BC/TNT Joint Conservation Land Management Program (Wildlife O&M)

Regional Summary Reports

2017-18

West Coast Region

Ministry of Forests, Lands and Natural Resource Operations

NATURE TRUST 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	Asseek Estuary
Somenos Marsh	Kumdis Slough
Willow Creek	Bella Coola Estuary
Koeye Estuary	Quatse WMA
Tofino Mudflats WMA	

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.

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West Coast Region Program Summary 2017-2018

HCTF O&M Funding allocated $164,000 to the West Coast Region in 2017-18 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 $360,00 to support this work.

Over $164,000 was invested in the West Coast Region for the 2017/18 fiscal year that greatly assisted the conservation partners in achieving several key land management objectives. Of this funding:

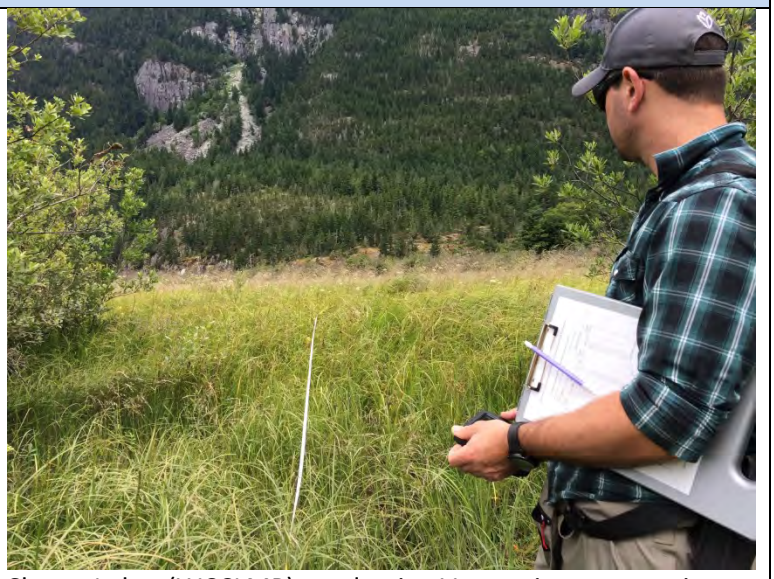
- **$10,000** was invested in completing Phase one of an "Evaluation framework for Foreshore Development Proposals". Guiding principles and criteria were developed for use in the management of coastal and nearshore conservation lands, including for project/proposal review. The work will help to ensure projects are reviewed in a consistent/transparent way that considers adaptability to climate change and related sea level rise, as well as effectiveness in maintaining or supporting ecological resilience, maintaining habitat diversity and function and reducing cumulative impacts to the coastal environment.
- **$15,000** was invested in ongoing efforts to continue the development and implementation of a more comprehensive coastal/estuarine monitoring program for conservation lands in the West Coast, including joint work with Coastal First Nations (sites now include Cowichan, Nanaimo, Englishman, Salmon River, Cluxewe, Quatse, Asseek, Bella Coola, Koeye, Kumdis Slough and Kingcome estuary). This monitoring work has broader benefits for all BC coastal areas with a focus on ecosystem resiliency as it relates to climate change and includes vegetation, water quality, and fish/wildlife habitat utilization metrics. Monitoring results will continue to inform strategic land management and restoration priorities, help in gauging the success of on-the-ground initiatives, and provide input to a resiliency ranking model of the National Estuarine Research Reserve Association (NERRA) http://www.nerra.org/marsh). The work is also likely to continue to attract new partners (other regions, first nations, local government, other scientific organizations).
- **$20,000** was invested in the Parksville Qualicum Beach WMA implementing a large scale restoration project in the western Englishman Estuary in partnership with local community groups and DFO; completing a forage fish inventory and mapping project throughout the entire WMA; completing migratory bird surveys (shorebirds/waterfowl); completing fish utilization surveys in Englishman Estuary; working with the Town of Qualicum Beach in the development of the Beach Creek estuary restoration project; invasive species management; trail and facility maintenance; resolution of trespass issues; coordination of Foreshore Conservation Areas Framework for assessing development proposals
- **$18,000** invested at Somenos Marsh Conservation Area implementing species at risk restoration projects with Cowichan Tribes; invasive species inventory and removal; farm management; trespass management due to homeless camping areas; new signs; fences

- **$10,000** was invested in the Cowichan Estuary working with Cowichan Tribes in developing a comprehensive restoration plan; enhancing hedgerow habitat for species at risk; collecting estuary monitoring information; completing winter waterfowl surveys; trail maintenance and signage
- **$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; resolution of trespass at Fanny Bay; removal of 30,000kg of invasive spartina; trail and facility maintenance
- **$7,500** invested at Lazo Marsh NE Comox Wildlife Management Area completing the Hilton springs fish habitat enhancement project; removing invasive species; conducting recreational user surveys; trail and facility maintenance; installation of signage
- **$9,000** invested at Nanaimo River Estuary implementing a large scale restoration project in partnership with Snuneymux First Nation, Ducks Unlimited Canada and DFO; enhancing hedgerow habitat for species at risk; collecting estuary monitoring information; invasive species removal and inventory; signage
- **$8,000** invested at Tofino Mudlfats Wildlife Management Area undertaking a comprehensive migratory bird inventory project
- **$5,000** invested at Willow Creek Conservation Area undertaking trail maintenance and mapping; new signage; engineering assessment of footbridges
- **$3,500** was invested at Quatse Wildlife Management Area for invasive species inventory removal; estuary monitoring data collection; trail maintenance.
- **$5,000** invested in implementing on-going estuary monitoring work at Bella Coola, Koeye, Kumdis, Cluxewe, Asseek River Estuaries in partnership with coastal First Nations

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		
Category: 1. Management 2. Inventory 3. Monitoring **Goal:** 1. Goal 1, 2 2. Goal 1 3. Goal 1 **Goal Descriptor:** 1. Stakeholder engagement 2. Vegetation/species inventory 3. Habitat condition **Activity Completed:** Site visit conducted on; July 11, 2017 with the Nuxalk First Nation Coastal Guardian Watchmen to retrieve Data Logger (data downloaded/retrieved and re-installed to continue monitoring); conduct vegetation transects in high salt marsh	**Planned Activity:** 1. 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 property and engage with on the ground land management projects and monitoring 2. Conduct veg and species inventory on site as part of monitoring program; record search for species information in EcoCAT and other online catalogues 3. Year 2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees)	 Karen Barry (WCCLMP) with Nuxalk Guardian Watchmen  Asseek Tidal Channel with Data Logger in foreground

Goals & Objectives by Property	Activities / Description	Image(s)
Baynes Sound Conservation Areas		
Category: 1. Management 2. Restoration Enhancement 3. Inventory 4. Monitoring **Goal:** 1. Goal 1,2,3,4,5 2. Goal 1,2,3,4,5 3. Goal 3 4. Goal 1,2,3,5 **Goal Descriptor:** 1. Public safety & Liability; Facility Maintenance 2. Invasive species removal 3. Invasive species 4. Photo monitoring	**Planned Activity:** 1. No public injuries; reduction of trespasses; improved compliance with posted regulations; All facilities within conservation area maintained to acceptable standards including trails, interpretive kiosks, viewing platforms, board walks, bridges; 2. Work towards a reduction of the EDRR terrestrial invasive species coverage by 50% from mapped 2015 levels by year 3; no new infestations within treatment areas 3. Continued mapping of terrestrial and aquatic invasive species 4. Standardized photo monitoring program in place for invasive species removal areas at 2 primary locations (Fanny Bay; Millard Creek)	 Maintenance on Viewing Platform  Hilary Blackman (WCCLMP) with Spotted Knapweed Removal
Activity Completed: 1. Maintenance on Viewing Platform 2. Completed invasive species inventory and removals, including 18.5 bags of Meadow Knapweed (*Centaurea pratensis*) along dike at Fanny Bay Water Control Structure. 3. All properties within Baynes Sound area (Fanny Bay, Mud Bay, Coal Creek, Millard Creek) were subject to Invasive species inventory and mapping 4. Photo monitoring completed in Fanny Bay		

Goals & Objectives by Property	Activities / Description	Image(s)
Bella Coola Conservation Area		
Category: 1. Management 2. Inventory 3. Monitoring **Goal:** 1. Goal 1, 2 2. Goal 1 3. Goal 1 **Goal Descriptor:** 1. Stakeholder engagement 2. Vegetation/species inventory 3. Habitat condition	**Planned Activity:** 1. 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 property and engage with on the ground land management projects and monitoring 2. Conduct veg and species inventory on site as part of monitoring program; record search for species information in EcoCAT and other online catalogues 3. Year 2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees)	 Shawn Lukas (WCCLMP) conducting Vegetation transect in Bella Coola Estuary  Shawn Lukas (WCCLMP) and Nuxalk Guardian Watchmen conducting Vegetation transect in Bella Coola Estuary
Activity Completed: Site visit conducted on; July 07, 2017 with the Nuxalk First Nation Coastal Guardian Watchmen to retrieve Data Logger (data downloaded/retrieved and re-installed to continue monitoring); conduct vegetation transects in high salt marsh and take measurements from Rod Surface Elevation Table (Rset).		

