

Impact Assessment Agency of Canada

600-55 York Street Toronto, Ontario M5J 1R7: 416-952-1576 email: designationontario@iaac-aeic.gc.ca

Re: Request for Impact Assessment Project Designation:

Project: Baldwin East Aerodrome Project – IAA Reference 84333 - SUTTON Airport Development Ltd -

Location: Concession 5, Lot 10 & 11, otherwise known as 7818 and 7486 Old Homestead Road, Pefferlaw, Town of Georgina

Please consider this project for an impact Assessment under the amended Impact Assessment Act and Regulations which provided new criteria to designate project types and their locations determined appropriate as:

1) Wildlife Areas, 2) Migratory Bird Sanctuaries, or 3) Transport, 4) public concern, and/or 5) at the discretion of the Minister.

IMPACT ASSESSMENT ACT - IMPACT ASSESSMENT ACT P.C. 2019 1182 August 7, 2019....
Amendment <https://gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors285-eng.html>

Physical Activities Regulations: SOR/2019-285 Canada Gazette, Part II, Volume 153, Number 17 Registration SOR/2019-285 August 8, 2019

Her Excellency the Governor General in Council, on the recommendation of the Minister of the Environment, pursuant to sections 109 and 188 of the *Impact Assessment Act* makes the annexed *Physical Activities Regulations*

National Parks and Protected Areas

1 The construction, operation, decommissioning and abandonment in

- *a **wildlife area**, as defined in section 2 of the *Wildlife Area Regulations*,
- *a **migratory bird sanctuary**, as defined in subsection 2(1) of the *Migratory Bird Sanctuary Regulations* or a protected marine area established under subsection 4.1(1) of the *Canada Wildlife Act*, of one of the following[selected]:
 - (b) a new structure for the diversion of water, including a new dam, dyke or reservoir;
 - (i) a new public road or parkway that is intended for the passage of motor vehicles;
 - (j) a new aerodrome or runway
 - (k) a new waste management facility;*

*A **wildlife Area** - a *wildlife area*, as defined in section 2 of the *Wildlife Area Regulations*...
Excerpt: " As National Wildlife Areas are found throughout Canada [in any single province], "... A permit may be issued only if the Minister is of the opinion that the proposed activities are consistent with the purpose for which the National Wildlife Area was established as reflected in the Canada Wildlife Act
<https://www.canada.ca/en/environment-climate-change/services/environmental-enforcement/acts-regulations/wildlife-area-frequently-asked-questions.html>

Impact Assessment Act S.C. 2019, c. 28, s. 1 Assented to 2019-06-21 ... Interpretation...
effects within federal jurisdiction means, with respect to a physical activity or a designated project,

- (a) a change to the following components of the environment that are within the legislative authority of Parliament:
 - (i) *fish and fish habitat*, as defined in subsection 2(1) of the *Fisheries Act*,
 - (ii) *aquatic species*, as defined in subsection 2(1) of the *Species at Risk Act*,
 - (iii) *migratory birds*, as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*, and
 - (iv) any other component of the environment that is set out in Schedule 3; [...]
- (c) with respect to the Indigenous peoples of Canada, an impact — occurring in Canada and resulting from any change to the environment — on
 - (i) physical and cultural heritage,
 - (ii) the current use of lands and resources for traditional purposes, or
 - (iii) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance;
- (d) any change occurring in Canada to the health, social or economic conditions of the Indigenous peoples of Canada; and
- (e) any change to a health, social or economic matter that is within the legislative authority of Parliament that is set out in Schedule 3. [...]

Or, excerpt: "... the Minister of the Environment and Climate Change may designate a project not described by the Regulations based on their discretion or advice from experts."...

https://static1.squarespace.com/static/5e20f34c4be93e7c47a3b815/t/5e7a27b8ddb1ef32f857a88c/1585063864907/20200205-IAA_Airports_Public.pdf

Excerpt: "The Minister of Environment and Climate Change continues to have the power to designate projects not on the Project List if, in the Minister's opinion, the project may cause adverse effects within federal jurisdiction or adverse direct or incidental effects, or if public concern related to those effects warrants a designation.

<https://gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors285-eng.html>

This major landfill construction airport/aerodrome project can now proceed early in 2023, on the path offered by Transport Canada.

PUBLIC CONCERN related to those effects warranting a designation is met. Public concern has been presented by the Local land use authority, the elected Mayor and Municipal Council (*voice representing 47,642 constituents 2021*), Region and Provincial Ministry officials, Lake Simcoe Regional Conservation Authority (LSRCA), the Chippewa of Georgina Island Chief (representing 923 band members), the surrounding and local community, adjacent and affected landowners, Registered-Agrofood producer farm adjacent property owners, the elected MP York-Simcoe – Scot Davidson (*voice representing all of 153,415 constituents*). Published Council resolutions, MP and Federal Official writing, organized local meetings and FB discussions, and a petition to parliament are all *underway at this time*. All are opposed with reasons in writing and with ongoing campaigning to reverse the ill-advised detached approval of Transport Canada, and to plead to save/preserve the important environment at this location.

Construction has not yet started but is imminent. A great urgency for an impact Assessment designation is necessary.

Transport Canada (TC) Several TC Officials expressly claim and maintain that matters distinct from aviation related interests is not their responsibility. They had professed no discretion beyond simple compliance with criteria.

This changed when the regulations were amended in 2014 to include a requirement for consultations and wide-open discretions. A judicial review in Aug 2021 explained it with great clarity: <https://www.canlii.org/en/ca/fct/doc/2021/2021fc819/2021fc819.html> .

However, Transport Canada ignored the official and express opposition from the elected Municipal Council; The local Planning Authority; Regional and Provincial authorities; The Lake Simcoe Conservation Authority (LSRCA); its surrounding communities; Registered and adjacent Agro-Food producing farms; the elected MP Scot Davidson, and other interested parties, including the affected non-consulted William's Treaty Chippewa's of Georgina Island First Nation (CGIFN) , without discussion. **All cite significant relevant environmental, health, social, and economic issues, with a unanimous consensus of predictable catastrophic effect.**

Scope of Impact Assessment Issues • the project is to be located centrally amid coastal Georgina within the Lake Simcoe Lowlands Basin area and within less than 2.7km/1.68 mi from shore. A 4000m/4k radius is identified as the zone of concentrated impacts. The Airport is to be on drainage basin terrain that slopes drastically so that surface pollution runoff entering surface water flows directly downward toward and into the Lake along and across everything between it and the Lake.

The regions characteristic wetness is the foundation of the Natural Heritage and premium agricultural conditions. Because of the geologic and hydrologic dynamics (the drainage that flows north of the Oak Ridges Moraine to Lake Simcoe), the location creates a coastal specialized complex of integrated contiguous habitats - wetland swamps, natural forest, meadows, complemented with undulating elevations having Class1, 2 and organic soil as farmlands for agricultural industries.

This project will foreseeably impose a substantial impact violating the 'environmentally sensitive environment' to permanently and irretrievably damage all surrounding areas and the functional ecology of everything that relies on it. Any development, much less of the magnitude of this project, and the extent of foreseeable impacts to the existing viability of the area is prohibited under existing local, regional and provincial applicable laws.

An assessment could establish existing pre-damage condition metrics and the current state of integrated ecological systems; In order to manage and monitor the health of the area and its functions to negative and destructive impacts and to inform controls.

It is adjoined immediately north of the Zephyr Creek Swamp wetland complex. The 4,000k radius zone includes approx. 5,000 acres of the Zephyr Creek Swamp's wetlands and forests complex, huge swaths of York Regional Forest Tracts, approx. 5 kilometers of critical shoreline, Lake Simcoe coastal waters, vital Natural Heritage and hydrological systems, local community agricultural farms, crop fields and meadows, and their industries, Sibbald Point Provincial Park, and the Chippewa First Nation CGIFN mainland properties, and Virginia Hamlet.

Zephyr Creek Swamp wetland complex (a designated area of natural scientific interest (ANSI) without public access). It would directly impact the flora and fauna habitat of species and those at risk, which include fish, fish hatcheries and nurseries that stock the lake, in the several named creeks converging regional drainage into the Lake *within the critical 5k kilometer Lake Simcoe shoreline* – notably Virginia Creeks A, B, C, Kay Seepage, Duclos, and of Burnie Creek whose headwaters emerge in the southeast corner of the aerodrome property. Consider the impact to the fishing tourism industry economy.

Existing 'protected areas' protections include governance under the federally recognized Lake Simcoe Protection Act and management by the Lake Simcoe Regional Conservation Authority (LSRCA), and Ontario Environmental Ministries. The Lake Simcoe Watershed Plan is in effect with exhaustive documentation to evidence the significance of preserving the environmental qualities of these important areas and cannot be overstated, or overlooked.

The airport site alteration, construction, and its operations and traffic for same, will impact all wildlife areas from aquatic and benthic organisms, toads, frogs and turtles, larger significant wildlife and the migratory birds who fill the skies gather at the shores, fields and gardens. Currently it is an original pristine and protected Natural Heritage system of value to all Canadians, and those who live here. Consider airport construction and operations activity is not confined to its property...

PRE-CONSTRUCTION LANDFILL DUMP

An assessment could evaluate the pre-construction site alteration which qualifies as a landfill dumpsite of 1.2 million cubic metres of fill, delivered by 120,000 dump trucks at capacity, as 100 per day for years –for phase 1 site alteration as 'airfield development area.

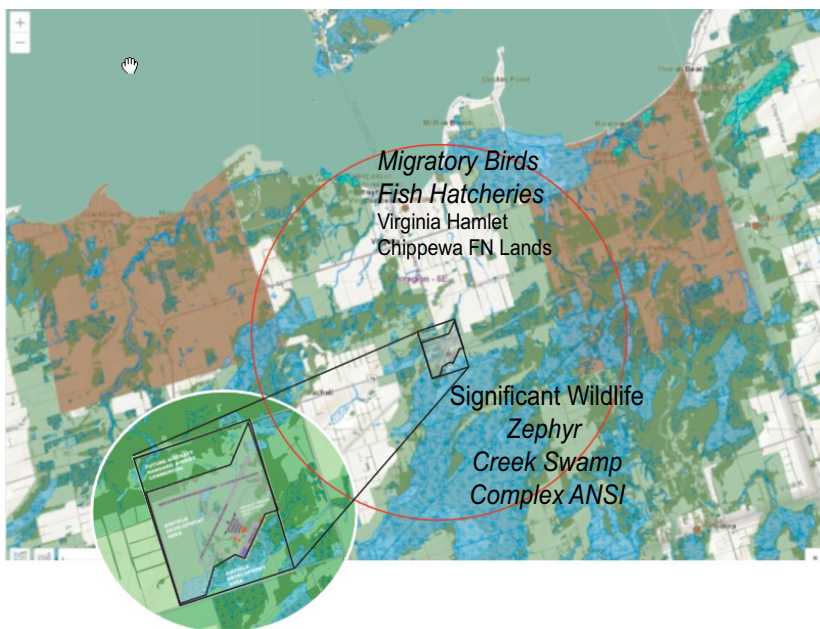
A fully loaded dump truck can weigh 25 – 36 tons carrying sand, dirt, gravel, broken concrete, or other materials from/for construction or demolition projects. The narrow local farm roads raised out of wetland marsh areas, are not capable of supporting 120,000 dump trucks driving excessive damage to the rural road – Old Homestead Rd. The two acre parking lot alone could not be approved at this location. The 1.2 million cubic metres/tons would never be permitted at this location. With noted lack of environment concern, it is acceptable to Transport Canada when pitched as an aerodrome. There is unanimous opposition in *public concern*.

