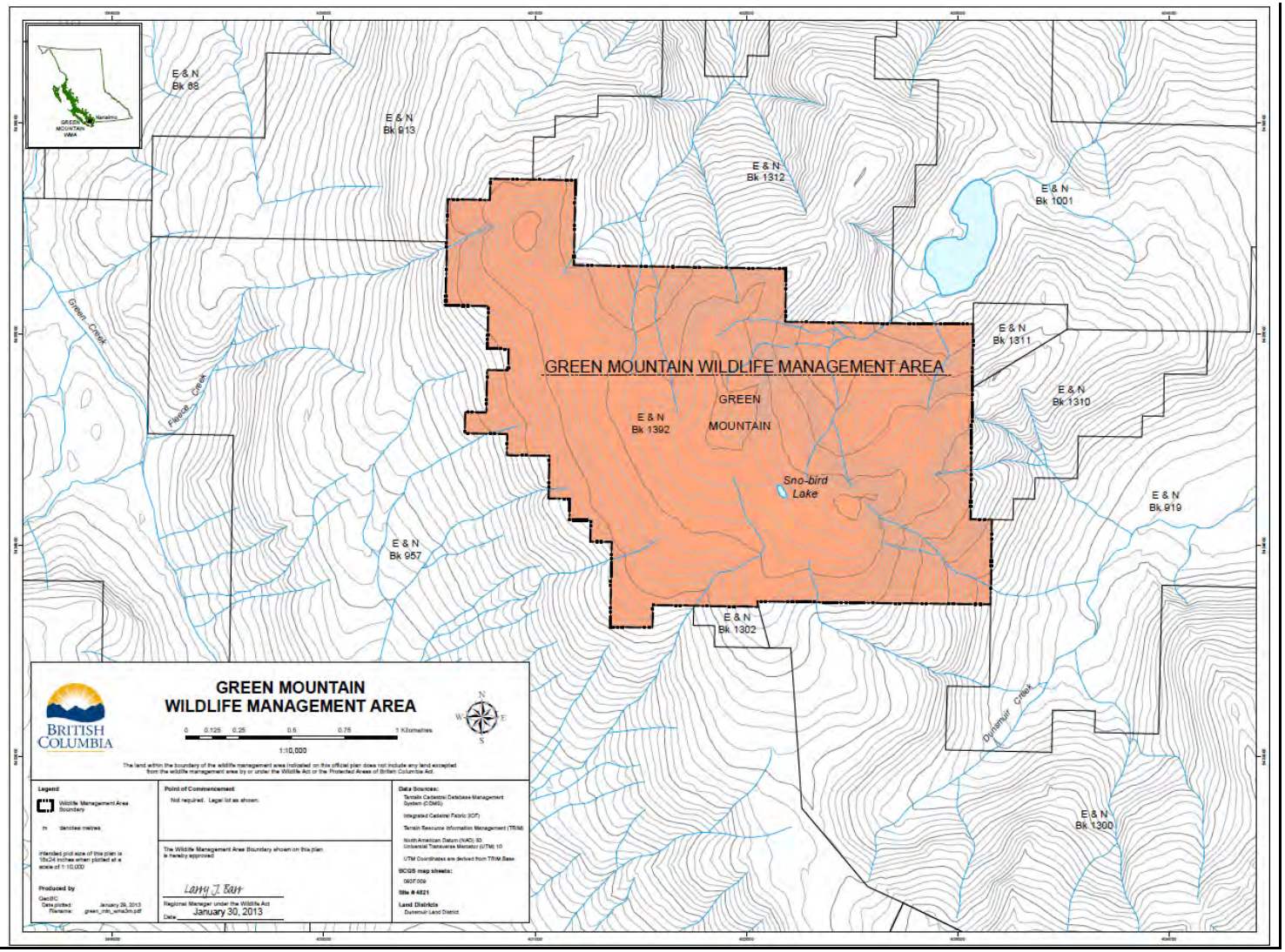
Dudley Marsh		
Goal #2 Objective 1	2.1 Inventory wetland for rare and endangered species (specifically targeting painted turtle, red-legged frogs). *Amphibian egg mass inventor.*	
Goal #1 Objective 3	1.1 Operation of water control structure intake valves, spill way and low flow regulator box in accordance with mgmt regime and water license. *Maintenance of water control structure.*	

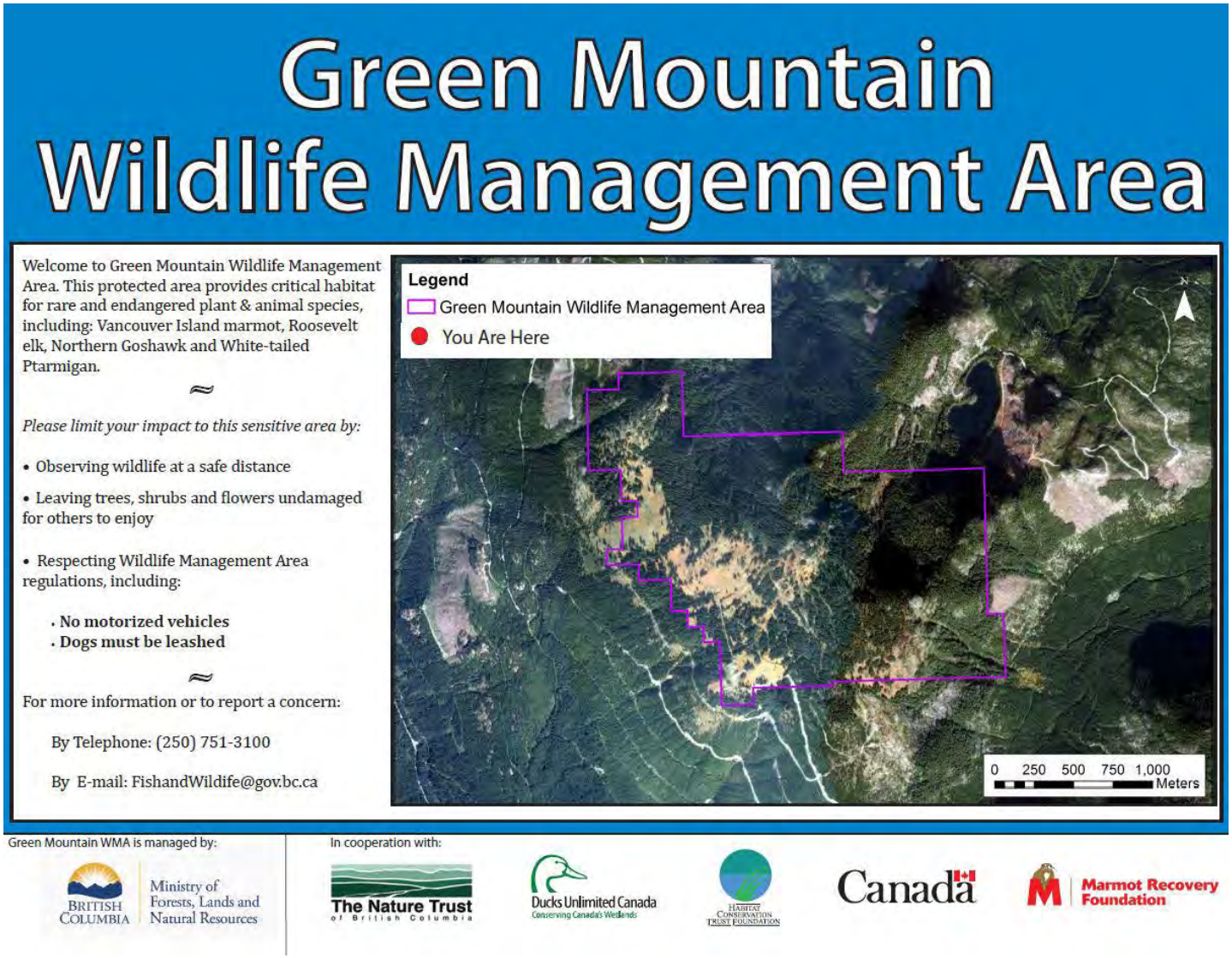
Goal #1 Objective 3	1.1 Operation of water control structure intake valves, spill way and low flow regulator box in accordance with mgmt regime and water license. *Maintenance of water control structure – clearing of beaver debris.*	 
Filberg Marsh		
Goal #1 Objective 1 & 3	1.2 Inventory for rare and endangered species (e.g painted turtle; red legged frogs) & 1.4 Boundary identification/inventory for trespass management. *Property inspections and species inventories completed by canoe and kayak (access to property by water only).*	 

