

Priority Habitats & Species Report

**H Street Road Property
Blaine, WA**

For:
**Blossom Management Corporation
PO Box 30647
Bellingham, WA 98228**

August 23, 2005



1510 Mill Avenue, Bellingham WA 98225

Introduction

The following report was prepared by Cantrell & Associates, Inc., to describe our investigation of wildlife presence and wildlife habitats on or in close proximity to an approximately 450 acre property located north of H Street Road in Blaine, Washington (Township T37N, Range R03E, Sections 7 & 18). The location is shown on the attached Vicinity Map. The purposes of the study were 1) to determine if state listed sensitive, threatened, or endangered species, state candidate species, federal listed threatened or endangered species, federal species of concern, or other priority species are documented or known to occur on or near the study area, 2) to examine the study area for obvious signs of the presence of state listed sensitive, threatened, or endangered species, state candidate species, federal listed threatened or endangered species, federal species of concern, or other priority species, 3) to determine if any habitats are present within the study area that have a likelihood of supporting state listed sensitive, threatened, or endangered species, state candidate species, federal listed threatened or endangered species, federal species of concern, or other priority species, and 4) to determine if any fish & wildlife habitat conservation areas, as defined in Chapter 17.82.070 of the Blaine Municipal Code, are present within the study area.

The study was comprised of field surveys conducted between February and May, 2005, review of records, and a habitat assessment of the site. The habitat assessment utilized observations of flora, fauna, soils, surface water, and human activities, combined with information from maps (topographic, soils, and wetlands), aerial photographs, literature, and unpublished data from various sources to characterize selected habitat units on the site. These characterizations are then compared with information from literature, unpublished data, and other sources to assess the likelihood of occurrence of certain wildlife and wildlife habitats on the site.

The project proposed for the study area is a residential subdivision of mixed single- and multi-family homes. The homes and infrastructure are proposed to be located primarily within the western, southern, and eastern portions of the study area, while the central northern portion of the study area is proposed to be set aside as a preserved open space and park area.

Site Description

The study area consists of 450 acres of undeveloped land located approximately 3.5 miles east of Blaine city center. It is bounded on the south side by H Street Road and on the north side by 0 Avenue in British Columbia at the U.S./Canadian border. The northeastern portion of the study area is the site of historic gravel extraction. A network of old logging roads is present throughout the study area. Two maintained gravel roads access the study area from H Street Road: one enters the property

across an off-site parcel at the eastern end just west of Valley View Road. The other (known as the Old Mill Logging Road) enters the property near the western end. There are no existing structures within the study area.

The majority of the study area lies within the Little Campbell River watershed, and a smaller portion located at the western end of the study area lies within the Dakota Creek sub-basin of the Drayton Harbor Watershed (see the attached Watershed Map).

The Little Campbell River watershed drains approximately 15,539 acres of land and extends from the upper reaches of Little Campbell River, west approximately 16 miles downstream to White Rock, B.C. and Semiahmoo Bay. Water from the study area flows approximately 3.6 miles down Jacobson Creek to join Little Campbell River, then proceeds another 2.4 miles before emptying into Semiahmoo Bay just south of White Rock. Downstream of the study area, land use within the sub-basin is primarily agricultural and rural residential with urban area and some forest at the western end.

Topography in the eastern, northwestern, and central portion of the study area is sloped towards the center on all sides comprising a bowl shaped headwaters to Jacobson Creek to the northwest. Water draining the slopes through an extensive network of wetlands and ephemeral streams is detained in an approximately 16 acre shallow pond located on flat topography prior to discharging to Jacobson Creek situated in a distinct ravine to the northwest of the pond.

The Drayton Harbor Watershed drains approximately 35,102-acres of land and extends from Drayton Harbor approximately 8 1/2 miles to the east, and from the U.S. Canadian border to approximately 7 miles to the south. It includes both the California and Dakota Creek basins and their tributaries. Land use within the watershed is dominated by rural residential and agricultural land, with cores of commercial use at the western end.

The southwestern portion of the property is separated from the Little Campbell River drainage to the east and north by a minor ridge. Topography slopes generally to the west and south with some relatively flat areas and minor depressions. This portion of the study area is a headwater contributing basin to the Dakota Creek portion of the Drayton Harbor watershed.

The eastern and southwestern portions of the study area were logged within the last ten years, and vegetation in these areas is representative of a regenerating clear-cut left with sparse standing evergreen and deciduous trees. The central and northwestern portions of the study area are forested, with evidence of less-recent logging activity throughout, in the form of remnant roadbeds, machinery ruts, and stands dominated by red alder, paper birch, black cottonwood, quacking aspen with a

salmonberry dominated understory. More diverse and mature mixed evergreen/deciduous forest plant communities remain within and around wetlands that were protected during past logging.

Methods

Review of Records, Literature, and Other Sources

We consulted with Washington Department of Fish and Wildlife (WDFW) for records of priority habitats and species within the study area and the nearby vicinity. Priority species in Washington State include all WDFW Species of Concern as well as vulnerable aggregations and species of recreational, commercial, and/or tribal importance that are vulnerable.

Species of Concern include State Sensitive, Threatened, Endangered, and Candidate species, and Federal Threatened, Endangered, and Candidate fish stocks. State listed and candidate species are defined by WDFW as follows:

State Sensitive Species. Any wildlife species native to the state of Washington that is vulnerable or declining and is likely to become endangered or threatened throughout a significant portion of its range within the state without cooperative management or removal of threats.

State Threatened Species. Any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats.

State Endangered Species. Any wildlife species native to the state of Washington that is seriously threatened with extinction throughout all or a significant portion of its range within the state

State Candidate Species. Includes fish and wildlife species that the Department will review for possible listing as State Endangered, Threatened, or Sensitive. A species will be considered for designation as a State Candidate if sufficient evidence suggests that its status may meet the listing criteria defined for State Endangered, Threatened, or Sensitive.

In addition to Species of Concern, priority species also include the following categories, as documented by Washington Department of Fish and Wildlife:

Vulnerable Aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a

specific area or statewide, by virtue of their inclination to aggregate. Examples include heron rookeries, seabird concentrations, marine mammal haulouts, shellfish beds, and fish spawning and rearing areas.