Contaminated fill is inevitable considering the proponent principals well known history of same. The Proponent - Sutton Airport Developments Ltd –is comprised of organized waste management career principals with a history of non-compliance contaminated soil. The regulatory state of random occasional testing is wholly inefficient and impossible. The fill testing, certificate issuer and receiving system is easily maneuvered, and cannot be relied upon. There is no confidence of assurance of responsibility before the fact or afterward, no prospect of remediation, no measure of compensation...

The waste management/ construction demolition/hauling associated partnered interests include cooperative end-to-end controlled solution goals. Increased business capacity and cost controls very much need a landfill, until they don't need an airport after all. The site alteration dump facilitation is done. Construction demolition, and debris hauling is very profitable with end-to-end solutions and a huge capacity, readied, private, sanctioned dumpsite. Tipping revenue is insignificant compared to demolition/construction/hauling contracts. Tipping fees are a minor expense. Aerodrome movements may not be the objective or concern when most aerodromes lose money.

An assessment could evaluate the intended sizable 'massive' pavement, far and wide approximately of 270 acres (*over 200 Canadian football fields*) solid, for airfield development and flight operations, and a phase 2 removal of a further 230 acres of natural heritage, agricultural and hydrological features for another fill and pave works for hangars in the future.

The wholesale environmental value of this location is irreplaceable, and once lost is gone forever. Contaminating to the ultimate destruction to the environment impacting the health, safety viability of rural and farm economies are grave *public concerns*.



Minister of Natural Resources and Forestry
[MNR Natural Heritage Map](#)

ZEPHYR CREEK SWAMP COMPLEX
 Area of Scientific Interest (ANSI):
 Provincially Significant Wetland Conservation area
 - Habitat Complex - System_Calculated_Area
 33,170,720.167 m²/ 3,317.1 ha

Excerpt: "*The Zephyr Creek Swamp Complex and its role in the migration, breeding, stopover are particularly vulnerable to disturbance. Because of its vulnerability it is not available for public use - Lake Simcoe Region Conservation Authority (LSRCA).*

The Lake Simcoe Watershed: 58 fish, 1,250 plants, 50 mammals, 98 butterflies, 141 birds, 100s of aquatic and terrestrial benthics Approximately 427 native local species are regionally rare to the watershed and 65 are provincial or national species at risk (SAR) in the watershed.

Impact Assessment Criteria Review:

TRANSPORT - The impact Assessment under 'Transport' was bypassed in that a) runway length max 991m (of two runways) was less than the 1000m threshold, and that b) the critical aircraft designation would be AGN II serving only smaller planes, than the minimum AGN IIA, described in the new Impact Assessment amendment dated August 8, 2019.

This appears to reasonably presume that construction impacts for this type of short runway airfield would be minimal – a runway for a few small planes for small scale enterprise and private uses without scheduled flight, as is generally the case with short runways.

Consider that in this case however, there will be TWO runways described as up to 991m/3,250 ft and 893m/2,928 ft. or (up to 6,178 feet of runway combined- width noted as 30 meters) with additional taxiways, airplane parking apron, rental hangars, service buildings, club house, parking lots, access roads etc. Not a grass strip private aerodrome for a pilot on his own land and enterprise.

The proponent stated goal is 45,000 – 65,000 aircraft movements in year-round operation purporting to replace Buttonville.

BUTTONVILLE IS A MUNICIPAL AIRPORT - 'a municipal airport impact' and with 'phased growth plans'. Typical single-engine planes fly around 140 mph (122 knots). There are 56 other aerodromes within 30 nautical miles/knots (4 minutes flying time), existing in nearby other preferred locations at and around Lake Simcoe east and west. The location in Georgina has no nearby offerings, no demonstrated need to merit an aerodrome, and much opposition. The proliferation of aerodromes and runways in the area posit that no single one is essential by this time, as when only a few airports were in existence in the past.

Please weigh the colossal environmental considerations of this location.

Buttonville - the largest decreases in itinerant aircraft movements during the year were recorded at Toronto/Buttonville Municipal, Ontario 2017(-15,912) [...] ...These gains were partially offset by a reduction in local movements at Toronto/Buttonville Municipal 2016 (-25,726) <https://www150.statcan.gc.ca/n1/pub/51-004-x/51-004-x2018008-eng.htm>

Buttonville was not profitable despite its prime location after losing its Pearson overflow agreement and 1.2 million dollar subsidy, then losing its NAV tower 3 Jan 2019 because of the great drop in movements below a minimum threshold.

NOISE - Effect of noise and air pollution are additive Low-altitude flyovers seem to be more disruptive in terrain where there is little cover (Manci, et al. 1988).

Impact Assessment Amendment -8 August 2019 <https://gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors285-eng.html>

Physical Activities Regulations identifying that two additional areas come under the amended regulation.

Immediate consideration is urgently requested.

WILDLIFE AREA – “As National Wildlife Areas are found throughout Canada” - a significant wildlife area - The airport/landfill defined area of concern that is concentrated in a 4,000m radius includes a substantial portion where it will interfere in a vital wildlife area in Georgina... of importance to Canadians and of public concern.

The airfield region is comprised of forests, wetlands, meadows and drainage processes to the coastal areas of Lake Simcoe's watershed lowlands basin. It is home or throughway for thousands, if not millions of birds, creatures and plants. Its several creeks are fish hatcheries and nurseries that stock Lake Simcoe-*that support fishing tourism*; attract anglers; recreational fishing, ice fishing, CGIFN fishing and migratory birds. It is a major destination stopover along the Atlantic Flyway, and summer breeding destination for migratory birds.

Low-flying aircraft can affect behavior, physiology, and distribution of wildlife (Manci et al., 1988), and over time, may impact a population by reducing survival and reproductive performance. Waterfowl are particularly sensitive to low-flying aircraft (Manci et al., 1988) and respond at all stages of their annual cycle, including breeding (Gollop et al., 1974a; Laing, 1991), molting (Derksen et al., 1979; Mosbech and Glahder, 1991), migration (Jones and Jones, 1966; Belanger and Bedard, 1989), and wintering (Owens, 1977; Kramer et al., 1979; Henry, 1980). <https://www.usgs.gov/publications/response-geese-aircraft-disturbances>

The coastal areas of Lake Simcoe, and its lowland wetlands, marshes, swamps, forests, agricultural and meadow fields provide a unique complex habitat system and contiguous corridor comprising the natural heritage character of the area in Georgina.

The to-be airfield property has functioned historically as an important wildlife corridor. It is directly between the Zephyr Creek Wetland Complex adjoined immediately south, and Lake Simcoe less than 3 kilometers to the north. The natural heritage features incorporate the proposed airfield as a well-travelled Zephyr Creek Swamp, Wetland, fields and forested to coastal Lake Simcoe contiguous corridor for significant wildlife to travel back and forth to meet their needs.

THE ZEPHYR CREEK SWAMP, WETLAND COMPLEX 3,317.1 hectares is a PROTECTED ONTARIO NATURE PRESERVE.'

The proposed airfield property is adjoined to an officially designated 'wildlife area' protected habitat and an important Area of natural scientific interest (ANSI). It is adjoined immediately south of the proposed airfield. The 4,000k radius zone includes approx. 5,000 acres of the Zephyr Creek Swamp's wetlands and forests complex, huge swaths of York Regional Forest Tracts, approx. 5 kilometers of critical shoreline, Lake Simcoe coastal waters, vital Natural Heritage and hydrological systems for direct impact. I

Excerpt; "The Zephyr Creek Complex and its role in the migration, breeding, stopover are particularly vulnerable to disturbance. Because of its vulnerability it is not available for public use- Lake Simcoe Region Conservation Authority. The Lake Simcoe Watershed: 58 fish, 1,250 plants, 50 mammals, 98 butterflies, 141 birds, 100s of aquatic and terrestrial benthic organisms. Approximately 427 native local species are regionally rare to the watershed and 65 are provincial or national species at risk (SAR) in the watershed – Lake Simcoe Region Conservation Authority (LSRCA).

Significant wildlife are a hazard to aviation at this location. Transport Canada requires a 'Wildlife Management Plan'

Specified by Transport Canada in a **Wildlife Control Manual**. A manual which stipulate that wildlife are a hazard to aviation - a hazard that must be 'eliminated'. 'Eliminations' in the manual present methods of deterrents, to poisoning and or to shooting to kill any wildlife including migratory birds that appear on or above the airfield.

It is a wildlife conservation area! Wildlife would be on these runways all the time as this airfield is the main corridor natural route of this wildlife conservation area! Flocks of migratory birds and native birds would be in the area and skies all the time.

[Transport Canada - TP 11500 UPDATED WILDLIFE CONTROL PROCEDURES MANUAL](#) – read for yourself.

Consider - An airport in a conservation protected regulated area of significant wildlife, scientific interest promoting wildlife. An intended 'municipal airport' at this location will dissect and blockade the earth, sky and waters, all along the Lake Simcoe Georgina coastal areas.

Consider the airport executing a program deterring, poisoning and killing the wildlife and migratory birds. The antithesis of the conservation and preservation this otherwise protected 'wildlife area'. It matters to Canadians that these 'wildlife areas' which are currently under express Canadian Provincial legal protections, continue to be such.

We urgently request Canadian Federal consideration, examination, protection and or intervention.

MIGRATORY BIRDS - Consider this coastal location of the Lake Simcoe Watershed at Georgina, together with the Zephyr Creek Wetland Complex meets the criteria for an official Federal recognition of Migratory Bird Sanctuary - *a migratory bird sanctuary, as defined in subsection 2(1) of the Migratory Bird Sanctuary Regulation*.

The airport and its flight paths are to be located less than 3three km from the coastline having two runways serving planes flying all across and into Georgina, parallel with, at and alongside, the south and east coastal shoreline, dissecting the skies at the shoreline, at all heights, taking off, landing and circling – constantly, year-round. The 4,000 m air zone includes all of the migratory shoreline area and significant portion of the Zephyr Wetland Complex and surrounding Natural Heritage.'

The Transport Canada Wildlife Control Procedures Manual notes that large birds...are particularly problematic - migratory swans, geese, ducks and eagles. These important Atlantic Flyway migratory birds concentrate here and stopover in the Lake Simcoe Lowlands, basin, forests, fields and shallow waters.