Goal #1 Objective 1 & 3	1.3 Bullfrog eradication pilot project. *Assessment of American bullfrog population*	 
Green Mountain WMA		
Goal #1 Objective 1	1.2 Implementation of South scree slope habitat restoration program with Marmot Recovery Foundation and Nan F&G Club. *Members of Nanaimo Fish and game club with VICLMP summer crew, TNT staff, and MFLNRO employees.*	

Goal #1 Objective 1	1.2 Implementation of South scree slope habitat restoration program with Marmot Recovery Foundation and Nan F&G Club. *Working on the Southeast talus.*	

Goal #1 Objective 1	1.2 Implementation of South scree slope habitat restoration program with Marmot Recovery Foundation and Nan F&G Club. *South slope before (left) and after (right) Vancouver Island marmot habit enhancement work.*	 
Goal #1 Objective 1	1.2 Implementation of South scree slope habitat restoration program with Marmot Recovery Foundation and Nan F&G Club. *SE talus before (left) and after (right) Vancouver Island marmot habit enhancement work.*	 

Goal #1 Objective 3	1.3 Coordinate expansion of WMA boundaries to include old ski hill area. .	

Goal #2 Object 1 & 2	2.1 Install boundary and regulatory signs. *New interpretive/ boundary signs designed.*	

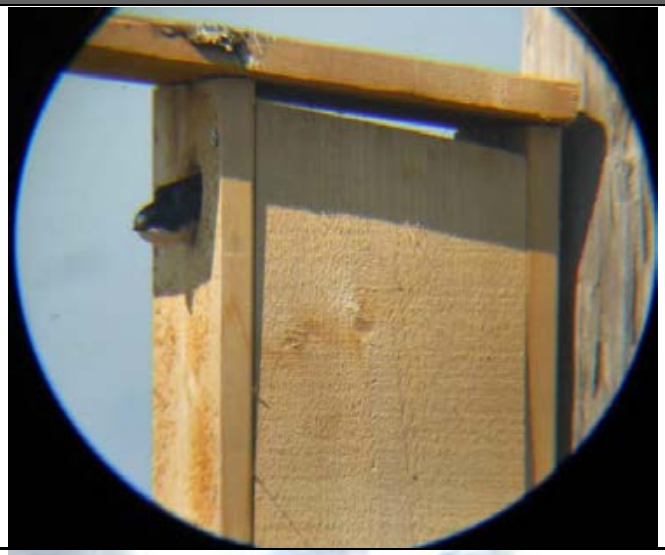
Kingcome Estuary		
Goal #1 Objective 1	1.1 Property inspection. *Assessment of built structures on property for safety and future restoration potential.*	
Goal # 1 Objective 1	1.1 Property inspection. *Aerial view of Kingcome Estuary.*	

Lazo Marsh NE Comox WMA		
Goal # 1 Objective 3	1.5 Implement phase 1 of trail management plan. *20 interpretive signs installed and 40 directional posts, marking the "Lazo Loop trail" as developed with the Lazo Co-management committee.*	
Goal # 4 Objective 1 & 2	4.1 Inspection and maintenance of viewing platform, trails, board walks, fences and gates. *Hazard tree removal work near viewing platform, completed under contract by Davey tree.*	

Goal #4 Objective 1 & 2	4.1 Inspection and maintenance of viewing platform, trails, board walks, fences and gates. *View from the viewing platform at Lazo Marsh*	
	4.1 Inspection and maintenance of viewing platform, trails, board walks, fences and gates. *Viewing platform and boardwalk inspections – minor repairs have been completed to southern viewing platform, while some footings require maintenance in the near future on large northern boardwalk/ viewing platform.*	

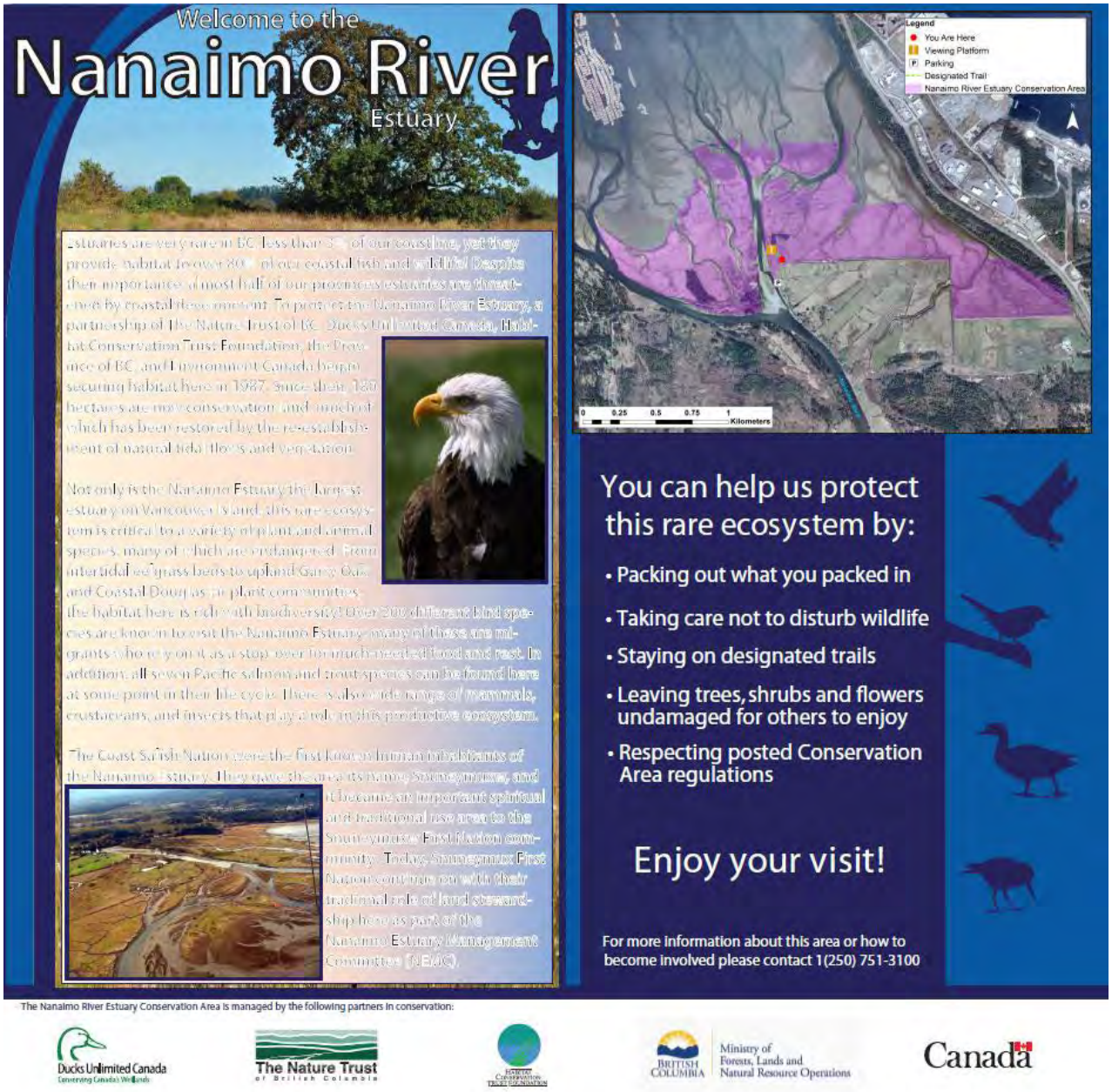
Goal #4 Objective 1 & 2	4.2 Conduct dam safety inspection and complete report for water control structure. *Dam safety inspection reports completed.*	
Goal #1 Objective 2	1.3 Priority invasive weed removal (knotweed, flag iris, scotch broom control) along with updated inventory of invasive plants throughout WMA. Yellow *Flag-iris assessment in Lazo Marsh.*	 

