

# Management Plan Ryder Creek Property

1st Edition



By Jon Blais, PAg.

Habitat Enhancement Coordinator

August 22, 2025



**FRASER VALLEY  
CONSERVANCY**

## Acknowledgements

We respectfully acknowledge that the Ryder Creek property is part of the shared unceded territory of the Stó:lō people (S'ólh Téméxw). We especially want to thank the Ts'elxweyeqw Tribe First Nations whose home includes what is now commonly referred to as the Chilliwack River Valley. We appreciate the privilege of being able to steward this sacred land as they have for generations.

This document received generous financial support from the Habitat Conservation Trust Foundation (HCTF). The FVC Board of Directors and the Habitat Protection Committee played an important role in reviewing and granting approval.

Additionally, a special appreciation extends to the experts who generously contributed their valuable time, and knowledge. The thoughts they shared were instrumental in ensuring the long-term protection of the property. Particular acknowledgement is given to, in no particular order, Mike Pearson, Ph.D., for his knowledge of salmon and the aquatic environment, Aleesha Switzer R.P. Bio, for her passion and understanding of amphibians, Sofi Hindmarch R.P. Bio for her owl expertise, Drew Brayshaw, Ph.D, P.Geo, for his past work and recommendations regarding the geotechnical hazards of the area, and Steve Clegg for his local knowledge and past experience in working on the property. Joanne Neilson and Tamsin Baker played significant roles editing and providing valuable insights during the development of this document.



**HABITAT  
CONSERVATION TRUST  
FOUNDATION**

## Edition Table

Table 1 - List of Management Plan editions with authors and dates

<b>Edition</b>	<b>Author</b>	<b>Authors Title</b>	<b>Date</b>
1st Edition	Jon Blais	Habitat Enhancement Coordinator	August 22, 2025

## Contents

Acknowledgements.....	2
Edition Table.....	3
1.0 Introduction.....	5
1.1. Location.....	6
1.2. Legal Description.....	7
1.3. Landscape Description.....	7
1.4. First Nations Cultural Heritage and Traditional Land Use.....	9
1.5. Access.....	9
1.6. Surrounding Land Use.....	10
2.0 Natural Values.....	12
2.1. Watercourses and Waterbodies.....	12
2.2. Vegetation and Large Trees.....	17
2.3. Habitat Connectivity.....	17
2.4. Habitat Potential for Species at Risk.....	19
3.0 Threats to Natural Values.....	20
4.0 Management Vision, Goal and Objectives.....	24
4.1. Goal.....	24
4.2. Objectives.....	24
5.0 Management Recommendations.....	25
5.1. Management Actions Completed to Date.....	25
5.2. Current Recommendations to Address Threats.....	25
5.3. Additional Recommendations.....	28
5.4. Summary of Recommended Documents.....	29
6.0 References.....	31
Appendix A – Covenant.....	32
Appendix B – Water Quality Data.....	38
Appendix C – Species Survey Data.....	39
Appendix D – Invasive Species Map.....	41

## 1.0 Introduction

The Ryder Creek property is a 0.52 hectare parcel located in the Fraser Valley Regional District (FVRD). In 2009, a landslide brought down debris from the slope above. This obstructed Ryder Creek and flooded the residential home which was located on the property. A geotechnical assessment was done, and the property was deemed unsuitable for human habitation due to the risk of another slide occurring. The FVRD gifted the property to the Fraser Valley Conservancy (FVC) to hold in perpetuity in 2011. The property's history is outlined in the Ryder Creek Property Baseline Documentation Report (Blais, 2025).

The property contains many natural features worth protecting. The flat riparian zone is diverse in flora and complete with ponds and other topographical features which are usable by wildlife. Ryder Creek divides the property in half and provides spawning and rearing habitat for salmon, as well as habitat for other aquatic species. The steep sloped section of the property hosts a number of second growth trees. This property forms a connection between the Crown lands to the north, and provincial and regional park lands to the south.

This document provides management recommendations for the Ryder Creek Property in a way that conserves these natural features and retains its value as wildlife habitat. It summarizes the natural values of the property and potential threats to these values. The FVC's goals in managing the property are also stated, along with recommendations on how to achieve those goals going forward.

With proper management, the Ryder Creek property can serve as a small hub of biodiversity as well as a wildlife corridor which will strengthen the ecological integrity of the greater area and watershed. As the threat to biodiversity increases globally, the importance of such land protection should not be understated.

### 1.1. Location

The Ryder Creek property is located at 48513 Auchenway Road, Chilliwack, BC. This address is within the boundaries of the FVRD Electoral Area E and positioned within the Chilliwack River Valley. Its location is north of the Chilliwack River, and south of the community of Ryder Lake, which sits on the plateau above (Figure 1).

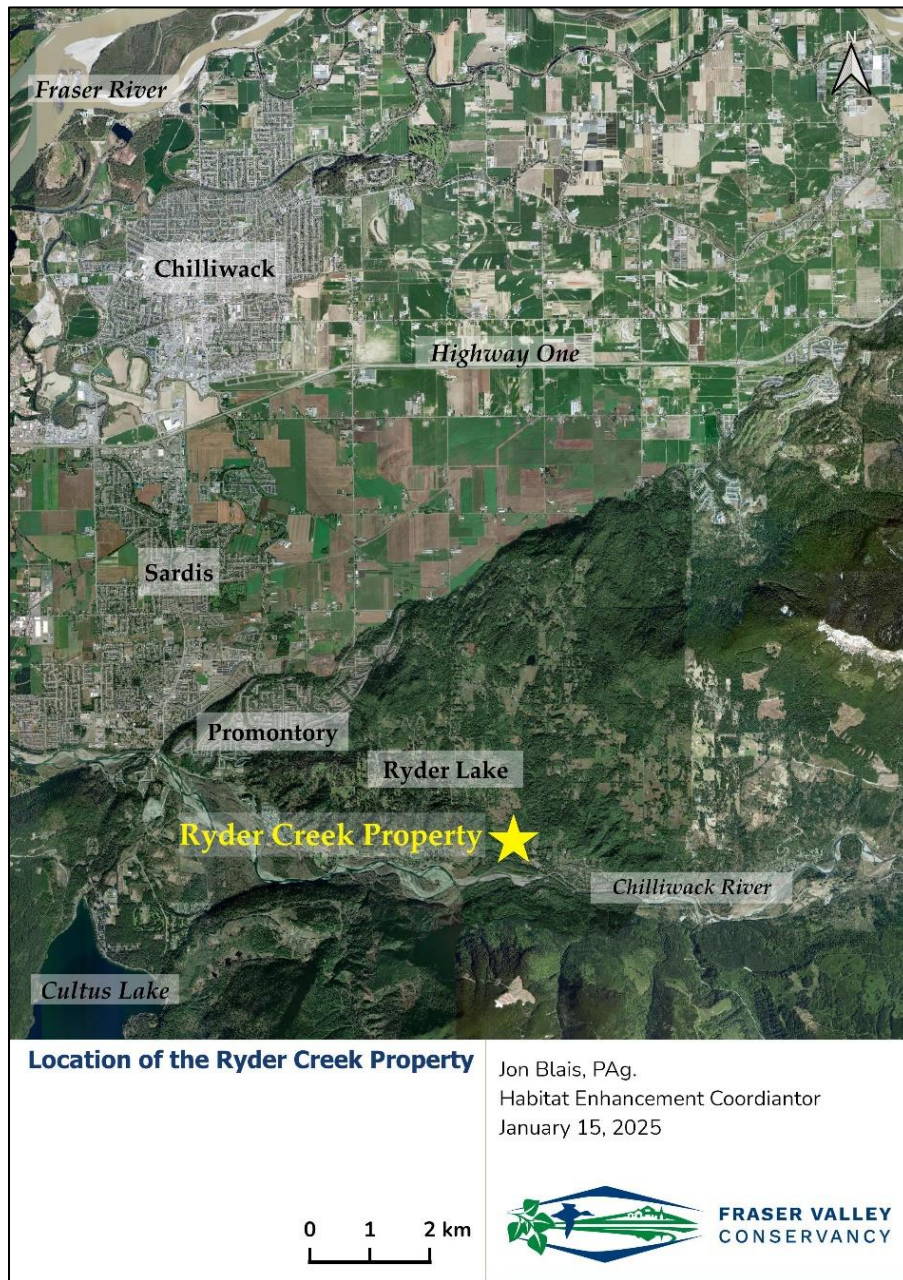


Figure 1 - Location of the Ryder Creek property in relation to the surrounding region.