The airport is adjoined at immediately north of the Zephyr Creek Swamp wetland complex. The 4,000k radius zone includes approx. 5,000 acres of the Zephyr Creek Swamp's wetlands and forests complex, huge swaths of York Regional Forest Tracts, approx. 5 kilometers of critical shoreline, Lake Simcoe coastal waters, vital Natural Heritage and hydrological systems. Georgina's Lake Simcoe, field, forest and coastal shoreline play a vital role where gathering, resting and feeding, migratory birds thrive in the course of their historical breeding destinations, or stopover migration along this part of the Atlantic Flyway.

Consider it will blockade the sky to severely interfere with migratory birds' vital access to this 'provincially designated' protected habitat, significant 'wildlife areas'. The location will substantially interfere and harm all migratory birds and those amid their breeding destination at the Lake Simcoe Lowlands, coastal wetlands and conservation areas.

HYDROLOGICAL SYTEMS - WATER – WELLS – An assessment could evaluate the impact on the hydrological systems and water security of the surrounding community including all of Virginia Hamlet, Pefferlaw and farms in the impact region, that rely on drilled or dug wells all drawing from the same aquifer. Water taking stated for a quoted 'Municipal Airport alternative Buttonville' aiming for 65,000 movements annually when there are no municipal services in this region - no tap water, no drains. (All of rural Georgina). Water availability is an issue depending on the geological variables in the bedrock. Many residents have water availability issues now. The groundwater and highly vulnerable aquifer are highly susceptible to contamination.

The proponent submits incredulously, that drilled wells will 'likely' supply all necessary water to support the airport in delivering water; and a septic systems to service the needs of these people of 65,000 movements, and of all related airport facilities. At the same time preventing groundwater recharge.

The 270 acre paved impervious surface will prevent groundwater recharge, into the aquifer below the massively paved airfield, and contaminate it. Runoff and hosings will carry pollutants and toxic chemicals into the groundwater and surface waters, along the many open creeks and meltwater seepage into Lake Simcoe. A pollutant laden 270 acre solid pavement cannot be managed realistically.

All regions north of the Oak Ridges Moraine – the rivers, creeks and seepage channels converge on a steep drainage slope to drain into the Lake Simcoe lowlands basin. It would directly *contaminate* its 4,000 meter radius area of the Simcoe Lowland drainage basin, coastal wetlands. Shoreline, agricultural area and Lake Simcoe waters. An airport development at this location dissects, interferes, damages, pollutes and spoils the interdependent ecological functions, violating the 'protected' natural heritage system 'wildlife areas,' specialized habitat complex and migratory bird gathering, breeding and stopover of this environmentally sensitive area Lake Simcoe coastal Georgina area are described below:

FARMLANDS AND THE LOCAL AGRICULTURAL ECONOMY IMPACTS - Georgina includes an agricultural economy of its rural inhabitants. Many residents and families are descendants of the original settlers. The land is Prime Agricultural Canada Land

Inventory Class 1 and 2 soils, premium agricultural land. This airport is flanked on both sides with Registered Agro-Food Producing farmlands, grazing livestock, and dairy farms, farms with large farm families and children.

Everything and everyone lives and works outdoors. The health, social and economic effects of the agricultural industries and surrounding community, including the Chippewa of Georgina Island and mainland territories rely on its environmental condition.

AvGAS LEAD FUEL and EXHAUST PARTICULATES All Small planes all use AVGAS leaded fuel – the airport

An assessment could evaluate an airport **toxic leaded exhaust, particulates** activity at this location that will **defile the air, land and waters of anticipated 20,000 – 65,000 low flying small planes**, taking off and landing. Spewing AvGas fuel exhaust particulates across all of the south coastal shores of Lake Simcoe, concentrated in the in a 4k radius Georgina year round, in all seasons.

Small planes will crop dust lead exhaust and particulates on the Class 1 and 2 prime agricultural soils – taken up by plants and grazing animals destroying the produce and meat and dairy products - and the agricultural economy. It will defile the Atlantic migratory birds' systems stopovers and breeding destination, and the otherwise protected 'wildlife areas' as described below and with photographic evidence following attached – are public concerns of all. Detail and photographic evidence following attached

Small planes will crop dust lead exhaust and particulates into the wetlands, creeks and river systems destroying the fish, fish hatcheries and the fishing tourism economy.' as described below and with photographic evidence following attached – are public concerns of all. Consider the Fishing tourism economy.

AIRPORT - AvGAS– LEAD FUEL EXHAUST- AIR, LAND and WATER POLLUTION Lead emission particulates, and concentrates have been found in the creeks, rivers, sediments, air, soils, crops, in groundwater seeping into the aquifer, near GA airports. It is taken up by plants from the soil, by livestock grazing and into the meat or dairy and plant products produced. It builds and remains present, never degrades. It is in the air breathed. Small planes exhaust toxic lead particulates crop-dusting lead and related gases and particulates, polluting and poisoning everything. Especially concentrated by low flying planes in the vicinity of the airport, circling, taking off and landing. No level of lead has been found safe. (Large planes use jet fuel (unleaded kerosene based)

Transport Canada requires an emergency plan for accidents. Plane crashes, excursions, AvGAS lead fuel spills are guaranteed to occur. Buttonville is regularly in the news about accidents. The airport design includes water stored in underground tanks readied for this purpose. When the aquifer or tank water is used to hose the inevitable if occasional emergencies in uncontrollable areas; to clean up Avgas Lead fuel spills, fires crash debris, chemicals, foams, cleaning, de-icing, firefighting exercises, hoseings of a municipal airport, and flushings into a septic system.. Well water contamination and issues are foreseeable– wells rely on the health of the groundwater and availability from the aquifer. This airport is over top of the high water table, the groundwater and into the aquifer. How will accidents and cleanups impact the environmental sensitivities, the wildlife? Where will the toxic spent water end up? Into the surface headwaters of Burnie Creek carrying its contaminated load through to the creek's fish hatchery downstream, then into Lake Simcoe - killing every living thing along the way. Lead for the lake. In the groundwater, the aquifer and Lake Simcoe.

What impact on Migratory birds flying through the airport past leaded sky *past snipers*, straight-line to the leaded lake, fish and aquatic plants? An airport activities are not confined to its own property, but will change damage this whole region.

The Migratory Birds and Wildlife will become decimated, or extirpated... If they get past flying into the turbo-props as 'bird-strikes, and hapless creatures in their corridor/runway face 'deterrents' and 'snipers'; 'They face the range of aviation related crop-dusted lead and chemical pollution. The Fish will be eating and drinking lead in their hatchery, or not surviving. Consider any fish will be inedible or deformed that originated in the nearby creeks, if any.

Environment Protection Agency (EPA) of the USA - After exhaustive leaded fuel AVGAS studies, has proposed an Endangerment Finding in October 2022, with an announcement expected in early 2023...[....] <https://www.epa.gov/lead>

“The proposed finding that emissions from the combustion of leaded aviation gasoline (avgas) in piston-engine planes cause or contribute to air pollution that endangers public health and welfare.)

<https://www.federalregister.gov/documents/2022/10/17/2022-22223/proposed-finding-that-lead-emissions-from-aircraft-engines-that-operate-on-leaded-fuel-cause-or>

Excerpt: “The negative health impacts of lead exposure are well-documented. Short-term and prolonged lead exposure can cause memory loss, nausea, fatigue, and increase the risk of developing hypertension, heart disease, kidney disease, and infertility. Lead exposure is particularly dangerous for children, whose developing brains and nervous systems are more sensitive to its damaging effects. The impacts of lead exposure in children include behavioral issues, reduced IQ, slowed body growth, and a predisposition to depression, anxiety, or high-risk behavior. There is widespread scientific consensus that there is no safe level of lead exposure.”... [....]

“EPA must swiftly finalize its proposed finding and address the serious public health and environmental justice harms posed by avgas in a rulemaking for aircraft lead emissions.”

<https://portal.ct.gov/AG/Press-Releases/2023-Press-Releases/Attorney-General-Tong-Supports-EPA-Finding-on-Leaded-Aviation-Gas>

The impact assessment could include consideration of the stated 1.2 million tons of fill - a hundred twenty thousand dump trucks, a hundred dump trucks daily 'for years'. Fill to be delivered for site alteration, prior to any airport construction. Given the terrain and existing slope setting, as deep as many meters in places for an altering Inhumation of the hydrological processes vital to the area.

The impacts of this as a 'major development' should be known regardless if the application proposal was for a dump site, or an airport and its operations, or a three hundred acre parking lot, as perhaps all three now that it may proceed. The effects of this project are not confined to its property, but poised to substantially and permanently alter the essential environmental and productive characteristics of the region to its detriment.

Transport Canada had informed publicly, and to our elected representatives, that such local concerns are not their problem. As a federal agency, Transport Canada is subject to the Impact Assessment Act, at least.

In 2019, Canada 'Declared a Climate Emergency,' joining global acknowledgement and urgencies.' Climate change and global efforts to combat it now referred to as World War 3 'the new world war.' Consider Climate Change and environmental protections and preservation have by now, "risen to the dimension affecting the nation as a whole.' Justifying federal review of local factors

Please help or advise. Canadians are looking for our Federal Government to take these concerns due the sheer scale of the project's far-reaching impacts to the community from the magnitude of consequences of these 'physical activities' named in the amendment, seriously.

An Impact Assessment is necessary because The Proponent together with Transport Canada, has not engaged with anyone, including our elected MP stonewalled. The Proponent representative was contemptuous throughout the consultation process to our provincial and municipal representatives, our MP and to the community on the flawed assumption by asserting that consultations are only 'recommended' but not required, and thereby declined. The initial summary report claimed that they 'achieved' 'Consultations' which appear sufficient for the report. The public was denied a full consultation in accordance to the regulation, by errors, omissions, and refusal of meaningful engagement.

In an OpenParliament session, the Minister of Transport explaining the year-long delay of his decision, with that he was 'waiting for other non-partisan, independent officials to review the material and make recommendations.'

This would be the Aviation Regulatory Review Committee (Senior Transport Canada Executives) on the recommendation of the Aviation Regulatory Advisory Council (the official main consultative body to Transport Canada comprised of Independent Aviation related industries and Associations *now embedded in Transport Canada*).

The Aviation Regulatory Advisory Council include General Aviation well-known lobbyists doing great work, but with a legal history hostile and resistant to the amendment requiring consultations, engagement, and limitations and the environmental considerations of local, municipal, provincial or other regulators - so stated on their website.

Excerpt [53]" ...However, public interest is broader than public safety, *Morales*, at page 758. Furthermore, those cases were based on very different provisions of the *Act* than those governing the construction of aerodromes. In any event, section 4.32 makes separate mention of aviation safety and public interest. Therefore, the two concepts must not be confused...
[...] [55] it is difficult to understand why the public interest should be analyzed differently depending on whether it relates to authorizing a project that is in the public interest or prohibiting one that is not ...
<https://www.canlii.org/en/ca/ctf/doc/2021/2021fc819/2021fc819.html>

*Please consider designating the Baldwin East Aerodrome Project in Georgina
for an impact assessment.*

*An impact assessment would address the public concerns,
and would serve the public interest.*

The following pages attached offer photographic and documentary support including, 'Significant Wildlife Areas and Migratory Bird activity,' within the 4,000 meter radius zone including the coastal to be area affected by Aerodrome Location.