Recreational, Commercial, and/or Tribal Importance that are Vulnerable. Native and non-native fish and wildlife species of recreational importance, and recognized species used for tribal ceremonial and subsistence purposes, that are vulnerable to habitat loss or degradation.

Washington Department of Fish and Wildlife lists certain habitats as priority habitats. Priority habitats are defined by WDFW as “those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.”

We consulted with the Washington Natural Heritage Program (WNHP) for records of rare plants or high quality/rare ecological communities within the study area and the nearby vicinity.

We reviewed literature providing detailed information about wildlife species profiles and habitat use, including specific distribution information for Whatcom County.

Field Reconnaissance

We conducted field reconnaissance surveys of the study area during multiple visits between February, March, and early May, 2005. All vertebrate species observed, heard or otherwise indicated (i.e. tracks, scat, nests, excavations, burrows) were recorded.

We recorded data on vegetation communities and habitats present within the study area. We mapped these vegetation communities utilizing air photos and the results of field observations (see Vegetation Map).

Because this investigation was of short duration, this survey emphasizes potential occurrence based on habitats with reference to recorded presence in the general vicinity. In addition to evaluating the potential occurrence of sensitive, threatened and endangered species, other wildlife categories reviewed were raptors, woodpeckers, songbirds, waterfowl, mammals, amphibians and reptiles.

Results

Documented Presence of Priority Species and Habitats

Washington Department of Fish and Wildlife does not report the presence of any priority species within the study area or in the near vicinity. Washington Natural Heritage Program does not report the presence of any rare plants or high quality/rare ecological communities within the study area or near vicinity.

One priority habitat is documented by WDFW as being present within the study area. The pond in the central portion of the study area and the adjacent forest is listed with The Washington Department of Fish and Wildlife as a priority habitat for cavity nesting ducks.

Observations of Priority Species Presence

We observed one priority species within the study area. Columbia black-tailed deer (*Odocoileus hemionus columbianus*) is listed as a state species of recreational, commercial, and/or tribal importance that is vulnerable to habitat loss or degradation. We observed tracks, scat, fur, and bones of black-tailed deer in various locations during our site visits.

Potential Habitat for Priority Species

We observed potential habitat for a number of priority species within the study area. Please see **Appendix C: Potential Priority Species** for the state and federal status of each species. The following paragraphs describe vegetation communities and habitats present within the study area at the time of our field reconnaissance surveys. Next is a discussion of all Washington State priority species which may be supported by habitats within the study area, including those species with a low likelihood of occurrence.

Vegetation Communities/Habitats

Vegetation communities which were present within the study area at the time of our field visits included medium-aged deciduous forest regenerating from past logging activity, more recently logged areas with low shrubs and a few scattered remnant trees, wetlands, aquatic habitat within the central pond, a perimeter of wetland scrub-shrub around the pond, and a disturbed gravel pit area. Refer to the attached Vegetation Map for approximate locations of the vegetation communities which accompany the following descriptions.

Early seral deciduous forest is present throughout the central and northwestern portions of the study area and is typically characterized by a canopy dominated by medium-aged red alder. Also present in the canopy to a lesser degree are western redcedar, western hemlock, Douglas fir, paper birch, bigleaf maple and bitter cherry. A shrub layer of salmonberry is present in most areas, with vine maple, red elderberry, and Indian plum also common.

More recently logged areas are present within the southwestern and eastern portions of the study area, and contain vegetation communities characterized by a regenerating plant community made up of short shrubs, remnant herbaceous plants, and a few remnant evergreen and deciduous trees. These areas are dominated by red alder saplings, and regenerating vine maple, red elderberry and salmonberry. Sword fern and trailing blackberry are present in the understory, as well as various other herbaceous plants typical of disturbed areas. Himalayan blackberry is present and generally sparse, but is thick in some places of greater past disturbance. A very sparse canopy of uncut western redcedar, western hemlock, Douglas fir, bigleaf maple, red alder, and black cottonwood were left standing throughout.

Numerous wetlands were present in many locations. Some of these wetlands remain with an evergreen forested buffer, therefore containing the most mature vegetation communities within the study area. Wetland areas are described in more detail in a separate report authored by Cantrell & Associates, Inc, of Bellingham, WA, titled Critical Areas Assessment Report: Wetland Delineation, dated August 16, 2005. The attached Vegetation Map shows the locations of the on-site wetlands.

An aquatic habitat is present within the approximately 16 acre pond, located in the north central portion of the study area. Water depths vary from 3.5-5' and aquatic plants, such as cattail, yellow pond lily, watershield, and floating-leaved pondweed are rooted throughout the majority of the pond. At the outer edge of the pond, vegetation was dominated by a shrub layer of hardhack and willow.

Historic gravel extraction pits are present near the northern property boundary in the northeastern part of the study area.

The surrounding land use south of the U.S./ Canadian border is primarily forested with some single family residences. H Street Road parallels the study area in places along the southern boundary, and 0 Avenue at the U.S. /Canadian border parallels portions of the property at the northern boundary. North of 0 Avenue land use is residential with a golf course.

