

29 May 2022
Impact Assessment Agency of Canada

Re: GIFN - Fixed Link Impact Assessment public consultation ending 29 May 2022

Please find these comments and information that may be useful to your considerations in the attached pdf.

It includes photo observation in documentation of the significant wildlife appearing and photographed in the coastal Virginia Hamlet and local areas, along her shores and the creek mouths that drain into Lake Simcoe, and in the north half of the 115 Hadden farm field at the edge of the nine-acre coastal wetland (mouth of Virginia Creek C) at the lake. The creeks draining through Virginia Hamlet are hatcheries that feed and stock the lake.

The wildlife photo pages and other pages were not purposed to this information, but I thought the info may be useful in some way so have included random excerpted pages. I don't have time to recompose and repurpose them.

Virginia Hamlet and these mainland shoreline habitations are swampland marshlands by default when early settlers drained these Simcoe Lowlands to make settlements. There are significant wildlife, and vital hydrological conditions.

The wildlife (foxes, turkeys, ducks and ducklings, frogs and toads can sometimes be seen walking on our street (Kay) during the day. This area is the destination for another great variety of migrating birds that nest in our trees and bushes and teach their young at the bird feeders, in the birdbaths, under the flowers and through the lawn for seeds or garden bugs. Streams of Geese and black flock specks, blue herons, Cormorants, turkey vultures fly North-South overhead morning and night, back and forth frequently in migrating seasons. This is characteristic of the environment at this location and this area.

The nine acre wetland (west side of Hadden) has a highly vulnerable aquifer where it opens up near the surface as the source water that the Virginia Hamlet community relies and must protect from contaminants.

Note that all properties west of Park Road/ Sibbald Provincial Park are exclusively on drilled or dug wells; they rely on the surface, recharge and aquifer for water - entirely. This includes all farms, all Virginia Hamlet, all of Duclos Point and all of Pepperlaw - the areas under consideration. There are no municipal services at any of locations east of Park Road. The GIFN have treated 'clean drinking water' and watermains, but we do not have municipal services, drains, or watermains. Town water may be fetched from ONE town public tap.

Hadden Road as it currently exists, is a heritage road of value to this community that cannot be widened due to its vital role in the hydrological health of the Hamlet source water. The original crown grant was to William Johnson, also the founder of Pepperlaw. He created this road in 1837. Much of this area, the streetscape, farmscape and hamlet characteristics remains the same along this road since then. Hadden is a two lane two way narrow unpainted local road lined with hydrological significant deep ditches on both sides that conduct drainage into the wetland and into the aquifer. A small portion of Black River Road East of the GIFN marina narrows into a small bridge just before it turns as Hadden Rd. This portion of Black River Road is lined with cottages close to the road on both sides and cannot be widened. Hadden Road cannot be widened without interfering in the hydrology and the highly vulnerable aquifer. Traffic and road widening if necessary, should focus on Black River Road to Park Road leading out of and away from the Hamlet - but not towards Hadden road.

If access to Georgina Island is to be restricted to residents, or all returning Band Members, with monitored access, the large mainland estate properties they own (alternative 1 and 2) could manage the traffic without widening roads to drive right into the property. Only substantial new development and high traffic expectations would warrant widening of roads.

After reading through the supplied materials, there were several other things...

Concerns and Issues I do have are in regards to not only the environmental impacts to lake Simcoe, but also impacts affecting the mainland natural environments, traffic and quiet residential coastal community of the Hamlet of Virginia and the rural recreation and mainland design and construction approach.

Firstly, let me say I could be opposed or supportive of the fixed link based not only on the environmental assessment outcome, whether mitigation has only a best (but poor) effort/result, so not effective, or satisfactory, and where no amount of 'compensation' is worth the disappointment, damage or disaster at its outcome. While the benefits have been stated, the real risks have not, and are still unknown.

I am very much concerned on the quality of design, construction approach and materials and their impacts, and making the most out of the project that EVERYONE can be proud of, including its visual appearance, and whether it is all it could be given some creative or world class thinking. Why shouldn't it be 'great', beautiful, and useful, multifaceted and a treasure, and serve the people of Georgina Island for what they want, and offer something to Lake Simcoe and mainland locals as well.