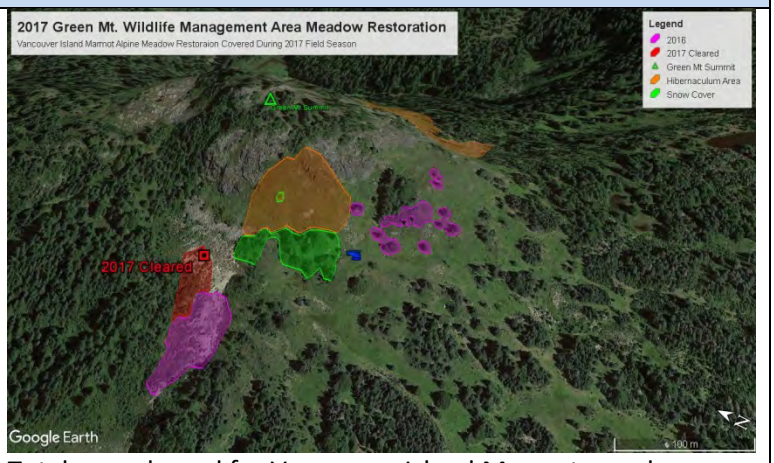
Goals & Objectives by Property	Activities / Description	Image(s)
Buttertubs Marsh Conservation Area		
Category: 1. Management 2. Restoration Enhancement 3. Monitoring **Goal:** 1. Goal 1,2,3,4 2. Goal 1 3. Goal1,2,3,5 **Goal Descriptor:** 1. Facility Maintenance 2. Invasive species removal; Enhancement 3. Public use; Habitat utilization	**Planned Activity:** 1. Annual inspections of viewing platforms, trails, boardwalks; repairs as necessary; inspect/repair fencing as required; inspections and maintenance of water control structures and dikes; Respond to public inquiries/complaints; review development proposals that may affect conservation areas 2. Annual work crews; partnership with local volunteers and stakeholders to achieve annual goal to achieve 3 year target; mapping; work with CISC and Provincial EDRR coordinator in identifying priority areas; Identify limiting factors for breeding bird success; work with stakeholders to construct and install nest boxes for swallows and wood ducks; 3. Property inspections to gauge public compliance with posted regulations; respond to complaints; work with partners to improve compliance monitoring; On the ground annual surveys throughout summer to gauge effectiveness of WPT restoration efforts; assessment of emergence/breeding success at nesting beaches	 Hilary Blackman and Jaylene Harper (WCCLMP) surveying for and maintaining nesting beaches for Western Painted Turtles  Hilary Blackman (WCCLMP) removing Purple Loosestrife from Buttertubs Marsh
Activity Completed: 1. Completed maintenance on all public information kiosks; Completed maintenance on fence lines along boundary of property 2. Invasive species identification, mapping and removal throughout the property, including extensive work removing Purple Loosestrife (*Lythrum salicaria*) within the West Marsh. 3. Turtle monitoring continued with numbers and use of basking logs (installed 2016) and nesting beaches. Nesting beaches also maintained to ensure minimal vegetation		

Goals & Objectives by Property	Activities / Description	Image(s)
Cluxewe Wildlife Management Area		
Category: 1. Inventory 2. Monitoring **Goal:** 1. Goal 3 2. Goal 1,2,3,5 **Goal Descriptor:** 1. Invasive Species 2. Habitat Condition **Activity:** 1. Invasive species identification, mapping and removal throughout the property, found a very minimal amount of invasive plants in the Cluxewe WMA 2. Retrieve Data Logger (data downloaded/retrieve data and re-installed to continue monitoring); conduct vegetation transects in high salt marsh; measurements from Rod Surface Elevation Table (Rset)	**Planned Activity:** 1. 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 2. Year 1 2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees, surface elevation tables)	 Jaylene Harper and Hilary Blackman (WCCLMP) taking readings from data logger installed in the Cluxewe Estuary  Data logger deployed in the estuary

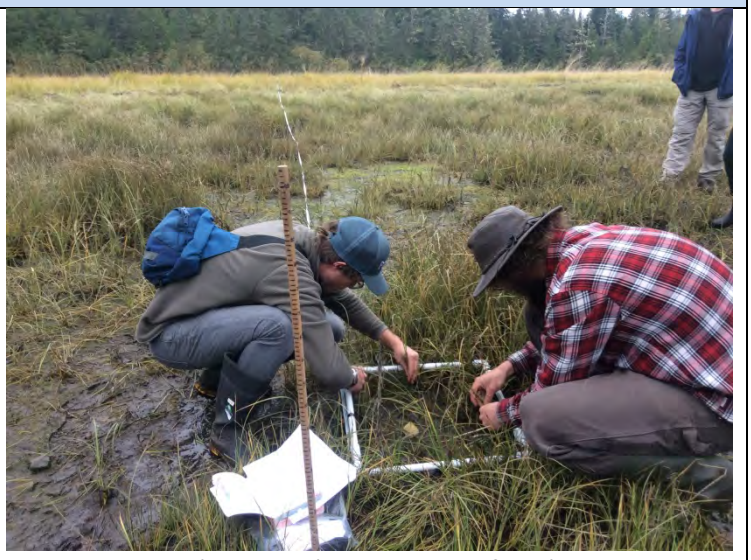
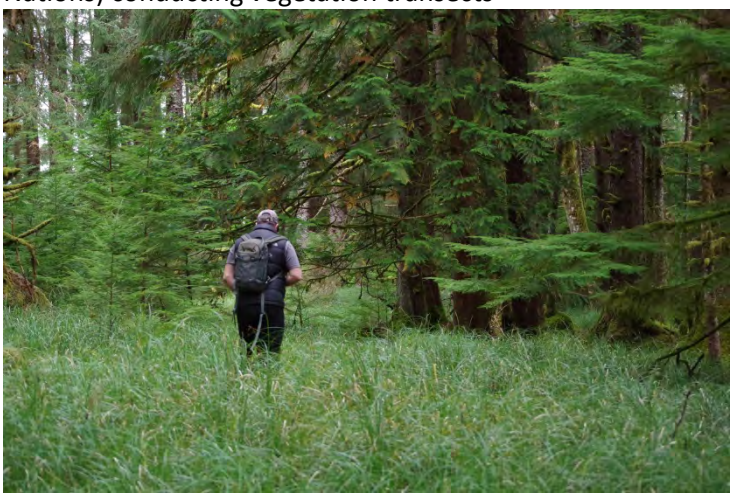
Goals & Objectives by Property	Activities / Description	Image(s)
Courtenay River Estuary		
Category: 1. Management 2. Restoration Enhancement 3. Inventory **Goal:** 1. Goal 1,2,4 2. Goal 1,3 3. Goal 3 **Goal Descriptor:** 1. Public Safety and Liability 2. Invasive species removal 3. Invasive species	**Planned Activity:** 1. Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed 2. Annual work crews; partnership with local volunteers and stakeholders to achieve annual goal to achieve 3 year target; mapping; work with CISC and Provincial EDRR coordinator in identifying priority areas 3. 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	 Purple Loosestrife identified, mapped and removed within the Courtney River Estuary  Hilary Blackman (WCCLMP) with garbage and invasive plants removed from the Courtney river Estuary
Activity: 1. Conducted property inspection to identify any concerns/issues 2. Invasive species identification and mapping 3. Invasive species removal of Purple Loosestrife (*Lythrum salicaria*) and Spartina		

Goals & Objectives by Property	Activities / Description	Image(s)
Cowichan Estuary Conservation Area		
Category: 1. Management 2. Restoration Enhancement 3. Inventory 4. Monitoring **Goal:** 1. Goal 1, 2, 3, 4, 5 2. Goal 1, 3, 4, 5 3. Goal 3 4. Goal 1, 2, 3, 5 **Goal Descriptor:** 1. Facility Maintenance 2. Habitat Complexity 3. Invasive Species 4. Habitat Condition	**Planned Activity:** 1. 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 2. Hedgerow planting of low growing species; invasive species removal; installation of nest boxes 3. Utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database 4. Year 1 ,2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees, surface elevation tables)	  Dinsdale dike maintenance (Mowing Before-After)  Hilary Blackman (WCCLMP) maintaining facilities
Activity: 1. Completed several deficiencies found during inspections, including; dike inspections and maintenance (mowing vegetation); interpretive kiosk painting; regulation sign installations; and maintenance of water control structure 2. Planted native vegetation (trees and shrubs) to enhance hedgerows 3. Invasive species identification and mapping 3. Retrieve Data Loggers information, conduct measurements from Rod Surface Elevation Table (Rset)		