Priority Bird Species

We did not observe any Priority bird species within the study area or vicinity during our site visits. Potential habitat may be present for five Priority bird species. Merlin (*Falco columbarius*), a state Species of Concern, is found in a variety of forested and riparian habitats, and is likely to occur within the study area. Band-tailed pigeon (*Columba fasciata*) has a low likelihood of occurrence, as the species favors large Douglas-fir for nesting, which are scarce within the study area (Baron, 1997), and is typically found near mineral springs (Wahl, 2005). Band-tailed pigeon is listed as a state species of recreational, commercial, and/or tribal importance that is vulnerable to habitat loss or degradation. Bald eagle (*Haliaeetus leucocephalus*), great blue heron (*Ardea herodias*), and pileated woodpecker (*Dryocopus pileatus*) also have a low likelihood of occurrence due to marginal habitat within the study area. Bald eagle is listed as a state and federal Threatened Species. We looked for but did not observe bald eagle nests. Although there are a few large snags and live trees within the study area that may provide nesting habitat for bald eagle, the species favors habitats associated with large river channels, shorelines, and lakes. WDFW is concerned with “vulnerable aggregations” of great blue heron. Heron rookeries are of concern because the species’ inclination to aggregate causes it to be susceptible to population decline (WDFW). Great blue heron may visit the site but are not likely to nest within the study area as greater food sources can be found elsewhere, at marine embayments, fresh-water lakes, or open fields supporting vole populations. A heron rookery is present near H Street Road approximately 4 miles to the east (Wahl, 1995). Habitat for pileated woodpecker, a state candidate for listing, is only marginal. Although they can occur in younger forests with large remnant trees and snags, and a few large snags and live trees are present within the study area, pileated woodpecker favors mature forests (Wahl, 2005), and is not likely to be present. Two additional species, Vaux’s swift (*Chaetura vauxi*) and golden eagle (*Aquila chrysaetos*), both state candidates for listing, may be rare seasonal visitors. Vaux’s swift favors old growth forests for breeding and forages over water, grasslands, and forests, while golden eagle breeds in rain-shadows habitat and is a year-round resident in eastern Washington and the San Juan islands only (Wahl, 2005).

Priority Mammals

We did not observe any bats during our site visits, and potential for habitat is low. Bats that may occur in Whatcom County and are considered Priority Species include any occurrence of Townsend’s big-eared bat (*Plecotus townsendii*), or breeding or roosting concentrations of big brown bats (*Eptesicus fuscus*) or myotis bats (*Myotis spp.*). Roosting and breeding concentrations of myotis and big brown bats are considered by WDFW to be vulnerable aggregations, susceptible to significant population declines. These species typically utilize caves, structures, or large trees for roosting and maternity colonies. We did not observe any caves or structures within

the study area, and large trees and snags were scarce. Although a more detailed study would be required to determine whether roosting or maternity colonies are present, the likelihood of such is low.

Townsend's big-eared bat is a federal Species of Concern, and a state candidate for listing. Roosting and breeding concentrations are mapped by WDFW in several locations in Whatcom County, but there do not appear to be any records for locations near the study area. Patricia Otto, a local bat expert, states that Townsend's big-eared bat roosts in caves, large spaces in talus slopes or inside barns or attics. We did not observe any of these features within the study area.

In addition to bats and Columbia black-tailed deer (previously discussed), the only other priority mammal species likely to occur within the study area is mink (*Mustela vison*). Mink is listed as a state species of recreational, commercial, and/or tribal importance that is vulnerable to habitat loss or degradation. Mink (*Mustela vison*) are likely to be present as they are considered semi-aquatic and generally live in areas with wetlands (Creighton J. H. and D. M. Baumgartner, 2001). Suitable habitat is present throughout much of the central portion of the study area in the pond and its associated wetlands and drainages.

Priority Amphibians

We did not observe any amphibians during our site visits. The only Priority Amphibian likely to occur within the study area is the red-legged frog (*Rana aurora*). This species utilizes wetland areas, which are plentiful within the study area. The red-legged frog is a federal Species of Concern and is being reviewed for possible listing by the US Fish and Wildlife Service. This species is unlikely to warrant listing in Washington, although it has been reported to have declined in other portions of its range (Nussbaum et al., 1983).

Other Wildlife Species

In addition to the Priority Species discussed above, the following species were observed, or are likely to occur, within the study area and surrounding areas.

Fish

Native fish populations are not likely to occur within the study area. We did not observe any great blue herons, osprey, or mergansers, all of which rely on a diet of primarily fish. We measured the depth of the pond varying between 3.5-5' deep during March, 2005, and it appears to be fairly thick with emergent vegetation during

the growing season. Because the water is relatively shallow, temperatures are likely to be warm enough during the summer to preclude use by native salmonid fish species. The pond may be home to introduced warm water species such as bass, crappie, bluegill, and catfish.

The on-site pond and its associated wetlands form the headwaters for Jacobson Creek, which immediately flows across the U.S./ Canadian border and enters into Little Campbell River approximately 3.6 miles downstream of the study area. Little Campbell River is listed for Chum, Coho, and Steelhead presence, with the Coho and Steelhead continuing up Jacobson Creek to approximately 1 mile downstream of the study area. Resident cutthroat trout are also listed as present in Jacobson Creek to approximately 1 mile downstream of the study area. The remaining on-site drainages are small and seasonal, and not listed for fish presence.

Raptors

A healthy population of both barred owls (*Strix varia*) and red-tailed hawks (*Buteo jamaicensis*) appear to be present across most of the study area, and were seen or heard during nearly every field visit. Red-tailed hawks are non-migratory in Washington and have relatively large home ranges. This species is one of the most commonly seen raptors in western Washington and is considered a recreationally important species because of a high public profile and opportunities for observation.

In much of the country, Barred Owls are associated with large trees in old-growth forests. In Washington, they also use mature second-growth forests. These forests may be coniferous, broad-leaved, or mixed, often with openings from logging. Barred Owls are often found in swampy areas.

Other species of raptor with potential habitat within the study area include the following: Great horned owl (*Bubo virginianus*) prefers open areas within forested landscapes, and may use edge habitats within the study area; northern saw-whet owl (*Aegolius acadicus*) nests in all forest types and is fairly adaptable in its choice of nesting locations; western screech owl (*Megascops kennicottii*) favors riparian areas and various forest types including deciduous hardwood or mixed forests, which are present on-site; and American kestrel (*Falco sparverius*), which utilizes clear cut habitats.

Species which are possible visitors but unlikely to breed within the study area include: Northern pygmy owl (*Glaucidium gnoma*), which prefers coniferous woodlands and is dependent on suitable snags for nesting; cooper's hawk (*Accipiter cooperii*), which may be found in coniferous and mature deciduous forests and typically nests in mid-age to old growth forests; and sharp-shinned hawk (*Accipiter striatus*), which typically nests at higher elevations, mainly utilizing coniferous forests

Woodpeckers

Woodpeckers are important indicator species because they excavate tree-cavities for nest sites that are utilized by other species of birds and mammals. Although some species of woodpeckers excavate nest-holes in live trees, most favor snags in various stages of decay. Overall woodpecker habitat is marginal, as there does not appear to be an abundance of large trees or standing snags within the study area, nevertheless, those present appear to be well utilized.