I shudder to think about the dumping of crusher run, gravel rocks and recycled asphalt, utility pilons and dingy culverts however adequate the basic bridge part is. Gravel and its dust changes the PH of water, asphalt and recycled asphalt leaches chemicals (PAHs) including long saturated automotive leaks and pollutants that it had absorbed. It is road scrapings. The construction and materials very much factor into an environmental assessment and the end result. I am horrified to think of the causeway portion as a solid ugly asphalt covered block with invisible culverts fish will go in to die.

GIFN just want year-round safe access to and from the mainland. Of the existing GI residents, most do not want outsiders, unguarded or, uninvited or any noticeable increases in traffic and people accessing Georgina Island. A guard or pass-card monitoring system. An economic benefit GIFN stated to be about being able to travel to the mainland freely, and safely for work or school.

I wonder that it may have to be designed with a clear tunnel like cover so that there is no snow to plow or road to treat.

Re: Alternative 2 and 3,

Consider, the 'cause-way bridge' will be two to three kilometers sticking out and through our precious and much beloved Lake Simcoe and we will all (the locals) be especially affected by the changes on the mainland side and whether it is an eyesore or a welcome treasure.

Vehicular access to the fixed link and Georgina Island managed at a point to be determined.

Something for consideration if accessed from Black River Road.

Perhaps this is an opportunity for much more with vision, design and engineering:

Keeping in mind GIFN may own mainland property at both ends, but not what is in-between, something of 2 kilometres which belongs to everyone.

1) A wider or tiered version with a full length 'Active Transportation' walking and/or biking trail loop alongside. This would have great appeal. Black River Road is an Active Transportation route and terminus has not been determined.

In a tiered version plowed snow could be pushed off onto the Active Transportation portion where it could be captured and treated be as it is not used in the winter.

I wonder the volume of snow from two kilometers has not been size calculated or the actual moving that volume evaluated.

Active transportation ends with a final turn-around/u-turn anywhere before bridge or at Georgina Islands 300 Meter zone.

Controlled vehicular traffic through to Georgina Island as planned, but 'ActiveTransportation' alongside in special section okay. *(Note: Many local residents of Virginia Hamlet walk to the island and back in the winter).*

Perhaps something of a negotiated 'Georgina' active transportation portion ramp, or from Sibbald or another pathway from outside and not part of the GIFN properties onto the Active Transportation portion.

2) Not allowed to fish on the bridge is okay, makes sense.

But fishing off nice design areas expanded out for fishing along the causeway/wharfway, that can only be reached by walking or biking. It could be a park-like patch or round wharf like section addition, a scenic viewstop on the causeway sections. Fishing off of it somewhere along the two kilometers. Perhaps wherever there are turnaround-u-turn places or the like.

3) The entire fixed link raised out from the water where fish, canoes and small watercraft can fit under and through.

4) It could have a scenic wharf like appearance outer detailing.

Alternative#1 to Duclos Point is half the distance and cost.

Perhaps more could be invested in design, construction approach and materials for a much better result.

It would permit the cottage residential renters a direct route along the east side of the island so that traffic does not need to traverse the actual GIFN neighborhoods on the west sides. The 250 cottage rentals are non-members and non-indigenous so not party to the programs. While they are presently seasonal only, this could change with the greater access and with a fixed link they will be able to come and go year round as well, and this will increase with any further development. Economic development activity could be focused to there. It would be easier to monitor and manage additional traffic, and limit travel through to the GIFN west side.

Thank for the opportunity to comment , I hope the following is useful.

Cora Raine
<personal information
removed>

AN ECOLOGICALLY SIGNIFICANT COASTAL AREA

COASTAL WETLAND & SWAMP –Virginia Creek C ends in a nine acre coastal wetland swamp at Lake Simcoe, with possible unreported rare creatures and threatened species. It is Georgina's unique unspoiled creek with a wetland swamp mouth

Salamanders, black toads, small and large toads and frogs, pilated woodpeckers, red-bellied woodpeckers, woodpeckers and birds large and small, emerald dragonflies, foxes, owls, and turtles appear everywhere in Virginia Hamlet on fields, roads and in gardens. Great blue herons nest here.