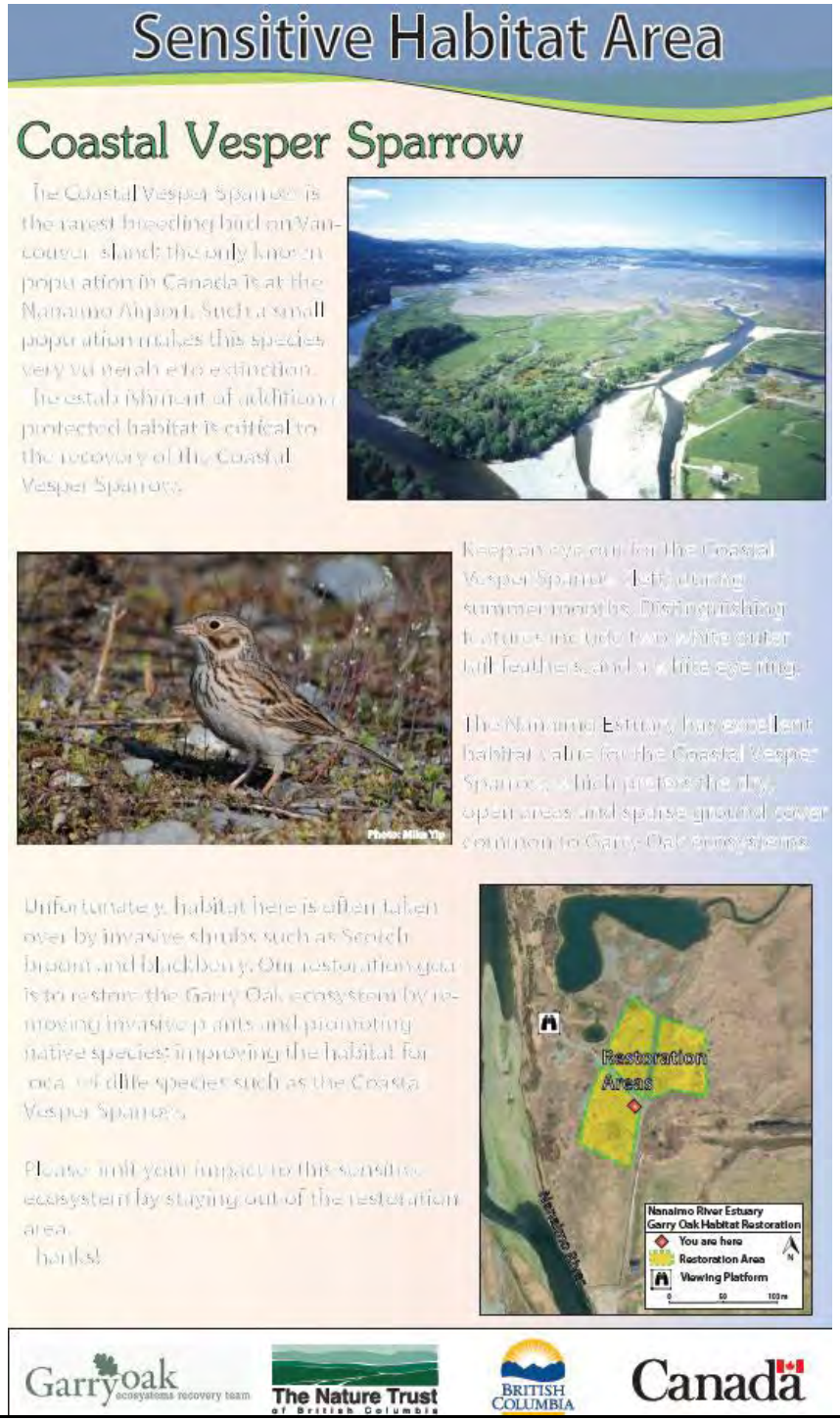
Goal #1 Objective 1	1.2 Work with MOT to address amphibian mortality at Lazo Rd; coordination of remedial works and permitting. *A red-legged frog hides amongst the debris in an old-growth forested of the Lazo WMA.*	

Nanaimo River Estuary		
Goal #1 Objective 3	1.3 On-going monitoring of restoration activities. *Monitoring of VESP habitat enhancement area and nest boxes installed for Western bluebird (pictured – one of the 5 tree swallow pairs who took up residence in the nest boxes).*	
Goal #1 Objective 3	1.3 On-going monitoring of restoration activities. *Monitoring of VESP habitat enhancement area and nest boxes installed for Western bluebird.*	

Goal # 3 Objective 1	3.3 Baseline inventory focusing on invertebrates and amphibians. *Incidental observations of small mammals.*	

Goal #3 Objective 1	3.3 Baseline inventory. *Nanaimo Estuary eelgrass GIS mapping.*	
Goal #3 Objective 1	3.3 Baseline inventory. *GIS polygons of eelgrass coverage along estuary channels.*	

Goal #2 Objective 2	2.1 Develop interpretive sign for Raines Rd access point that highlights restoration activities as well as Fish & Game opportunities. *Interpretive sign designed and printed for interpretive kiosk to be at Raines Rd. access.*	

Goal #2 Objective 2	2.1 Develop interpretive sign for Raines Rd access point that highlights restoration activities as well as Fish & Game opportunities. *Interpretive sign designed and printed for interpretive kiosk to be at Raines Rd. access highlighting VESP restoration work and ecology.*	

Goal #1 Objective 3	1.2 Invasive species management and natural vegetation restoration focused on VESP habitat restoration program. *Himalayan Blackberry removal before (above) and after (below).*	 

Goal #1 Objective 3	1.2 Invasive species management and natural vegetation restoration focused on VESP habitat restoration program. *Planting of Blue Camas bulbs and red fescue grass plugs.*	
Goal #1 Objective 3	1.2 Invasive species management and natural vegetation restoration focused on VESP habitat restoration program. *A panoramic view of the restoration area, which was previously completely dominated by Scotch broom and blackberry.*	

Goal #2 Objective 2	2.2 Maintain trails, platforms, gates. *New stairs constructed up to Raines Rd. viewing platform, Himalayan blackberry mowed around tower, entrance trail maintained and improved.*	 

Goal #1 Objective 3	1.2 Invasive species management and natural vegetation restoration focused on VESP habitat restoration program. *Himalayan Blackberry removal before (left) and after (right).*	 
Goal # 2 Objective 2	1.4 Restoration of DFO enhancement pond. *Scotch broom removed around fringes, Shore pine, Douglas fir, Red alder planted.*	

Goal # 2 Objective 2	2.2 Maintain trails, platforms, gates. *Maintenance around the Richard Davies memorial viewing area.*	

Orel Lake		
Goal #2 Objective 1	2.1 Painted turtle inventory and monitoring. *A Western painted turtle at Orel Lake.*	
Goal #1 Objective 1 & 2, 4	1.2 Invasive species managment (Yellow flag iris seed head clipping; bull frog control). *Yellow flag-iris seed-head clippings bagged and disposed of.*	