We observed red-breasted sapsuckers (*Sphyrapicus rubber*) and their excavations, and northern flickers (*Colaptes auratus*) during our site visits.

Also common in deciduous and mixed forests and highly likely to be present is the downy woodpecker (*Colaptes auratus*). Hairy woodpecker (*Picoides villosus*) is more dependent on the presence of large trees and conifers, but may still have some likelihood of occurring.

Passerine Species (Songbirds)

Thirteen species of songbirds were detected during field surveys, representing common year-round residents and early spring migrants of western Washington. The majority of passerine species of western Washington are migrants present for extended periods during the breeding season or for brief intervals during spring or autumn migration. Other species sometimes occur as vagrants in summer after breeding elsewhere.

We observed or heard the following species numerous times during February and March field visits were American robin (*Turdus migratorius*), black-capped chickadee (*Parus atricapillus*), golden-crowned kinglet (*Regulus satrapa*), dark-eyed junco (*Junco hyemalis*), rufous hummingbird (*Selasphorus rufus*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo erythrophthalmus*), and winter wren (*Troglodytes troglodytes*). Red-winged blackbird (*Agelaius phoeniceus*) and marsh wren (*Cistothorus palustris*) were observed only at the pond.

Additional species observed during the early May field visit were orange-crowned warbler (*Vermivora celata*), white-crowned sparrow (*Zonotrichia leucophrys*), and Wilson's warbler (*Wilsonia pusilla*).

Other species to be anticipated are those associated with deciduous and mixed forests, clear-cuts, wetlands, forested riparian areas, and urban settings. In contrast, species characteristic of open fields, lakes, or shoreline habitat are not likely to be well-represented.

Mammals

In addition to Columbia black-tailed deer, we observed Douglas' squirrel (*Tamiasciurus douglasii*), eastern cottontail (*Sylvilagus floridanus*), coyote (*Canis latrans*) scat and tracks, mountain beaver (*Aplodontia rufa*) excavations, and multiple cougar (*Felis concolor*) scratches on trees. We also observed beaver (*Castor canadensis*) sign at the pond.

Additional mammals that could occur in the study area include Virginia opossum (*Didelphis virginiana*), Townsend's chipmunk (*Tamias townsendii*), northern flying squirell (*Glaucomys sabrinus*), porcupine (*Erethizon dorsatum*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), long-tailed weasel (*Mustela frenata*), shrews, mice, moles, and rats.

Wide ranging mammals that may occasionally occur in the study area include bobcat (*Lynx rufus*), and black bear (*Ursus americanus*). Black bear have been reported to have been sighted near the study area as recently as 2004.

Amphibians and Reptiles

We observed garter snakes (*Thamnophis* spp.) in the clear-cuts, heard Pacific chorus frogs (*Hyla regilla*) throughout the study area, and observed bullfrogs (*Rana catesbeiana*) at the pond during our field visits. Other species of amphibians whose ranges and habitat requirements match conditions within the study area include northern red-legged frog, rough-skinned newt, western red-backed salamander, northwestern salamander, ensatina, and western toad.

Other species of amphibians that are may occur based on habitat availability and species ranges include western toad (*Bufo borea*), rough skinned newt (*Taricha granulose*), ensatina (*Ensatina eschscholtzi*), western red-backed salamander (*Plethodon vehiculum*), and northwestern salamander (*Ambystoma gracile*). The only other reptile which is known to occur in Whatcom County is the northern alligator lizard (*Elgaria coerulea*).

Regulatory Analysis

The City of Blaine regulates Fish and wildlife habitat conservation areas through Chapter 17.82.070 of the Blaine Code. **The pond is considered to be a Fish and wildlife conservation area under this chapter (see #4), outlined as follows:**

“17.82.070 Fish and wildlife habitat conservation areas.

A. Classification. Areas conserved for management and maintenance of fish and wildlife habitat; for public health, safety and well-being. These areas may include other critical areas such as wetlands and their associated buffers.

B. Land to Which This Section Applies.

1. Areas with which endangered, threatened, and sensitive species have a primary association;
2. Commercial and recreational shellfish areas;
3. Kelp and eelgrass beds; herring and smelt spawning areas;
4. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat. Naturally occurring ponds do not include ponds deliberately designed and created from a dry site, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds (of less than three years' duration) and landscape amenities. However, naturally occurring ponds may include those artificial ponds created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority;
5. Waters of the state. Waters of the state are defined in WAC Title 222, the forest practices rules and regulations. Said waters shall be classified as established in WAC 222-16-030;
6. Lakes, ponds, streams and rivers planted with game fish. This includes game fish planted in these water bodies under the auspices of federal, state, local or tribal programs or which support priority fish species as identified by the Department of Wildlife;
7. State natural area preserves and natural resource conservation areas.

C. Standards. Alterations of these critical areas may reduce the likelihood that the species will survive or reproduce. The city shall assure that activities allowed in fish and wildlife habitat conservation areas are consistent with all applicable state and federal regulations regarding that species. Development in these areas shall be in accordance with the requirements of any overlapping critical area classification. (Ord. 2554 § 3, 2003)”

In Washington State local governments are required by the state to protect Endangered, Threatened and Sensitive Species (WAC 232-12-011 and WAC 232-12-014). Washington State has Management Recommendations for Washington's

Priority Species and Habitats. Included in the recommendations are Invertebrates, Amphibians and Reptiles. The Washington Department of Fish and Wildlife maintains several Geographic Information System (GIS) databases containing information on important fish and wildlife species. This database should be considered in making land use decisions, so as to minimize conflicts and delays from Fish and Wildlife Issues.

Conclusions and Recommendations

We found no documented reports of and did not observe any state listed Sensitive, Threatened, or Endangered species, state Candidate species, federal listed Threatened or Endangered species, or federal Species of Concern, within or near the study area.