Goals & Objectives by Property	Activities / Description	Image(s)
Dudley Marsh		
Category: 1. Management 2. Inventory 3. Monitoring **Goal:** 1. Goal 1, 2, 3, 4, 5 2. Goal 3 3. Goal 1, 2, 3, 5 **Goal Descriptor:** 1. Public safety and Liability; Facility Maintenance 2. Support Monitoring 3. Habitat Condition; Habitat Utilization **Activity:** 1. Property inspection including boundary walks boundary encroachment; Inspections of viewing platform and water controls completed regularly with work being completed on viewing platform 2. Working with Vancouver Island University students for wildlife inventory and monitoring 3. Water level/flow recordings collected weekly by the Friends of French Creek. Discussions with DUC/DFO determined best practices for amphibian communities in marsh and salmonid populations in Dudley creek through low water/high temp.	**Planned Activity:** 1. Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed; 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 2. Conduct inventory of priority species/vegetation for monitoring work 3. Compile weekly data recordings from volunteers; work with DFO/DUC to develop water model on site; conduct water quality measurements on site throughout year; Continue amphibian monitoring program (Year 2-3); monitor for fish usage in Dudley Creek	 Dudley Marsh at lowest water level recorded in 2017  Danger tree removal around Viewing platform 

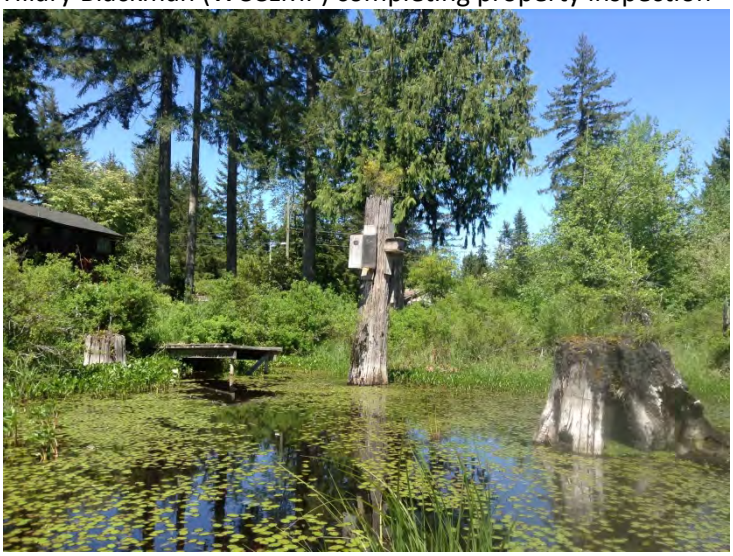
Goals & Objectives by Property	Activities / Description	Image(s)
Green Mountain Wildlife Management Area		
Category: 1. Management 2. Restoration Enhancement **Goal:** 1. Goal 1, 2, 3, 4, 5 2. Goal 1, 3, 4, 5 **Goal Descriptor:** 1. Stakeholder engagement 2. Alpine Meadow; Planning **Activity:** 1. Worked with FLNRO and MRF to identify best practices for alpine meadow restoration and areas targeted. 2. Completing alpine meadow restoration and tree removals from identified areas	**Planned Activity:** 1. 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; 2. Year 1-3 mapping, removal, and burning of priority restoration areas in cooperation with FLNRO, MRF; Work with local stakeholder and partner agencies in identifying priority projects; compile background information; mapping of project areas; summary document prepared	 Total area cleared for Vancouver Island Marmot meadow habitat restoration (2017)  Shawn Lukas (WCCLMP) clearing encroaching trees on Vancouver Island Marmot habitat

Goals & Objectives by Property	Activities / Description	Image(s)
Koeye River Estuary		
Category: 1. Management 2. Inventory 3. Monitoring **Goal:** 1. Goal 1, 2, 3 2. Goal 1 3. Goal 1 **Goal Descriptor:** 1. Stakeholder engagement 2. Vegetation/species inventory 3. Habitat condition **Activity:** Site visit conducted on; October 12 2017 with the Heiltsuk First Nation Coastal Guardian Watchmen to retrieve Data Logger (data downloaded/retrieved and re-installed to continue monitoring); conduct vegetation transects in high salt marsh	**Planned Activity:** 1. 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 to discuss property and engage with on the ground land management projects and monitoring 2. Conduct veg and species inventory on site as part of monitoring program; record search for species information in EcoCAT and other online catalogues 3. Year 2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees)	 Peter deKoning (WCCLMP) with Heiltsuk First Nation Coastal Guardian Watchmen taking measurements from Rset  Coastal Guardian Watchman vessel traveling to the Koeye River Estuary

Goals & Objectives by Property	Activities / Description	Image(s)
Kumdis Slough Conservation Area		
Category: 1. Management 2. Inventory 3. Monitoring **Goal:** 1. Goal 1, 2 2. Goal 1, 2 3. Goal 1, 2 **Goal Descriptor:** 1. Stakeholder engagement 2. Vegetation/species inventory 3. Habitat condition	**Planned Activity:** 1. 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 2. Conduct veg and species inventory on site as part of monitoring program; record search for species information in EcoCAT and other online catalogues 3. Year 2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees)	 Peter deKoning (WCCLMP) and Stu Crawford (Haida First Nations) conducting vegetation transects  Thomas Reid (WCCLMP) conducting site visit  WCCLMP staff and stakeholders onstie
Activity: Site visit conducted on September 27, 2017 with members of the Haida Nations and the Province of British Columbia to retrieve Data Logger (data downloaded/retrieved and re-installed to continue monitoring); conduct vegetation transects in high salt marsh; measurements from Rod Surface Elevation Table (Rset)		

Goals & Objectives by Property	Activities / Description	Image(s)
Lazo Marsh North East Comox Wildlife Management Area		
Category: 1. Management 2. Restoration Enhancement 3. Monitoring **Goal:** 1. Goal 1, 2, 3, 4 2. Goal 1, 2, 3 3. Goal 1, 2, 3, 4 **Goal Descriptor:** 1. Public Safety & Liability; Facility Maintenance 2. Invasive species Removal 3. Habitat Condition **Activity:** 1. Boundary and encroachment issues identified and noted; Maintenance on facilities completed (boardwalk anti-skid installed) 2. Invasive plant identification, mapping and removals completed throughout property 3. Species present survey completed, within Hilton Springs restoration stream, 5 fish species found	**Planned Activity:** 1. Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed; 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 2. Annual work crews; partnership with local volunteers and stakeholders to achieve annual goal to achieve 3 year target; mapping; work with CISC and Provincial EDRR coordinator in identifying priority areas 3. Finalize monitoring program focused on habitat condition/utilization (Year 1); Year 2, 3 implement priority monitoring measures focused on key indicator species (waterfowl abundance, breeding bird surveys, fish)	 Jaylene Harper (WCCLMP) removing invasive plants  WCCLMP Crew constructing fences around spring headwater  Hilton Springs species present survey electrofishing

Goals & Objectives by Property	Activities / Description	Image(s)
Nanaimo River Estuary		
Category: 1. Management 2. Restoration Enhancement 3. Monitoring **Goal:** 1. Goal 2. Goal 3. Goal **Goal Descriptor:** 1. Facility Maintenance 2. Habitat complexity 3. Photo monitoring **Activity:** 1. Maintenance on facilities including stairs, bridges and viewing platforms 2. Clearing invasive plants for Vesper Sparrow restoration 3. Completed photo monitoring with identified locations and bearings noted	**Planned Activity:** 1. 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 2. Continued implementation of VESP restoration plan; ongoing work to restore riparian habitat on off-channel pond; replanting with native species 3. Identify areas for photo monitoring project; review standardized protocols and data recording methodology (Year 1); Year 2 and 3 implement protocol	 Removing invasive plants and clearing view at Holden Creek  Jaylene Harper (WCCLMP) clearing invasive plants  Facility Maintenance completed on walkways

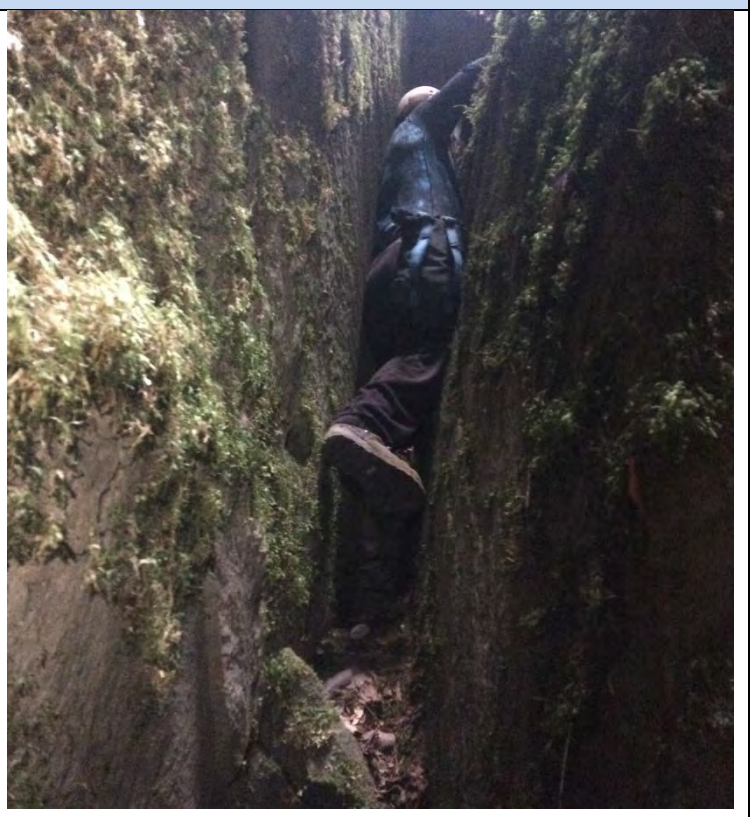
Goals & Objectives by Property	Activities / Description	Image(s)
Orel Lake		
Category: 1. Management **Goal:** 1. Goal 1, 2 **Goal Descriptor:** 1. Public Safety and Liability **Activity:** 1. Boundary check for encroaching residential properties and structures in trespass	**Planned Activity:** 1. Property inspections and updated inventory of boundary encroachment; install updated regulatory / interpretive signs at key access points throughout conservation area complex as needed	 Hilary Blackman (WCCLMP) completing property inspection  Trespass issues  Trespass issues