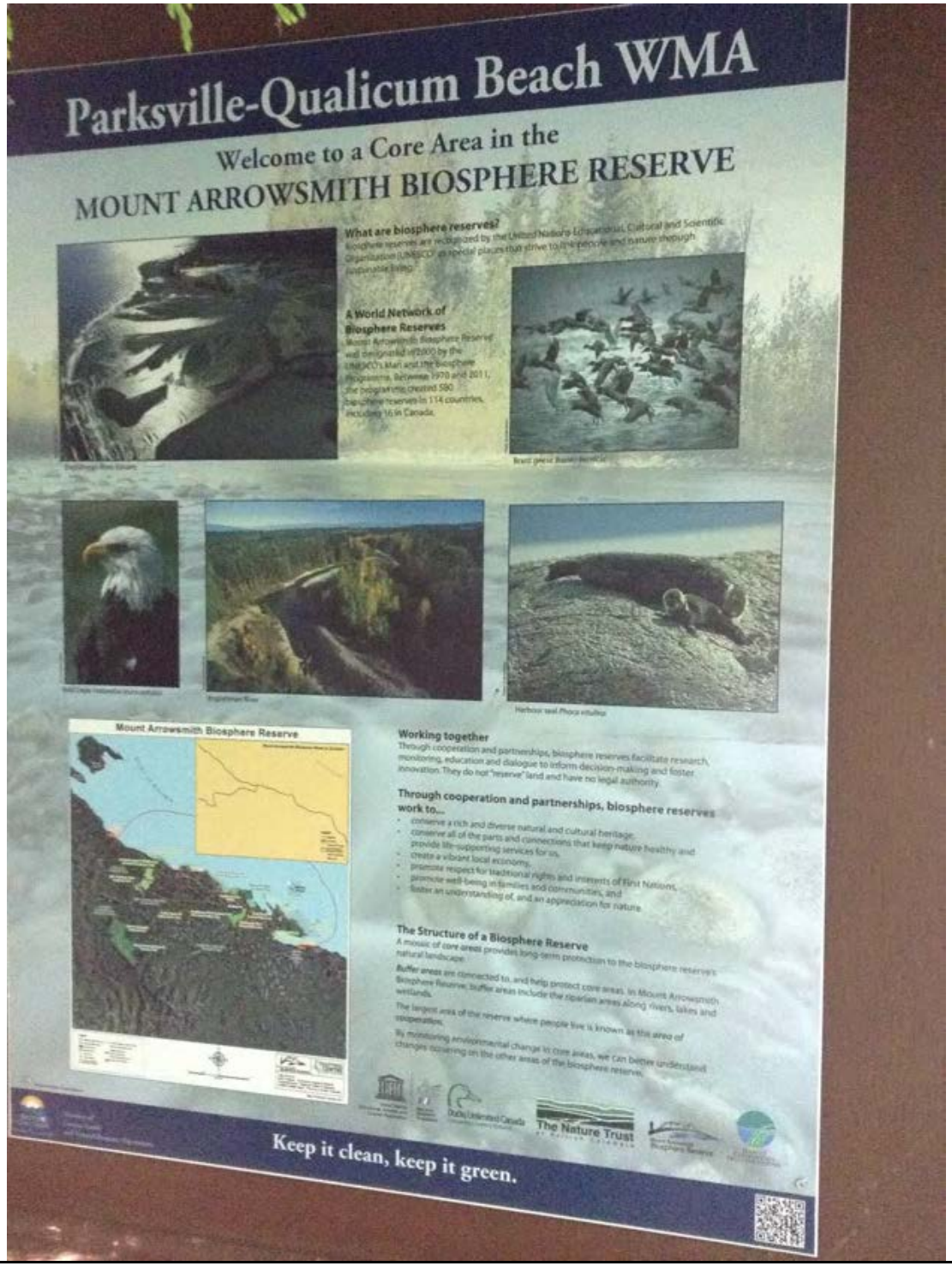
Parksville Qualicum Beach WMA		
Goal # 1 Objective 1 - 4	1.7 Invasive species management and inventory throughout WMA focused on CIPC priority species and resident CAGO control plan. *Scotch broom removals with volunteers from Ducks Unlimited Canada, RBC Royal Bank, Arrowsmith Naturalists and the Volunteer Warden for the Englishman River Estuary.*	

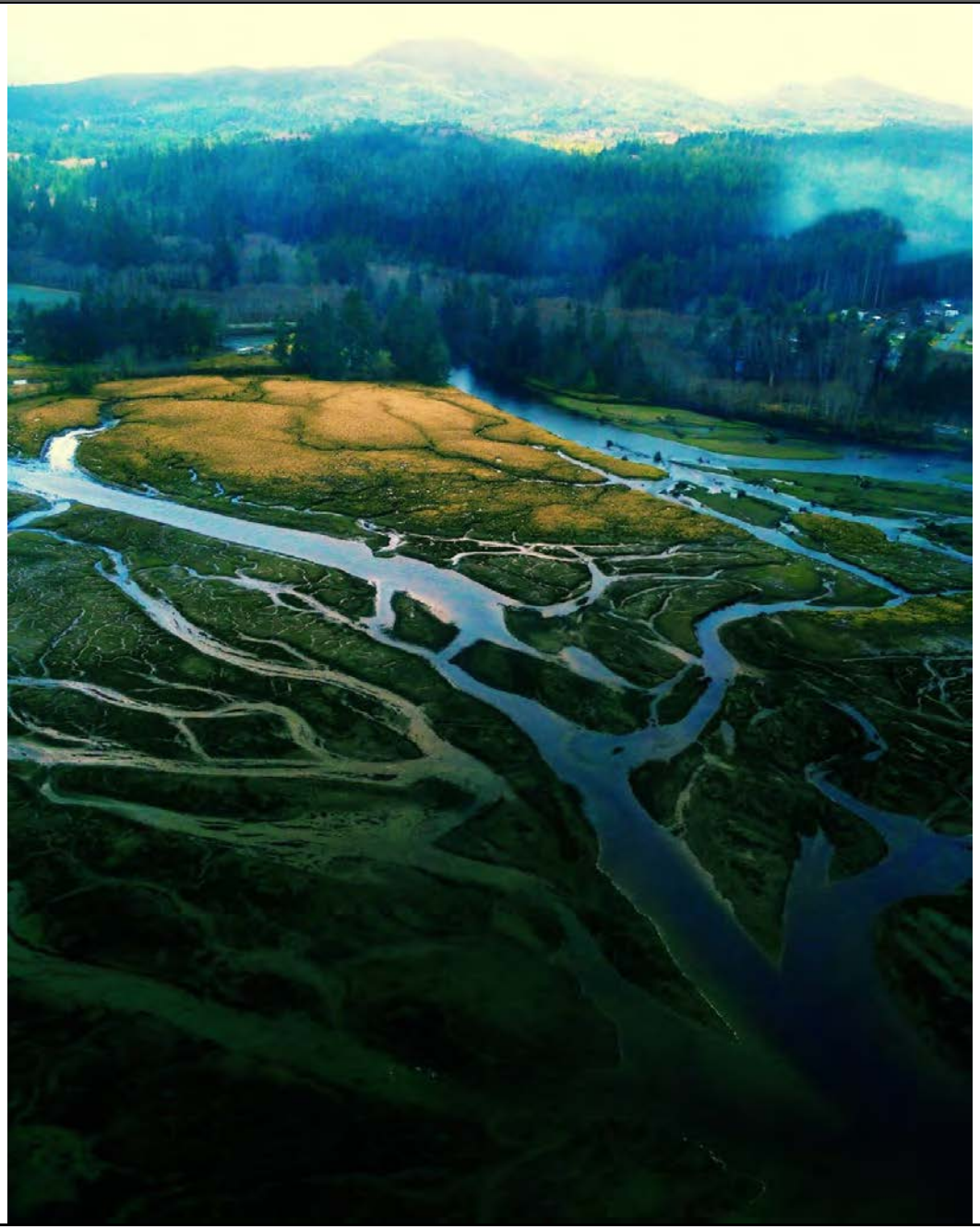
Goal # 1 Objective 1 - 4	1.4 Coordinate annual RM Order Closures including the installation/ production of signage; coordinate VIU monitoring program. *Replacement of boundary and closure order signs.*	

Goal # 2 Objective 1, 2 & 4:	2.2 Maintain infrastructure (trails, interpretive signs, viewing platforms, gates). *Footbridge replacement at Mills St. entrance – (above) summer crew mid-construction and (below) the finished product with the Arrowsmith Naturalists on route for a combined effort of Scotch broom removals.*	 

Goal # 1 Objective 1 - 4	1.2 On-going trespass management. *Cleanup of debris left behind by squatters.*	

Goal # 1 Objective 1 - 4	1.7 Invasive species management and inventory throughout WMA focused on CIPC priority species and resident CAGO control plan. *CAGO control work – installing exclosure structures in cooperation with Guardians of Mid-Island Estuaries Society.*	

Goal # 2 Objective 1, 2 & 4:	2.2 Maintain infrastructure (trails, interpretive signs, viewing platforms, gates). *Developed and installed interpretive signs.*	

Hardy Bay – Quatse River Estuary		
	1.2 Boundary assessment and signage (boundary and regulatory) installation. *Aerial view of Quatse River Estuary.*	

Goal #1 Objective 1 & 3	1.2 Boundary assessment and signage. *Boundary and regulatory signs installed.*	

Salmon River Estuary		
Goal #2	2.2 On going invasive species work focused on priority invasive plants of the CIPC (e.g. Japanese Knotweed, spartina). *Ongoing herbicide treatments of Japanese Knotweed*	