We did not observe potential habitat for any state or federal endangered species within the study area. We observed marginal potential habitat for one state and federal threatened species (bald eagle). We observed potential habitat for four state candidate species (merlin, vaux's swift, pileated woodpecker, and golden eagle). Of these four, merlin is the most likely to occur, while the others are potential as rare or seasonal visitors and/or have marginal habitat within the study area. We observed potential habitat for one federal Species of Concern, the red-legged frog, which does not currently warrant listing as a state listed or candidate species.

We observed marginal potential habitat for great-blue heron colonies, a priority species due to its listing by WDFW as having vulnerable aggregations. However, there are currently no heron colonies known to be present within the study area. We also observed signs of Columbia black-tailed deer and potential habitat for mink and band-tailed pigeon within the study area, which are all priority species because they are listed by WDFW as species of recreational, commercial, and/or tribal importance.

If any of the state or federal listed or candidate species are found to be present within the study area, a Habitat Management Plan would be recommended. Although Columbia black-tailed deer is listed as a species of recreational, commercial, and/or tribal importance, we do not recommend a Habitat Management Plan for the species. Columbia black-tailed deer are common throughout Whatcom County. If any other priority species listed as vulnerable aggregations or species of recreational, commercial, and/or tribal importance is found to be present within the study area, further study would be warranted to determine if the proposed project is likely to impact the species.

The pond in the central portion of the study area and adjacent forest is listed with Washington Department of Fish and Wildlife as Priority Habitat for cavity nesting ducks and as such that area likely meets the criterion of a Fish and Wildlife Habitat Conservation Area under 17.82.070. It is our opinion that the pond and its periphery

will be amply protected by the banding of surrounding regulated forested wetlands and their associated upland buffers if the requirements of Chapter 17.83 are met.

Since the remainder of the study area contains primarily second growth forest and open, recently harvested forest, with vegetation typical of the region, there is a low likelihood of any sensitive, threatened, endangered, or candidate wildlife species having primary associations with the study area.

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APPENDIX A
PLANT LIST
H STREET ROAD PROPERTY

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<i>Acer circinatum</i>	vine maple	<i>Oenanthe sarmentosa</i>	Pacific water-parsley
<i>Acer macrophyllum</i>	bigleaf maple	<i>Oplopanax horridus</i>	devil's club
<i>Agrostis alba</i>	creeping bentgrass	<i>Phalaris arundinacea</i>	reed canary grass
<i>Alnus rubra</i>	red alder	<i>Picea engelmannii</i>	Engelmann spruce
<i>Athyrium filix-femina</i>	lady fern	<i>Picea sitchensis</i>	sitka spruce
<i>Betula papyrifera</i>	paper birch	<i>Polystichum munitum</i>	sword fern
<i>Brasenia schreberi</i>	watershield	<i>Populus balsamifera</i>	cottonwood
<i>Carex deweyana</i>	Dewey's sedge	<i>Populus tremuloides</i>	trembling aspen
<i>Carex obnupta</i>	slough sedge	<i>Potamogetin natans</i>	floating-leaved pondweed
<i>Cirsium arvense</i>	Canada thistle	<i>Potentilla palustris</i>	marsh cinquefoil
<i>Cirsium vulgare</i>	bull thistle	<i>Prunus emarginata</i>	bitter cherry
<i>Claytonia sibirica</i>	Siberian miner's lettuce	<i>Pseudotsuga menziesii</i>	Douglas-fir
<i>Cornus sericea</i>	red-osier dogwood	<i>Pteridium aquilinum</i>	bracken fern
<i>Crataegus douglasii</i>	black hawthorn	<i>Ranunculus repens</i>	creeping buttercup
<i>Dicentra formosa</i>	pacific bleedingheart	<i>Rhamnus purshiana</i>	cascara
<i>Digitalis purpurea</i>	foxglove	<i>Ribes lacustre</i>	swamp gooseberry
<i>Festuca rubra</i>	red fescue	<i>Rubus discolor</i>	Himalayan blackberry
<i>Gaultheria shallon</i>	salal	<i>Rubus spectabilis</i>	salmonberry
<i>Geum macrophyllum</i>	large-leaved avens	<i>Rubus usrinus</i>	trailing blackberry
<i>Glyceria borealis</i>	northern mannagrass	<i>Salix lasiandra</i>	Pacific willow
<i>Glyceria grandis</i>	reed mannagrass	<i>Salix sitchensis</i>	Sitka willow
<i>Holodiscus discolor</i>	oceanspray	<i>Sambucus racemosa</i>	red elderberry
<i>Ilex aquifolium</i>	holly	<i>Scirpus microcarpus</i>	small-flowered bulrush
<i>Juncus effusus</i>	common rush	<i>Spiraea douglasii</i>	hardhack
<i>Lonicera involucrata</i>	twinberry	<i>Stachys cooleyae</i>	Cooley's hedge-nettle
<i>Luzula parviflora</i>	small-flowered woodrush	<i>Symphoricarpos albus</i>	snowberry
<i>Lysichiton americanum</i>	skunk cabbage	<i>Thuja plicata</i>	Western redcedar
<i>Mahonia nervosa</i>	oregon-grape	<i>Tolmiea menziesii</i>	piggyback plant
<i>Maianthemum dilatatum</i>	false lily-of-the-valley	<i>Tsuga heterophylla</i>	western hemlock
<i>Malus fusca</i>	crabapple	<i>Typha latifolia</i>	cattail
<i>Menziesia ferruginea</i>	false azalea	<i>Urtica dioica</i>	stinging nettle
<i>Nufar polysepalum</i>	yellow pond-lily	<i>Utricularia vulgaris</i>	greater bladderwort
<i>Oemleria cerasiformis</i>	Indian-plum	<i>Vaccinium parvifolium</i>	red huckleberry
		<i>Veronica americana</i>	American brooklime

**APPENDIX B
WILDLIFE & WILDLIFE SIGNS OBSERVED
H STREET ROAD PROPERTY**

Note: The following observations were made by Cantrell & Associates, Inc. during February to May 2005 field visits.