Thank you for any assistance, your urgent consideration or any reply is appreciated.

J.C. Raine
Virginia Hamlet
Pefferlaw

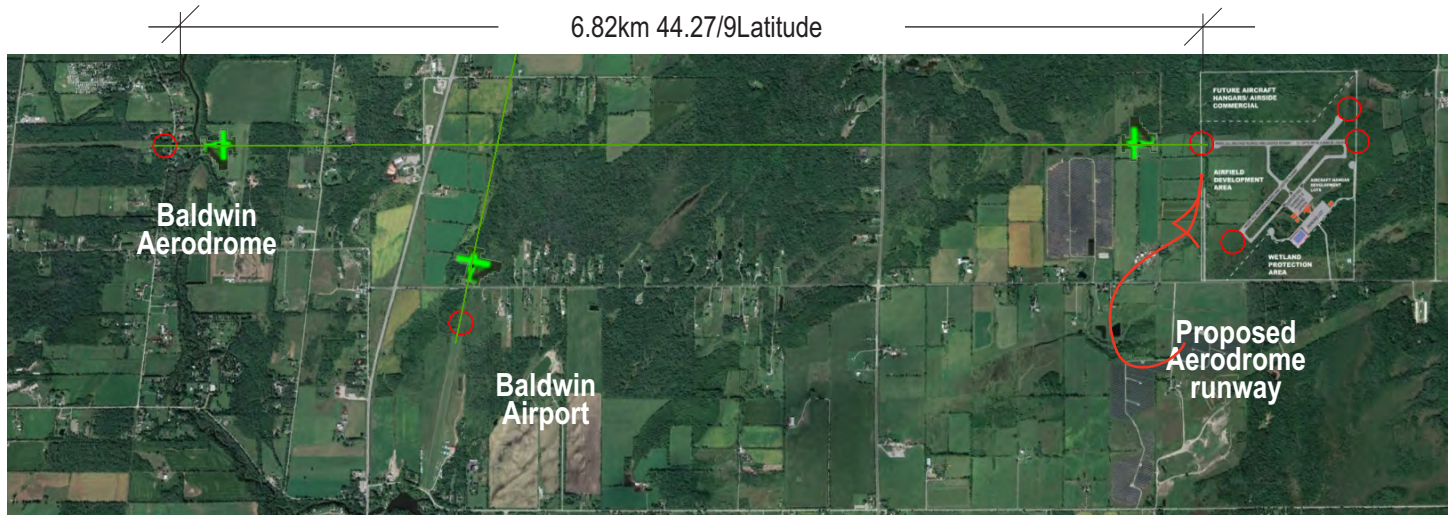
(attachments following)

PROPOSED NEW AERODROME DANGEROUSLY CLOSE TO BALDWIN AIRPORT ACTIVITY

BALDWIN AIRPORT Located at 5 km WSW, Flight Paths cross over at 4.56km

BALDWIN WEST AERODROME (A Registered Aerodrome)

East West Runway located directly opposite at 6.82 km E *Runway at same Latitude 44.27/9 to the proposed Aerodrome indicated runway



BALDWIN AERODROME - HOME OF TORONTO PARACHUTE SCHOOL & SKYDIVING - FLIGHT PATHS and DROPZONE

"Open for jumping all day on weekends and holidays all year, plus afternoons on Mondays, Thursdays, and Fridays in the warmer months."

<https://canaguide.ca/P29946-en-skydiving-parachute-school-of-toronto-limited-baldwin-on/>

Flights are up and down with people jumping from 13,500 feet high who can be anywhere in the sky all the way to the ground for kilometers



Other Airports and small regional airports and aerodromes serving the local region:

Lake Simcoe Regional Airport, Beaverton, Holland Landing, Kawartha Lakes, Municipal airport,, Orillia Rama Regional Airport, The Bradford aerodrome, The Cookstown Airport and the Churchill Aerodrome. Another airport is not needed at this location.

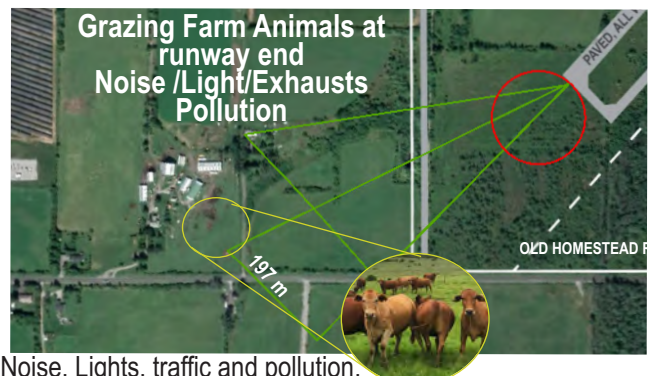
GREENBELT, GREENLANDS SYSTEM, PROTECTED COUNTRYSIDE

The proposed Aerodrome is located in the GreenBelt, Greenlands System, Protected Countryside, of the Simcoe Lowlands in Georgina. It is in Pefferlaw Creeks Watershed where at Lake Simcoe, all the water north of the Oak Ridges Moraine makes its way first through the larger Black River watershed into the Simcoe Lowlands here to drain into Lake Simcoe. The area is characterized by natural heritage, significant wildlife traveling to from Lake Simcoe along its five named creeks, and forest corridors, migratory birds, and in wetlands, marshes and swamps flora and fauna thrive in an environmentally respected system.

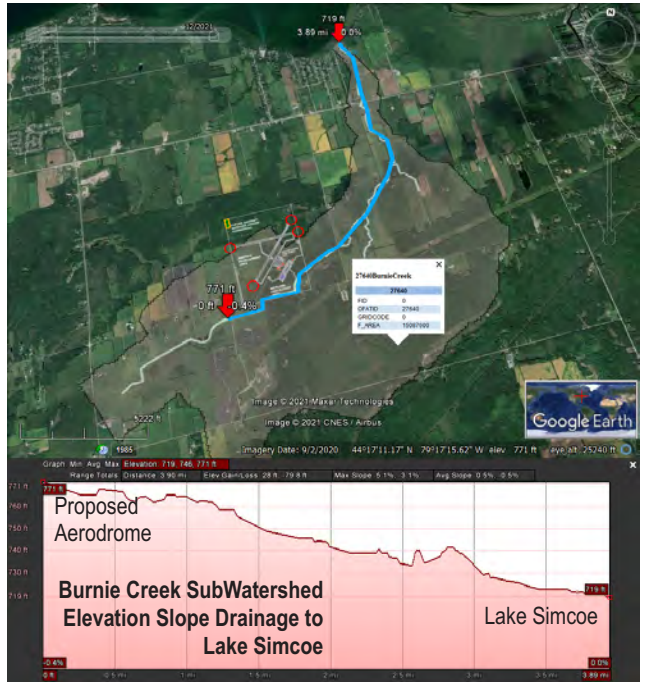
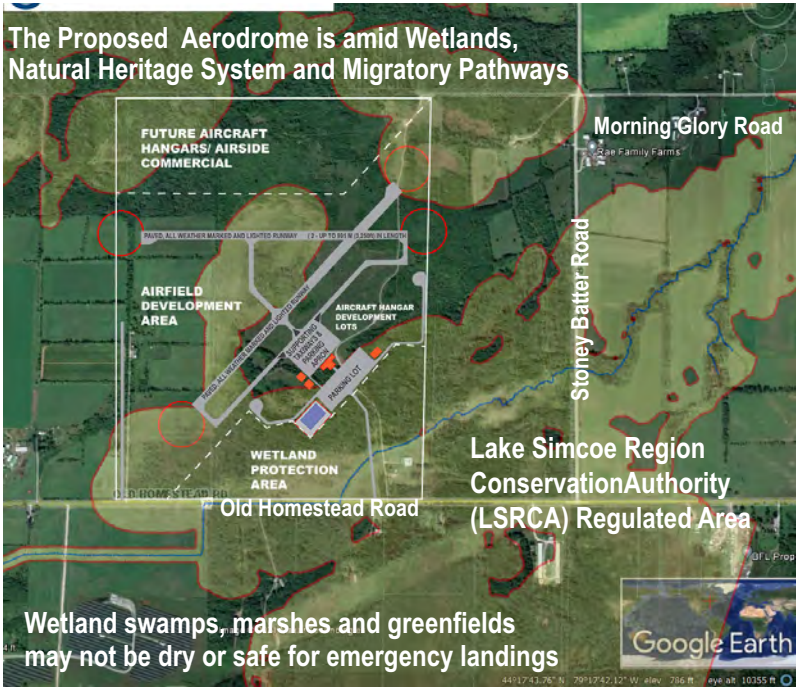
The land rises out of the wetlands in swaths and patches as Prime Agricultural Farmland - Canada Land inventory Class I and II soils.

The proposed aerodrome will generate every kind of pollution to contaminate the air, land and water. It could negatively affect the entire system, poisoning the land air and soil, as well as take in millions of tons of possibly contaminated soil permeating the water systems forever. Everyone and everything - human , livestock, and wilderness creatures rely on the groundwater, the aquifer and the ecological systems integrated here for life, quality of life and some for survival.

These cattle/cows next door are not going to be able to get along with the Noise, Lights, traffic and pollution.



LAKE SIMCOE REGION DRAINAGE AND SEEPAGE - SIMCOE LOWLANDS Burnie Creek drainage to Lake Simcoe

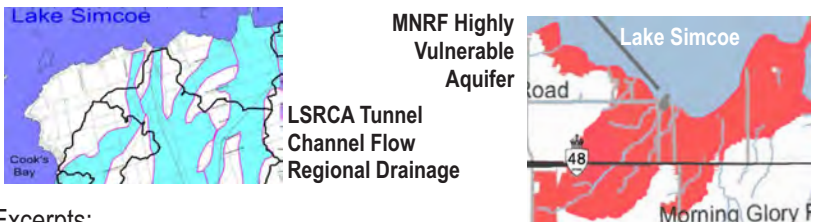


PROPOSED AERODROME RELATIVE TO REGULATED AREAS

<https://www.lsrca.on.ca/permits/policies-and-guidelines>, <https://maps.lsrca.on.ca/EH5Viewer/index.html?viewer=LSRCARegulations>

SIMCOE LOWLANDS 35 tributary inflows with 5 major rivers drain approximately 60% of the watershed area into the Lake's basin

Water table is at or near surface. The groundwater & aquifer are highly vulnerable to pollutants.
Wetland drainage routes include surface and groundwater flow of Burnie Creek direct to Lake Simcoe. Clean Water Act provides Source Water Protections against pollution.



