

Study Site FE-03

Fox Street Wetlands

Municipality Town of Fort Erie

Formerly Fox Street Woodlot (Brady et al., 1980)

Approximate Area 475 hectares

Watershed This study site drains to the Black Creek subwatershed.

Ownership Private and Public with some area owned by Niagara Peninsula Conservation Authority.

General Summary

This study site is located mostly in Fort Erie however a portion is linked to continuous cover in the municipality of Port Colborne. The site is located between Eagle Street in the north and Bowen Road in the south. There is an area that extends along Black Creek to where Learn Road and Wilhelm Road meet in the west. In the east, the boundary is Winger Road.

Physical Description

This natural area is situated in the floodplain of Black Creek on the low lying, poorly drained Haldimand Clay Plain. It is underlain by the dolostone and shale of the Salina Formation.

Soils

Soil Type	Percentage of Study Site
ALLUVIUM	13.44
CHINGUACOUSY - RED PHASE	5.57
HALDIMAND - LOAMY PHASE	0.56
JEDDO - RED PHASE	0.27
LINCOLN	4.89
LINCOLN - LOAMY PHASE	0.56
MALTON - HEAVY RED PHASE	8.56
NIAGARA	9.43
NIAGARA - LOAMY PHASE	1.51
ONEIDA - RED PHASE	3.35
ONTARIO	0.58
PEEL - HEAVY RED PHASE	0.18
WELLAND	50.32
WATER	0.55
NOT MAPPED	0.22
Total %	100.00

Ecological Land Classification

Summary

A Gray Dogwood (*Cornus foemina* ssp. *racemosa*) Deciduous Thicket community was

noted for this study site. The very driest of knolls were dominated by Gray Goldenrod (*Solidago nemoralis* ssp. *nemoralis*), Common Strawberry (*Fragaria virginiana* ssp. *virginiana*), Common Cinquefoil (*Potentilla simplex*), Sedges (*Carex* sp.), Poverty Oat Grass (*Danthonia spicata*), and Wild Carrot (*Daucus carota*). Occasionally scattered Eastern Red Cedar (*Juniperous virginiana*) trees can also be found.

A Narrow-leaved Meadowsweet (*Spirea alba*) Thicket Swamp community documented was characterized by Narrow-leaved Meadowsweet and associated Rough Goldenrod (*Solidago rugosa* ssp. *rugosa*), and Black Chokeberry (*Aronia melanocarpa*). On the edges of the Meadowsweet Swamp along the terrestrial/wetland interface, this community also includes wetter areas of Grey Dogwood Swamp with various patches of Green Ash (*Fraxinus pennsylvanica*), Pin Oak (*Quercus palustris*), Red Maple (*Acer rubrum*), White Elm (*Ulmus americana*), Glossy Buckthorn (*Rhamnus frangula*) and Common Buckthorn (*Rhamnus cathartica*) forming a savanna-like community that is succeeding to a Green Ash Swamp.

A very open Pin Oak Swamp was also noted with a ground cover of Fowl Manna Grass (*Glyceria striata*).

Although the stream was dry when NAI teams visited, they did note a very nice Green Ash Swamp with patches of Buttonbush (*Cephalanthus occidentalis*) Swamp in an abandoned channel. Also, a few patches of White Elm Swamp occur in disturbed areas at the upstream end of this community. In places, dense colonies of Grey Dogwood occur while in most other areas the shrub layer is open. There is evidence of Dutch Elm disease with some standing dead wood. Pale Smartweed (*Polygonum lapathifolium*) dominated in the stream bed and adjacent floodplain.

Vegetation Communities

There are a total of 174 recorded taxa (unique plant records) for this study site.