Amphibians

<i>Common Name</i>	<i>Scientific Name</i>	<i>Type of Sign</i>	<i>Priority Species?</i>
Pacific chorus frog	<i>Pseudacris regilla</i>	Heard	No

Mammals

<i>Common Name</i>	<i>Scientific Name</i>	<i>Type of Sign</i>	<i>Priority Species?</i>
Coyote	<i>Canis latrans</i>	Tracks, scat	No
Columbia black-tailed deer	<i>Odocoileus hemionus columbianus</i>	Tracks, scat, bones, fur	Yes
Eastern cottontail	<i>Sylvilagus floridanus</i>	Visual	No
Douglas' squirrel	<i>Tamiasciurus douglasii</i>	Visual	No
Beaver	<i>Castor canadensis</i>	Lodge	No
Mountain beaver	<i>Aplodontia rufa</i>	Excavations	No
Cougar	<i>Felis concolor</i>	Old scratches on trees	No

Birds

<i>Common Name</i>	<i>Scientific Name</i>	<i>Type of Sign</i>	<i>Priority Species?</i>
American Robin	<i>Turdus migratorius</i>	Visual, heard	No
Barred owl	<i>Strix varia</i>	Visual, heard	No
Black-capped chickadee	<i>Parus atricapillus</i>	Heard	No
Bufflehead	<i>Bucephala albeola</i>	Visual	No
Canada goose	<i>Branta Canadensis</i>	Visual, heard	No
Common goldeneye	<i>Bucephala clangula</i>	Visual	No
Dark-eyed junco	<i>Junco hyemalis</i>	Heard	No
Golden-crowned kinglet	<i>Regulus satrapa</i>	Heard	No
House finch	<i>Carpodacus mexicanus</i>	Visual, heard	No
Lesser scaup	<i>Aythya collaris</i>	Visual	No
Mallard	<i>Anas platyrhynchos</i>	Visual	No
Marsh wren	<i>Cistothorus palustris</i>	Visual, heard	No
Red-tailed hawk	<i>Buteo jamaicensis</i>	Visual, heard	No
Red-breasted sapsucker	<i>Sphyrapicus ruber</i>	Excavations	No
Rufous hummingbird	<i>Selasphorus rufus</i>	Visual	No

<i>Common Name</i>	<i>Scientific Name</i>	<i>Type of Sign</i>	<i>Priority Species?</i>
Song sparrow	<i>Melospiza melodia</i>	Heard	No
Spotted towhee	<i>Pipilo erythrophthalmus</i>	Heard	No
Trumpeter swan	<i>Cygnus buccinator</i>	Visual, heard flying over	No
Winter wren	<i>Troglodytes troglodytes</i>	Visual, heard	No

**APPENDIX C
POTENTIAL PRIORITY SPECIES
H STREET ROAD PROPERTY**

State Classifications

1. State Listed and Candidate Species

- SC: State Candidate Species
- ST: State Threatened Species
- SE: State Endangered Species
- SS: State Sensitive Species

2. Vulnerable Aggregations

Vulnerable Aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to aggregate. Examples include heron rookeries, seabird concentrations, marine mammal haulouts, shellfish beds, and fish spawning and rearing areas.

3. Species of Recreational, Commercial, &/or Tribal Importance that are Vulnerable

Native and non-native fish and wildlife species of recreational or commercial importance, and recognized species used for tribal ceremonial and subsistence purposes, that are vulnerable to habitat loss or degradation.

Fish

Common Name	Scientific Name	Federal Status	State Status	Potential Habitat?
Searun cutthroat	<i>Oncorhynchus clarki clarki</i>	None	3	No- lacks fish-bearing stream
Coho salmon	<i>Oncorhynchus kisutch</i>	Species of Concern	2,3	No- lacks fish-bearing stream
Pigmy whitefish	<i>Prosopium coulteri</i>	None	1,2	No-not in species range
Fall chinook	<i>Oncorhynchus tshawytscha</i>	Threatened Species	1-SC	No-lacks fish-bearing stream

Amphibians

Common Name	Scientific Name	Federal Status	State Status	Potential Habitat?
Red-legged frog	<i>Rana aurora</i>	Species of Concern	None	Yes

Mammals

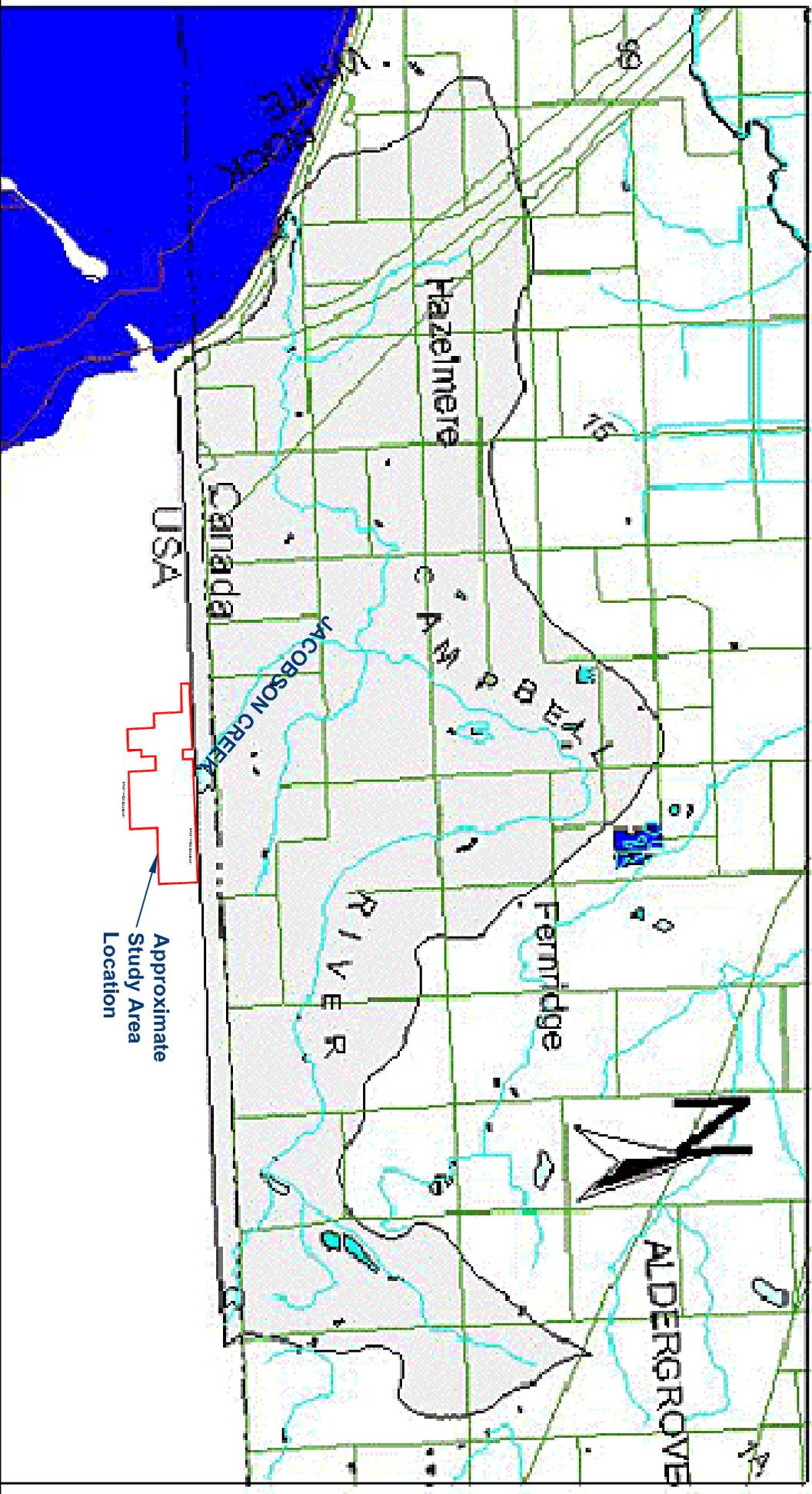
Common Name	Scientific Name	Federal Status	State Status	Potential Habitat?
Mink	<i>Mustela vison</i>	None	3	Yes
Columbia black-tailed deer	<i>Odocoileus hemionus columbianus</i>	None	3	Yes

