Proposed Development:

Valley Environmental (VE) understands that the proposed development is a 2 lot subdivision of the property as noted in the attached supporting rationale (by others). No physical construction is proposed for this development and there are separate road access to both proposed lots. VE also understands from the property owner that there is no proposed physical development in the near future.

Field Review:

An on-site field review was conducted on November 9, 2022 by David Cassidy, RPBio. of VE. Although the ground was covered in snow, VE was able to note the general vegetation types and ecosystems in the area. Furthermore, since there is no proposed physical disturbance or construction on the property, no further detailed on-site assessment is required.

COMMENTS:

Grasslands:

The upper portion of the property contains portions of a heavily disturbed provincially red-listed bluebunch wheatgrass ecosystem. Areas upslope of the property, above the KVR and outside the assessment area contain natural steep-slope grasslands within an open parkland setting of the ponderosa pine forest ecosystem.

Much of the lower extents of the property between the home and Naramata Road as well as surrounding areas have been historically disturbed for several decades due to agricultural and residential developments. Much of the property currently contains a vineyard. Prior to these historical disturbances, it appears that the natural ecosystem on the property and in the area contained an open parkland forest within a bunchgrass ecosystem.

Sparsely Vegetated Areas / Rocky Outcrops:

Some areas of the property within the vineyard and along the KVR trail contain rocky outcrop features that may be used by Bighorn sheep as well as other ungulates as escape terrain.

These exposed rocks could be used by snakes for sunning and the shallow crevices could be used for day roosting and shelter from sun and predators. Given the location of the proposed development on the property, it is not anticipated that the proposed development will negatively affect any potential habitat value in and around these rocky outcrops.

Additional Comments with Regards to Species at Risk (SARA species) noted within Recovery Strategy Documents. VE reviewed those additional species, their specific recovery strategy documents and their critical habitat and are commented on below:

Snakes:

The BC Habitat Wizard Mapping did not indicate critical habitat for snakes and are not available to the general public for viewing. However, the Critical Habitat Mapping, indicated in the SARA Recovery Strategy Document for Snakes (2017), indicates that the property is within potential critical habitat for snakes. Snake species indicated in the recovery strategy document may include Western Rattlesnake, Great Basin Gophersnake and Desert Nightsnake. The Species at Risk Act (SARA) recovery strategy document indicates numerous generalized 10 km x 10 km grid areas

which cover much of the South Okanagan Valley basin. Detailed critical habitat locations for these species is not indicated in the recovery strategy guidebook for this species due to concerns of persecution and sensitivity of habitat from disturbance.

VE reviewed the Federal Recovery Strategy Documents and Maps (from the Species at Risk Public Registry federal website) for Species at Risk and their general mapping ranges (10 x 10 km grid). VE noted that a 10 km x 10 km critical habitat grid for snakes does overlap the proposed development and subject property.

As such, VE reviewed detailed and secured mapping information regarding snake habitats from the BC CDC as well as federal (Canadian Wildlife Service) critical habitat data for snakes in the Southern Interior of BC.

The BC-CDC masked data indicates a rattlesnake den/hibernacula within 500 m from the proposed development. The secured federal critical habitat data indicates that the entire property and assessment area are within federal critical habitat for western rattlesnake.

VE reviewed the area within 100 meters of the home and noted there is some foraging habitat in the grassy areas adjacent to the property. However, no critical habitat features will be disturbed for the proposed new development.

As there is a known snake den \sim 500 meters from the proposed home development, there is strong potential for rattlesnakes to be found foraging within or migrating through the 100 meter assessment area.

As there is a strong potential for rattlesnake to found in the area and on the property, if any future construction is proposed, it is required that tarps and or plastic mesh and bags should not be left on the ground where snakes can become trapped or can hide. If excavation is required for foundations/footings, snakes can get trapped in the excavated area. Low sloped areas must be placed within the excavation area to allow for snakes to exit. Furthermore, snakes can hide under decks or stairs; these areas should be enclosed off or fenced off to avoid any unwanted interactions with snakes during the summer months.

Given that there is no physical construction on the property, it is not anticipated that the development will negatively affect this species.

American Badgers:

Within 100 meters of the proposed development, there are some areas where soils may be friable and somewhat suitable for badger dens however, VE did not observe any dens at the time of the assessment due to snow. The recovery strategy for American Badger in Canada indicates that activities to result in the destruction of critical habitat include activities that result in the destruction or degradation of Badger dens. As there are currently no physical development proposed, it is unlikely that this species or its critical habitat will be destroyed.