	2.2 On going invasive species work focused on priority invasive plants of the CIPC (e.g. Japanese Knotweed, spartina). *Ongoing herbicide treatments of Japanese Knotweed.*	

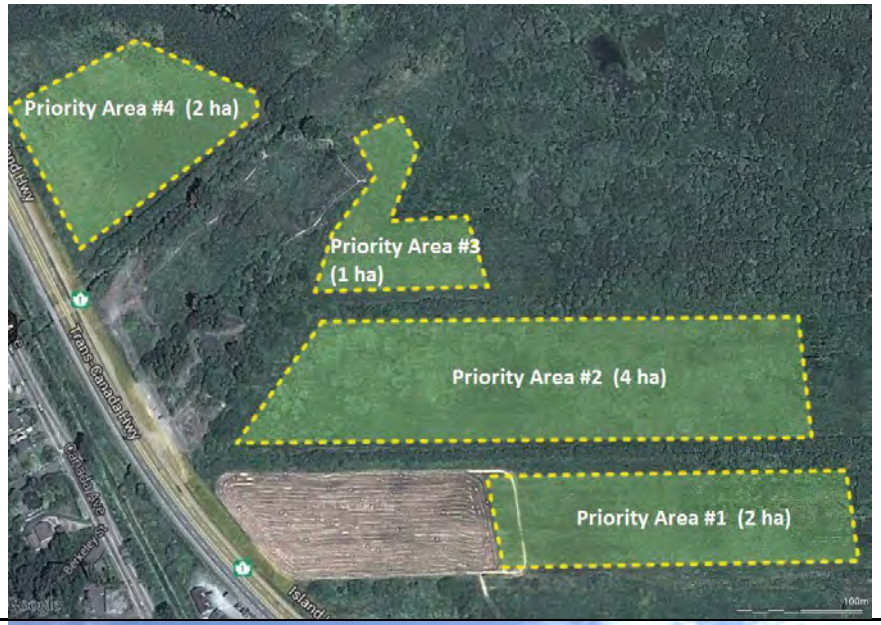
Salmon River Elk Reserve		
Goal #1 Objective 1	1.1 Addressing immediate site issues/needs including trespass management/boundary assessment adjacent to cut block areas. *Boundary assessment.*	

Goal #1 Objective 1	1.1 Addressing immediate site issues/needs including trespass management/boundary assessment adjacent to cut block areas. *Boundary assessment.*	 
	1.1 Addressing immediate site issues/needs including trespass management/boundary assessment adjacent to cut block areas. *Property inspection.*	

Somenos Marsh		
Goal # 3 Objective 1 & 2:	3.1 Manage development and implementation of habitat recovery plan for endangered species at Somenos Marsh in cooperation with HSP and Environment Canada. *Split rail fence installed to keep public from disturbing restoration area.*	

Goal # 3 Objective 1 & 2:	3.1 Manage development and implementation of habitat recovery plan for endangered species at Somenos Marsh in cooperation with HSP and Environment Canada. *Photo-monitoring of Tall woolly-heads restoration area.*	 

Goal # 3 Objective 1 & 2:	3.1 Manage development and implementation of habitat recovery plan for endangered species at Somenos Marsh in cooperation with HSP and Environment Canada. *Sign designed and installed in order to restrict access to restoration area and limit disturbance.*	

Goal #1 Objective 1	1.7 Manage farm lease to maximize forage production for migratory birds. *Areas #1-#3 – total of approx. 7 ha - were mowed to improve habitat for waterfowl and other birds (Area #4 was unable to be mowed due to high water levels)*	
Goal #1 Objective 1	1.7 Manage farm lease to maximize forage production for migratory birds. *Priority Area #2*	

Goal #1 Objective 1	1.7 Manage farm lease to maximize forage production for migratory birds. *Priority Area #3*	
Goal #1 Objective 1	1.4 Maintenance of Bings Creek riparian restoration area including on-going riparian planting. *Bings Creek riparian area maintenance work – Reed-canary grass is successfully being shaded out.*	

Tofino Mudflats WMA		
Goal #3 Objective 1 & 2	3.1 Coordinate on-going eel grass mapping and *Spartina* inventory. *Eelgrass mapping field work in cooperation with Raincoast Education Society.*	

Goal #3 Objective 1 & 2	3.1 Coordinate on-going eel grass mapping and *Spartina* inventory. *Eelgrass mapping field work in cooperation with Raincoast Education Society.*	

Goal #3 Objective 1 & 2	3.1 Coordinate on-going eel grass mapping and *Spartina* inventory. *Eelgrass mapping field work in cooperation with Raincoast Education Society.*	

Goal #3 Objective 1 & 2	3.1 Coordinate on-going eel grass mapping and *Spartina* inventory. *Eelgrass mapping field work in cooperation with Raincoast Education Society – Stand-up paddle boards were required for access, and proved to be the most effective survey method.*	

Goal #1 Objective 1 & 3	1.2 Boundary delineation in areas of contention (e.g. Adjacent to J English property); including installation of boundary signs. *Boundary and regulatory signs installed.*	
Goal #3 Objective 1 & 2	3.1 Coordinate on-going eel grass mapping and spartina inventory. *Green polygons with corresponding red transect lines represent 2013 surveys by the Raincoast Education Society. Blue polygons represent SIMRS data (mapped 1999--2004). Pink outline represents the boundary of the Tofino Mudflats Wildlife Management Area.*	

Willow Creek		
Goal #1 Objective 2 & 3	1.3 Invasive species control. *False lamium removal work.*	

Goal # 2 & 4 Objective 3 & 1,2:	4.1 Maintain and inspect infrastructure (bridges, trails, kiosks); identify public safety hazards. *Trail maintenance work.*		

Goal # 2 & 4 Objective 3 & 1,2:	4.1 Maintain and inspect infrastructure (bridges, trails, kiosks); identify public safety hazards. *Finishing renovations on the Upper Willow Creek bridge – in 2012 steel braces were added for lateral stability – in 2013 the bridge treads were completely replaced in cooperation with volunteers from On-Site Engineering.*	 

Additional Images		
N/A	*Twitter account screenshot.*	

The Fraser estuary is a vital link in the Pacific Flyway, supporting over 1.5 million birds from three continents and 20 countries, the largest wintering shorebird and waterfowl populations in Canada.

South Coast 2013-14

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 2013-14 $91,295.00 was allocated to the 12 Conservation Lands in the South Coast region, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$9187.56 invested in the Bert Brink Wildlife Management Area for property inspection, documentation of ecological attributes and concerns, rubbish removal, and prevention of unauthorised motor vehicle access.

Seventy-five mature cottonwood trees were protected from beaver damage. Surveillance to record unauthorized motor vehicle access had limited success. The initial deployment of trail cameras documented significant numbers of vehicles accessing the WMA. However, the positions of the cameras during the initial deployment didn't allow licence plates or activities to be documented. When the

cameras were redeployed to get better coverage, they were detected and stolen. The access gate was repaired, but was subsequently vandalized and had to be removed. We are engaging the local Conservation Officer Service to plan next actions.

$12,278.46 invested in the Boundary Bay Wildlife Management Area for property inspections, invasive plant removal, habitat restoration projects, and public outreach/signage.

Activities at Boundary Bay WMA focussed on removal and control of invasive plants, including Yellow-flag Iris, Scotch Broom, Blackberry, Giant Hogweed and Thistle. Four information signs were produced and installed at primary access points to educate visitors on the values of the endangered sand dune ecosystems found within the WMA. Five hundred information pamphlets were also produced and distributed to local landowners to educate them on the ecological values of the sand dunes. The hope is that this information will reduce unwanted activity by locals, such as removing native vegetation, walking dogs off leash, dumping unwanted soil and gardening waste onto the dunes and allowing non-native garden ornamental plants to escape into the WMA. These educational materials were produced with the help of the South Coast Conservation Society and with the assistance of research funds from FLNRO.