Fisher	<i>Martes pennati</i>	Species of Concern	2	No – prefers higher elev.
Big brown bat	<i>Eptesicus fuscus</i>	None	2	Colonies not likely
Myotis bats	<i>Myotis spp.</i>	None	2	Colonies not likely
Townsend's big-eared bat	<i>Plecotus townsendii</i>	Species of Concern	1-SC	No

Birds

Common Name	Scientific Name	Federal Status	State Status	Potential Habitat?
Bald eagle	<i>Haliaeetus leucocephalus</i>	Threatened Species	1-ST	Marginal
Great blue heron	<i>Ardea herodias</i>	None	2	Marginal –pond likely to lack fish
Band-tailed pigeon	<i>Columba fasciata</i>	None	3	Yes
Vaux's swift	<i>Chaetura vauxi</i>	None	1-SC	Possible rare visitor only
Pileated woodpecker	<i>Dryocopus pileatus</i>	None	1-SC	Marginal
Merlin	<i>Falco columbarius</i>	None	1-SC	Yes
Golden eagle	<i>Aquila chryseos</i>	None	1-SC	Possible rare visitor only
Blue grouse	<i>Dendragapus obscurus</i>	None	3	No - not in species range
Purple martin	<i>Progne subis</i>	None	1-SC	No - not in species range
Western bluebird	<i>Sialia mexicana</i>	None	3	No - not in species range
Northern goshawk	<i>Accipiter gentiles</i>	Species of Concern	1-SC	No - not in species range
Peregrine falcon	<i>Falco peregrinus</i>	Species of Concern	1-SS	No
Lewis' woodpecker	<i>Melanerpes lewis</i>	None	1-SC	No - not in W. Washington
Marbled murrelet	<i>Brachyramphus marmoratus</i>	Threatened	1-ST	No – site lacks old growth

Little Campbell River Watershed



THIS MAP HAS BEEN PROVIDED BY
THE B.C. CONSERVATION FOUNDATION
OF NANAIMO, BRITISH COLUMBIA

Watershed Map
Little Campbell River
H Street Road

August 23, 2005

Not to Scale



CAI Cantrell
& Associates, Inc.