Lewis's Woodpecker:

VE reviewed habitat wizard for critical habitat for species and ecosystems at risk within the 100 meters of the proposed development. A critical habitat polygon was noted across all of the subject property as well as the 100 meter assessment zone.

VE did not observe any existing wildlife trees with nesting holes within 100 meters of the development. Furthermore, no large trees or wildlife trees will be removed for the proposed

development. However, if any living or dead trees are required for removal for future developments, they should not be removed during the least risk work window for birds which is March 31 to August 31 unless reviewed by a QEP. A QEP must conduct a nesting survey for this development if trees are removed between March 31 and August 31.

Bank Swallow:

VE reviewed the federal recovery strategy document for the Bank Swallow. As the name suggests, this bird nests and forages along banks adjacent to stream or lakes. Suitable stream banks include those that are regularly eroded for natural or anthropogenic means. Foraging for insects typically occurs in open areas over water or agricultural fields such as nearby Okanagan Lake or possibly over the vineyard on the property.

As there are no erodible banks located on the property, it is unlikely that this bird species nest on directly adjacent to the property.

Conclusion:

As there is no physical development proposed and the proposed lots will maintain their current use, VE feels that there will be no destruction of species at risk. Furthermore, VE does not feel that a more detailed or directed environmental assessment or on-site review would be provide any further clarification, protection measures or mitigation for this particular development.

If any future physical development is proposed, VE recommends that an updated environmental assessment is conducted to provide further on-site review of the property during spring and summer months. A more detailed assessment would provide specific mitigation measures to minimize the threat of impact to critical habitats or federally listed species at risk (SARA).

If you require any further clarification on these additional comments, please feel free to contact me.

Regards, David Cassidy, RPBio.