Two major projects were completed in Boundary Bay by industrial partners. Port Metro Vancouver completed a large-scale removal of accumulated logs and other debris along the Boundary Bay dike. Some of this debris, which is almost entirely composed of man-made materials such as dimensional lumber, plastics, metal, creosote and pressure treated wood, was crowding-out native salt marsh vegetation. Natural logs, root-wads, logs with advanced natural decay and large woody debris that provide perches for migratory birds were left in place. The total value of this work exceeded $500,000. BNSF Railway also conducted a similar log removal project, but over a smaller area. The total value of this work was approximately $125,000.

$3603.20 invested in the Camp Slough conservation area, a former agricultural property, for property inspection, documentation of ecological attributes and concerns, rubbish removal, and restoration of disturbed areas.

The gravel parking area was repaired to allow members of the Chilliwack Field Naturalists, our conservation partners, a safe area to park off of the road. The owner of a neighbouring property had built a fence that trespassed onto the property. Once this trespass was pointed out, the neighbour rebuilt the fence on his property.

$2,730.00 invested in the Chilliwack River conservation area for property inspection, documentation of ecological attributes and concerns, and production/installation of property information signage.

$14017.86 invested in the Pitt-Addington Wildlife Management Area to assess land management needs and ecological values, installation of informational signage, and maintenance of public access trails and facilities.

The primary activities at Pitt-Addington included invasive plant control and removal (Giant Hogweed and Yellow Flag Iris), minor repairs to the viewing towers and cutting vegetation on trails and around structures. Estimates to replace the roof and other structural elements of the viewing towers were much higher than anticipated, primarily because of the remoteness of the sites, which would have required generators and complete packing and unpacking of tools, equipment and supplies. Consequently, we are re-evaluating our plans for the viewing towers.

$2,180.00 invested in the Silverhope Creek conservation area for ecological assessment, inspection for land management needs, public information sign installation, rubbish removal, and boundary identification.

$2,230.00 invested in the Wells Sanctuary conservation area for property inspections, invasive plant removal, habitat restoration projects, rubbish removal, and signage.

$1,230.00 invested in the Surrey Bend conservation area for property inspections, boundary identification, and rubbish removal.

$2,680.00 invested in the Harrison River conservation area for property inspections, boundary identification, and rubbish removal.

The Harrison-Chehalis WMA has not been designated yet, so the planned spending on a sign package and inspection of the grounds and trails for safety issues was deferred until fiscal 2015 pending designation.

$6137.47 invested in the Coquitlam River Wildlife Management Area for removal of blackberry, repair of the fence along the northern boundary and clearing of the fence line. The northern fence had been severely damaged due to falling trees and branches over the last few years. Estimates to repair the fence by fence contractors were significantly higher than anticipated, primarily because their quotes included replacement of all materials. Instead, the contractor retained by Ducks Unlimited Canada, was able to repair the fence using most of the existing materials and saving significant funds.

$8,536.96 invested in Roberts Bank Wildlife Management Area for removal and management of invasive plants and installation of a new sign package. Roberts Bank is the newest WMA in the South Coast Region and hasn't received any signs since it was designated, except for a single entrance sign that only announced the name of the WMA. An entire sign package was designed and produced. Installation materials were also purchased. However, due to delays in producing the sign package, installation could not be completed before the end of fiscal 2014. This work will be completed in fiscal 2015. Invasive plant management included removal or control of Scotch Broom and Yellow-flag Iris.

$12,133.75 invested in Serpentine Wildlife Management Area for removal and management of invasive plants, to install loafing logs within wetlands, maintenance of trails and fences and garbage removal. Blackberry and Japanese Knotweed are the primary invasive plants within the WMA. With funding obtained from FLNRO, we partnered with the Invasive Species Council of BC to use a combination of cutting and herbicide application to control the Knotweed infestation. Cutting was used to remove

blackberry from trails and also from the picnic area where the blackberry had begun to smother some of the small and medium sized trees. Although we purchased materials to anchor new logs within the wetlands, we were unable to acquire any logs for a reasonable price. This work will be deferred to next fiscal.

$4,892.75 invested in South Arm Marshes Wildlife Management Area for removal and management of invasive plants and to maintain trails, repairs to viewing towers and boardwalk, and to repair a berm adjacent to a concrete weir. All of these repairs were completed.

$280.59 invested in Sturgeon Banks Wildlife Management Area. Very little work was required at Sturgeon Banks this year, partially due to the fact there is no infrastructure in place and the fact the City of Richmond is very proactive with its programs to manage and control invasive plants along the dike. Limited work was necessary to remove Scotch Broom and Giant Hogweed plants.

$4,799.37 invested in Forslund-Watson conservation area to manage blackberries on the edge of the hayfield, old-field and forest edge. Other minor repairs were also necessary to fix a gate that had been vandalized and some gravel was purchased to repair access to the hayfield for the farmer that cuts the hay.

$3510.14 was invested in Squamish Estuary Wildlife Management Area. This investment was not part of our workplan for fiscal 2014. Due to the delays producing the signs for the WMAs, we were unable to install the signs. The funds that we had planned to spend on sign installation therefore became a surplus. A number of WMAs were slated to receive new signs as well in fiscal 2015, including Squamish Estuary, so we purchased installation materials (metal sign posts) in preparation of that work.

Conservation Outcomes:

The 2013-14 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.

Photographs:

1. **Bert Brink Wildlife Management Area** –property inspections, removal of rubbish, control of invasive vegetation at access points.

2. **Camp Slough** – property assessed for habitat values, invasive vegetation removed from conifer planting area.

3. **Chilliwack River** – property assessed for management needs; boundary signage installed; rubbish removed.

4. **Pitt-Addington WMA** – property assessed for management needs; information signage installed; public access facilities maintained.

5. **Silverhope Creek** – property assessed for management needs; signage installed; extensive rubbish removed.

The Okanagan has more federally listed species at risk and more Red-listed and Blue-listed species than any other area of the province.

Thompson Okanagan Region 2013-14

Ecological Significance of the Region:

The Okanagan Region has a dry, continental climate, lying in the rain shadow of the Coast and Cascade Mountain ranges. Vegetation varies from Engelmann spruce and lodgepole pine at the subalpine elevations, to 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 Okanagan, especially in the south, contains a large number of unique flora and fauna, as it is the northern extension of the arid Columbia Plateau sagebrush steppe and grassland ecosystems. Analysis has shown that the South Okanagan is 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 **$95,000** was invested in the Okanagan Region for the 2013-2014 year, greatly assisted the crown and its conservation partners in addressing key land management objectives.

Project Highlights:

- **$7,400** was invested in the Dewdrop Rosseau WMA (near Kamloops) to complete baseline surveys for rare and sensitive plants and to construct and install nest boxes for woodpeckers.
- **$7,000** was invested in the Okanagan for invasive plant inventory, treatment plans and treatments for the South Okanagan WMA, Antlers Saddle/Garnet Valley complex, Bourassa Spring, Trepanier Creek, Ashnola River complex, and Vaseux Lake – South properties.
- **$8,200** was invested in the South Okanagan WMA for boundary surveys on 10 properties adjacent to WMA. Numerous trespasses impacts by adjacent landowners were identified, including buildings, land clearing, fencing and placement of fill in riparian areas. These areas are sensitive riparian habitat and associated with Park Rill, oxbows or old river channel and the boundary surveys will greatly assist efforts to mitigate impacts and restore habitats affected by trespass activities.
- **$8,000** was invested in the South Okanagan WMA for boundary fencing and signing to control impacts from off road vehicle use, woodcutting and camping in sensitive antelope brush ecosystems. Support from adjacent and other landowners in the vicinity was very positive, with landowners volunteering to assist by informing land managers of unauthorized activities in a timely manner.
- **$3,000** was invested in conservation land boundary and informational signs to control negative impacts in Antlers Saddle/Garnet Valley and Ashnola River properties.
- **$4,900** was invested at TNT Keremeos Creek in protecting grassland and wetland habitat through annual inspection; sign replacement; maintenance of public access points and fence lines; and trespass and rubbish removal.
- **$5,850** was invested at the TNT Skaha Lake property. Primary tasks included site visits; review and input to vegetation management along transmission line right of way; invasive species management; and rubbish removal at parking area and along hiking trails.
- **$10,150** was invested at the TNT Vaseux Lake – Brock & Thomas complex. Primary tasks included site visits; review and input of EMP and vegetation management for utility ROW; invasive species management including survey and mechanical removal; fence repairs and sign development and installation.
- **$6,150** was invested at the TNT Vaseux Lake – East, West, North complex. Primary tasks included site visits; trail assessments, sign development and installation, and invasive plant management including surveys, mechanical treatment, and seeding.
- **$7,250** was invested at the TNT Vaseux Lake – Emery & Franmar complex. Primary tasks included site visits; maintenance of fences; invasive plant management; utility ROW review of EMP with operational oversight during Line 41 removal; and maintenance of public and research facilities.
- **$2,650** was invested at the TNT Vaseux Lake – McIntyre Bluff property. Primary tasks included site visits; trail assessments, sign maintenance, and invasive plant management planning. The property includes a highly popular hiking trail to the bluff, which requires attention in order to protect the habitat values of grassland and rugged terrain.