Goals & Objectives by Property	Activities / Description	Image(s)
Parksville Qualicum Beach Wildlife Management Area		
Category: 1. Management 2. Restoration Enhancement 3. Inventory 4. Monitoring **Goal:** 1. 1, 2, 3, 4, 5 2. 1, 3, 4, 5 3. 3 4. 1, 2, 3, 5 **Goal Descriptor:** 1. Public Safety & Liability 2. Restoration 3. Invasive Species 4. Habitat condition	**Planned Activity:** 1. 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 2. coordinate removal of surfside dike with local stakeholders; liaison; meetings; contract supervision; meet with RDN and Inspector of Dikes to develop a plan for Old Mine Rd dike site 3. Utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database 4. Year 1 ,2, 3 implement priority monitoring measures focused on habitat condition (water quality measurements, vegetation structure, wildlife trees, surface elevation tables)	 Hilary Blackman (WCCLMP) ensuring public safety during dike removal  Monitoring – data loggers, rset, water quality readings  Jaylene Harper (WCCLMP) water quality measurements
Activity: 1. Conducted routine property inspections for encroachments, public safety concerns, and signage. 2. Supervised removal of dike and restoration efforts with local stakeholders and volunteer groups 3. Revisited areas from 2016 invasive plant removals and continued efforts to identify, map and remove all invasive plants. 4. Retrieve Data Loggers information, conduct measurements from Rod Surface Elevation Table (Rset), and conducted water quality readings on regular basis at set locations within estuary.		

Goals & Objectives by Property	Activities / Description	Image(s)
Quatse Wildlife Management Area		
Category: 1. Inventory **Goal:** 1. 3 **Goal Descriptor:** 1. Invasive species **Activity:** 1. Revisited areas from 2016 invasive plant removals and continued efforts to identify, map and remove all invasive plants.	**Planned Activity:** 2. Utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database	 Invasive plant ID – Orange Hawkweed

Goals & Objectives by Property	Activities / Description	Image(s)
Salmon River Estuary Conservation Area		
Category: 1. Inventory **Goal:** 1. 1, 2 **Goal Descriptor:** 1. Invasive species; Fish, Wildlife Inventory **Activity:** 1. Revisited restoration areas from 2016 work where 3ha were cleared of invasive plants and replanted with native species. Continued removals of invasive plants in areas; Wildlife camera installed in areas of restoration where riparian areas were enhanced. Continued monitoring Western screech Owl Nest Boxes	**Planned Activity:** 1. Utilize seasonal work crews to continue mapping/inventory of invasive species sites and input data into the IAPP database; Year 1 conduct winter migratory bird study; Year 2 fish utilization and breeding bird assessment; Year 3 report; work with local naturalists to complete work; installation of wildlife cameras to monitor large mammal use of estuary	 Hilary Blackman (WCCLMP) checking WSOL Nest Boxes  Wildlife Camera at 2016 riparian restoration site

Goals & Objectives by Property	Activities / Description	Image(s)
Somenos Marsh Conservation Area		
Category: 1. Management 2. Inventory **Goal:** 1. 1, 2, 3, 4, 5 2. 1, 3, 4, 5 **Goal Descriptor:** 1. Public Safety and Liability 2. Support Monitoring **Activity:** 1. Continued monitoring and clearing of homeless from conservation area and cleanup of sites. 2. Continued monitoring of Species At Risk within Somenos marsh by maintaining sites and working with local stakeholders	**Planned Activity:** 1. Property inspections and updated inventory of boundary encroachment; liaison with community advocates for homeless; install updated regulatory and interpretive signs at key access points throughout conservation area complex 2. Conduct inventory of priority species/vegetation for monitoring work	 Homeless camp in Somenos  Homeless camps in Somenos  Jaylene Harper and Hilary Blackman (WCCLMP) clearing invasives at Species at Risk site

Goals & Objectives by Property	Activities / Description	Image(s)
Thetis Island Bat Caves		
Category: 1. Inventory 2. Monitoring **Goal:** 1. 1 2. 1 **Goal Descriptor:** 1. Bat Species 2. Habitat Utilization **Activity:** 1. Site visit with consultants and contractor to install acoustic monitoring systems within caves for bat presence/absence and population estimates.	**Planned Activity:** 1. Work with consultants/contractors to develop an acoustic monitoring program at the bat caves to determine population estimates of bats utilizing area 2. Work with consultants/contractors to monitor health of bat populations	 Thetis Island bat cave entrance  Thetis Island Bat Cave entrance

Goals & Objectives by Property	Activities / Description	Image(s)
Willow Creek Conservation Area		
Category: 1. Management; 2. Restoration Enhancement **Goal:** 1. 1, 2, 3, 4, 5 2. 1, 3, 4, 5 **Goal Descriptor:** 1. Public Safety and Liability; Immediate site issues, concerns 2. Invasive Species Removals	**Planned Activity:** 1. 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; 2. Respond to public inquiries/complaints; review development proposals that may affect conservation areas; 3. Annual work crews; partnership with local volunteers and stakeholders to achieve annual goal to achieve 3 year target; mapping; work with CISC and Provincial EDRR coordinator in identifying priority areas	 Jaylene Harper and Hilary Blackman (WCCLMP) completing maintenance on bridges and walkways  Hilary Blackman and Jaylene Harper (WCCLMP) completing maintenance on bridges and walkways
Activity: 1. Bridge maintenance and inspections conducted to ensure public safety after extreme rainfall events and flooding in area. 2. Revisited areas from 2016 invasive plant removals and continued efforts to identify, map and remove all invasive plants		

South Coast Region

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, Roberts 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 18 Conservation Land complexes, administered regionally, including a number of properties owned by The Nature Trust of British Columbia.

Summary Statement of Regional Investment:

In 2017-18 $97,090 was invested in 18 Conservation Lands in the South Coast region, to assist regional staff and partners in achieving management objectives. The single largest investment of funds granted by HCTF was in the demolition of an old barn and trailer in the Serpentine WMA. These structures posed a risk to human health, and thus necessitated demolition. Volunteers were recruited to help sort materials stored within the barn for recycling and reduce the amount of materials sent to the landfill.

In October 2017, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) partnered with Ducks Unlimited Canada (DUC), The Nature Trust of British Columbia (TNTBC), and the Canadian Wildlife Service to initiate the South Coast Conservation Land Management Program (SCCLMP). Modelled off the successful West Coast Conservation Land Management Program (WCCLMP), the goal of the SCCLMP is to provide a more collaborative and integrated approach to the management of conservation lands for the benefit of fish, wildlife, species at risk, and their habitats. In particular, this program will leverage resources to apply a strategic focus to the management of Wildlife Management Areas in the South Coast. A full-time Coordinator was hired to lead the partnership, oversee the South Coast HCTF Conservation Lands O&M budget, and expand the capacity of the program by soliciting additional funds and promote community stewardship throughout conservation

lands. Until additional funding is brought into the partnership, HCTF O&M grants will fund the majority of the Coordinator's salary.

In 2017/2018 Fisheries and Oceans Canada selected three projects within South Coast Conservation Lands to receive significant investment from the Coastal Restoration Fund over the next five years. One of the main goals of each of these projects is to increase fish passage through river training structures and other infrastructure throughout estuaries. Funding includes $2.3 million to the Squamish River Watershed Society for a project in the Skwelwil'em Squamish Estuary WMA, $2.7 million to Raincoast Conservation for a project in the Sturgeon Bank and Roberts Bank WMAs, and $2.0 million to Ducks Unlimited Canada for a project in the South Arm Marshes WMA. Over the next five years the SCCLMP Coordinator will continue to be consulted and involved in these projects to varying degrees to ensure that the goals of the WMAs are met and the projects to not interfere with ongoing conservation land management activities.

Project Highlights:

$6,463 invested in Bert Brink Wildlife Management Area for property inspection, invasive plant assessment, rubbish removal, ecological restoration opportunities/priorities, and integrated land management planning.

$8,911 invested in Boundary Bay Wildlife Management Area for property inspections, rubbish removal, invasive plant management, sign maintenance, ecological restoration prioritization, and engagement with local stakeholders for integrated planning.

$4,011 invested in Camp Slough conservation area for property inspection, invasive species management, and rubbish removal.

$1,136 invested in the Wells Sanctuary conservation area for property inspections, invasive plant removal, rubbish removal, and signage.