They find their necessary unique habitat array in close range.

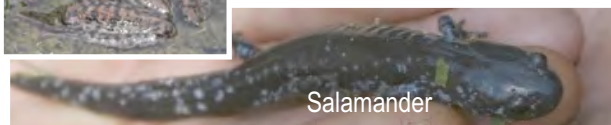
They have a sandy and rocky shoreline with trees, fishless standing pools, swamp plants, woody debris, stream mouth, stream, near forests and the lake. Adjacent areas offer a grassland meadow field, garden soils, vegetation and the respect of residents. Migratory species find a stopover haven to rest and replenish for long journeys. Many creatures are dependent on the seasonal water habitat for reproduction. Some swamp and wetland species also use the upstreams and ditches. The creek's wetland swamp is in its natural pristine condition now. The lot is unevaluated and decades vacant.

Hadden Road's 1000m long roadside deep ditch is a vital part of the health of this habitat and water coursing system. It should not receive runoff from acres of winter salt or sand, summer pollution and toxins that would directly enter from the ditch for years to come. It merges with Virginia Creek C creek where it enters the northwest corner of the wetland. This is where the vulnerable aquifer below, opens to the surface to receive runoff. There have not been any exposures from this 33 acre farmed field/meadow or Hadden Road into the ditch, area,

creek, swamp and Lake Simcoe

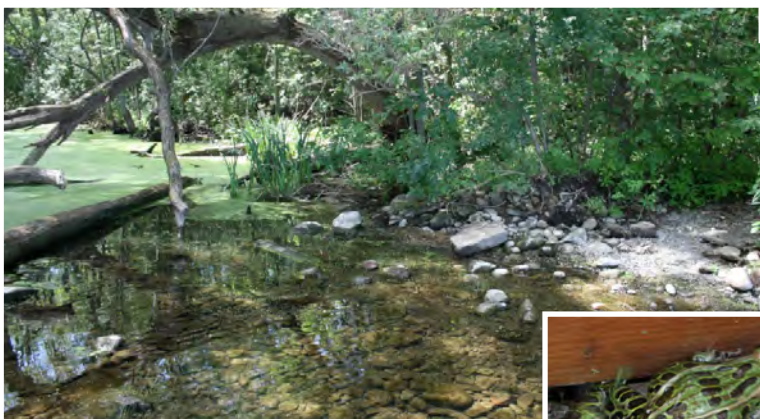


Wood Frog

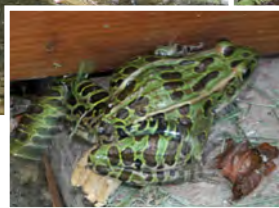


Salamander

All creature photos were taken in Virginia Hamlet



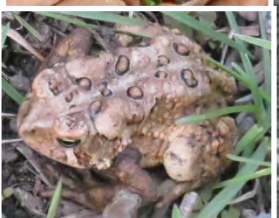
Snapping Turtle nearby docks



Green Leopard Frog



Fowlers Toad



Brown Leopard Frog



Mouth of Virginia Creek C at Lake Simcoe Shoreline

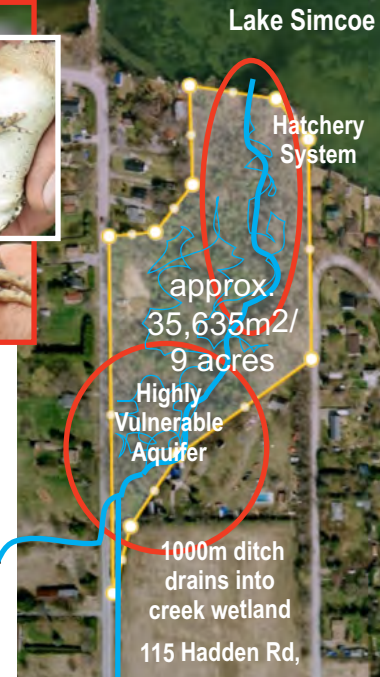


Fowlers Toad?