Community Series

Coniferous Forest (FOC)
Deciduous Savanna (SVD)
Deciduous Swamp (SWD)
Deciduous Thicket (THD)
Meadow Marsh (MAM)
Shallow Marsh (MAS)
Thicket Swamp (SWT)

Vegetation Type

Buttonbush Mineral Deciduous Thicket Swamp Type (SWTM5-1)
Dry-Fresh Scotch Pine Naturalized Coniferous Plantation Type (FOCM6-3)
Forb Mineral Shallow Marsh Type (MASM2-1)
Fresh-Moist Willow Deciduous Savanna Type (SVDM5-1)
Gray Dogwood Deciduous Shrub Thicket Type (THDM2-4)
Green Ash Mineral Deciduous Swamp Type (SWDM2-2)
Meadowsweet Mineral Deciduous Thicket Swamp Type (SWTM5-7)
Pin Oak Mineral Deciduous Swamp Type (SWDM1-3)
Red Maple Mineral Deciduous Swamp Type (SWDM3-1)

Red-top Graminoid Mineral Meadow Marsh Type (MAMM1-4)
Reed-canary Grass Graminoid Mineral Meadow Marsh Type (MAMM1-3)
White Elm Mineral Deciduous Swamp Type (SWDM4-2)

Significant Flora

Species at Risk- None noted

Provincially Rare Species- None noted.

Faunal Records:

43- Birds

8- Mammals

5- Reptiles & Amphibians

Site Visits

September 1, 1980

Brady, et al.

July 13, 2005

L. Campbell & Associates

April 16, 2006

A. Garofalo, K. White

August 29, 2006

A. Garofalo, K. White, T. Staton

% of site visited

2.19 % of the total study site was visited by NAI teams.

References Cited

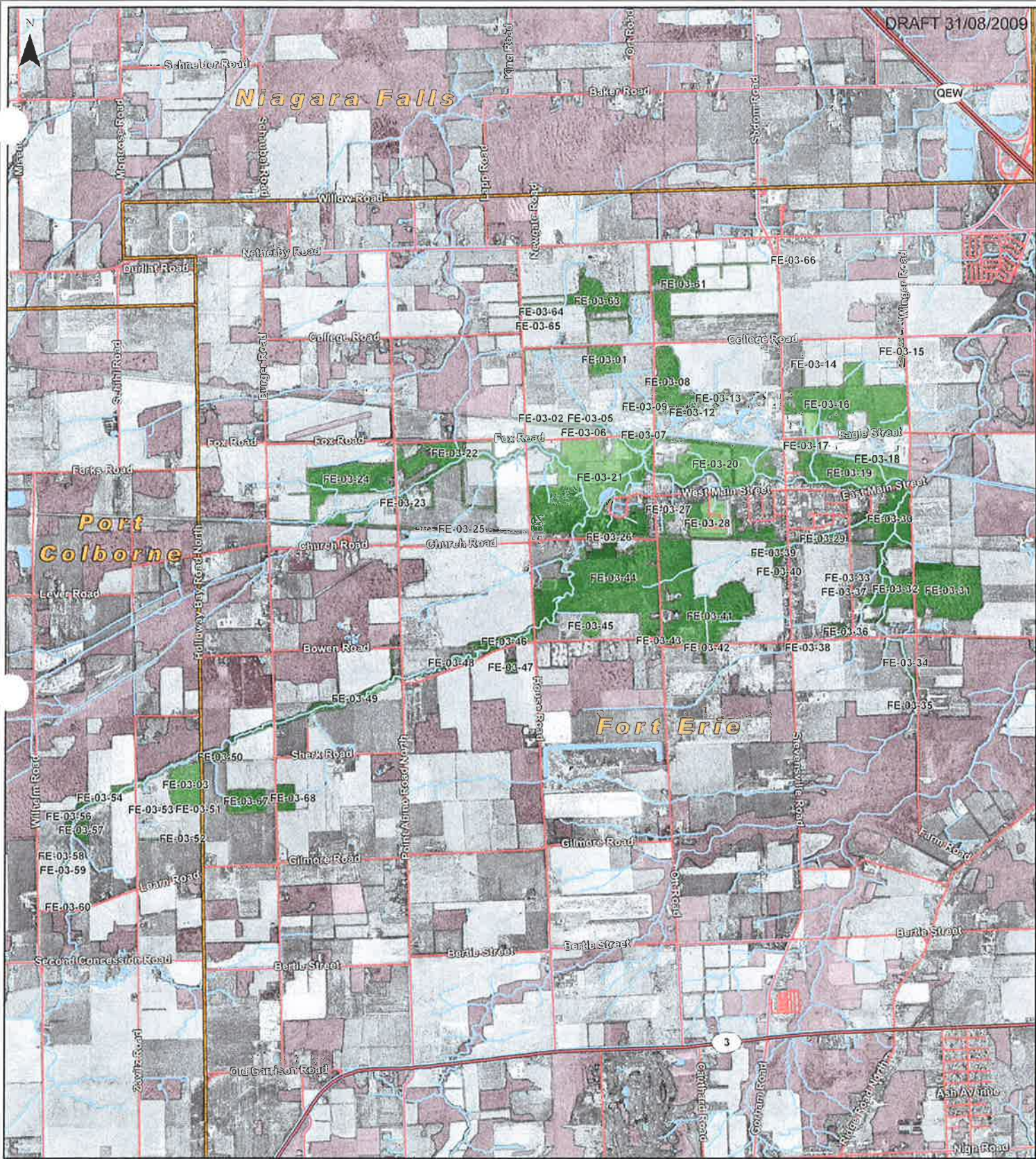
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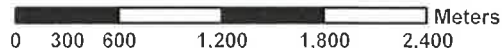
- Major Highways
- Regional Highways
- Roads
- Watercourses
- Waterbodies
- Municipal Boundaries
- Study Sites
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Natural Areas Inventory