$2,786 invested in the Chilliwack River conservation area for property inspection, rubbish removal, maintenance of property information signage, and addressing illegal camping issues.

$5,417 invested in the Lhá:lt/Harrison-Chehalis WMA for property inspection, rubbish removal, invasive species management, maintenance of property information signage, planning for site access and signage requirements, and integrated stewardship between stakeholders.

$13,669 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, maintenance of turtle nesting beach, purchase of wood for volunteer-led construction/installation of swallow and duck nest boxes, and management planning for species at risk and nuisance species.

$1,136 invested in the Surrey Bend conservation area for property inspections and rubbish removal.

$3,561 invested in the Silverhope Creek conservation area for ecological assessment, inspection for land management needs, public information sign installation, rubbish removal, and boundary identification.

$1,435 invested in Coquitlam River Wildlife Management Area to remove nuisance beavers, remove garbage, and repair fence.

$2,248 invested in Roberts Bank Wildlife Management Area to remove and control invasive plants (e.g., blackberry and scotch broom) and coordinate with stakeholders and government to ensure the ecological and shoreline projection values of the Fraser River Estuary WMAs are incorporated into regional flood adaptation strategy planning.

$34,309 invested in Serpentine Wildlife Management Area for demolition of barn and trailer, tower and trail maintenance, garbage pickup and removal, and vegetation maintenance.

$880 invested in South Arm Marshes Wildlife Management Area for site visit, inspection, and identification of restoration priorities.

$4,900 invested in Sturgeon Bank Wildlife Management Area to support ongoing research into the cause of marsh recession throughout the WMA and coordinate with stakeholders and government to ensure the ecological and shoreline projection values of the Fraser River Estuary WMAs are incorporated into regional flood adaptation strategy planning. 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.

$1,750 invested in Squamish Estuary Wildlife Management Area to conduct site assessment for signage/infrastructure needs and ongoing management planning for an upcoming large-scale restoration project in the WMA.

$306 invested in Forslund-Watson conservation land for site visits to determine management priorities.

$525 invested in Pemberton Valley Wildlife Management Area to resolve boundary dispute and unauthorized right-of-way through WMA.

Conservation Outcomes:

The 2017-18 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 $1,119,323 of funding was provided by FLNRORD, TNTBC, DUC, and its partners:

1. $20,000 from FLRNROD to support land management activities.
2. $586,728.60 from DUC for land management activities in WMAs and other conservation lands, including:
    - **a.** $11,577.97 invested in Cheam Lake Wetlands from DUC and the North American Wetlands Conservation Act (NAWCA) grant for regular project inspections, maintenance of habitat and water control infrastructure, staff time and labour associated with yellow flag iris control study, small tools and supplies
    - **b.** $6,000 invested in the Serpentine WMA from the NAWCA for staff time associated with Parrot's feather control
    - **c.** $80,193.60 invested in the Serpentine WMA from DUC and NAWCA for staff time associated with: regular project inspections, habitat maintenance, minor infrastructure repairs, preparation for trailer and barn demolition, design and installation of new signage (including materials and contractors associated with installation), responding to inquiries from members of the public.
    - **d.** $37,016.75 invested in the Pitt-Addington WMA from DUC and the NAWCA for staff time associated with regular project checks, habitat maintenance and vegetation control, excavator and operator for beaver dam removal.
    - **e.** $18,467.70 invested in the South Arm Marshes WMA from DUC and the NAWCA for staff time associated with habitat management, water control infrastructure inspection, vegetation control, grant writing, and repair of boat for site access.
    - **f.** $13,261.46 invested in the Boundary Bay WMA from the City of Surrey for staff time associated with literature review of effects of salt marsh habitat in flood mitigation and on ecology of Mud Bay, and installation of sediment measurement platforms; purchase of sediment platforms and small tools for installation.
    - **g.** $220,181.12 invested in the Boundary Bay WMA from the National Wetland Conservation Fund (NWCF) for the eradication of *Spartina anglica*, including: staff time for mapping and removal of *Spartina*, data entry, and project management; equipment for mapping and removal of *Spartina*; pesticides for removal of *Spartina*.
    - **h.** $200,000 invested in the Boundary Bay WMA from the FLNRORD for the eradication of *Spartina anglica*, including: staff time for mapping and removal of *Spartina*, data entry, and project management; equipment for mapping and removal of *Spartina*; pesticides for removal of *Spartina*.

3. $157,000 for the Sturgeon Bank Marsh Recession Project in the Sturgeon Bank and Roberts Bank WMAs, including:
    a. $37,500 from the National Wetland Conservation Fund
    b. $68,000 from HCTF Restoration/Enhancement grants
    c. $15,000 from the Vancouver Fraser Port Authority
    d. $2,500 from FLNRORD
    e. $20,000 in-kind support from FLNRORD
    f. $14,000 in-kind support from Environment and Climate Change Canada

4. $291,765 raised by the Squamish River Watershed Society for several projects within the Skwelwil'em Squamish Estuary Wildlife Management Area, including:

    a. Squamish River Training Dike Fish Passage Upgrades Seed Funding Project
        i. $5,000 from HCTF
        ii. $5,000 from the Fish and Wildlife Compensation Program
        iii. $1,500 in-kind support

    b. Squamish Estuary Salmon Habitat Recovery Project
        i. $125,540 from the Coastal Restoration Fund
        ii. $52,000 in-kind support

    c. No Child Left Indoors Education Outreach Program
        i. $7,500 from TD Friends of the Environment
        ii. $3,000 from Fisheries and Oceans Canada
        iii. $5,600 from Squamish Savings
        iv. $125 from private donations
        v. $25,500 in-kind support

    d. BCIT Summer Intern / Invasive Species Management & Monitoring Project
        i. $500 from BCIT Summer Intern / Invasive Species Management & Monitoring Project

    e. Juvenile Chinook Outmigration Study
        i. $58,000 from the Pacific Salmon Foundation

    f. Volunteer Estuary Monitoring Project Support Team: Quest University, Simon Fraser University
        i. $2,500 in-kind support

5. Over $58,640 from Raincoast Conservation with funding from the Coastal Restoration Fund to increase fish passage throughout river training infrastructure in the Fraser River delta and conduct research in salmonid utilization of estuarine marshes, including:

    a. Over $50,000 for sampling salmonid utilization of estuarine marshes

b. Approximately $8,640 in-kind field work support from volunteers

6. $4,065 in-kind support from the Pitt Waterfowl Management Association for ongoing stewardship and nest box monitoring and maintenance in the Pitt-Addington Marsh Wildlife Management Area, including:

    a. $3,315 in-kind labour

    b. $750 supplies and fuel

7. Over $374.50 in-kind support from volunteer Al Serfas for constructing swallow nest boxes in the Pitt-Addington Marsh WMA, including:

    a. Over $262.50 in-kind labour

    b. $112 in nest box supplies and transportation costs

8. Over $750 in-kind support from the Langley Field Naturalists for stewardship of the Forslund-Watson Conservation Area, including invasive species control and monitoring, gate repair, nest box installation and cleaning, monitor bats, monitor constructed wetland, tree planting and monitoring, bird counts, tools and equipment.

9. In-kind contribution from Thompson Rivers University for ongoing research into to the efficacy of a novel technique of yellow flag iris control in Cheam Lake Wetlands.

10. Ongoing stewardship activities and public engagement in the Boundary Bay and Serpentine WMAs by the Friends of Semiahmoo Bay Society.

11. Ongoing UBC research into eelgrass ecology in the Roberts Bank and Boundary Bay WMAs.

12. Ongoing SFU research into western sandpipers in the Roberts Bank WMA.

13. Ongoing Environmental Assessment by Hemmera (on behalf of the Vancouver Fraser Port Authority) for the Roberts Bank Terminal 2 expansion and its effects on the adjacent Roberts Bank WMA.

Region: **South Coast**

Photographs:



1. **Bert Brink Wildlife Management Area** – property assessed for habitat values, management needs, and restoration priorities; extensive garbage removal from illegal dumping sites.


2. **Camp Slough** – property assessed for management needs; signage and fences maintained; invasive plants removed and native planting sites maintained.