- **$5,480** was invested at the TNT 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 updated.
- **$3,096** was invested at the TNT Kilpoola Lake property. Primary tasks included site visits; addressing livestock trespass; fence maintenance; and invasive plant management planning.

Conservation Outcomes:

The 2013-2014 field season resulted in site assessments being conducted on a number conservation properties in the 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.

On TNT properties, updated boundary and information signs were produced and installed, over 20 hectares was surveyed and mechanically treated for invasive species. Approximately 22 km of boundary and range fence surveyed and maintained. Ongoing communication with conservation partners, utility right of way holders, and neighbors contributed to a successful field season.

Photographs:

1. Keremeos Creek – property assessed for ecological values and concerns; public information signage produced and installed; public access points maintained for safety and effectiveness.

2. **Okanagan Falls Biodiversity Ranch** – Inventory and mechanical control of invasive species; property assessed for ecological values.

3. **Skaha Lake -** property assessed for ecological values and concerns; public information signage produced and installed; public access points maintained for safety and effectiveness.

4. **White Lake Basin Biodiversity Ranch -** property assessed for ecological values and concerns; public information signage produced and installed.

5. **Vaseux Lake-Brock & Thomas** - property assessed for ecological values and concerns; public information signage produced and installed

6. **Duck Meadows** – property assessed for ecological values and concerns; boundary signage produced and installed.

7. **South Okanagan WMA –** Boundary fencing, access control and informational signing.

8. South Okanagan WMA – Boundary fencing

9. Okanagan – Invasive plant inventory. Puncture Vine

10. Okanagan – Invasive plant inventory – Diffuse Knapweed

11. Okanagan – Invasive plant inventory – Baby's Breath

12. Okanagan – Antlers Saddle cattle impacts on wetland

Ministry of Forests, Lands and Natural Resource Operations

The Nature Trust of British Columbia

The Kootenay landscape remains an icon of breathtaking beauty and wildlife richness.

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

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.

Summary Statement of Regional Investment:

To assist regional staff and conservation partners in achieving conservation land management objectives, $83,356.88 was allocated to 12 properties in the Kootenay region

In 2013-14,

Project Highlights:

$10, 121.65 was invested into the Bull River conservation land complex which is comprised of The Nature Trust of B.C.'s Armstrong and Lower Norbury Creek properties. Capital investment was directed towards invasive plant control and native seeding and of roadways, landings, and slash burn piles. Gates, information signage and wildlife friendly fencing was installed on the Armstrong conservation property and public information signs were installed on the Lower Norbury Creek property.

$500.00 was invested into the Wigwam Flats conservation property. Capital investment was directed towards the identification, removal, and mapping of invasive plant communities along with installation of "non-motorized use" signage.

$6,375.78 was invested in the Wasa Slough conservation property for identification and mapping of spotted knapweed communities, restricting neighboring horse access, and property signage design and purchase.

$10,076.00 was invested into the Sheep Mountain conservation property for an inventory of invasive plant communities, monitoring of the 2011 wildlife tree creation project and for fence repair and construction.

$8,225.00 was invested into the Grand Forks conservation property for a property inspection, inventory and mapping of invasive plant communities and a rare plant survey.

$12,702.68 was invested into the Lower Duncan-Lardeau Flats conservation property complex. Collapsed or decadent fences, outbuildings, and trash were removed and taken to the transfer station. Invasive plant communities were treated and management recommendations were made for incorporation into the 2014-15 HCTF O&M work plan.

$7,981.90 was invested into the Grave Prairie property complex to replace decadent fence structures with new 'wildlife friendly' fencing, install rail fencing, and in the design and installation of property signage.

$2,537.89 was invested into the Gold Creek game reserve for the design, purchase, and installation of property boundary signage.

$2,225.00 was invested into the Columbia Lake Westside conservation property for fence repair and maintenance, installation of property boundary signage, investigation of cattle grazing impacts, and treatment of invasive plant communities.

$5,472.51 was invested into the Columbia Lake Eastside conservation property for the enhancement of Rocky Mountain bighorn sheep habitat and the monitoring of previously planted blue-listed, Limber Pine seedlings.

$7,138.47 was invested into the Bummers Flats-Cherry Creek conservation property complex for the treatment of invasive plant communities, thinning of encroaching conifer tree species and monitoring bat box usage on North Bummer Flats.

$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:

The structural maintenance or installation component of the land management program enabled the Kootenay Conservation crew to conduct an inventory of property information signage and property boundary signage. This 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 fencing component also established an identifiable footprint on the properties and facilitated the control of domestic livestock and public recreation activities.

The slashing component of the program clearly addressed some significant forest encroachment issues on several conservation properties while seeding disturbed sites re-established native vegetation and prevented the establishment of undesirable species. Invasive weed control, a perpetual and annual problem, was also successfully conducted on several properties which resulted in infested areas returning to a functional and suitable condition.

Invasive weed inventory and mapping was conducted concurrently with control measure or independently on properties which were not scheduled for control treatment in 2013. The intent is to establish a good inventory which will facilitate the ability to address infested sites in the future.

Similar inventory and mapping work was initiated on several properties where forest encroachment was identified as a management issues that needed to be addressed. Like the invasive weed inventory the principle intent is to establish a good inventory which will facilitate the ability to address affected sites in the future.

Cariboo Region 2013-14

Ecological Significance of the Region:

The Cariboo Region is a diverse landscape, ranging from coastal mountains, 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 2013-14 $28,932.00 was allocated to the 6 properties in the Cariboo, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$1,900.00 invested in the Chilanko Marsh conservation area for property inspection, documentation of ecological attributes and concerns, and production/installation of property information signage.

$22,265.00 invested in the Chilcotin Lake & Marshes conservation area to construct 2,240 meters of log-rail fencing to protect the marsh from livestock access. Activities also included property inspections, documentation of ecological attributes and concerns, and production/installation of property information signage.

$600.00 invested in the Dale Lake conservation area for property inspection, documentation of ecological attributes and concerns, and production/installation of property information signage.

$550.00 invested in the Tautri Creek conservation area for property inspection, documentation of ecological attributes and concerns, and production/installation of property information signage.

$1,388.00 invested in the Knife Creek conservation area for fence maintenance and production/installation of property boundary signage.

$2,023.00 invested in the Hanceville Ranch conservation area for fence supplies. These will go toward fence replacement and repairs. The tenants will be building the fences as part of our agreement.

Conservation Outcomes:

The 2013-14 field season resulted in important land management activities on a number of Conservation Lands within the Cariboo Region. Most of the money was spent on fence construction and maintenance that 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.

Skeena Region 2013-14

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 2013-14 $26,250.00 was allocated to the 7 properties in the Skeena, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$1,965.00 invested in the Alice Arm conservation area for property inspection, documentation of ecological attributes and concerns, survey of invasive plants, and production of property information signage.

$1,677.00 invested in the Kitsumkalum Lake – Nelson River conservation area for property inspection, documentation of ecological attributes and concerns, survey of invasive plants, access evaluation, and production/installation of property information signage.

$1,227.00 invested in The Lakelse Lake – Mullers Bay conservation area for property inspection, rubbish removal, documentation of ecological attributes and concerns, and production/installation of property information signage.

$777.00 invested in The Lakelse River in evaluation of access conditions and the production of boundary demarcation signage.

$1,227.00 invested in the Nadina River Valley – Owen Lake conservation area for property inspections, documentation of ecological attributes and concerns, and production/installation of property information signage.

$4,377.00 invested in the Smith Island conservation area for property inspections, documentation of ecological attributes and concerns, and production/installation of property information signage.