## 1.2. Legal Description

The Parcel Identifier (PID) for the property is 005-033-586. Its Legal Description is “Lot 2 Except: Part Subdivided by Plan 45369, District Lot 794 Group 2 New Westminster District Plan 40221”. The property is currently zoned as RR - 1 (Rural Residential). The Fraser Valley Conservancy is the Registered Owner of the property. A covenant was placed on the property at the time it was transferred to the FVC (Appendix A).

## 1.3. Landscape Description

The property is a 0.52 hectare parcel which was previously a residential lot that was cleaned up in 2011 and restored to a more natural state. The topography of the landscape (Figure 2) is influenced by the natural terrain and previous enhancement efforts. The southern part of the parcel is located at approximately 85 meters above sea level (A.S.L.). This section is relatively level, with slopes ranging from 0-10% (Golder Associates, 2009). It contains features including small berms and depressions which were created by a channel enhancement project in 2011 which was not completed (Blais, 2025). Ryder Creek flows across the property from the east and exits to the south. North of Ryder Creek, there is a roughly 8-10 meter stretch of gentle slope (0-10%) which then transitions into a moderately steep incline with an average slope of about 60% (Golder Associates, 2009). This slope extends for approximately 145 meters, past the northern property boundary, until a break where the incline decreases to an average of 35% (Golder Associates, 2009). The slope continues for an additional 100 meters before reaching the Ryder Lake area which is situated at approximately 220 meters A.S.L.(Golder Associates, 2009).

The parcel sits between two currently inhabited rural residential lots to the east and west. Minor anthropogenic structures exist on the property including gates, a sign, metal pieces left from the previous land use and a chain on a tree. A section of Ryder Creek is reinforced with tires embedded into the bank. There are also the remnants of an old structure, possibly a chicken coop or doghouse. Features added by the FVC in years past include bird houses, and a small bridge that spans the creek. The property is only fenced on the south ends of the east and west boundaries with the western fence being quite degraded. Additional details can be found in the Property Baseline Documentation Report (Blais, 2025).

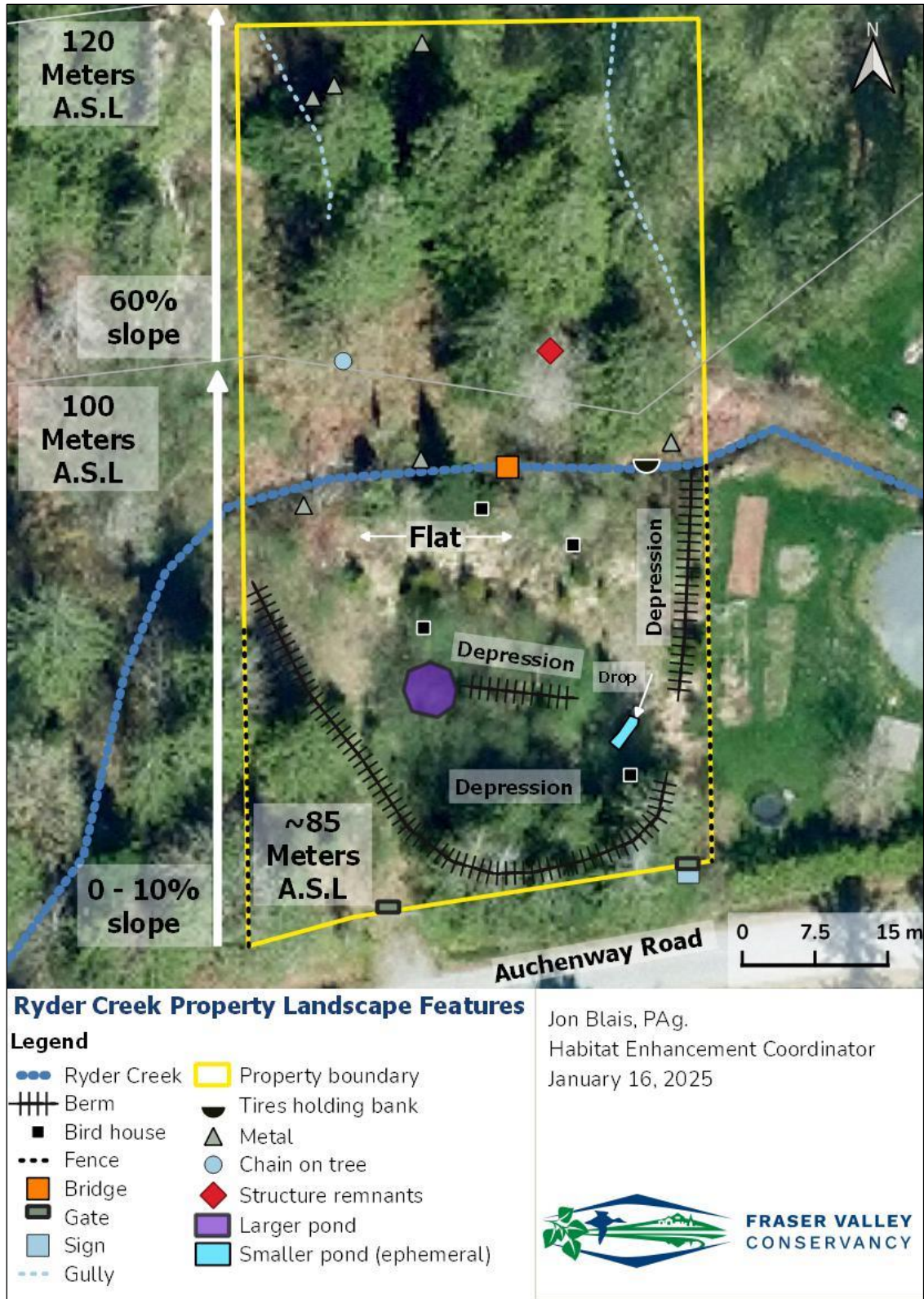


Figure 2 – The shape of the property’s parcel, its topography and location of features.

## **1.4. First Nations Cultural Heritage and Traditional Land Use**

The Ryder Creek property lies within the traditional territory of the Ts'elxweyeqw (Ch-ihl-kway-uhk) Tribe, a Halq'eméylem speaking people and a member of the Stó:lō (Stall-lo) Nation. The Chilliwack River Valley, where the property is located, is home to several historical settlements, including T'ept'op, Loyumthel and Ly'oythel, only 6.5 km east of the Ryder Creek property's location. The Chilliwack River has always served as a vital connection between these settlements and other expanses of the traditional territories, where land use practices such as hunting and fishing are carried out (Shaepe, 2018). Between 2014 and 2017, burial mounds were unearthed approximately 5km east of the Ryder Creek property on Winona Road (McCue, 2019), further highlighting the importance of the area to First Nations. Additional information about the First Nations cultural heritage in the area can be read in the property's Baseline Documentation Report (Blais, 2025).

## **1.5. Access**

The property is accessible from Chilliwack River Road, approximately 6 km from the Vedder River bridge turn-off. Auchenway Road is north of Chilliwack River Road and runs mostly parallel to it except for where Auchenway Road turns off (Figure 3). The eastern intersection is approximately 100 meters east of the entrance to Thompson Regional Park.

Access, and parking, is via a short driveway at the southern end of the property, marked by a distinctive gate (Lat/Long: 49.081787, -121.883010).

While it is possible to access the Ryder Creek Property on foot from the north by crossing public Crown lands, this route is not recommended due to its steep hillside and potentially unstable terrain.