Study Site FE-03

1:44,000



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 All Frames. North American Datum 1983, Universal Transverse Mercator 6° Projection, Zone 17N, Central Meridian 81° West



There are a total of 174 recorded taxa (unique plant records) for this study site
Community Series:
 Deciduous Swamp (SWD) Thicket Swamp (SWT)
 Meadow Marsh (MAM)
 Deciduous Thicket (THD)

Study Site FE-11

Point Abino

Municipality Town of Fort Erie

Formerly Point Abino (Brady, et al., 1980)

Approximate Area 639 hectares

Watershed The drainage from this study site is almost exclusively through the Point Abino Drain to Lake Erie. There is one small area that drains through the Lake Erie 3 tributary.

Ownership Mostly private

General Summary

This study site is dissected by the Port Colborne/ Fort Erie town line. It extends from Pleasant Beach Road in the west to Willowood Avenue in the east. The northern boundary is Sherkston Road and Michener Road and of course, the lake is the southern extent.

Physical Description

This natural area is situated primarily on the limestone plain of the Onondaga Formation. This is evident in the outcropping of bedrock at the surface, and shallow soils.

Nearer to the Lake Erie shore, the back dune communities are characterized by deep organic deposits that create bog-like conditions.

The unique dune communities found at the water's edge in this study site are supported by the sandy soils of the Sand Plain over limestone.

Soils

Soil Type	Percentage of Study Site
BEACH	0.42
BRADY	4.30
BROOKE - SHALLOW PHASE	1.75
BROOKE - VERY SHALLOW PHASE	11.56
CHINGUACOUSY - LOAMY RED PHASE	0.69
CHINGUACOUSY - RED PHASE	4.88
FARMINGTON - VERY SHALLOW PHASE	3.87
FONTHILL	0.18
FRANKTOWN - SHALLOW PHASE	0.29
FRANKTOWN - VERY SHALLOW PHASE	15.19
GRANBY	10.04
HOLLY	15.88
JEDDO - RED PHASE	3.08
ONEIDA - RED WASHED PHASE	0.43

PLAINFIELD - DUNE PHASE	7.44
SCARP	0.42
WALSINGHAM	4.53
WATER	0.90
NOT MAPPED	14.17
Total %	100.00

Ecological Land Classification

Summary

Along the lake there are high dunes with good drainage, while behind these dunes the area is very low and consists primarily of marsh and swamp communities.

The sand dunes at Point Abino support a mature virgin forest and are considered a unique geomorphological and biological feature in Ontario.