Excerpts:
LSRCA BLACK RIVER WATERSHED PLAN
<https://www.lsrca.on.ca/Shared%20Documents/Subwatershed-Plans/black-river-subwatershed-plan.pdf> Excerpts:
4.5 GROUNDWATER FEATURES AND FUNCTIONS
Significant recharge areas exist in the Black Creek Subwatershed area supporting baseflow in Burnie Creek and the smaller Virginia Creeks.
4.6 SURFACE WATER FEATURES AND FUNCTIONS
Main surface water features that drain to Lake Simcoe **within** the Town include:
4. Burnie Creek, the largest of a number of smaller creeks (LSRCA, 2010) that have been included as part of the Black River Subwatershed Plan but flow into Lake Simcoe around the community of Virginia;
4.6.2 FLOW MODELING
Based on the mapping, there are some regions within the Town's urban centers that are prone to flooding. These areas include: Areas of Virginia along the downstream reaches of Burnie Creek, Virginia Creek D, Virginia Creek C, and Virginia Creek B;
Georgina stormwater management master plan
https://www.georgina.ca/sites/default/files/Article/2017/georgina_cswm-mp_final.pdf

CLEAN DRINKING WATER - WATER AVAILABILITY ISSUES - THERE ARE NO MUNICIPAL SERVICES, DRAINS

All properties west of Park Road in Georgina are on drilled or dug wells for any water. Supply dependent on surface, groundwater conditions and recharge rate into the aquifer. **An Aerodrome here would rely on drilled wells for any water, or acquired by tank trucks for all uses.** There is ONE Town treated water tap station for residences and one bulk water station available for commercial uses.



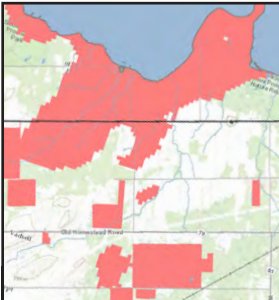
ALL GENERAL AVIATION USES AVGAS (Leaded) - EPA: All forms of lead are toxic if inhaled or ingested.

THE SIMCOE LOWLANDS Several named creeks (Virginia Creek A, Virginia Creek B, Virginia Creek C, Kay Creek, Virginia Creek D, Burnie Creek & Duclos Creek) all converge through Coastal Virginia Hamlet to drain the region into Lake Simcoe. The Jacksons Point Watershed region of Georgina at Lake Simcoe is characterized as a predominantly wet region of swamps, marshes, fens, forests, floodzones and near surface aquifers, with rolling higher elevation swaths of prime agricultural class 1 & 2 soils.

Virginia Creek B	
6491CreekB	
MNRF Flow Assessment	
6491	
FID	0
OFATID	6491
GRIDCODE	0
F_AREA	9443700

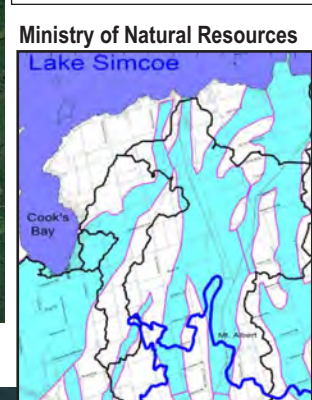
Virginia Creek C	
17089CreekC	
MNRF Flow Assessment	
17089	
FID	0
OFATID	17089
GRIDCODE	0
F_AREA	1581300

Source Water Protection
<https://maps.york.ca/Html5ViewerPublic/Index.html?viewer=SourceWaterProtection.YorkMaps#>



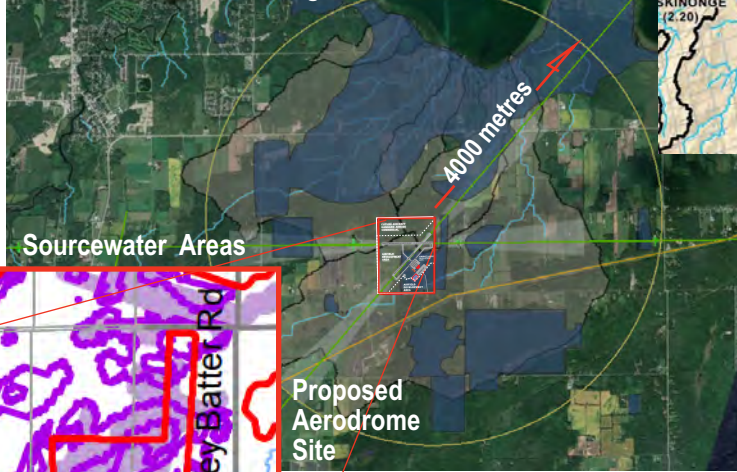
Virginia Creek D	
11848CreekD	
MNRF Flow Assessment	
11848	
FID	0
OFATID	11848
GRIDCODE	0
F_AREA	2860200

Burnie Creek	
27640BurnieCreek	
MNRF Flow Assessment	
27640	
FID	0
OFATID	27640
GRIDCODE	0
F_AREA	15087600



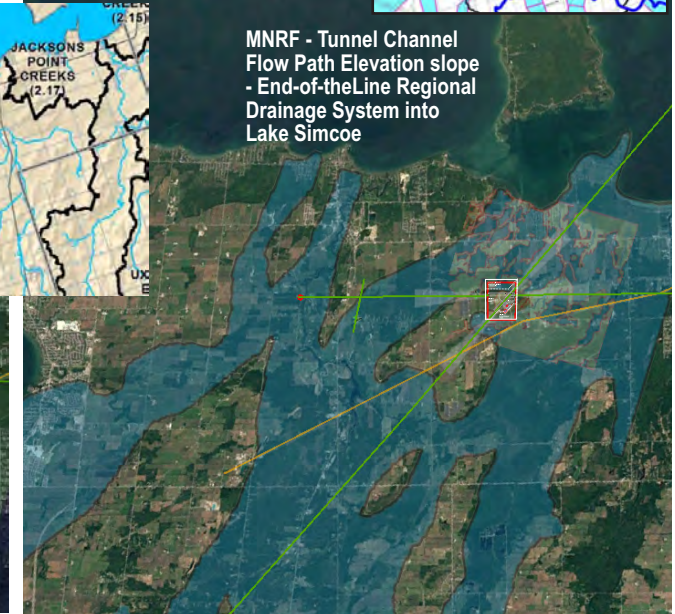
<https://www.lsrca.on.ca/Shared%20Documents/Subwatershed-Plans/black-river-subwatershed-plan.pdf>
Georgina Island

Highly Vulnerable Aquifer Areas & Ecologically Significant Groundwater Recharge



https://www.georgina.ca/sites/default/files/page_assets/b3_sourcewater_1.pdf

MNRF - Tunnel Channel Flow Path Elevation slope - End-of-the-Line Regional Drainage System into Lake Simcoe



Clean Water Act, 2006, S.O. 2006, c. 22
<https://www.ontario.ca/laws/statute/06c22#BK60>
Prohibited activities

57 (1) If a source protection plan that is in effect designates an activity as an activity to which this section should apply and an area within which this section should apply to the activity, a person shall not engage in that activity at any location within that area. 2006, c. 22, s. 57 (1).

On potential impacts, facilities are expected to have a legacy of lead resulting from the extended use of leaded AVGAS. 11

NATURAL HERITAGE SYSTEMS, PROVINCIALLY SIGNIFICANT WETLAND, WILDLIFE CORRIDOR -

Lake Simcoe Region Conservation Authority (LSRCA)

<https://www.lsrca.on.ca/Pages/Natural-Heritage-System-Restoration-Strategy.aspx>

Excerpts: "...n the Lake Simcoe watershed, there are thousands of species of plants and animals! There are: 58 fish, 1,250 plants, 50 mammals 98 butterflies, 141 birds, 100s of aquatic and terrestrial benthics. Approximately 427 native local species are regionally rare to the watershed and 65 are provincial or national species at risk (SAR) in the watershed..".

"Natural Heritage System and Restoration Strategy With natural heritage protection in mind, we recently published our Natural Heritage System and Restoration Strategy. This document includes an implementation plan to protect and restore our natural spaces...." The strategy began with an inventory of all the natural heritage features (such as woodlands, wetlands, watercourses) in our watershed. Once completed, we discovered that our watershed has over 128,000 hectares of natural heritage to protect. We also compiled a list of 39 strategic action items. We now have clear and measurable guidelines to protect, grow and enhance our natural heritage features."



<https://www.lsrca.on.ca/enjoytheoutdoors/nature-preserves>

Excerpts:"... 10 NATURAL HERITAGE SYSTEM - Significant Wildlife Habitat

Natural heritage features and areas are linked by natural corridors, necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species and ecosystems.

These systems can include:

- Wetlands
- Coastal wetlands
- Fish habitat
- Woodlands
- Valleylands

"....ZEPHYR CREEK WETLAND COMPLEX .

A Provincially Significant Wetland,

It is of Natural and Scientific Interest and is considered an Environmentally Sensitive Area. It also contributes to flood reduction, ground water recharge and water quality improvements.

The Zephyr Creek Wetlands

The mix of features includes a mixed swamp, extensive ephemeral pools and marshes with standing water. Common ecosystems found here are alder thicket swamps, black ash swamps, and white cedar swamps, providing excellent breeding habitat for a number of wildlife species. Among species found here include western chorus frogs, wood frogs, tree frogs, eastern wood-pewee, great-crested flycatchers, mourning warblers, and ovenbirds.

Due to the difficulty of access, and the sensitivity of features, no trails or other public use facilities have been developed. It is owned and managed by the Lake Simcoe Region Conservation Authority...."

**Wildlife Controls and Elimination
is unacceptable in this region**

COASTAL VIRGINIA HAMLET - BURNIE CREEK Pefferlaw Lake Simcoe - BURNIE CREEK IS A HATCHERY

A 4 kilometer radius of the aerodrome, is approx 12,397 acres incorporates all of Virginia Hamlet, its 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, registered agrofood producer farms both crops, cattle and dairy, and creek system.

THE CONVERGENCE IN VIRGINIA HAMLET OF SEVERAL CREEKS ARE HATCHERIES THAT FEED LAKE SIMCOE.

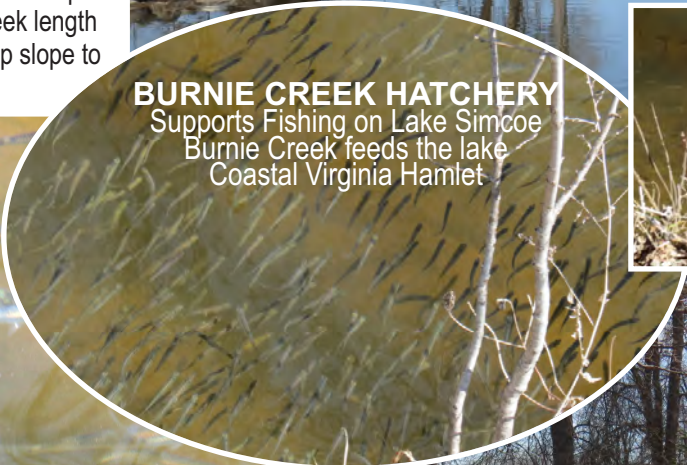
An aerodrome at this location would poison soil, crops, water, land and air in this unique environmentally sensitive area. The plan overlays a key hydrological system in a region where the whole population must safeguard surface water from pollutants. Runoff and stormwater infiltrate into the aquifers to recharge the aquifer that drilled or dug wells rely on for potable water...clean drinking water. There is no municipal system (Drains, sewers or treated water supply for the region. Many have water availability issues now.

Headwaters at proposed Aerodrome

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.