Figure 3 - Access routes to the property from Chilliwack River Road

## 1.6. Surrounding Land Use

The property is located between two residential parcels (Figure 4), 48485 and 48523 Auchenway Road. North is a steep hillside of public Crown land that defines the topographical backdrop of the area. South of the property, across Auchenway Road, is Chilliwack River Provincial Park. This park extends south to the Chilliwack River and is bisected by Chilliwack River Road. Thompson Regional Park is connected to the eastern section of the provincial park, south of Chilliwack River Road.

To the east, there is a shooting range, rural residential properties, and to the southeast is the Chilliwack River Fire Department as well as a small commercial area.



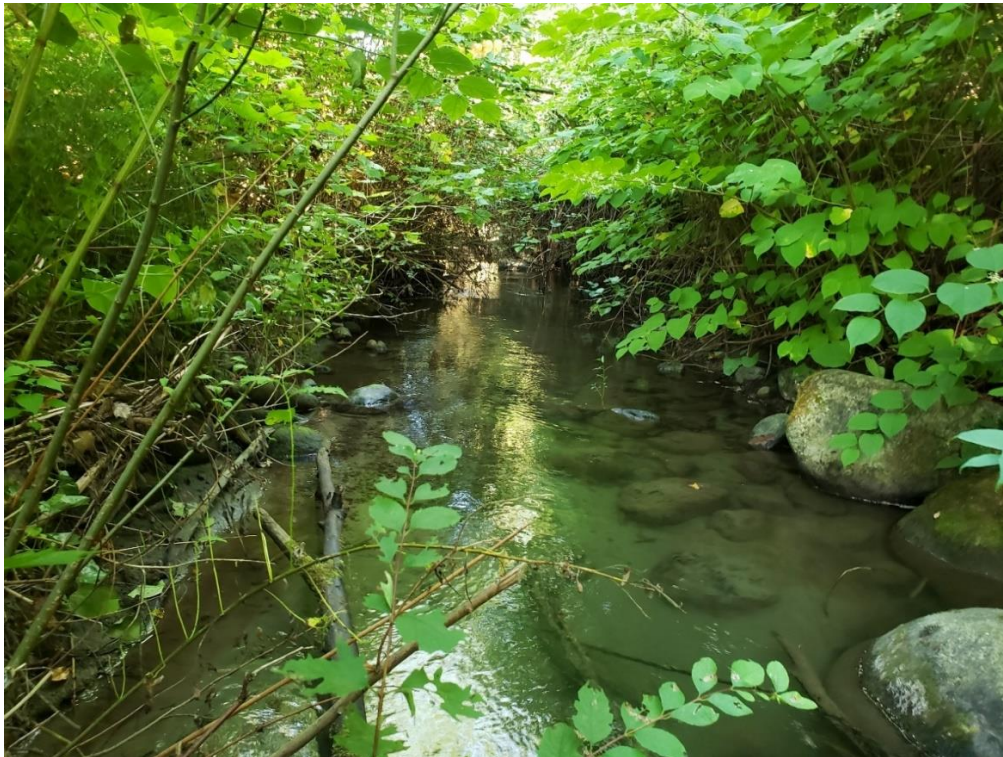
Figure 4 - The land use in the area surrounding the Ryder Creek property.

## 2.0 Natural Values

The natural features of the property, including its watercourses, large trees, vegetative communities, and habitat connectivity, support local biodiversity and provide essential ecosystem functions. The following sections outline the key natural values present on the property and their significance.

### 2.1. Watercourses and Waterbodies

The property's watercourses, waterbodies, and surrounding riparian zones, play a vital role in supporting the local ecosystem. Key features include Ryder Creek, ponds, and ephemeral channels. Ryder Creek (Figure 5), is the primary watercourse. It begins at the outlet of Ryder Lake, approximately 3.5 km north of the property. Wingfield Creek joins Ryder Creek from the east (Figure 6) after which, Ryder Creek flows westward across the property. Upon exiting the western boundary, it continues southwest to the Chilliwack River, about 1 km downstream. The Chilliwack River eventually drains into the Fraser River and then on to the Pacific Ocean.



*Figure 5 - Photo of Ryder Creek as it crosses the property taken on September 9, 2023.*



Figure 6- Watercourses connected to the property and surrounding area.

Ryder Creek functions as a breeding and rearing habitat for several salmonid species. Chum Salmon (*Oncorhynchus keta*) were observed by FVC staff in 2024, and Coho Salmon (*Oncorhynchus kisutch*) were recorded nearby in 2022 (Dowdle, 2023). The creek and adjacent watercourses also support Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) and Cutthroat Trout (*Oncorhynchus clarkii*, Province of British Columbia, 2023).

The segment of Ryder Creek that flows within the property, currently offers limited habitat value due to its uniform channel structure and excessive fine sediment, which impairs spawning suitability. These sediments likely originate upstream and are expected to persist (Pearson, 2023). Despite these limitations, the creek continues to support aquatic life, and there is potential for habitat enhancement to improve conditions (Pearson, 2023). Water quality assessments done on August 29 and October 26, 2023 (Appendix B) show Ryder Creek's water quality parameters are within suitable ranges for multiple salmon life stages.

Apart from Ryder Creek, the property contains two ponds which were created during earlier restoration efforts (Blais, 2025). The larger pond (Figure 7, left) appears permanent, though long-term data is needed to confirm. The smaller pond (Figure 7, right) is ephemeral. Both ponds are located at the southern end of the property in a depression originally intended to be part of a diversion channel for Ryder Creek (Figure 8). The local topography helps collect surface runoff, directing water toward the ponds. They are also fed by groundwater and lack visible outflows.

The conditions in the pond align with typical habitat requirements for Northern Red-legged Frog (*Rana aurora*) and other amphibians, with temperature suitable at the time of testing (Switzer, 2023). Additional data is needed to confirm amphibian breeding activity.

Across the sloped portion of the property there are also a number of ephemeral channels which are evident by erosion. While they may only carry water during precipitation events, they too add to the overall complexity of the local ecosystem, transporting nutrients and creating habitat niches. Together, these waterbodies and watercourses provide habitat features integral to the property's ecological systems.



*Figure 7 - Photo of the permanent pond (left) and the ephemeral pond (right) taken on July 28, 2023.*