$15,000.00 invested in Todagin WMA for management plan consultation and production.

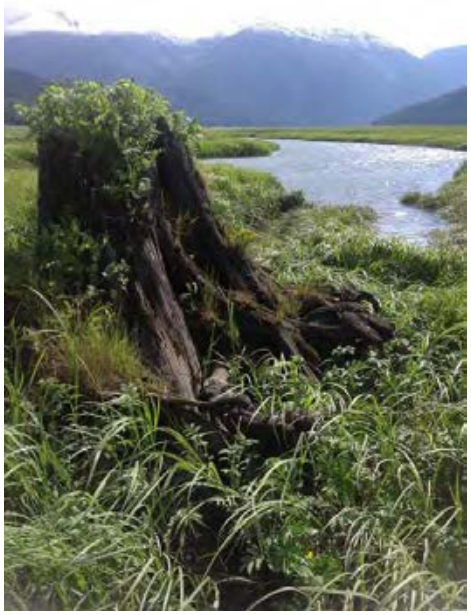
Conservation Outcomes:

The 2013-14 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 an evaluation 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 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.

The production of a management plan for the Todagin Wildlife Management Area is a critical step in ensuring the long-term protection of this tremendous conservation area.

Photographs:




1. **Alice Arm** – assessment of a highly productive estuary and grizzly bear habitat.


2. **Kitsumkalum Lake – Nelson River** – property assessed for habitat values, public usage, and management needs. Informational signage installed.

3. **Lakelse Lake – Mullers Bay** – property assessed for management needs; Boundary signage installed.

4. **Nadina River Valley – Owen Lake** – property assessed for management needs; boundary signage installed.

5. **Smith Island** – property assessed for management needs; boundaries identified and signed.

Omineca Region 2013-14

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: Frazer, 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 Greyling, 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 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, and Mule Deer, with local populations of 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 the cover a small selection of the habitats that can be found regionally.

Summary Statement of Regional Investment:

In 2013-14 $33,125.32 was allocated to the 5 conservation properties in the Omineca, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$4104.50 invested in the Joanne Lloyd property for the construction of a clearspan crossing over Cluculz Creek, invasive species removal, installation of boundary signage, development of invasive species signage and seasonal inspections.

$5943.22 invested in the Cranberry Marsh / Starratt WMA for boundary identification, update of current interpretive signs to reflect current land designation and replace signs that are in disrepair, community engagement, identification of trespass over 15.9m^2 of the WMA, trail assessment, Invasive plant signage and planning for 2014, and seasonal inspections.

$1862.39 invested in The Stellako River WMA for invasive species removal, invasive plant signage and planning for 2014, updated signage and seasonal inspections that identified trail issues, invasive species monitored. Boundary signage was installed and habitat values assessed for potential impacts from adjacent land use. Derelict cabin was dismantled and removed from site.

$675.00 invested in the Nechako River conservation property to assess property condition, needs, and public usage.

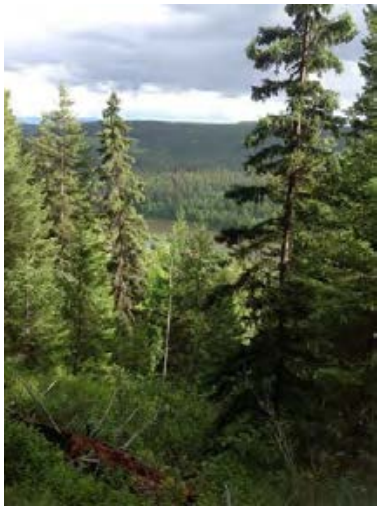
$675.00 invested in the Mount Robson Ranch property to install boundary demarcation signage and assess property condition, needs, and public usage.

Conservation Outcomes:

Auxiliary staffing issues greatly reduced our ability to utilize funding; however, much of the work projected was completed by in house staff at no billable cost. Invasive plant management was continued with in-kind contribution of 2 signs from the Invasive Species Council and the development and procurement of signage for conservation lands. Site investigations and treatments were carried out and plans for follow-ups and initiation of existing invasive plant management plans have been developed for the 2014 field season. Habitat degradation associated with ATV's in Cluculz creek and lake has been halted and mitigation, in the form of a clearspan crossing, has been completed, other habitat assessments were undertaken and restoration is planned for 2014. Boundary identification and signage will be continued in 2014 with the information generated by the boundary survey in the Cranberry Marsh / Starratt WMA guiding sign placement.

Photographs:

1. **Stellako River WMA** – former site of derelict cabin, now dismantled and removed.


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

3. **Cranberry Marsh WMA** – property assessed for management needs; Nature Trust of BC boundary signed.

4. **Mount Robson Ranch Property** – property assessed for management needs; boundary signage installed; neighboring landowner engaged in property surveillance.

5. **Joanne Lloyd –** Completed bridge project

Northeast Region 2013-14

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, and numerous regionally administered Crown reserve areas.

Summary Statement of Regional Investment:

In 2013-14, $50,150.00 was allocated to 11 project areas in the Northeast, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$5,030.00 invested in the Boundary Lake conservation area for property inspection, documentation of ecological attributes and concerns, management of invasive plants, maintenance of water control structures, maintenance of property information signage and to develop land management objectives and improved awareness of conservation concerns with oil and gas development in the area.

$6,030.00 invested in the Comstock Marsh conservation area for property inspection, documentation of ecological attributes and concerns, survey of invasive plants, management of invasive plants, and maintenance of water control structures. Informative property information signage was produced and public access areas maintained for safety.

$6,437.00 invested in the Dunlevy Creek conservation area for property inspection, documentation of ecological attributes and concerns, and production of property boundary and information signage. Conifer ingrowth was also removed in select areas to maintain elk foraging habitat.

$4,680.00 invested in the Fort St. John Potholes conservation area for property inspection, management of invasive plants, maintenance of water control structures, and property boundary signage.

$9,893.00 invested in the McQueen Slough conservation area for property inspections, perimeter fence maintenance, management of invasive plants, and maintenance of water control structures. Property information signage was produced and installed, and boardwalks and public facilities were maintained for safety.

$3,530.00 invested in the Worth Marsh conservation area for property inspections, documentation of ecological attributes and concerns, management of invasive plants, and installation of property boundary signage.

$2,700.00 invested into the Doig Wetland complex located in the Doig River First Nations K'ih Tsaa? dze traditional tribal lands for the initiation of developing land management objectives for compatible land uses with industry, a site visit took place and group meetings with the Doig River First Nations.

$700.00 invested into Cecil Lake conservation area to develop land management objectives and improved awareness of conservation concerns with oil and gas development in the area.

$700.00 invested into Whispering Pines conservation land which included a site visit and visit with Jim and Margaret Little who recently donated land to TNT also initiated conversations with oil and gas producers and other stakeholders to develop compatible land management objectives.

$450.00 invested into La Guarde conservation area to develop land management objectives and improved awareness of conservation concerns with oil and gas development in the area.

$5,000.00 invested into an aerial survey's to photograph several property/complexes mentioned above which will be used for a future footprint analysis to investigate the frequency and type of incursions within these conservation lands to assist in the development of land management objectives.

Conservation Outcomes:

The 2013-14 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. In addition to initiating conversations with Stakeholders, government and First Nations as a first step in developing compatible land management objectives and improved awareness of conservation concerns with oil & gas and other industrial development in these areas.

Informational signage, indicating property ownership and management partners, with contact information was posted 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. Aerial flight surveys were conducted to spatially photograph on the ground incursions within specified property/ complex areas.

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.

Photographs:

1. **Dunlevy Creek** – property assessed for management needs. Elk foraging habitat being maintained through the removal of conifer ingrowth.

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.

3. **McQueen Slough** – property assessed for management needs, information sign produced, boardwalk and public facilities maintained.

4. **Worth Marsh** – property assessed for management needs, boundary signage produced, invasive plants managed to protect habitat values.

5. **Comstock Marsh** – property assessed for management needs, boundary signage produced; invasive plants managed, access points and water control structure maintained.

6. **Doig Wetland Complex-** Property assessed for habitat values, wetland is approximately 180 hectares of shallow permanent wetland complex located in the Doig first Nations K'ih Tsaa? dze traditional tribal lands.