The rich Deciduous Forests occurring on the dunes are dominated by Sugar Maple (*Acer saccharum ssp. saccharum*) and Red Oak (*Quercus rubra*). Other associated species include American Beech (*Fagus grandifolia*) and old growth Black Maple (*Acer saccharum ssp. nigrum*) was noted repeatedly.

The understory was a mix of Spicebush (*Lindera benzoin*), Common Elderberry (*Sambucus canadensis*), and Bladdernut (*Staphylea trifolia*).

The groundcover was noted as Northern Blue-flag (*Iris versicolor*), Jack-in-the-Pulpit (*Arisaema triphyllum ssp. triphyllum*), Raspberries (*Rubus sp.*), and Nightshade (*Circaea sp.*).

The foredune and beach community adjacent to Lake Erie is also significant since it is one of only a few examples of a natural, relatively undisturbed beach at the eastern end of Lake Erie. A mature Silver Maple (*Acer saccharinum*) Deciduous Swamp lies north of the deciduous dune forest and is a high quality, mature and undisturbed forest community.

The Deciduous Swamp communities noted in the back dune areas were dominated by Freeman's Maple (*Acer fremanii*), Green Ash (*Fraxinus pennsylvanica*), and Red Maple (*Acer rubrum*).

The understory was largely a mix of Spicebush, Spotted Touch-me-nots (*Impatiens capensis*), False Nettle (*Boehmeria cylindrica*), Moneywort (*Lysimachia nummularia*), and Fowl Manna Grass (*Glyceria striata*).

The Shallow Marshes or backdune wetlands were characterized by Broad-leaved Sedges (*Carex sp.*) and deep organic soils. The associated canopy was usually a mix of Freeman's Maple and Red Maple with Silky Dogwood (*Cornus amomum ssp. obliqua*). Other noted species included Common Clearweed (*Pilea pumila*) and Broad-leaved Cattail (*Typha latifolia*).

The Point Abino Drain runs along the north and west of this study site and has led to a drastic drying of the once dominant wetland communities and swamp forests. In places there are 120 cm of organics but they are now mostly dry.

The deep open water channel of the drain supports a continuous mat of Lesser Duckweed (*Lemna minor*). Tearthumb species (*Polygonum sp.*) emerge along both edges of the channel but often the middle of the water course is open with only floating leaved aquatics.

Vegetation Communities

There are a total of 448 recorded taxa (unique plant records) for this study site.

Community Series

Deciduous Swamp (SWD)
Floating-leaved Shallow Aquatic (SAF)
Graminoid Meadow (MEG)
Shallow Marsh (MAS)

Vegetation Type

Broad-leaved Sedge Organic Shallow Marsh Type (MASO1-6)
Duckweed Floating-leaved Shallow Aquatic Type (SAF_1-3)
Open Graminoid Meadow Type (MEGM4-1)
Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3)

Significant Flora

Species at Risk

Cornus florida (Eastern Flowering Dogwood) (Brady, et al., 1980) - Endangered
Eurybia divaricata (White Wood Aster) (Oldham, 1999) – Threatened
Juglans cinerea (Butternut) (Brady, et al., 1980; Oldham, 1999) – Endangered
Ptelea trifoliata (Common Hop-tree) (Brady, et al., 1980; Oldham, 1999) - Threatened

Provincially Rare Species

Carex albicans ssp. albicans (Sharp-scaled Oak Sedge) (Oldham, 1999) – S3
Carex appalachica (Appalachian Sedge) (Oldham, 1999) – S2, S3
Corispermum pallasii (Pallas Bugseed) (Oldham, 1999) – S1, S3
Prunus pumila var. pumila (Sand Cherry) (Oldham, 1999) – S3

Points of Interest

There has been a lot of inventory work undertaken within this study site in recent years due to a very public dispute over the sale of a piece of private property locally known as Marcy's Woods.

The NPCA database for the NAI contains a very extensive list of Fungi for Marcy's Woods.

Extensive bird surveys were also conducted at various times over the past decade.

Faunal Records:

103 – Birds
22 – Moths & Butterflies

9- Reptiles & Amphibians

8- Mammals

Site Visits

September 1, 1980

Brady, et al.