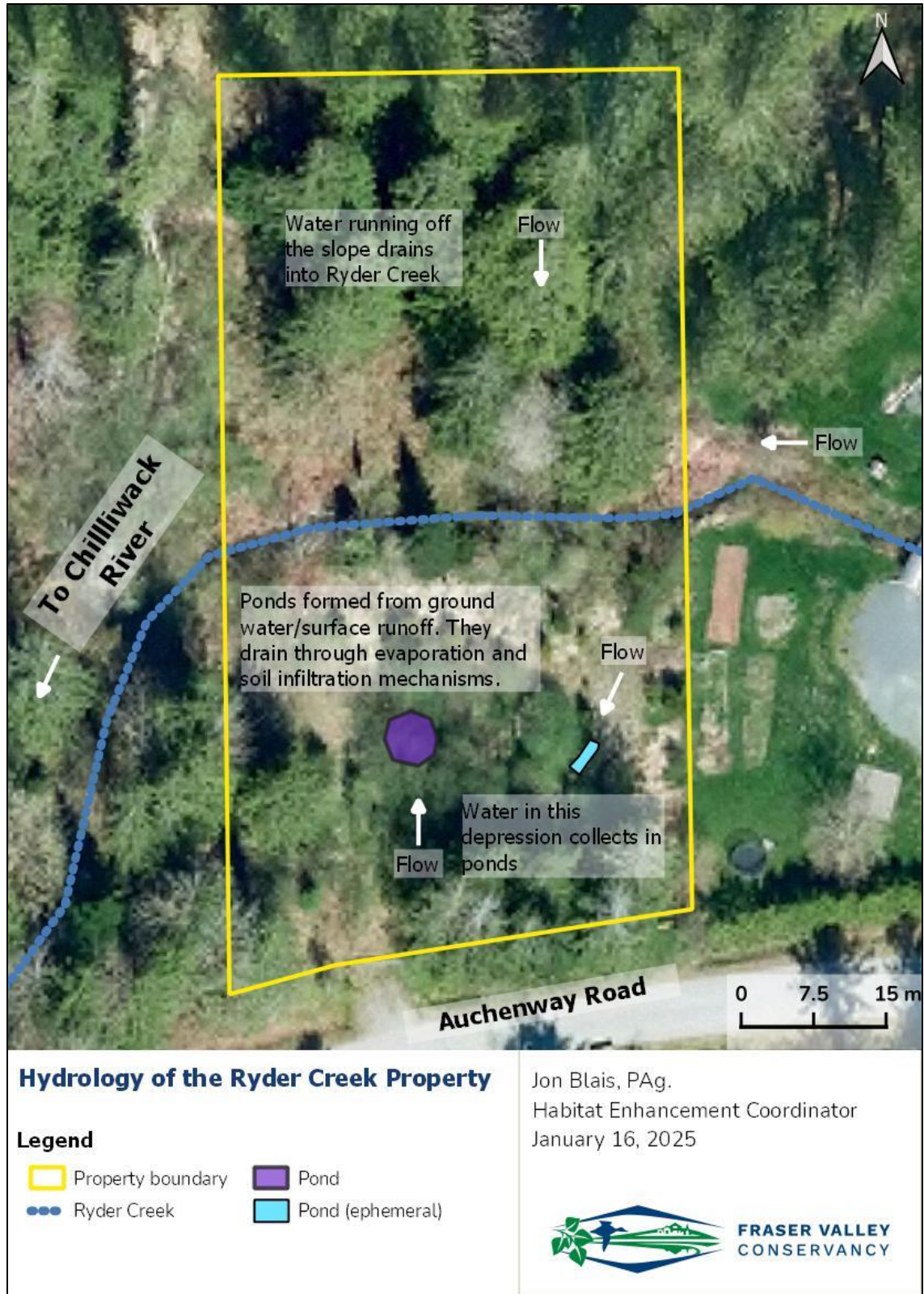


Figure 8 - Map illustrating the hydrology of the property.

## 2.2. Vegetation and Large Trees

A 2023 survey (Blais, 2025, Appendix C) provided valuable insights into the property's plant diversity, highlighting the biodiversity of the property. It also showed distinct differences between the flatter southern section and the steep northern slope, each having unique vegetative communities.

The southern half features typical riparian vegetation found in the area. It's dominated by red alder (*Alnus rubra*) with an understory largely made up of salmonberry (*Rubus spectabilis*), thimbleberry (*Rubus parviflorus*) and nootka rose (*Rosa nutkana*). Birds such as the Spotted Towhee (*Pipilo maculatus*), which have been observed on the property, can be found foraging within the thickets these species create. Additional trees include bigleaf maple (*Acer macrophyllum*), willows (*Salix sp.*), and conifers including grand fir (*Abies grandis*).

The northern steep slope contains fewer species but has the property's largest and oldest trees, some of which are estimated to be over 100 years old (Blais, 2025). These are primarily western redcedars (*Thuja plicata*), with a notably large bigleaf maple near the slope base. Most trees exceed 100 cm diameter at breast height (DBH). The forest floor here is covered by sword fern (*Polystichum munitum*), lady fern (*Athyrium filix-femina*), and shrubs including salmonberry, thimbleberry and common snowberry (*Symphoricarpos albus*).

This diverse vegetation and mature trees provide important habitat opportunities for wildlife. Fallen woody debris offers shelter and breeding sites for various small mammals, amphibians, and invertebrates. The abundant shrubs and understory plants supply food sources such as berries and foliage, supporting birds and herbivores. The large, old trees contribute nesting cavities and shade, creating microhabitats essential for many species, sustaining the property's overall ecological health.

## 2.3. Habitat Connectivity

The property is an important travel corridor for wildlife. It connects with Crown lands to the north which run through to the Ryder Lake community. To the south, this corridor continues through Chilliwack River Provincial Park. Only Auchenway Road interrupting the link (Figure 9). Maintaining this connectivity is important for wildlife movement and may add to species resilience when landscape changes occur over time.



Figure 9 - The property and the surrounding area showing its potential as a wildlife corridor.

## 2.4. Habitat Potential for Species at Risk

The property is not currently designated as critical habitat for any federally listed species at risk, according to British Columbia's iMapBC (Province of British Columbia, n.d.). However, several historical sightings have occurred nearby (Figure 10). Within 1 km are observations of the Oregon Forestsnail (*Allogona townsendiana*; federally "Endangered," BC "Red-listed"), and the Coastal Giant Salamander (*Dicamptodon tenebrosus*; federally "Threatened," BC "Blue-listed"). Screech Owls (*Megascops kennicottii*, federally "Threatened" with two BC "Blue-listed" subspecies) have been noted within 250m of the property (Province of British Columbia, n.d.). The Northern Red-legged Frog (federally "Of Special Concern," BC "Blue-listed") was observed on the property on July 28, 2023. Among plants, phantom orchid (*Cephalanthera austiniae*; federally "Endangered," BC "Red-listed") was found approximately 1.2 km away, and tall bugbane (*Actaea elata* var. *elata*; federally "Endangered," BC "Red-listed") is within 2.5 km.

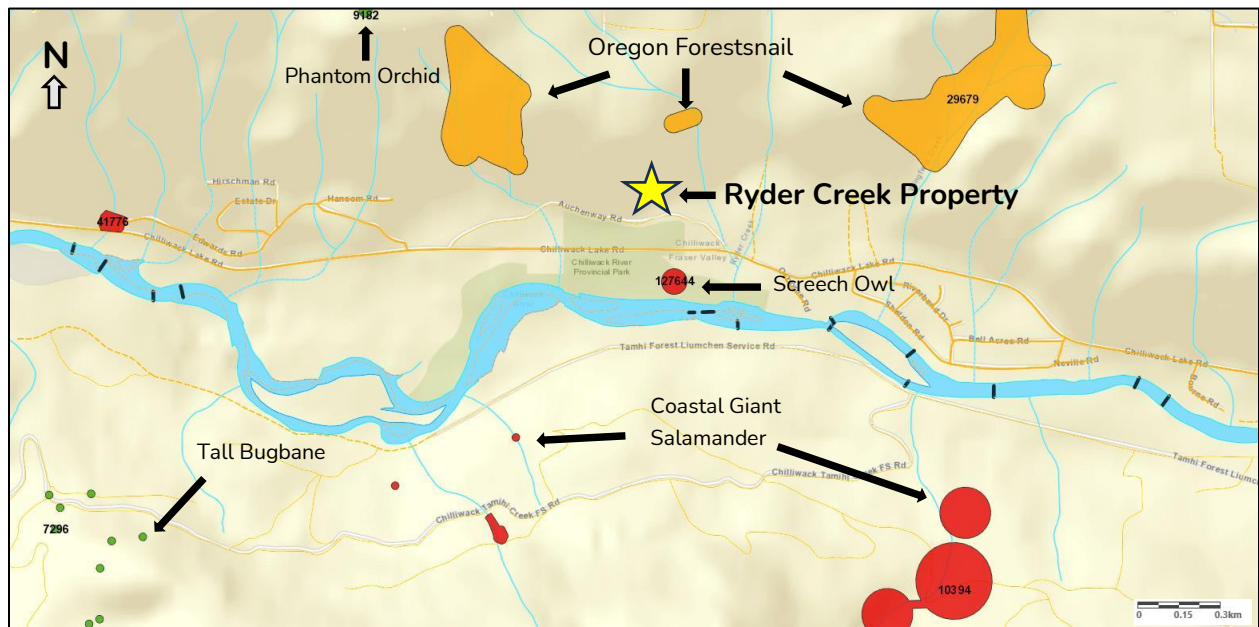


Figure 10 - Occurrences of federally listed species at risk near the Ryder Creek Property (Province of British Columbia, n.d.).

### 3.0 Threats to Natural Values

There are threats to the natural values and ecological integrity of the Ryder Creek property that should be addressed in its management. Table 2 below outlines these threats. The categories in the Table utilize the Level 1 threats naming system from the Conservation Measures Partnership Classification of Conservation Actions and Threats Version 2.0 (Conservation Measures Partnership, 2016). The threats are listed in order of their management priority, to be described later in Section 5.2 below.