Virginia Creek C Coastal Wetland Swamp Complex

Lake Simcoe



Hatchery System

approx. 35,635m²/ 9 acres

Highly Vulnerable Aquifer

1000m ditch drains into creek wetland

115 Hadden Rd,

COASTAL VIRGINIA HAMLET - BURNIE CREEK has a hatchery feeding and supplying Lake Simcoe's Fishing

A unique coastal combination habitat complex and connection corridors including Sandy and rocky shores, lowlands rich floodplain and deciduous forests, swamps, marshes, meadows, crop fields, convergent creeks, rivers, lush riparian banks at Lake Simcoe; to affect the concentrations of significant wildlife, migratory birds destination, stopover and flyway, can be found in Virginia Hamlet.

THE CONVERGENCE OF SEVERAL CREEKS IN VIRGINIA HAMLET DRAIN

It is a key hydrological system in a region where a small resident population must safeguard surface water from pollutants. Runoff and stormwater infiltrate into the aquifers to recharge the aquifer that drilled or dug wells rely on for potable water...clean drinking water. There are no municipal systems (Drains, sewers or treated water supply for the region. Many have water availability issues now.

Burnie Creek

The Burnie Creek mouth is a hatchery. Its riparian areas support and provide shelter to numerous species that

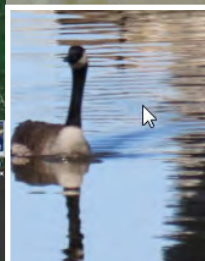
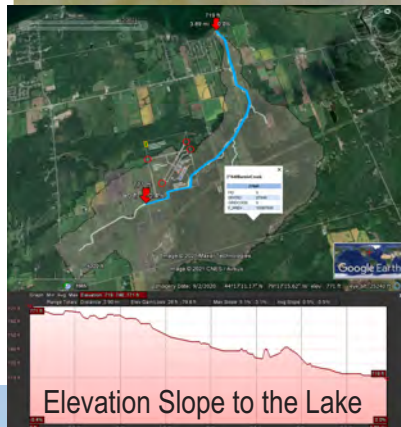
Burnie Creek's headwaters provide key habitat types for the breeding, feeding, and sheltering of upstream species. Its length is bottomland floodzone; a watershed habitat for wetland flora and fauna.

More species require headwaters at some point in their lives than any other type of habitat; Headwaters supply downstream ecosystems with significant portions of a watershed's nutrients, organic material, and sediment, providing the base of a watershed's biodiversity and resilience.



BURNIE CREEK HATCHERY
Supports Fishing on Lake Simcoe
Burnie Creek feeds the lake
Coastal Virginia Hamlet

Lake Simcoe Tourism industry is fishing



44°19'41"N - 79°16'19"W



Dept of Fisheries And Oceans Canada - Fisheries Act -
<https://laws-lois.justice.gc.ca/eng/acts/F-14/FullText.html>

2.1 Purposes of the Act (b) the conservation and protection of fish and fish habitat, including by preventing pollution.

34. Fish and Fish Habitat Protection and Pollution Prevention Fish habitat means water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas;

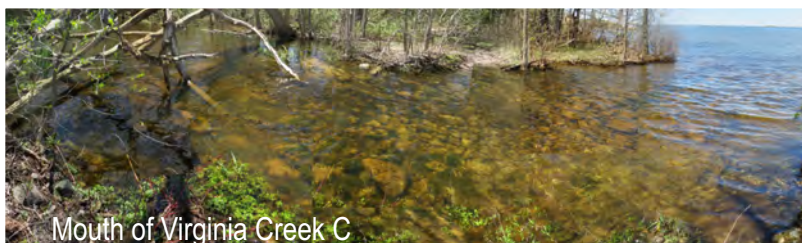
The rocky shorelines, rivers and coastal creek mouths offer sheltered pools of fish free standing pools - the habitat for the fish hatchery

COASTAL VIRGINIA HAMLET - VIRGINIA CREEK C - HATCHERY

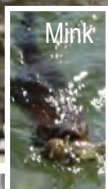
A Hadden road farmfield slopes into a contiguous nine acre rare pristine (unevaluated) coastal Lake Simcoe wetland swamp. Runoff empties into this creek, the Highly Vulnerable Aquifer, Hatchery system and into the lake.