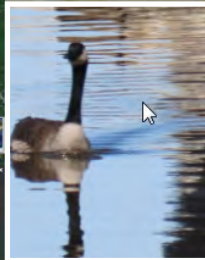
More species require headwaters at some point in their lives than any other type of habitat; Headwaters supply downstream ecosystems with significant portions of a watershed's nutrients, organic material, and sediment, providing the base of a watershed's biodiversity and resilience.

Burnie Creeks headwaters are areas within the proposed aerodrome lands. One runway proposes a approach and landing flight path ovetop the creek length at low levels. Surface drainage follows a steep slope to Lake Simcoe.



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

Lake Simcoe fish tourism industry



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.



**COASTAL WETLAND SWAMP
STREAM MOUTH LAKE SIMCOE**

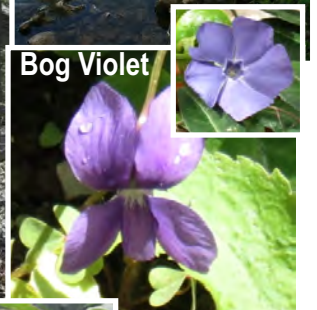


**Mouth of Virginia Creek C
at Lake Simcoe Shoreline**

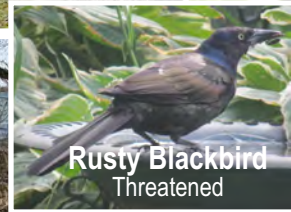


Mink

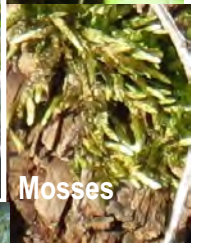
Spring Virginia Creek C Mouth at Lake Simcoe



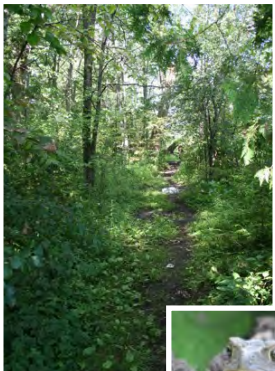
Bog Violet



**Rusty Blackbird
Threatened**



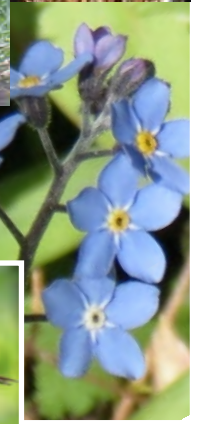
Mosses



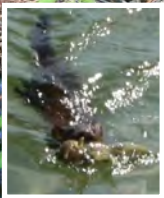
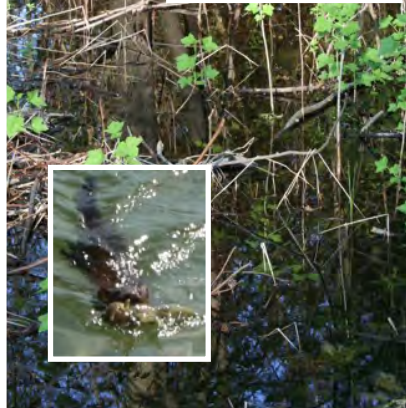
Gray Tree Frog



Wetland Swamp at Shore Lake Simcoe

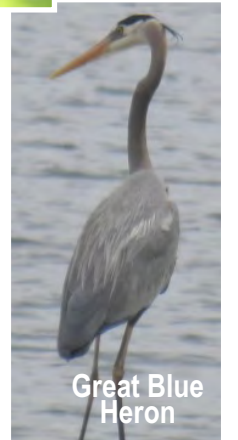


44°19'39.62" N 79° 16'59.05" W



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>

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;

AN ECOLOGICALLY SIGNIFICANT COASTAL AREA

Virginia Creek C Coastal Wetland Swamp Complex

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.

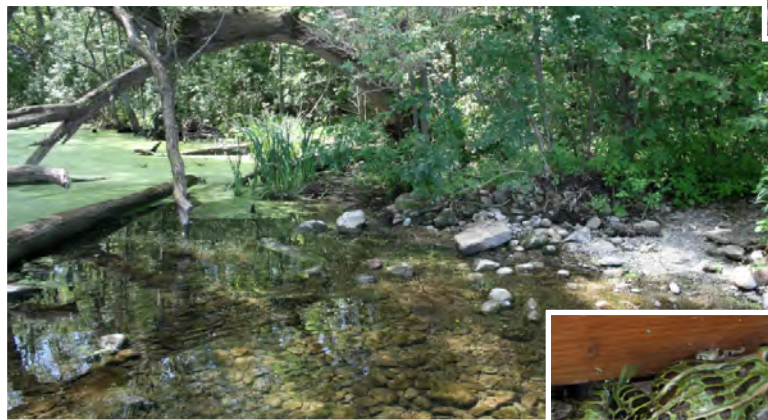
Hadden Road's 1000m long roadside deep ditch is a vital part of the health of this habitat and water coursing system. It should not receive runoff from acres of winter salt or sand, summer pollution and toxins that would directly enter from the ditch for years to come. It merges with Virginia Creek C 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, Lake Simcoe



Salamander

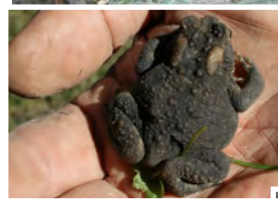
All creature photos were taken in Virginia Hamlet



Snapping Turtle nearby docks



Green Leopard Frog



Fowlers Toad



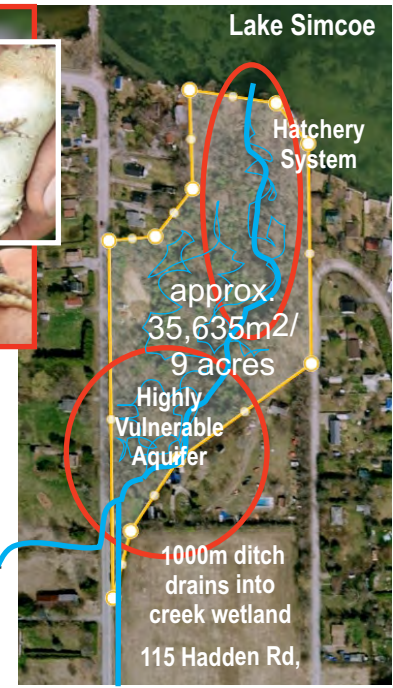
Brown Leopard Frog



Mouth of Virginia Creek C at Lake Simcoe Shoreline



Fowlers Toad



Lake Simcoe

Hatchery System

approx. 35,635m²/ 9 acres

Highly Vulnerable Aquifer

1000m ditch drains into creek wetland

115 Hadden Rd,

The NATURAL HERITAGE VALUE IS IN THE SIGNIFICANT WILDLIFE that utilize this specialized combination habitat array. It offers safe corridor from contiguous forested and field areas to the unspoiled coastal 9 acre wetland, through these, simple access to and from the lake. 15

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>

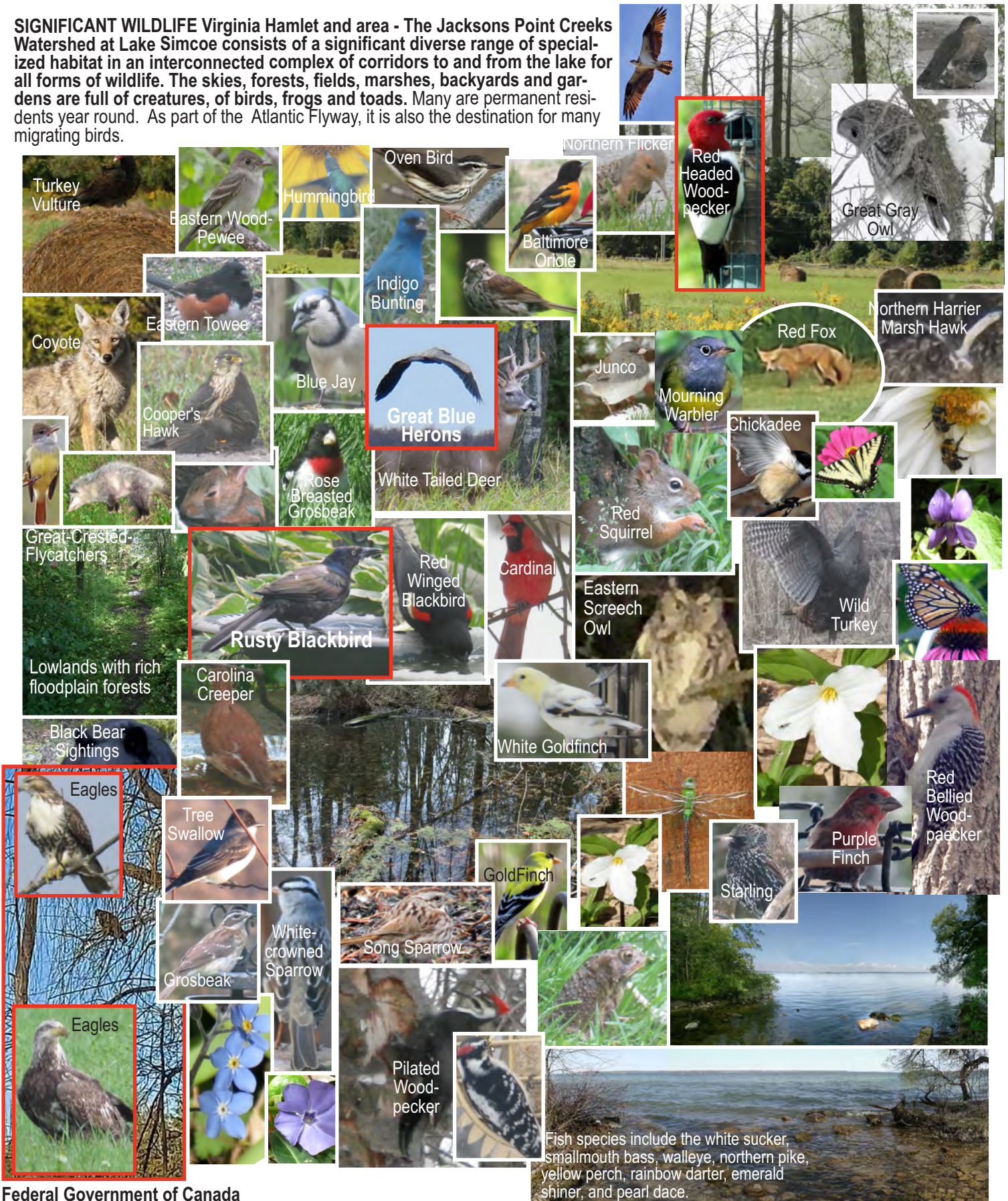
Prohibitions: 5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.



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 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.



Fish species include the white sucker, smallmouth bass, walleye, northern pike, yellow perch, rainbow darter, emerald shiner, and pearl dace.