Table 2 - Threats to the Ryder Creek Property

Category	Specific Threats to the Ryder Creek Property	Explanation
Invasive and Problematic Species	Invasive non-native species	Invasive species overtake native species, decreasing biodiversity. This reduction can lead to a decline in ecosystem services, resilience, and compromise overall ecological functionality, especially within Ryder Creek's riparian zone. Invasive plant species are already prevalent on the property (Appendix D) and additional species can still be introduced by neighbouring properties or via the creek. The only invasive animal species observed on the property are Arion Slugs ( <i>Arion sp.</i> ). Their extent and impact are currently unknown.
Geological Events	Sedimentation accumulation	Sedimentation is an ongoing occurrence in this reach of Ryder Creek due to upstream natural processes. This accumulation lowers the quality of the aquatic habitat, particularly for spawning salmon. Sedimentation also increases the likelihood of overland flooding.
Geological Events	Landslides	Landslides, often triggered by heavy rainfall and exaggerated after a season of drought, can cause significant damage to the property's ecology and block Ryder Creek, leading to flooding. Even minor landslides cause an increase in the sediment load that enters the creek. As the climate changes these factors are predicted to become more common and the risk of a landslide on the property could increase.

Natural System Modifications (by humans)	Anthropogenically caused increase to sedimentation load	Sedimentation load can increase due to land clearing and other human caused modifications to the landscape. This adds to the natural accumulation and lowers the quality of the aquatic habitat, particularly for spawning salmon, and increases the likelihood of overland flooding.
Climate Change	Changes in precipitation regimes	Prolonged periods of low precipitation can lead to reduced water availability, stressing plant and animal populations, and altering habitat conditions. Drought conditions can also exacerbate other issues, such as increased fire risk and habitat degradation. Higher levels of precipitation can lead to flooding of the creek, increased erosion, sedimentation, slides, and changes in water availability. It can also impact plant and animal species that are adapted to specific moisture conditions.
Climate Change	Severe weather events	Severe weather events, including but not limited to heavy winds, rainfall and ice storms, can damage the property's natural values. Heavy rainfall can lead to increased sedimentation and degradation of instream habitat.
Human Intrusions and Disturbance (Trespassing)	Encroachment by neighbours	Expansion by adjacent properties that might include unauthorized land clearing, moving of property lines/fences, and garden expansions can lead to habitat degradation.
Pollution	Illegal dumping	Dumping and accumulation of garbage and other debris such as household waste, can lead to pollution, spread disease, harm wildlife, and degrade overall habitat quality on the property. Ryder Creek's aquatic habitat is particularly sensitive.
Natural System Modifications (by humans)	Hydrological alteration	Changes in neighbourhood land-use and associated water management practices upstream can affect the property. Changes in watercourses or drainage patterns can affect the property's hydrology. This can lead to changes in soil moisture regimes, habitat conditions, and impact the ecosystem and species it supports.
Human Intrusions and Disturbance (Trespassing)	Unauthorized entry - Trail construction	The creation of unauthorized trails (i.e. mountain biking trails) can lead to a disruption of local wildlife and promote the unauthorized entry by individuals.

Human Intrusions and Disturbance (Trespassing)	Unauthorized entry - Camps	People occupying/camping on the property. Currently the gates prevent vehicle access and neighbours are vigilant.
Pollution	Contamination	Primary concern is contamination of the creek from upstream properties. For example, the overspray of pesticides and fertilizers, use of toxic bait boxes, chemicals for cleaning, and the runoff from other deleterious substances used on neighbouring properties may impact the values of the Ryder Creek property. Harmful chemicals entering the creek may also adversely impact the creek's aquatic values including salmon rearing and spawning opportunities.
Invasive and Problematic Species	Domestic/Livestock animals	Domestic/livestock animals such as dogs, cats, or goats can prey on or disturb wildlife, trample/consume vegetation, introduce invasive plants, and contribute to the spread of diseases. These impacts may disrupt ecological balance.
Natural System Modifications (by humans)	Fire	Given the amount of surrounding forest, a severe forest fire could pass through the property damaging its natural values. As the climate changes drought periods are predicted to become more common increasing the risk of occurrence.
Human Intrusions and Disturbance (Trespassing)	Unauthorized entry - Recreation	Individuals engaged in activities such as hiking, foraging or bird watching can lead to physical damage to the land, disturbance of wildlife, and disruption of habitat features. The FVC may inadvertently encourage trespassing by increasing community involvement around the property.
Natural System Modifications (by humans)	Fire suppression	Requirements to implement preventative measurements for fire could result in negative impacts to the property's natural values. Given the rural nature of the area, neighbours and/or government agencies may push for fire preventative measures to occur.

Natural System Modifications (by humans)	Adjacent land use practices	Adjacent land use practices may have a negative impact on plants, animals, habitat quality and ecological function. For example, changes in available light, wind exposure, and nutrient availability may cause a decline in trees along the property's edge. Other threats such as the presence of invasive species may also get exacerbated.
--	-----------------------------	--

## 4.0 Management Vision, Goal and Objectives

As the property is owned by the Fraser Valley Conservancy, it will be protected from development and managed in a manner that is consistent with the FVC's mission to conserve biodiversity.

**The FVC's vision for the Ryder Creek property is for it to support functional biodiverse habitats, both terrestrial and aquatic, that are resilient to changes over time.**

### 4.1. Goal

The goal in managing the property is to protect and maintain the values of the aquatic and terrestrial habitats in perpetuity.

### 4.2. Objectives

The FVC's management objectives to meet this goal for the Ryder Creek property going forward are as follows:

1. Support continued use and protection of areas of sacred and cultural significance by First Nations as per Section 35 of the Canadian Constitution Act 4 and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
2. Protect and maintain the functionality and habitat values of Ryder Creek and other aquatic habitats on the property.
3. Protect and maintain the ecological functionality and biodiversity of the terrestrial habitat.
4. Assess the risks of landscape changes over time.
5. Increase neighbourhood stewardship of the Ryder Creek watershed.

## 5.0 Management Recommendations

### 5.1. Management Actions Completed to Date

To support the property’s management goals, the FVC has undertaken the actions outlined below in Table 3.

*Table 3 - Past management actions taken on the property.*

Action	Year Completed
Initial restoration work	2011
Mapped invasive species	2023
Established photo points	2025
Published “Property Baseline Documentation Report”	2025
Created the 1 <sup>st</sup> edition of the Management Plan for the property	2025

### 5.2. Current Recommendations to Address Threats

The strategy to protect the natural values of the Ryder Creek property focuses on an approach that emphasizes additional planning, monitoring, and community engagement. Key action recommendations include the development and implementation of monitoring plans that assess impacts both on the ground and in the water. The results of this monitoring will inform future management decisions. Additionally, the strategy seeks to reduce threats through targeted community outreach to encourage local stewardship. Where determined feasible, actions that directly address specific threats will also be taken.

Each identified threat was prioritized in relation to their management importance (not necessarily by the level of the threat). This was determined through a scoring system. Scores were assigned (1 – 5, where 1 is low and 5 is high) for each of the following categories:

1. Probability that the threat will occur over the next five years.
2. The level of risk to the property’s natural values.
3. The feasibility of management actions to mitigate that threat.

These were totaled to give a final priority score. A cumulative priority score of 7 or below was considered “Low”, 8 – 9 “Medium”, 10 or 11 “High” and 12 or higher “Very High”. Table 4 lists the threats in order of this prioritisation, as well as the recommendations for management actions.

Table 4 - Recommended management actions to address the threats to the Ryder Creek property.