**Vegetation Map
H Street Road**

August 23, 2005

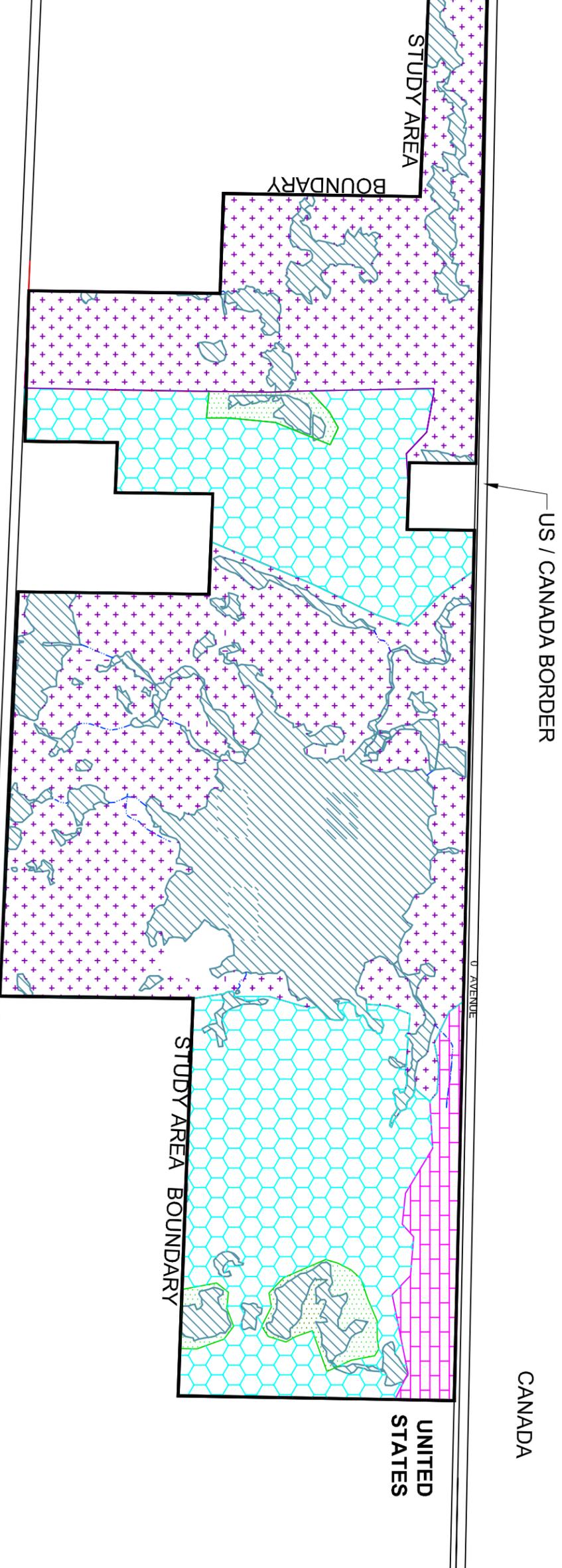


Property boundaries and wetland locations surveyed by David Evans & Associates, Inc. of Bellingham, Washington.

-  Wetland
-  Evergreen Forested Buffers
-  Recently Harvested Forest
-  Medium-aged Deciduous Forest
-  Gravel Pit/ Disturbed Area
-  Stream or Drainage



CAI Cantrell
& Associates, Inc.



US / CANADA BORDER

CANADA

UNITED STATES

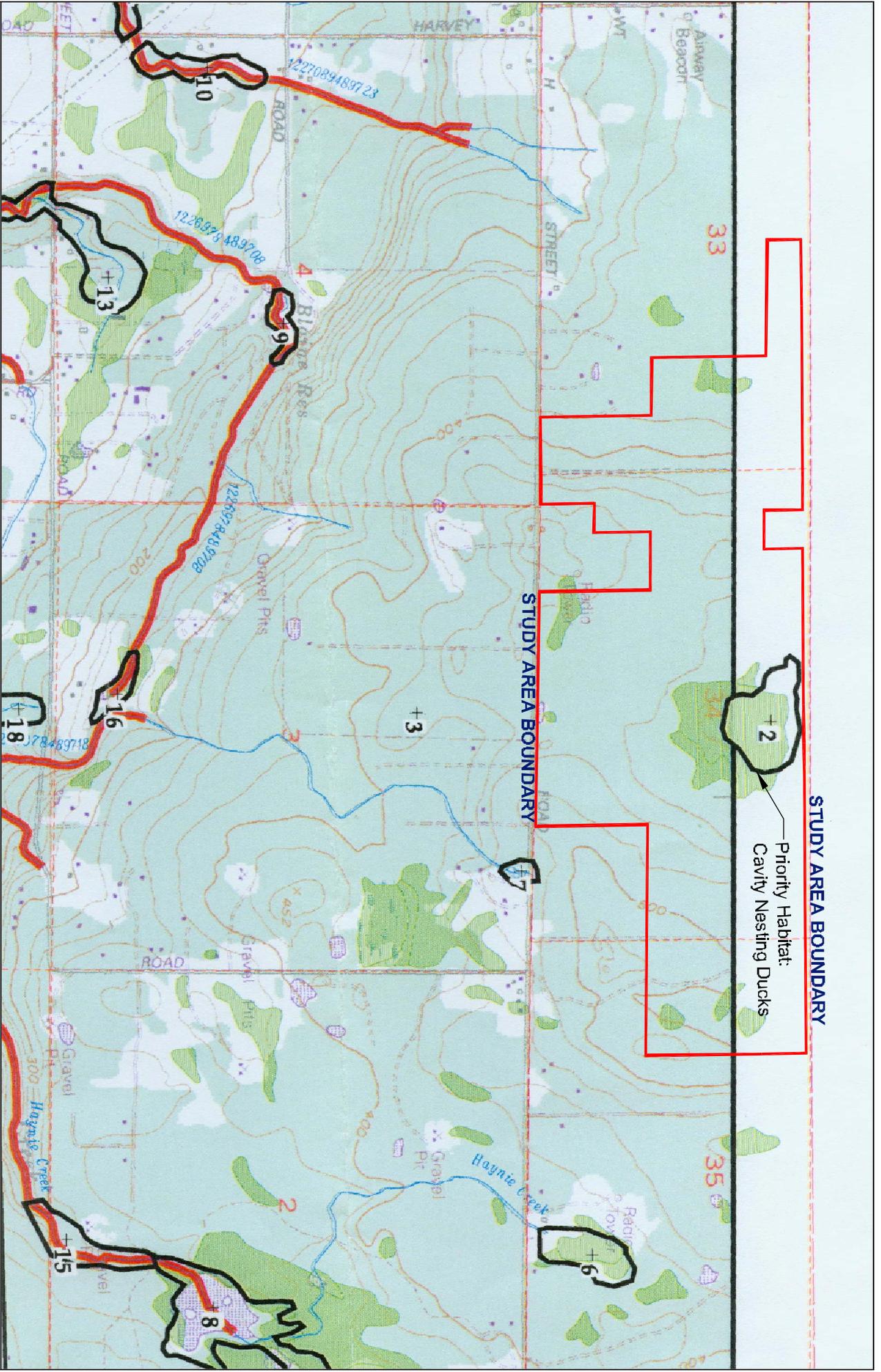
STUDY AREA BOUNDARY

BOUNDARY

STUDY AREA BOUNDARY

H STREET ROAD

U AVENUE

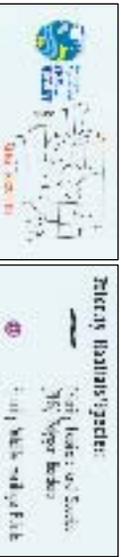


STUDY AREA BOUNDARY

Priority Habitat:
Cavity Nesting Ducks

NOTE: MAP INFORMATION HAS BEEN PROVIDED BY THE WASHINGTON DEPARTMENT OF FISH & WILDLIFE. THIS MAP HAS BEEN CROPPED TO A/CID DISPLAYING SENSITIVE WILDLIFE INFORMATION NOT AUTHORIZED FOR PUBLIC DISPLAY.

**Priority Habitats & Species Map
H Street Road**



August 23, 2005



CAI Cantrell & Associates, Inc.