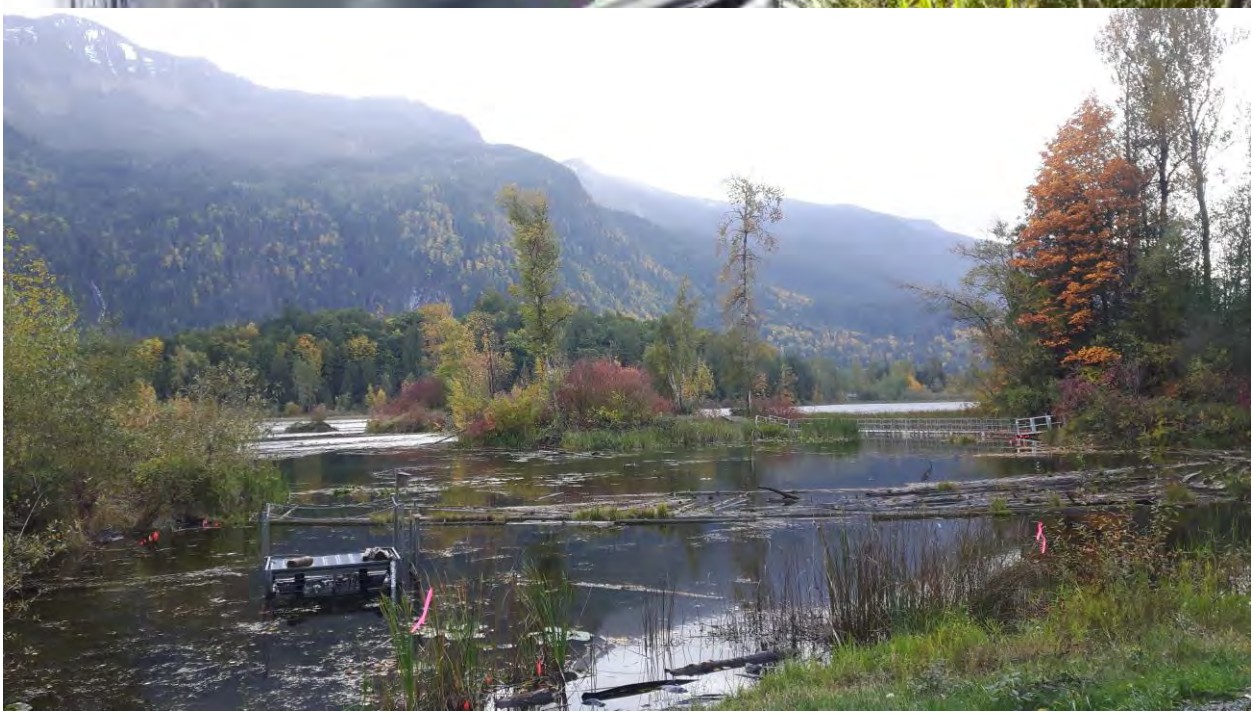

3. **Chilliwack River** – property assessed for management needs; boundary signage maintained.


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

5. **Sturgeon Bank and Roberts Bank Wildlife Management Areas** – ongoing research into the cause(s) of intertidal brackish marsh recession in the Fraser River delta

6. **Pitt-Addington Wildlife Management Area** – community-led installation of nesting boxes for ducks and swallows; burrowing owl sighting

7. **Serpentine Wildlife Management Area** – demolition of barn and trailer



8. **Cheam Lake Wetlands** – ongoing research by Thompson Rivers University into the efficacy of a novel technique to control invasive yellow-flag iris; property assessed for management needs and restoration priorities

9. **Lhá:lt/Harrison-Chehalis Wildlife Management Area** – property assessed for management needs; collaborate with Sts'ailes First Nation regarding identifying site access points, trails, and need for signage

Thompson Okanagan Region

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 Wildlife Management Area (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 340 m at Kamloops Lake to 1450 m 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, 19 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:

A total of $100,530 of Wildlife O&M money was invested in the Thompson Okanagan Region in the 2017-2018 fiscal year, and this greatly assisted the conservation partners in addressing key land management objectives.

Project Highlights:

- **$19,420** was invested in South Okanagan Wildlife Management Area, including $3,300 from Wildlife O&M for invasive plant treatment in the two parcels located at Oliver Mountain. In addition, wasp nest removal was contracted and deterrents were installed in the SOWMA kiosk. An additional $16,120 from FLNRORD and external partners was expended to purchase fencing materials for the cattle pastures to protect species at risk, and for maintenance at the SOWMA kiosk.
- **$17,500** was invested in McTaggart-Cowan/nsək'łniw't WMA to complete a recreational use assessment to inventory the recreational and environmental values present, and identify areas of spatial and temporal conflicts between these two sets of values. In addition, a protective cover was purchased for the WMA kiosk.
- **$10,000** was invested in Skull Mountain Acquisition 1 for assessments of habitat condition of wetlands, riparian areas and upland range areas including mapping of key habitats of species at risk and other wildlife.
- **$10,000** was expended to purchase fencing materials for Antlers Saddle Complex. This fencing will be used to reduce impacts from cattle in this conservation land.
- **$6,000** was invested in Dewdrop-Rosseau Creek WMA, including $2,000 from Wildlife O&M for new informational signage to increase public and resource user knowledge of the values on this property. An additional $4,000 from FLNRORD was invested to repair fences, manage and mitigate impacts from public recreation and off road vehicles, and to install and monitor Lewis' woodpecker and pygmy nuthatch nesting boxes.
- **$8,050** 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 and operational oversight of the AWUC to ensure conservation objects.
- **$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.
- **$5,120** 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.
- **$4,620** 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, continuation of the photographic monitoring program, and review and discussions with RDOS staff and contractors regarding monitoring well placement and installation on the property to assess potential impacts from neighbouring landfill.
- **$3,350** was invested at the Salmon Arm Bay property, including $1,350 from Wildlife O&M for site visits; review, input and participation in disturbance monitoring working group; assisted with restoration planning for foreshore habitat enhancement; discussions with SABNES regarding management planning update; boundary and information signs produced and installed. An additional $2,000 from FLNRORD was invested for replacement signage and materials for repairs to a bird blind on the property.
- **$3,075** was invested at the Keremeos Creek property. Primary tasks included site visits, fence maintenance, boundary and information signage produced and installed, invasive plant management, and discussions with FLNRORD staff regarding dyke failure, mitigation and repair plans.
- **$1,400** 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.

Conservation Outcomes:

Each of the conservation lands in the Thompson Okanagan Region has distinct management needs and objectives that reflect the unique landscape and ecology of the area. Numerous conservation outcomes were achieved on these lands in 2017-2018 using Wildlife O&M funding. Many of these outcomes continue to build upon the efforts and investments of previous years.

The largest single investment this year was in the region's newest WMA. Recreational activities including rock climbing, bouldering, mountain biking and motorized vehicle use have been identified as one of the key pressures in McTaggart-Cowan/nsək'łniw't WMA. The recreational use assessment[1] is the first step in assembling use information from key stakeholders in the area and determining how these activities affect important conservation values in the WMA such as

[1] http://a100.gov.bc.ca/pub/acat/public/viewReport.do?reportId=54228

bighorn sheep and species at risk habitat. This information will be used to inform subsequent management planning activities in the WMA.

There was an opportunity this year to attract regional invasive plant management attention to two South Okanagan WMA parcels located within the Oliver Mountain area near Oliver, B.C. A modest investment of Wildlife O&M funds facilitated selection of Oliver Mountain as the site for a three-year Okanagan and Similkameen Invasive Species Society (OASISS) comprehensive invasive plant treatment project, with a total of $14,000 invested in the first year only from multiple government funding partners. The aims of the project are to (i) reduce the abundance and diversity of invasive plants over 3 years, and (ii) demonstrate an integrated approach that is aligned with the principles of long-term sustainability.

The investment in Skull Mountain Acquisition 1 was used to survey and assess the habitat condition of wetlands, riparian areas and upland range areas within the Skull Mountain Acquisition 1. The key habitats of species at risk and other wildlife found in the conservation land were mapped. This information will enable FLNRORD conservation lands staff to make management recommendations based on outcomes of the habitat monitoring and assessment work. Signage improvements in both Dewdrop-Rosseau WMA and McTaggart-Cowan/nsək'łniw't WMA also helped increase public awareness of the presence and function of conservation lands in the Thompson Okanagan region.

The objective of the fencing project at Antlers Saddle Complex is to establish livestock fencing to exclude cattle access to the majority of the Garnet Valley parcels. Approximately 3 km of fencing is required to meet this objective. As of mid-March 2018, we had not yet reached agreement with the Penticton Indian Band (PIB), the cattle rancher and the FLRNROD Range Program as to the best location for fencing to be installed. As such, fencing materials were purchased in 2017, with the intent to complete the fence installation in spring of 2018 with a combination of funding and in kind support from the Conservation Lands program and partners (PIB, rancher, Range Program, volunteers).

The 2017-2018 field season resulted in site assessments being conducted on a number of TNTBC conservation properties in the Okanagan region. Each TNTBC conservation property/complex 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 signs at key access and high traffic points across the entire Okanagan region. Invasive plant management continues to be a top priority for TNTBC conservation lands, with the focus being updating survey information to help better inform treatment options and future planning. The conservation youth crew continues to play a key role in facilitating priority land

management activities that meet conservation goals and objectives. Ongoing communication with conservation partners, utility right of way holders, and neighbouring property owners to help inform all parties on the importance of conservation land management contributed to a successful field season.