Specific Threats to the Ryder Creek Property	Management Action Recommendations	Priority
Invasive non-native species	Investigate knotweed control options. Create and implement a comprehensive “Ryder Creek Invasive Species Management Plan (RCISMP)” for the property.	Very High
Sedimentation accumulation	Create and implement “Ryder Creek Property Monitoring Plan (RCPMP)” that includes monitoring of sediment levels over time. Investigate channel modifications that would reduce sediment buildup in the main stem. For example, this could include a sediment diversion catchment area.	High
Landslides	Communicate annually with the FVRD to get updates and reports relating to landslide activity in the Ryder and Wingfield Creek watersheds. Include as part of the property’s monitoring plan (RCPMP).	High
Anthropogenically caused increase to sedimentation load	Create and implement a “Ryder Creek Community Outreach Plan (RCCOP)” to encourage upstream neighbours to undertake activities that mitigate sedimentation input downstream.	High
Changes in precipitation regimes	Make sure any future habitat enhancement plans take climate change impacts into consideration. For example, planting species that are more drought tolerant for the hotter, drier summers expected.	High
Severe weather events	Include monitoring for the impacts of severe weather in the property’s monitoring plan (RCPMP). This will include, but is not limited to, tree damage and erosion of the landscape. The observed impacts will guide any future response action.	Medium
Encroachment by neighbours	Include as part of the property’s monitoring plan (RCPMP) to check for encroachment along the adjoining property lines south of creek. Conduct a professional land survey to confirm and establish legal boundaries, particularly north of Ryder Creek where property boundaries are not marked.	Medium
Illegal dumping	Ensure signage is clearly visible from the road. Include checking for illegal dumping as part of the property’s monitoring plan (RCPMP).	Medium

Hydrological alteration	Include educating landowners about avoiding impacts to the creek in the community outreach plan (RCCOP). Create and implement the property’s monitoring plan (RCPMP)” that includes water quality and hydrometric measurements.	Medium
Unauthorized entry - Trail construction	Add additional no trespassing signage at the front gate. Include monitoring of unauthorized entry in the property’s monitoring plan (RCPMP).	Medium
Unauthorized entry - Camps	Add additional no trespassing signage at the front gate. Monitoring, at minimum, the area south of the creek where camps are most likely to be placed. Include as part of the property’s monitoring plan (RCPMP).	Medium
Contamination	Include educating landowners about avoiding contamination impacts to the creek in the community outreach plan (RCCOP).	Medium
Domestic animals	Include educating neighbourhood landowners about domestic/livestock animals impacting the creek and/or property in the community outreach plan (RCCOP). Include monitoring for domestic/livestock animal presence in the property’s monitoring plan (RCPMP).	Low
Fire	Ensure future enhancement projects take current “FireSmart” recommendations/features into consideration.	Low
Unauthorized entry - Recreation	Add additional no trespassing signage at the front gate. Include monitoring of unauthorized entry in the property’s monitoring plan (RCPMP).	Low
Fire suppression	Include recommendations in the community outreach plan (RCCOP) that encourage neighbours to undertake fire suppression activities on their own properties. Stay engaged in the FVRD’s bylaw process for changes to fire suppression requirements.	Low
Adjacent land use practices	Include in the community outreach plan (RCCOP) recommendations to encourage beneficial environmental stewardship practices by neighbouring and upstream property owners. For example, education about the impacts of land clearing on adjacent trees.	Low

### 5.3. Additional Recommendations

To meet all the management goals of the property, objective one regarding the rights of First Nations will need to be addressed (Table 5). This objective is not discussed directly through the threat mitigation efforts described above but is considered a “Very High” priority.

*Table 5 - Additional management action recommendations to address all of the management objectives.*

Objective	Management Action Recommendation	Priority
Support continued use of areas of sacred and cultural significance by First Nations	Complete the FVC’s First Nation’s engagement policy and apply it to the management of this property.  Offer Ts’elxwéyeqw band members the opportunity to participate in activities that occur on the property.  Create a Memorandum of Understanding/Partnership Agreement with the Ts’elxwéyeqw Tribe First Nations	Very High

### 5.4. Summary of Recommended Documents

Based on the management recommendations, the following documents need to be created to further guide the actions and management of the Ryder Creek property (Table 6). The timeframe for creating and revising these documents varies depending on priority. These will address specific threats in detail and will be updated periodically to reflect the dynamic nature of those threats as well as the needs in property management.

*Table 6 - Documents needed for the management of the Ryder Creek property listed by priority.*

Document	Description	Recommended Creation Timeframe	Recommended Revision Period
First Nation Engagement Policy.	Engage all First Nations whose territory overlaps with the property, according to our policy.	By March 2026	As needed
Memorandum of Understanding with the Ts'elxwéyeqw Tribe First Nations	An agreement with the First Nations that outlines the FVC's intention with property, and how those relate to Ts'elxwéyeqw Tribe band members' right to access their ancestral territories.	By June 2026	As needed
Ryder Creek Invasive Species Management Plan (RCISM)	<p>This plan should list the invasive plant species found on the property, the locations of the known patches, as well as the methods required for management. Methods should include priority, frequency and timing of treatment efforts. The plan should also outline monitoring requirements.</p> <p>For example, Himalayan blackberry is found throughout the property. Location of known patches are mapped, but priority in its management will be based on the ecological sensitivity of a given area. Efforts for management include manual removal, to be done at a given frequency.</p>	<p>By June 2026 (funding dependent)</p> <p>To be implemented and updated annually with adaptive management recommendations.</p>	3 years (next revision in 2029)

<p>Ryder Creek Property Monitoring Plan (RCPMP)</p>	<p>This plan will be on how to monitor the property for threats and the impacts of those threats as they relate to the goals of the properties management. This plan should include the methodology and frequency of monitoring efforts for each threat addressed. The plan will include but not be limited to monitoring sediment accumulation, evidence of recent or forthcoming landslides and their impacts, impacts of severe weather events, encroachment by neighbours, illegal dumping, unauthorised trail building, camping or other outdoor recreation.</p>	<p>By December 2026 (funding dependent)  To be reviewed annually and adaptive management recommendations implemented.</p>	<p>5 years (in conjunction with updated management plan)</p>
<p>Ryder Creek Community Outreach Plan (RCCOP)</p>	<p>The plan on how to engage the local community about the property, its natural values, and protection of those values from the listed threats. Outreach efforts should be targeted at the adjacent and upstream property owners, then, to a lesser degree, others in the watershed based on the threat being mitigated for. The plan should include ideas on messaging, frequency, and additional on the ground actions where appropriate (i.e. signage).</p>	<p>By December 2026 (funding dependent)  To be implemented and updated annually (as funding permits)</p>	<p>5 years (in conjunction with updated management plan)</p>

## 6.0 References

- Blais, J. (2025). Ryder Creek Property Baseline Documentation Report: 48513 Auchenway Road, Chilliwack, BC PID 005-033-586. Fraser Valley Conservancy.
- Conservation Measures Partnership. (2016). *Classification of conservation actions and threats* (Version 2.0). Conservation Measures Partnership. Retrieved from <https://www.conservationstandards.org/>
- Dowdle, T (2023, October 10). Personal Communication.
- Golder Associates. (2009, March 30). Geotechnical hazard assessment: proposed home relocation 48513 Auchenway Road, Chilliwack, BC. Golder Associates, Abbotsford, BC.
- McCue, D. (2019, March 30). Discovery of ancient burial mounds traps landowners in bureaucratic 'bottomless pit of hell'. CBC News. <https://www.cbc.ca/news/canada/british-columbia/national-burial-mounds-property-dispute-chilliwack-bc-1.4979118>
- Pearson, M. (2023, August 3). Personal Communication.
- Province of British Columbia. (n.d.) Conservation Data Center imap. Retrieved from <https://maps.gov.bc.ca/ess/hm/cdc/>
- Shaepe, D. M. (2018). *Being Ts'elxwéyeqw: First Peoples' Voices And History From The Chilliwack-fraser Valley*, British Columbia. Harbour Publishing.
- Switzer, A. (2023, October 25). Personal Communication.