June 26, 1999

M. Oldham

July 25, 2006

A. Garofalo, K. White

% of site visited

0.32 % of the total study site was visited by NAI teams.

References Cited

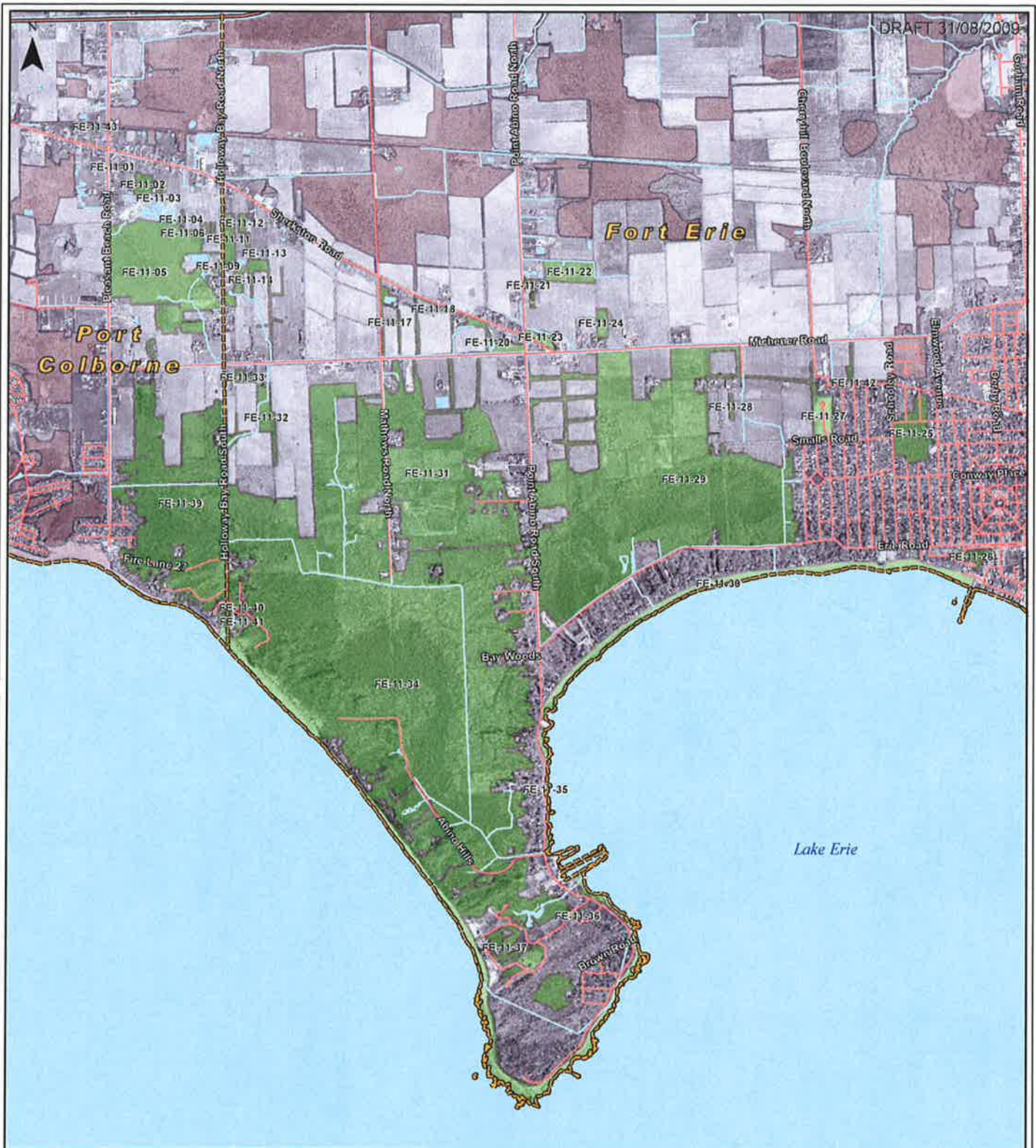
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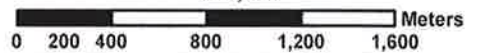
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