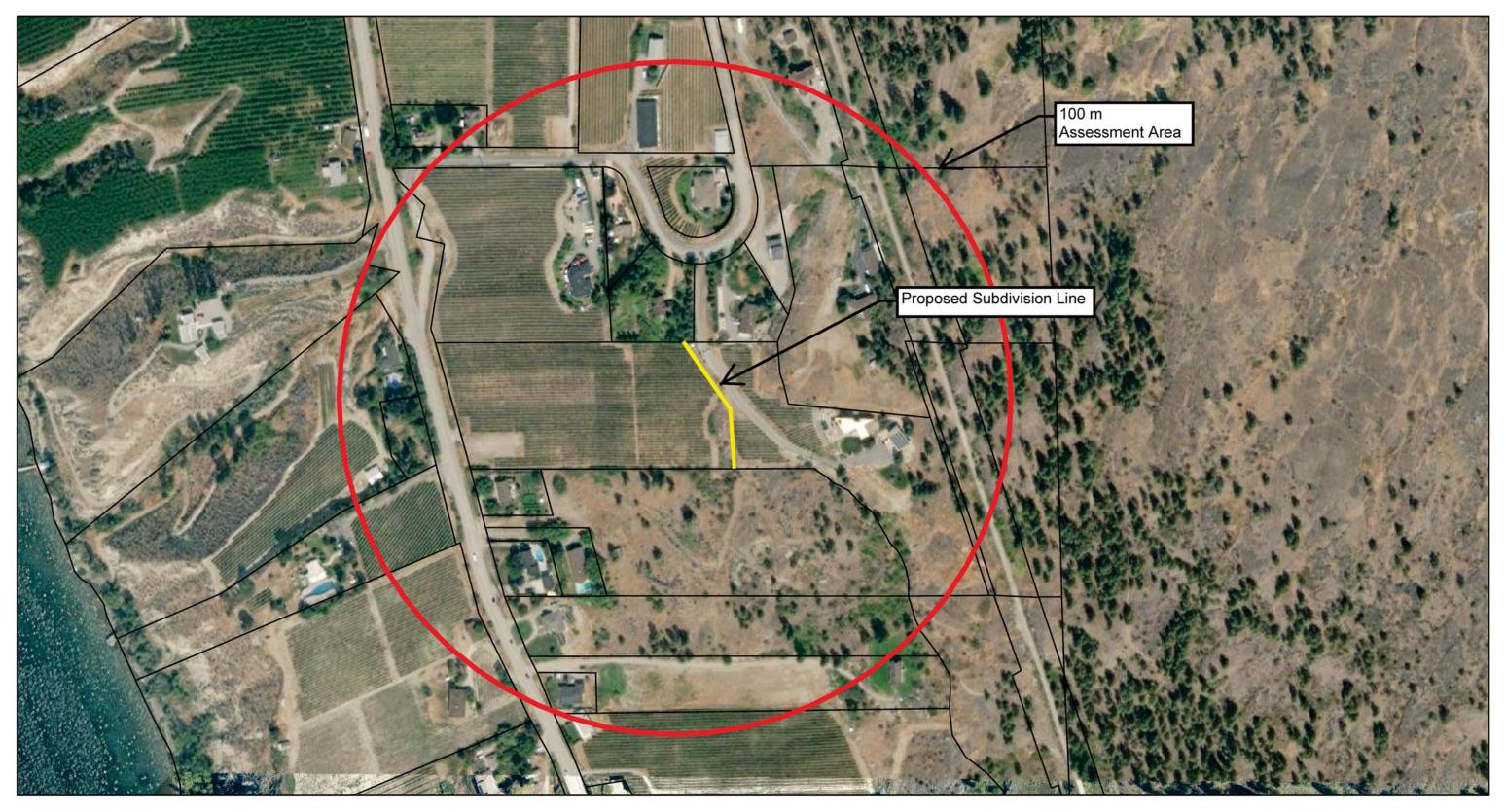


November 9, 2022 – Drone view looking east. The red line indicates the approximate property boundaries. Visible is the KVR trail at the top, the upper house and garage (left).



November 9, 2022 – Drone view of the property (red) looking west toward Naramata Road. The subdivision between the two lots will occur approximately along the yellow line.

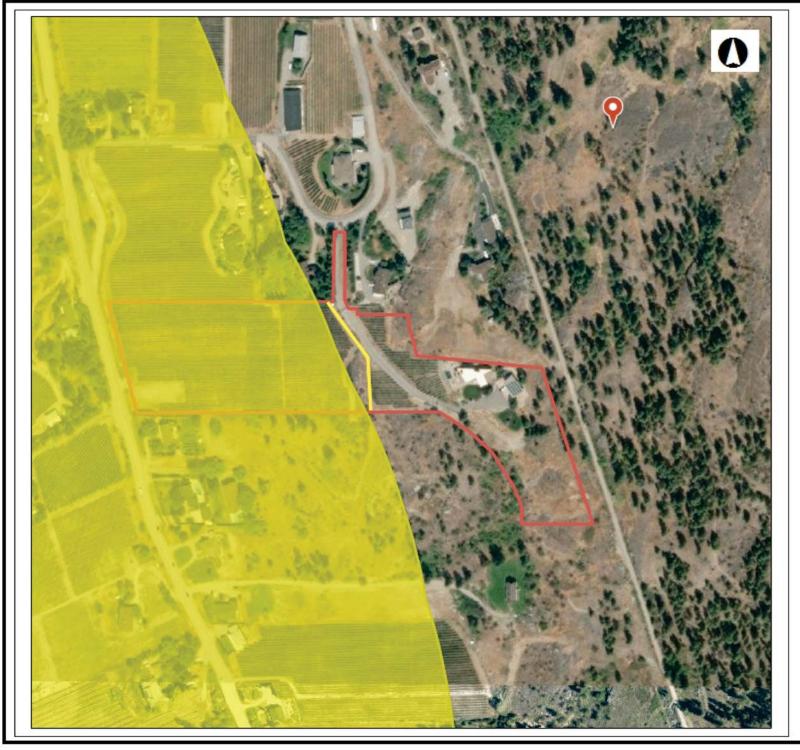
1238 Gawne Road - 100 m Assessment Area

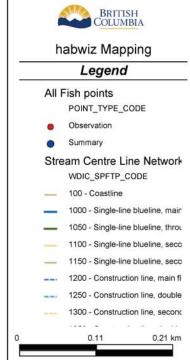


Lewis's Woodpecker & Western Rattlesnake Critical Habiat Over Entire Property and Assessment Area

1:4,514

Bank Swallow Critical Habitat - 1238 Gawne Road





Copyright/Disclaimer

The material contained in this web site is owned by the Government of British Columbia and protected by copyright law. It may not be reproduced or redistributed without the prior written permission of the Province of Minout the prior written permission or the Province of British Columbia. To request permission to reproduce all or part of the material on this web site please complete the Copyright Permission Request Form which can be accessed through the Copyright Information Page.

CAUTION: Maps obtained using this site are not designed to assist in navigation. These maps may be generalized and may not reflect current conditions. Uncharted hazards may exist. DO NOT USE THESE MAPS FOR NAVIGATIONAL PURPOSES.

Datum: NAD83

1: 5,287

Projection: WGS_1984_Web_Mercator_Auxiliary Sphere

Key Map of British Columbia