## Appendix A – Covenant

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 2011

**BETWEEN:** Fraser Valley Conservancy  
1B – 2760 Emerson Street  
Abbotsford British Columbia V2T 3J6  
(hereinafter called the "Grantor")

### OF THE FIRST PART

**AND:** Fraser Valley Regional District  
45950 Cheam Avenue.  
Chilliwack British Columbia V2P 1N6  
(hereinafter called the "Grantee")

### OF THE SECOND PART

#### WHEREAS:

- A. As a result of cold temperatures in the area in mid December 2008, followed by warmer temperatures and heavy rainfall on January 6, and 7, 2009 saturated soil conditions and high pore-water pressure lead to a slope failure on January 7, 2009 which resulted in debris and flooding impacts to Lands located at 48513 Auchenway Road, Chilliwack River Valley.
- B. Investigations by geotechnical engineering consultants concluded that the residents on the Lands were exposed to significant and ongoing risk to life and property from further landslide events.
- C. The Ministry of Public Safety and Solicitor General determined that the most cost-effective solution to address the risk to the residence on the Lands were to remove the residents from hazard by purchasing the Land and prevent future residential occupation.
- D. With direction and funding from the Provincial Emergency Program of the Ministry of Public Safety and Solicitor General, the Regional District "bought-out" the Lands located at 48513 Auchenway Road.
- E. The Fraser Valley Regional District is gifting this land to the Fraser Valley Conservancy a non-profit organization to hold in perpetuity for conservation purposes.

- F. The Fraser Valley Conservancy accepts this donation of land and agrees to protect the land in perpetuity for the purpose of maintaining the land in a natural state, and will endeavor to enhance the ecological value over time.
- G. The Grantor is the registered owner in fee simple of the following lands in the Province of British Columbia, more particularly known and described as:

LOT 2, EXCEPT: PART SUBDIVIDED BY PLAN 45369, DISTRICT LOT  
794, GROUP 2, NEW WESTMINSTER DISTRICT, PLAN 40221  
(hereinafter called the "Lands");

**AND WHEREAS** section 219 of the *Land Title Act* provides, inter alia, that there may be registered as a charge against the title to any land a covenant, whether of a positive or negative nature, in favor of the Grantee, in respect of the use of land, the use of building on or to be erected on the land, that land is not to be built on, or is not to be built on except in accordance with the covenant;

**NOW THEREFORE THIS AGREEMENT WITNESSETH** that in consideration of the sum of ONE (\$1.00) DOLLAR of lawful money of Canada and other good valuable consideration paid by the Grantee to the Grantor, the receipt of which is hereby acknowledged, the Grantor does hereby covenant and agree with the Grantee under section 219 of the *Land Title Act* of the Province of British Columbia as follows:

- 1. The Grantor is aware of and, on behalf of himself or herself and his or her heirs, executors, administrators, successors and assigns, hereby acknowledges that there is a potential flood, landslide and erosion danger to the Land as described in the following geotechnical report, a copy of which is attached hereto as Schedule "A":
  - a) Golder Associates Ltd. titled "Proposed Home Relocation 48513 Auchenway Road Chilliwack BC" dated March 30, 2009.

2. The Grantor, on behalf of himself or herself and his or her heirs, executors, administrators, successors and assigns, hereby covenants and agrees with the Grantee, as a covenant in favor of the Grantee pursuant to section 219 of the *Land Title Act*, it being the intention and agreement of the Grantor that the provisions hereof be annexed to and run with and be a charge upon the Lands, that from and after the date hereof:
  - a) The Grantor is aware that there is potential flood, landslide, debris flow and avulsion dangers to the lands as described in the following geotechnical report, a copy of which is attached hereto as Schedule "A";
  - b) No building, mobile home or unit, or modular home shall be constructed, reconstructed, moved, extended or located on the Lands; and
  - c) The Lands shall not be used for residential use, overnight accommodation or other uses involving prolonged human occupations;
  - d) The Lands may be used for habitat enhancement works provided that such works will not hinder future use of the lands for hazard mitigation works and activities;
  - e) Except for trees deemed to present a hazard, no tree with a trunk diameter of ten (10) centimeters or greater shall be cut down or removed from the Lands; and
  - f) Riparian vegetation within thirty (30) metres from the natural boundary of Ryder Creek shall be preserved and protected from disturbance from human activities.
  
3. The Grantor, on behalf of himself or herself and his or her heirs, executors, administrators, successors and assigns, acknowledges that the Grantee does not represent to the Grantor, nor to any other person that any improvement, chattel or other structure, built, constructed or placed on the Lands will not be damaged by flooding, landslides or erosion and the Grantor, on behalf of himself or herself and his or her heirs, executors, administrators, successors and assigns, with full knowledge of the potential flood, landslides or erosion danger and in consideration of the approvals given by the Grantee hereby:

- a) agrees to indemnify and to save harmless the Grantee and the Grantee's employees, servants or agents from all loss, damage, costs, actions, suits, debts, accounts, claims and demands which the Grantee or any of the Grantee's employees, servants or agents, may suffer or incur or be put to arising out of or in connection with any breach of any covenant or agreement on the part of the Grantor or his or her heirs, executors, administrators, successors and assigns contained in this Agreement or arising out of or in connection with any personal injury, death or loss or damage to the Lands, or to any improvements, chattel or other structure, built, constructed or placed on the Lands caused by flooding, landslides, and erosion or some such similar cause; and
  - b) does remise, release and forever discharge the Grantee and the Grantee's employees, servants or agents from all manner of actions, cause of actions, suits, debts, accounts, covenants, contracts, claims and demands which the Grantor or any of his or her heirs, executors, administrators, successors and assigns may have against the Grantee and the Grantee's employees, servants or agents for and by reason of any personal injury, death or loss or damage to the Lands, improvements, chattel or other structure, constructed or placed on the Lands, caused by flooding, landslide, and erosion or some such similar cause.
4. Subject to the provisions of section 219 of the *Land Title Act*, the Grantor's covenants contained in this Agreement shall burden and run with the Lands and shall enure to the benefit of and be binding upon the Grantor, his or her heirs, executors, administrators, successors and assigns and the Grantee and its assigns.
  5. Nothing in this Agreement shall prejudice or effect the rights, powers and remedies of the Grantee in relations to the Grantor, including his or her heirs, executors, administrators, successors and assigns, or the Lands under any law, bylaw, order or regulation or in equity all of which rights, powers and remedies may be fully and effectively exercised by the Grantee as if this Agreement had not been made by the parties.

6. The Grantor will do or cause to be done at his expense all acts reasonably necessary for the Grantee to gain priority for this Agreement over all liens, charges and encumbrances which are or may be registered against the Lands save and except those in favor of the Grantee and those specifically approved in writing by the Grantee.
7. The parties agree that this Agreement shall not be modified or discharged except in accordance with the provisions of section 219(9) of the *Land Title Act*.
8. The Grantor shall do or cause to be done all things and execute or cause to be executed all documents and give such further and other assurance which may be reasonably necessary to give proper effect to the intent of this Agreement.
9.
  - a) The Grantor or any of his or her heirs, executors, administrators, successors and assigns, as the case may be, shall give written notice of this Agreement to the Grantee any person to whom he or she proposes to dispose of the Lands, which notice shall be received by the Grantee and that person prior to such disposition.
  - b) For the purposes of this paragraph the word "dispose" shall have the meaning given to it under section 29 of the *Interpretation Act*, R.S.B.C. 1996, c.238.
10. Whenever the singular or masculine or neuter is used herein, the same shall be construed as including the plural, feminine, body corporate or politic unless the context requires otherwise.
11. If any section or any part of this Agreement is found to be illegal or unenforceable, then such sections or parts shall be considered to be separate and severable from this Agreement and the remaining sections or parts of this Agreement, as the case may be, shall be unaffected thereby and shall remain and be enforceable to the fullest extent permitted by law as though the illegal or unenforceable parts or sections had never been included in this Agreement.
12. This agreement shall be interpreted according to the laws of the Province of British Columbia.

13. Where there is a reference to an enactment of the Province of British Columbia in this agreement, that reference shall include a reference to any subsequent enactment of the Province of British Columbia of like effect, and unless the context otherwise requires, all statutes referred to herein are enactments of the Province of British Columbia.

## Appendix B – Water Quality Data

Table 7 - Water quality data taken August 29 and October 26, 2023.