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

AIRPORT AERODROME AVIATION POLLUTION & THE ENVIRONMENTAL BURDEN

https://en.wikipedia.org/wiki/Ground_deicing_of_aircraft

Excerpt: "...Airports are among the largest sources of air pollution. Effects are larger in areas adjacent to and downwind from airports. Some of the main environmental and sustainable development concerns raised with respect to the operation of airports are emissions, noise issues, land use..."

mcgill.ca/iasl/files/iasl/vii_sustainability_and_environmental_protection_measures_for_airports_final.pdf

II. AIRPORTS ENVIRONMENTAL BURDENS

A. EMISSIONS AND ENVIRONMENTAL CAPACITY

Excerpts: "...Emissions from aircraft, both at ground level and at altitude, can give rise to numerous negative effects on air quality, climate and the ozone layer. The gases and particles emitted from aircraft engines can cause harmful effects in different stages of the flight, from the ground to higher altitudes.

At ground level, where airports are involved, one of the adverse effects of aircraft emissions is degradation of the air quality, which may directly impact human health.⁶ According to the environmental reports and assessments, particulate matters, NO_x, HC, SO_x, and CO from aircraft engine emissions can affect air quality, health and welfare.

Aviation-related emissions in the ground level and airport vicinities do not limit to aircraft emissions; ground support equipment are other contributors. This means that air pollution from the airport ground-service vehicles, as well as the airport surface access systems should be considered as part of the environmental burden of the airports.

B. NOISE ISSUES

Noise, "...can cause profound negative effects on humans' health¹³ and their physical, psychological and social wellbeing and quality of life..., one of the most obvious environmental problems of airport activities is noise pollution....In addition, noise generated by ground access systems in the airport landside area adds to the already existing problem of excessive noise in airports..."

C. LAND UTILIZATION, WASTE AND CONGESTION

...Land use by airport, waste and ground congestion are among the problems....

Airport waste refers to the waste generated by an airport's operation. Such waste can be generated by passengers, airfield operations and maintenance activities, and those caused by construction and demolition. Some of the activities of airports such as aircraft and airfield deicing and anti-icing, fuel storage and refueling, aircraft and vehicle cleaning and maintenance, and construction may result in the discharge of pollutants to adjacent water bodies and consequently trigger aquatic life and human health..."

https://en.wikipedia.org/wiki/Ground_deicing_of_aircraft

SMALL AIRPORT Excerpts:

"...Even small airports could generate some additional and potentially serious specific risk as compared to large international ones.

Recent Research Revealed that the Heavy Metal Lead (Pb) Is Still Present in Aviation Gasoline Used in Small Aircraft

Lead (Pb) is a heavy metal known for its toxicity to human beings (particularly to children) and the environment. It can adversely affect the nervous system, immune system, and kidney function, as well as interfere with the reproductive and developmental systems and the cardiovascular system. Lead's well-established toxicity is the reason for its ban from leaded gasoline used in cars from several decades now. However, recent research (<http://www.ceh.org/avgas/>) revealed that Pb is still present in aviation gasoline used on small propeller planes and some helicopters in levels that are high enough to potentially cause air pollution risks..."

environmentalpollutioncenters.org/news/small-airports-lead-pollution-risk

TARMAC ASPHALT, PARKING & INTERLOT PAVEMENT and TRAFFIC POLLUTION

POLLUTION CONTAMINATION OF THE WATER, LAND AND AIR – CHEMICALS, TOXINS, GARBAGE WINDBLOWN - LITTER –

Grease, leaking oil, coolant spills, heavy metals shed from vehicles and tracked in by tires, batteries and airborne fumes and gasoline (Polycyclic aromatic hydrocarbons (PAHs) of combustion byproduct of gasoline and also in the tar-based sealants used to pave or protect parking lots), (toxic materials from in and around businesses and commercial properties are carried in by vehicle tires and rainwater. There can be no avoidance. Lot surfaces deteriorate into cracks, ruts and potholes. Contamination would be inevitable.

Just 1 litre of oil can contaminate 1 million litres of water.

TRAFFIC EXHAUST & ASPHALT generate harmful atmospheric emissions in gases with high VOCs (Volatile Organic Compounds). Pavement lots are noxious and polluting in every instance. Asphalt contains many toxic and carcinogenic compounds, as does regular maintenance repair substances and sealant chemicals. The smell is very unpleasant, the clean fresh country air forever lost. Leaching PAHs are best kept out of rivers, streams and natural waters. It's a problem if the surface is permeable or impermeable. Cleaning with chemicals, sweeping, power-washing worsens the pollution into the water, ground and air. Maintenance consumes much water from areas where the water supply is from wells, and problematic due to recharge rates. Paving prevents clean rainwater from entering the ground. Pavements permit ground and water contamination by penetration. Pavement increases toxic runoff and prevents groundwater recharge. By proximity to the watercourses and watershed, runoff damage is magnified Salt, and chlorides in plowed snow leach into the water table. The Clean Water Protection Act identifies road salts/calcium chlorides and plowed snow storage as major threats to water - groundwater, melt water, well & drinking water and the lake. It is harmful or fatal to aquatic organisms, and wildlife.

HEAT ISLANDS Heat waves emanate visibly into the air from the hot metal and engines of cars as well as paved surfaces.

Rural air. Paved surfaces can raise the temperature by degrees and this heat is retained into the night.

**CET Italian Assoc Chemical Engineering:
Concerns over Use of Leaded Aviation Gasoline (AVGAS) Fuel**

<https://www.aidic.it/cet/18/63/031.pdf> Excerpts:

2.1 Lead particles in the submicron size are deposited and retained in the lower respiratory system of humans and animals and is totally absorbed....Because of this small size, lead bearing particles from piston engines disperse widely in the environment. The particles emitted during ground based operations such as starting, pre-flight run up checks and take-off, deposit to the local surrounding (EPA, 2010).

2.3 Concerns on Tetraethyl Lead Exposure

Due to its volatility, the largest source of exposure is from the evaporative emissions associated with fuel production, distribution, refuelling of airplanes, pre-flight fuel checks, fuel spills and venting of fuel tank (EPA, 2008) Pilots inspect fuel for contamination by draining some of the fuel from each fuel sump prior to flight and after refuelling.

“After the check, this fuel is frequently deposited on the tarmac.”

3. Environmental Concerns on Lead

3.1 Health concerns:health effects include biosynthesis and related functions, neurological development and function, kidney function, reproduction systems, red blood cells, cardiovascular and immune function. Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning difficulties, and lower IQ due to their developing nervous systems. https://www.faa.gov/about/initiatives/avgas/env_airports . Adults are more susceptible to the effects of lead exposure at lower lead concentrations, which includes hematological, cardiovascular and renal effects. The regulatory agency notes that there is no lead exposure level that is not being associated with some risk of damaging health risks.

3.3 Terrestrial Eco-System concerns Lead from aircraft exhausts is removed from the atmosphere and is deposited on the terrestrial surfaces through wet or dry deposition....

Terrestrial ecosystems therefore form primary sinks for lead...Lead is taken up by plants through their foliage and root system.... Lead in vegetation is a concern to wildlife (EPA, 2007). The wildlife is exposed to this lead through silage and grass, or in surface soils through accidental ingestion of soil during grazing.

3.4 Aquatic Eco-System concerns Lead released from AVGAS exhaust enters the aquatic ecosystems through deposition, erosion and runoff of soils containing lead. Through ingestion of food and water, lead can accumulate in the tissues of aquatic organisms....

**AVGAS Aviation Fuel (LEAD) MSDS
AVGAS MATERIAL SAFETY DATA SHEET**

https://www.warteraviation.com/wp-content/uploads/2018/04/AVGAS-115_145-Safety-data-sheet.pdf
Excerpts:

7.3 Specific end use(s): Fuel for aircraft piston engines

Environmental exposure controls - Prevent direct runoff into drains / surface waters. Do not contaminate surface waters and drainage ditches, chemicals or used packaging. Any spills, particularly into surface water, should be reported to the appropriate authorities in accordance with national and local regulations.

12.4 Mobility in soil - Insoluble in water, it floats on the surface. Product is mobile in soil. Mobility of components of the mixture in soil depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms (mostly: ia, fungus, algae, invertebrates).

AVGAS - LEADED FUEL REPORT

Tetraethyl Lead is a neurotoxin banned decades ago but still in use in ALL general aviation planes (AvGas).

EPA (USA) said it will propose an endangerment finding on leaded aviation gasoline (Jan2022).... “The lead in air surrounding airports can be inhaled directly, or the lead may be ingested by children [and grazing animals] after it settles into soil or dust [or into food crops on neighboring farms] (U.S. EPA 2010). The U.S. EPA estimates that people living within 1 km of airports are at risk of being exposed to lead from avgas “EPA has repeatedly concluded that lead is extremely toxic to humans, wildlife and the environment and causes health effects even at low doses,”says Marcie Keever, FoE’s legal director.

A ban on the production of TEL [considered by] the EU would eliminate the only remaining source of aviation grade TEL from Innospec, Inc., which is located in the United Kingdom (UK). Banning the production of TEL from Innospec, Inc. could potentially end the worldwide production of 100LL specification AvGas https://www.faa.gov/about/initiatives/avgas/env_airports

Original <https://ehp.niehs.nih.gov/doi/10.1289/ehp.1003231>
Aviation Fuel - All About Aviation Fuel :
<https://www.news9live.com/knowledge/aviation-fuel-what-is-it-types-and-all-you-need-to-know-155948?infiniteScroll=1>

<https://www.epa.gov/newsreleases/epa-evaluate-whether-lead-emissions-piston-engine-aircraft-endanger-human-health-and-welfare>
EPA to Evaluate Whether Lead Emissions from Piston-Engine Aircraft Endanger Human Health and Welfare [Oct 2022]

The EPA proposed endangerment finding determination that emissions from piston engine aircraft operating on leaded fuel contribute to air pollution that endangers public health and welfare. The agency plans issue the proposal for public review/comment in 2022 for final action in 2023.

“Once this endangerment finding is issued, one of the fears is it could lead to the closing of airports.”

“...EPA has been investigating the air quality impact of lead emissions from piston-engine aircraft near airports for years, and now will determine whether this pollution endangers human health and welfare.”

<https://www.epa.gov/regulations-emissions-vehicles-and-engines/petitions-and-epa-response-memorandums-related-lead>

Exposure to lead causes “a broad array of deleterious effects on multiple organ systems,” among children and adults (AQCD for Lead, p.8 24 and Section 8.4.1).