Photographs

1. McTaggart-Cowan/nsək'łniw't WMA Kiosk (Credit: Garry Tipper).

2. Skull Mountain Acquisition - Coral Lake (Credit: Justine Densmore-McCulloch).

3. South Okanagan WMA Invasive Plant Treatment at Oliver Mountain Parcels (Credit: Jessica Hobden).

4. Okanagan Falls Biodiversity Ranch fence repair.

5. Okanagan Falls Biodiversity Ranch Antelope-brush planting restoration (not funded by HCTF O&M).

6. White Lake Basin Biodiversity Ranch installation of Burrowing Owl Burrows at (not funded by HCTF O&M).

7. White Lake Basin Biodiversity Ranch assisting with rattlesnake research project (not funded by HCTF O&M).

8. Vaseux Lake – East West North girdling of invasive trees.

9. Vaseux Lake – Brock Thomas photographic monitoring.

10. Vaseux Lake- Brock Thomas illegal dumping.

11. Keremeos Creek installation of temporary “safety fencing” along dyke.

12. SOWMA Kiosk invasive plant control.

Kootenay Boundary Region

Region: Kootenay Boundary (Region 4)

Ecological Significance of the Region:

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 many 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 wildlife naturally attracts predators and consequently, wide-ranging carnivores are still common in the Kootenay's. Additionally, over 270 species of birds make use of the region, many on their migratory travels along the Pacific flyway.

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 rare species such as the American badger, Swainson's hawk, Northern leopard frog and Lewis' woodpecker.

However, the low elevation valleys of the Kootenay's, 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. In turn, this creates additional pressures on the landscape and impacts wildlife habitat and biodiversity values. Fortunately, the Ministry of Forests, Lands, Natural Resource and Rural Development (FLNRORD) along with The Nature Trust of British Columbia (TNTBC) have worked for decades to conserve ecologically significant habitats within the region. As a result, dozens of properties have been secured and, when combined with properties conserved by other land trusts and agencies, have resulted in a significant area of the Kootenay landscape being conserved in perpetuity.

Summary Statement of Regional Investment:

In 2017-18, $110,064.00 was allocated to 18 TNTBC and FLNRORD conservation property complexes in the Kootenay- Boundary Region, to assist regional staff and partners in achieving management objectives.

The funding was used for a wide variety of operations and maintenance activities, the highlights of which are outlined below.

Project Highlights:

Project highlight for the Kootenay Boundary region during the 2017-18 year, include:

- $19, 670.07 was invested between TNTBC's Bull River Armstrong and FLNRORD's Neilson Conservation Property Complexes for fence removal and installation. Between the two properties, approximately 1100 metres of new range fencing was built, which included innovative wildlife friendly crossing features. The new fencing replaced sections that were estimated to be 25-30 years old and were a hindrance to wildlife travel. In the case of the Neilson property, the fencing installation will also prevent the drift of cattle from adjacent crown range, which happened occasionally due to a failing and incomplete fenceline.

- $15, 595.11 was invested for the removal and installation of new range fencing at TNTBC's Sheep Mountain Conservation Property Complex. Old fences were removed and 850 metres of new fence was built adjacent to the property access road and parking area. The fence was designed and built to be wildlife friendly, with fewer strands and low top-strand heights. This project will also prevent unauthorized motor vehicle access, which occasionally occurred due to the poor condition of the previous fence and a small, unfenced section near the entrance to the property.

- $10,000.00 was invested into FLNRORD's Creston Valley Wildlife Management Area to maintain and fix water control structures throughout the WMA and, to remove woody vegetation and rodent holes from dykes that threatened their structural integrity.

- $7,309.07 was directed to FLNRORD's Columbia Wetlands Wildlife Management Area to hire a consultant to update the existing management plan. The revised management plan will assist staff and partners with reassessing management goals and objectives for the wetlands to meet current pressures, while maintaining conservation values of this ecologically rich WMA.

- $4,178.80 was invested at TNTBC's Grand Forks (Gilpin) Conservation Property Complex for access management and rehabilitation work, which included the decommissioning of 200 metres of off-road vehicle (ORV) trails, using heavy equipment. The second phase involved planting shrubs on the rehabilitated trails in an effort to deter future use and stabilize slopes. Some funds were also used to hire a herbicide applicator contractor to conduct chemical treatments of priority invasive plant species infestations found on the property.

- $2,306.25 was invested at TNTBC's Columbia Lake Westside Conservation Property Complex to hire a local contractor to conduct road stabilization work on the Spur Lake Road, a popular access point to the property. The contractor re-established trenches next to the road, installed water-bars and re-surfaced the road in heavily eroded areas. This work is expected to stabilize the road and mitigate water quality issues that nearby Hardie Creek may have experienced in recent years due to the deteriorating road condition.

- $3,348.10 was invested into TNTBC's Columbia Lake Eastside Conservation Property Complex by hiring a professional forestry consultant to undertake a forest re-generation survey and an

accompanying Ecosystem Restoration Plan. These important guiding documents will be used to develop future work plans on the property, with an emphasis of reducing forest in-growth to achieve wildlife habitat and biodiversity objectives.

- $25,451.15 was invested to hire several herbicide applicator contractors to conduct chemical treatments for priority invasive plant species across 12 TNTBC and FLNRORD Conservation Property Complexes throughout the region. Meanwhile, TNTBC conservation youth crews were involved in several days of mechanical invasive plant treatments in sensitive and riparian areas on both TNTBC and FLNRORD conservation property complexes, which totalled another $5,075 in treatment expenditures.

Conservation Outcomes:

The 2017-18 field season resulted in a wide range of critical land management needs being addressed on conservation lands in the Kootenay Boundary Region. These activities, included but, were not limited to: infrastructure replacement, the development of critical documents such as property management and ecosystem restoration plans as well as, habitat restoration, monitoring and inventory activities.

Old fence lines were removed and replaced with new ones to reduce trespass of livestock and unauthorized motor vehicle use on sensitive conservation properties. Meanwhile, public information kiosk and boundary signage were installed in key locations to inform the public of land ownership and the important conservation values, each property possesses. A public access road to a conservation property was also repaired, so as to ensure safe public access and to reduce impairment to downstream water quality. Flood control structures and dykes also received much needed repairs to ensure they continue to function safely and as, designed.

Meanwhile, mechanical and chemical invasive plant treatments and re-seeding efforts were untaken on many properties in an effort to restore compromised ecosystems to native vegetative conditions. In some cases, illegal trails/roads were rehabilitated and planted with native shrubs in an effort to restore slope stability and reduce the likelihood of invasive plant establishment. On other properties, detailed assessments were made to design a future wetland restoration project.

Some funding was also invested into the future conservation by undertaking important planning activities, including the development of an ecosystem restoration plan designed to target forest encroachment in open forest sites on an important conservation property. Meanwhile, a dated WMA management plan was updated to make it more applicable and useful to implement into the future.

Finally, vegetation monitoring, invasive plant inventory and general property assessments were undertaken, which form the basis for work activity and conservation planning for future field seasons.

Photographs:

For region specific photos that highlight project work in the Kootenay-Boundary Region, please see the accompanying photo report.

Region: Kootenay Boundary (Region 4)

1. **Bummers Flats (FLNRORD) –** TNTBC Conservation Youth Crew canoeing to access and hand treat an isolated infestation of Purple Loosestrife, alongside the Kootenay River.

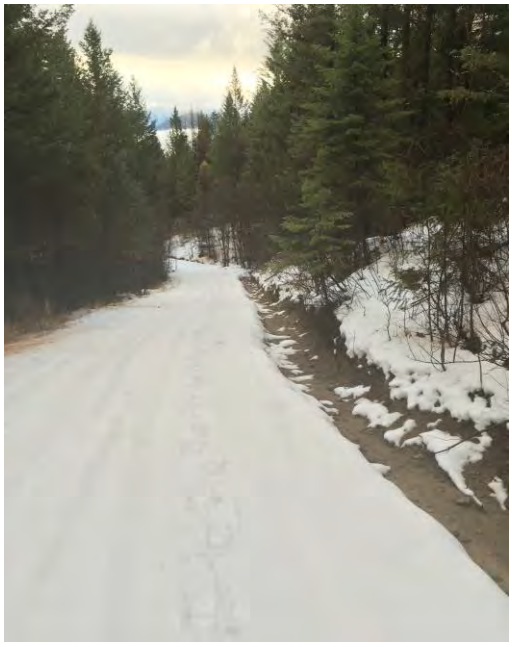
2. **Wasa Slough (TNTBC)** - Collaborative knapweed pull with TNTBC Conservation Youth Crew and staff from the East Kootenay Invasive Species Council.

3. **Big Ranch (TNTBC)** – TNTBC Conservation Youth Crew, bucking and piling Aspen in an effort to consolidate deadfall to improve wildlife access to property and forage values.

4. **Bummers Flats/Cherry Creek (TNTBC)** –TNTBC Conservation Youth Crew mechanically treating Common Burdock infestation alongside George's Pond, a key wetland feature of the property.

5. **Newgate (FLNRORD)** – TNTBC Conservation Youth Crew conducting fence maintenance on perimeter fencing to reduce likelihood of unauthorized public access and cattle trespass.

6. **Gold Creek (TNTBC)** – Installation of new information kiosk, prior to installation of educational signage at a conservation property that is threatened by heavy recreational use nearby.



7. **Bull River/Armstrong (TNTBC)** – Replacement of a new wildlife friendly perimeter fence, note the crossing feature of wire placement. The old fence was approximately 25-30 years old.

8. **Columbia Lake Westside (TNTBC)** – Road upgrades to Spur Lake, the trenching will ensure that run-off will not deteriorate the road and impact water quality on nearby Hardie Creek.