August 29, 2023						
Site	Temperature	pH	Conductivity (us/cm)	TDS (ppm)	TDO (Mg/l)	DO2 (%)
Creek at bridge	13.8	7.92	281	198	N/A	N/A
Pond	15.9	7.28	283	202	N/A	N/A
October 26, 2023						
Site	Temperature	pH	Conductivity (us/cm)	TDS (ppm)	TDO (Mg/l)	DO2 (%)
Creek at bridge	7.3	7.63	256	182	12.88	106.8
Pond	7.5	6.95	271	191	0.7	5.6

## Appendix C – Species Survey Data

Table 8 - Plants observed on the property during the July 28, 2023, survey.

Common Name	Botanical Name	Area Found (R = Riparian, S =Slope)
Apple species	<i>Malus sp.</i>	R
Beaked hazelnut	<i>Corylus cornuta</i>	S
Bigleaf maple	<i>Acer macrophyllum</i>	S, R
Boxwood	<i>Buxus sp.</i>	R
Dock species	<i>Rumex sp.</i>	R
Black cottonwood	<i>Populus trichocarpa</i>	R
Common comfrey	<i>Symphytum officinale</i>	R
Common dandelion	<i>Taraxacum officinale</i>	R
Common horsetail	<i>Equisetum arvense</i>	S, R
Common snowberry	<i>Symphoricarpos albus</i>	S, R
Cooley's hedge-nettle	<i>Stachys chamissonis var. cooleyae</i>	R
Creeping buttercup	<i>Ranunculus repens</i>	R
Douglas-fir	<i>Pseudotsuga menziesii</i>	R
Douglas maple	<i>Acer glabrum var. douglasii</i>	R
*English ivy	<i>Hedera helix</i>	R
Fringecup	<i>Tellima grandiflora</i>	R
Grand fir	<i>Abies grandis</i>	R
Helleborine species	<i>Epipactis sp.</i>	R
*Himalayan blackberry	<i>Rubus armeniacus</i>	R
*Knotweed species	<i>Fallopia sp.</i>	R
Lady fern	<i>Athyrium filix-femina</i>	S, R
Licorice fern	<i>Polypodium glycyrrhiza</i>	S
Northern maiden-hair	<i>Adiantum aleuticum</i>	S, R
Nootka rose	<i>Rosa nutkana</i>	R
Osoberry	<i>Oemleria cerasiformis</i>	S, R
Pacific willow	<i>Salix lasiandra var. lasiandra</i>	R
Red alder	<i>Alnus rubra</i>	R
Red huckleberry	<i>Vaccinium parvifolium</i>	S, R
*Reed canarygrass	<i>Phalaris arundinacea</i>	S, R
Robert's geranium	<i>Geranium robertianum</i>	S, R
Salmonberry	<i>Rubus spectabilis</i>	S, R
Sitka columbine	<i>Aquilegia formosa</i>	R
Sitka spruce	<i>Picea sitchensis</i>	R
Stinging nettle	<i>Urtica dioica</i>	S
St. John's wort	<i>Hypericum sp.</i>	R
Sword fern	<i>Polystichum munitum</i>	S, R

Management Plan Ryder Creek Property - 1st Edition

Thimbleberry	<i>Rubus parviflorus</i>	S, R
Trailing blackberry	<i>Rubus ursinus</i>	S
Vine maple	<i>Acer circinatum</i>	R
Wall lettuce	<i>Mycelis muralis</i>	R
Western redcedar	<i>Thuja plicata</i>	R
Wild cherry	<i>Prunus sp.</i>	R
Willow species	<i>Salix sp.</i>	R
*Yellow archangel	<i>Lamium galeobdolon</i>	R

\*Indicates an invasive species

Table 9 - Animal species noted on the property during the survey on July 28, 2023.

Common Name	Scientific Name	Category
American Robin	<i>Turdus migratorius</i>	Bird
Arion slug	<i>Arion sp.</i>	Gastropod
Northern Red-legged Frog	<i>Rana aurora</i>	Amphibian
Northwestern Crow	<i>Corvus brachyrhynchos</i>	Bird
Spotted Towhee	<i>Pipilo maculatus</i>	Bird
Steller's Jay	<i>Cyanocitta stelleri</i>	Bird

## Appendix D – Invasive Species Map

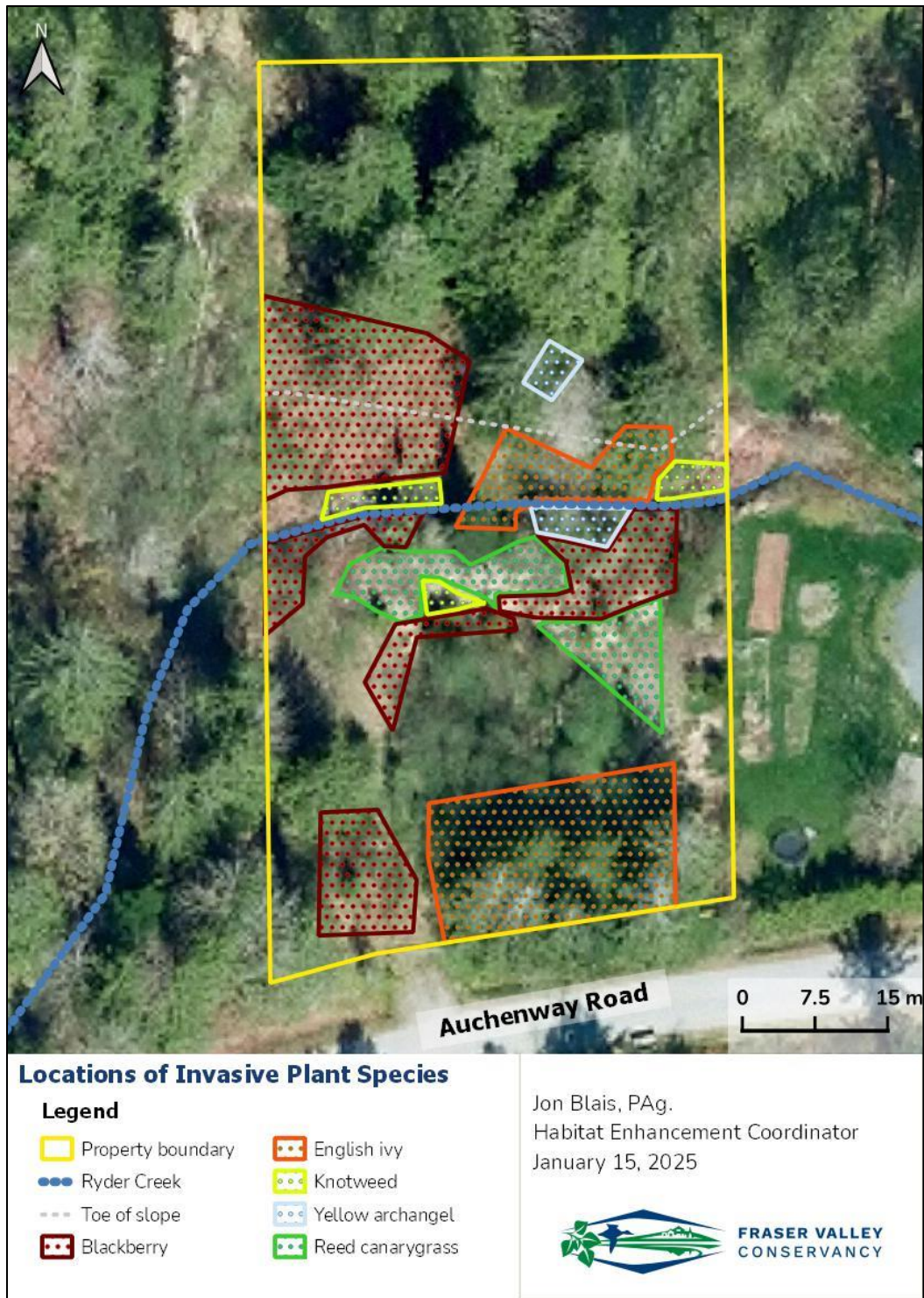


Figure 11 - Locations of the property's invasive plant species that were originally mapped in July of 2023. Individual plants or small patches outside the indicated areas may also exist. This map was last updated in January 2025.