Original Petition Information Package 107pg & Studies
<https://www.kaplankirsch.com/portalresource/avgas-anprm.pdf>

Model-extrapolated Estimates of Airborne Lead Concentrations at U.S. Airports (FEB2020)

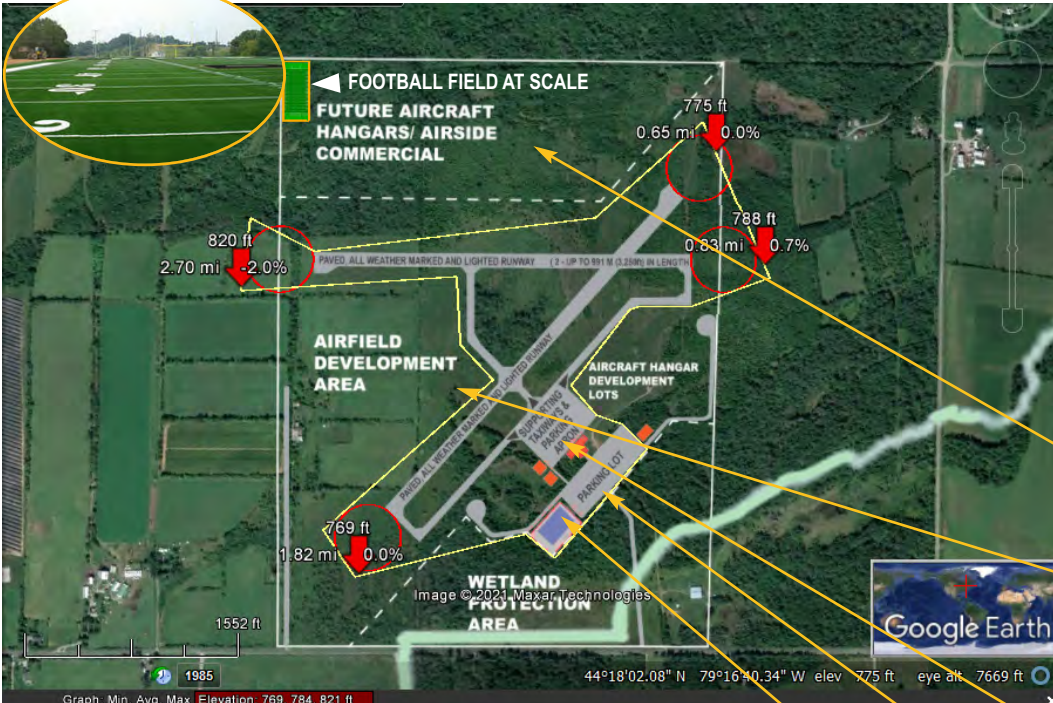
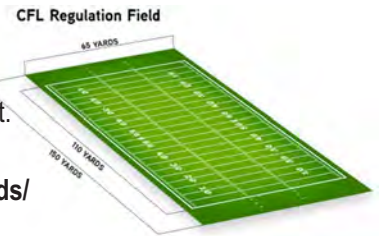
nepis.epa.gov/Exe/ZyPDF.cgi?DockKey=P100YG52.pdf
<https://www.latesting.com/News.aspx?action=show&NewsID=472>
The U.S. Environmental Protection Agency (EPA) states, “Lead is extremely toxic. Human exposure to lead typically occurs via inhalation of air and ingestion of lead in food, soil, water or dust.” *Lead particles can remain for decades longer in the soil of surrounding communities. On the basis of the potential impacts resulting from extended use of the leaded AVGAS in the past, the old facilities are expected to have a legacy of lead.*

SITE ALTERATION EXTENTS, Elevation, Terrain and Geology - Source and Construction Waste Fill Environmental Issues

PARKING LOT VISUAL AID SIZE COMPARISON - WHEN SIZE MATTERS

The Canadian football field is 150 yards/137metres long, 65 yards /59 metres) wide, within which the goal areas are 20 yards (18 metres) deep, and the goal lines are 110 yards (101 metres) apart. (The American football field, is smaller at 100 yards long and 53 and 1/3 yards wide(.75 acres).

One Canadian Football Field Area: 2 acres; 8082.9327 Square Metres/9667.1875 square yards/



TOTAL LOT PROPERTY AREA:

135 Canadian Football Fields/ 270 acres/

1,091,916 square metres

(Note - The following measurements have been taken in Google Earth (from placed concept drawing as shown) therefore are approximate or estimated only.

Future Aircraft Hangars / Airside Commercial
280,500 square metres/69 acres

Airfield Development Area & Aircraft Hangar Development Lots
818,660 square meters/202 acres

Includes:
Runways Areas TBD Supporting Taxiways & Parking Apron
19,160 square Metres/ 4.73 Acres

Parking Lot
16,781/39 Square Metres/ 4 acres (Two Canadian Football Fields)

Accessory and Utility Buildings Access an OnSite Roads Stormwater Management Pond
N/A

Wetland Protection Area
227,707 square metres/56 acres

Source and Extents of FILL required is not yet known

The majority of airport asphalt surfaces are constructed from a 40 to 60 mm thick, 14 mm (nominal maximum aggregate size), densely graded and Marshall-designed asphalt Grooves are generally sawn transversely in runway surfaces to promote aircraft skid resistance .

SITE ALTERATION – MAJOR DEVELOPMENT – LARGE SCALE PROJECTS

11. By-law no. 2011-0044 (Reg-1) of the Corporation of the Town of Georgina.....

A) No person shall place or dump any fill, remove any peat or topsoil, or otherwise alter the grade of land by causing, permitting or performing any form of site alteration involving the placing or dumping of more than 2,000 m3 of fill on land within the town....Large scale site alteration projects include all work where fill material of 250m3 to a maximum of 2000m3 is proposed to be imported onto the site (including material used for driveway construction).

(LSRCA) SUBMISSION REQUIREMENTS FOR PERMIT:

A) Lake Simcoe Region Conservation Authority Permits where required ,) B) Town or Region Entrance permit approvals (where required) C) Material Compliance Form , D) Detailed Lot Grading Plan (P. Eng. stamped drawings required in many situations)

"Toxic Dirt dumped in Ontario's prime farmland" Toronto Star Article By Moira Welsh Staff Reporter Mon., Oct. 20, 2014" mentioning Mauro Marchioni as a respondent's lawyer. Aerodrome 2021 - Contact Name: Mario Marchioni

https://www.thestar.com/news/gta/2014/10/20/toxic_dirt_dumped_in_ontarios_prime_farmland.html

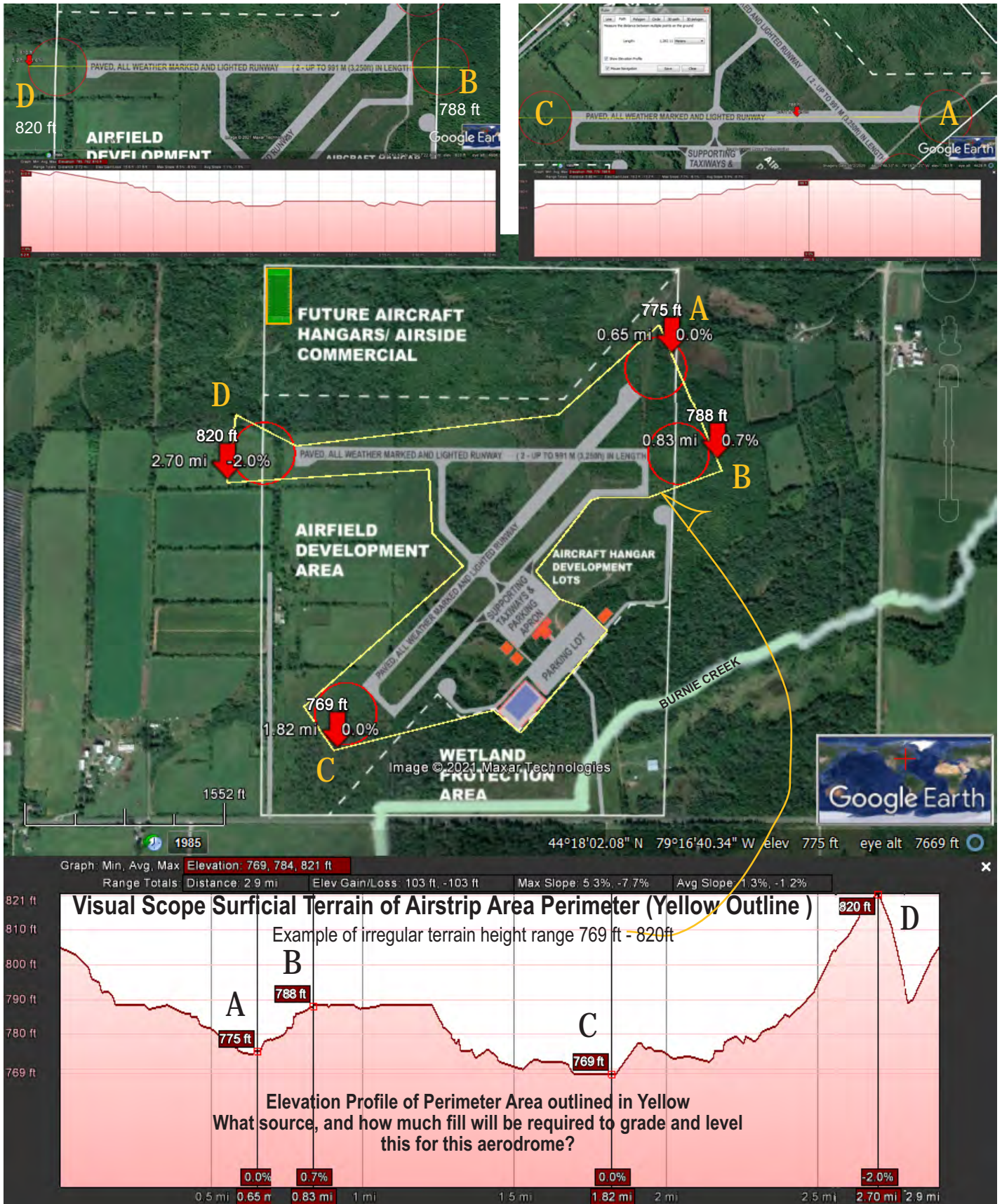
Excerpts: "Toronto's construction boom is unearthing massive volumes of soil contaminated with dangerous heavy metals and petroleum, but it's nearly impossible to know where the dirt is going because Ontario doesn't track it. Instead, thousands of tonnes of toxic earth taken to prime farmland from downtown condominium projects are usually discovered accidentally — by neighbours who report bad odours from soil that is supposed to be "clean." Long-term, experts warn of contamination of agricultural land and groundwater, often in the Greenbelt

What makes an airport different from an aerodrome?

An aerodrome in Canada is a location from which aircraft flight operations take place, regardless of whether they involve air cargo, passengers, or neither, and regardless of whether it is for public or private use.

All airports are aerodromes. All aerodromes are not airports. the difference between an aerodrome and an airport is not about the facilities or the equipment, it's about how it is operated and who checks it is done as intended.

13 SITE ALTERATION EXTENTS, Elevation, Terrain and Geology - Source and Construction Waste Fill Environmental Issues



AERODROME 2021 - 7818 and 7486 Old Homestead Rd., Excerpt:..”owned by numbered Ontario companies, purchased in August, 2020 and April, 2021, respectively. Wilf Goldlust, listed as the sole director for both companies, is the president of Triwaste Services, a waste disposal company located at 260 New Toronto St in Etobicoke, which is now called Waste Management Construction Services. - Mike Anderson - Georgina Post 15 Nov 2021 Article - New Aerodrome Proposal flies under the Radar <https://georginapost.com/2021/11/15/new-aerodrome-proposal-flies-under-the-radar-in-pefferlaw/>