Virginia Creek C Coastal Wetland Swamp Complex
STREAM MOUTH LAKE SIMCOE



Mouth of Virginia Creek C
at Lake Simcoe Shoreline



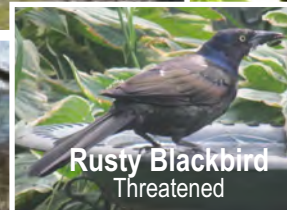
Mink



Bog Violet



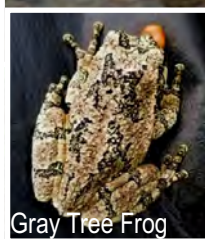
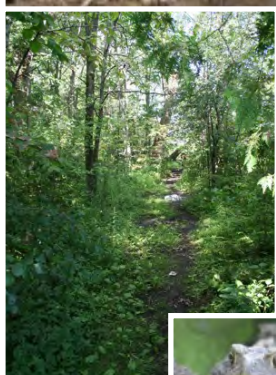
Spring Virginia Creek C Mouth at Lake Simcoe



Rusty Blackbird
Threatened



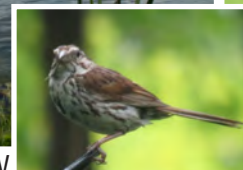
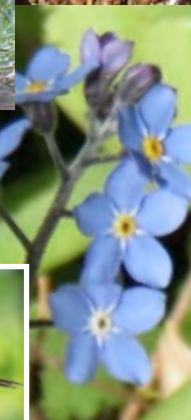
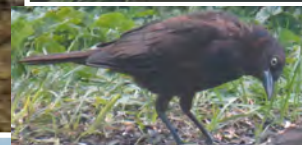
Mosses



Gray Tree Frog



Wetland Swamp at Shore Lake Simcoe



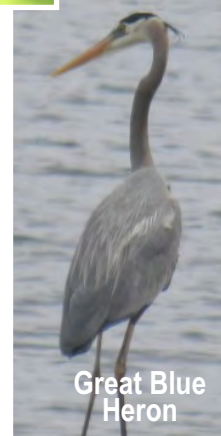
44°19'39.62" N 79° 16'59.05" W



HATCHERY

Wetland of Virginia Creek C Mouth
feeds the Lake

06/05/2020



Great Blue
Heron

Dept of Fisheries And Oceans Canada - Fisheries Act - <https://laws-lois.justice.gc.ca/eng/acts/F-14/FullText.html>

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Fish habitat means water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas;

VIRGINIA HAMLET MIGRATION ROUTE November/Dec/April/May month-long **stop-over** - Tundra swans, Trumpeter swans, their cygnets, rafts of Mergansers, Redhead and Bufflehead ducks, Canada and Snow Geese, Black Back and Black Headed Gulls and Eagles gather to the shallow waters along the shores of the coastal Hamlet of Virginia. It is a unique area of Lake Simcoe characteristic of a sheltered cove and habitat similar to Chesapeake Bay (Virginia, USA). They feast on the aquatic vegetation, fish, zebra mussels and plentiful edibles.

Migratory Birds Convention Act 1994 <https://laws-lois.justice.gc.ca/eng/acts/M-7.01/page-1.html#h-357433>