9. **Sheep Mountain (TNTBC)** – Removal and replacement of old fencing that was not wildlife friendly. The new fencing will ensure that illegal motorized use doesn't impact the property.

10. **Big Ranch (TNTBC)** – Aspen enclosure plots were established to measure the vegetative response to fencing-off aspen stands that were being heavily impacted by ungulate browsing.


11. **Creston Valley WMA (FLNRORD)** – An contractor uses an excavator to expose and remove rodent holes that compromise dyke integrity at the Wildlife Management Area.

12. **Earl Ranch/Bar 40 (FLNRORD)** – Consultant and FLNRORD staff laying out proposed wetland restoration project at the conservation property.

Cariboo Region

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 2017-18 $29,109 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:

$675 was invested in the Chilanko Marsh conservation area to inspect the property for safety and ecological concerns. The perimeter fence and signage were inspected and maintained as needed.

$27,309 was invested in the Chilcotin Lake & Marshes conservation area to inspect the property for safety and ecological concerns, and to acquire fencing materials for installation in 2018-19. Property information signs were designed and printed, for installation in 2018-19.

$450.00 invested in the Dale Lake conservation area for property inspections for safety and ecological concerns, and maintenance of property information signage.

$675.00 invested in the Tautri Creek conservation area for property inspections for safety and ecological concerns, and maintenance of property information signage. The forested portions of this property were heavily impacted by wildfire in 2017.

$0 was invested in the Knife Creek Creek conservation area. This year the Cariboo Regional District (CRD) was able to provide us with crew to pull invasive plants from the site and conduct an herbicide spray.

Conservation Outcomes:

The 2017-18 field season resulted in important land management activities on a number of Conservation Lands within the Cariboo Region. Implementation of the 2017-18 work plans was a challenge, due to the high degree of wildfire activity throughout the 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. **Chilcotin Lake & Marshes** – property assessed for habitat values and management needs. Chilcotin Lake fence line planned and materials purchased for installation in 2018-19. Perimeter fencing at Chilcotin Marsh was inspected, and three fence breaches resulting from wildfire treatment were repaired. Signs maintained as needed.


2. **Chilanko Marsh** – property assessed for habitat values and management needs. Perimeter fencing and signage inspected and maintained.

3. **Dale Lake** – property assessed for management needs and safety issues; boundary signage installed. Rubbish removed from public access area.

4. **Tautri Creek** – property assessed for management needs and safety issues; boundary signage replaced. The forested portions of this property were extensively impacted by wildfire in 2017. Use of the property by wildlife since the fire was evident, including snowshoe hare and wolves.

Skeena Region

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:

$3,700 - Alice Arm Conservation Area was treated for invasive plants (burdock removal) and mapping a new area for treatment for 2018. An innovation in access for 2017 was extensive land exploration for an alternate route from the town of Kitsault to the estuary, which did not involve boat rental, improved safety, and expanded the field time on site. The new route is GPSed.

Field data collection for 2 CDC Element Occurrences of Pacific Crabapple were documented for sites outside of the TNT property, but which will help protect connectivity with the estuary.

$10,500 - Hubert Hill Conservation Area was intensively managed this year to install solar-powered, electric fencing around hill-top reseeding, caging young juniper from browse damage and public outreach. Future work will be periodic monitoring and maintenance.

$7,000 - Todagin Plateau Wildlife Management Area had recreational trail realignment and maintenance of the North Trail completed this year and a trail-cam purchased for monitoring activity (human and wildlife). Todagin WMA Management Report was officially signed off.

In response to increased concerns from Tahltan regarding access to sensitive areas, collaborative and strategic meetings were initiated and results are guiding future projects to more fully integrate the adjoining management jurisdictions and coordinate funding from various resources

more effectively. An ecosystem health monitoring project is being considered for 2018, involving Tahltan Wildlife Guardians, under professional supervision. The need to remove garbage will be recognized in each future plan, and prioritized with help of local Guide Outfitters to improve cost-effectiveness.

$2,075 - invested in the Kitsumkalum Lake – Nelson River conservation area for property inspection, survey of invasive plants, access and safety evaluation, and maintenance of signage.

$1,150 invested in The Lakelse Lake – Muller's Bay conservation area for property inspection, review of industrial referrals, boundary sign maintenance, and rubbish removal.

$2,500 invested in The Lakelse River conservation area for property inspection, trail maintenance, engagement with local stewardship club, and boundary sign maintenance.

$2,79 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.

Conservation Outcomes:

The 2017-18 field season resulted in the unique habitat values being checked for invasive weed or other problems and joint problem solving with motorized users at the Lakelse property. This communication with users and First Nations has guided 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.

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.

Photographs


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


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


3. **Lakelse River –** property assessed for management needs. Public recreation trail assessed for maintenance requirements. Local stewardship partner engaged in maintenance. Signage repaired.


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

Omenica Region

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: 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 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 the cover a small selection of the habitats that can be found regionally.

Summary Statement of Regional Investment:

In 2017-18 $31,260.00 was allocated to 7 conservation properties in the Omineca, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$20136.37 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, implementation of invasive plant management plans, and seasonal inspections. The reduced mobility trail project has been initiated. $9000 of HCTF O&M funds were leveraged and an additional $74001.00 of grants and contributions received. The first phase of the project is nearly complete with an assessment, signage, and final trail works to be completed in spring 2018.

$1578.75 invested in The Stellako River WMA for invasive species removal, and seasonal inspections. Fisheries and habitat values were assessed. Additional boundary signage needs have been identified.

$2175.25 invested in the Joanne Lloyd property for invasive species control and removal, infrastructure maintenance and seasonal inspection.

$900.00 invested in the Nechako River conservation property. Property condition, invasive species, forest health assessment, and public usage were all addressed.

$1,800.00 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.

$0.00 invested in the Tachick/Nulki property as Government staff time was not available.

Conservation Outcomes:

Invasive plant management continues to be a focus on priority areas of concern and significant reductions of invasive plants have been achieved at Stellako, Joanne Lloyd. Implementing invasive plant management plans is ongoing, in conjunction with the Northwest Invasive Plant Council. In partnership with community groups, funding from the Village of Valemount, The Columbia Basin Trust and Northern Health was applied for to undertake a trail resurfacing project to improve access and allow for individuals with reduced mobility access to a 2km section of trail in the Cranberry Marsh. Works were undertaken in the fall of 2017 and 1.8km of trail was completed before site conditions required works to be halted. Maintenance of infrastructure, installation of signage, site visits and trail maintenance were

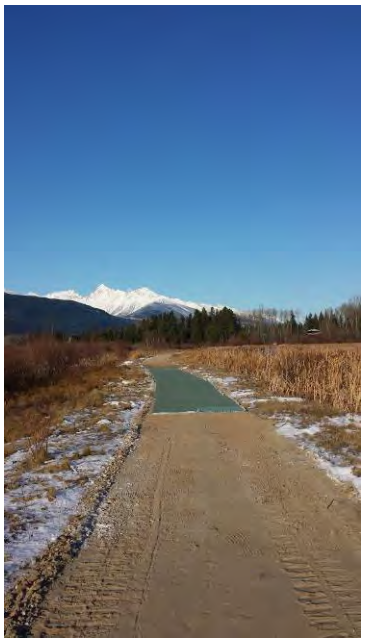
undertaken by The Nature Trust of British Columbia and FLNRO staff. Fisheries management continues to be a priority at the Stellako River WMA with increased effort from Government being spent. This provided opportunity for multiple site visits at reduced cost to the O&M budget. Management Plans for Stellako and Cranberry Marsh / Starratt are in final review.

Region: **Omineca**

Photographs:


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


2. **Nechako River Property** – property assessed for public usage and management needs; signage maintained. Invasive hawkweeds removed from public use trail.

3. **Cranberry Marsh WMA** – Installation of accessibility trail, 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.

Northeast Region

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 2017-18 $36,268.00 was allocated to 6 project areas in the Northeast, to assist regional staff and partners in achieving management objectives.

Project Highlights:

$6,526.00 invested in the Boundary Lake conservation area for property inspection, management of invasive plants, and maintenance of water control structures. Boundary signs were installed and maintained.

$5,903.00 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.

$3,254.00 invested in the Dunlevy Creek conservation area for property inspection, boundary sign maintenance, and control of forest ingrowth in grassland areas to maintain elk foraging habitat.

$2,944.00 invested in the Fort St. John Potholes conservation area for property inspection, maintenance of water control structures, and property boundary signage.

$12,393.00 invested in the McQueen Slough conservation area for property inspections, management of invasive plants, and maintenance of water control structures. Public access facilities, including trails and boardwalk, were maintained, as this conservation area regularly hosts elementary school children for an outdoor learning area.

$5,248.00 invested in the Worth Marsh conservation area for property inspections, installation of property informational signage, maintenance of water control structure, and review of oil and gas industry activities adjacent to the conservation area.

Conservation Outcomes:

The 2017-18 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** –Removing conifer ingrowth to protect elk foraging habitat. Area around informational signage maintained.

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. Boundary signage installed.

3. **Worth Marsh** – property assessed for management needs; water control structure maintained. Informational signage installed and maintained.

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