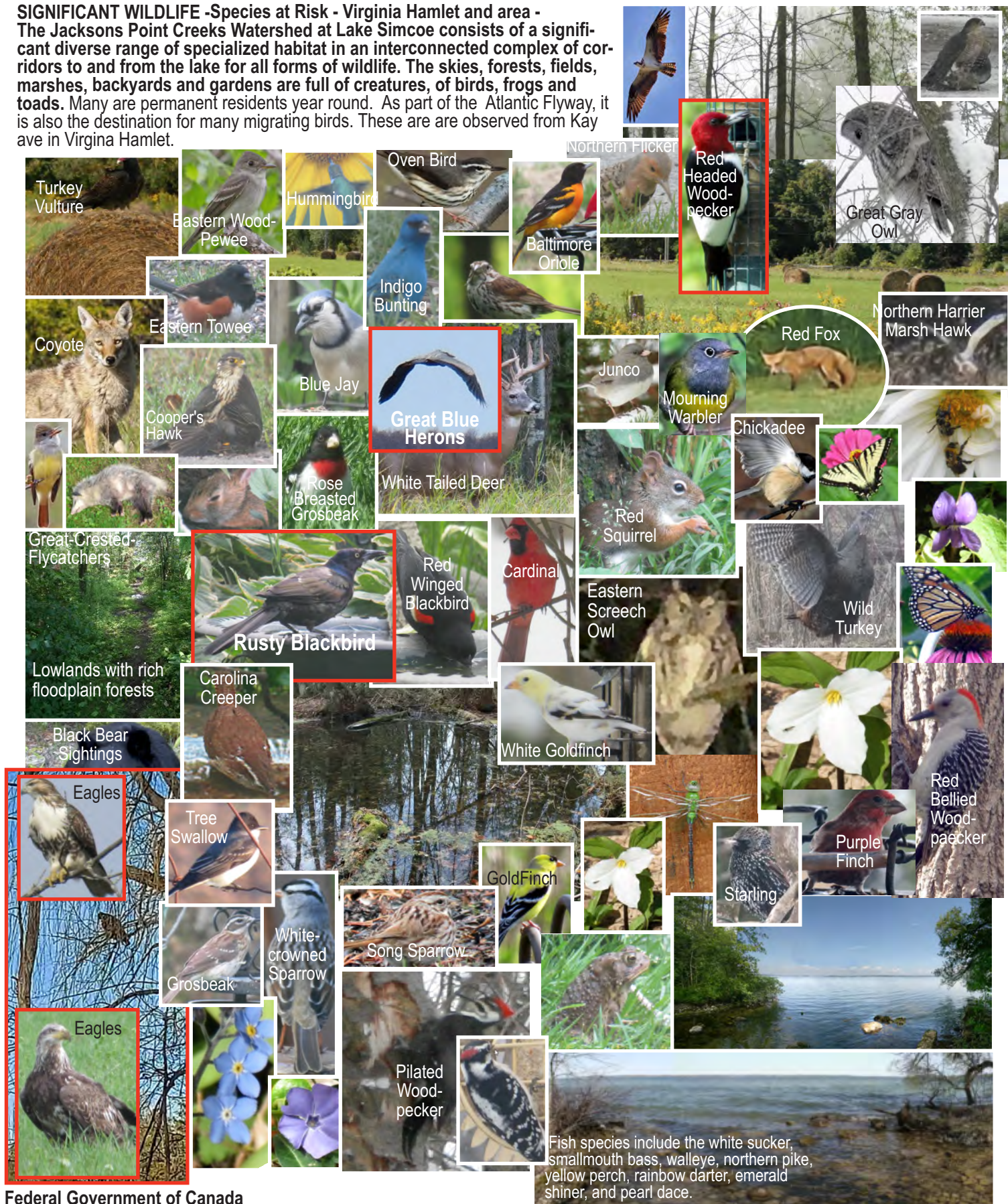
Prohibitions: 5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.



44° 19'39.68N 79°16'58.69W - Virginia Hamlet

Major land use changes brings habitat destruction, fragmentation and is considered to endanger migratory birds.

SIGNIFICANT WILDLIFE -Species at Risk - Virginia Hamlet and area -
The Jacksons Point Creeks Watershed at Lake Simcoe consists of a significant diverse range of specialized habitat in an interconnected complex of corridors to and from the lake for all forms of wildlife. The skies, forests, fields, marshes, backyards and gardens are full of creatures, of birds, frogs and toads. Many are permanent residents year round. As part of the Atlantic Flyway, it is also the destination for many migrating birds. These are observed from Kay
ave in Virginia Hamlet.



Federal Government of Canada

Species at Risk Act <https://www.canada.ca/en/environment-climate-change/services/species-risk-act-accord-funding.html#toc0>

The Species at Risk Act (SARA) is a federal law with three main goals:

1) to prevent endangered or threatened species from becoming extinct or extirpated; 2) to help in the recovery of endangered, threatened and extirpated species; and 3) to manage species of special concern to help prevent them from becoming endangered or threatened.

Committee on the Status of Endangered Wildlife in Canada - cosewic.ca/index.php/en-ca