

Study Area Background Information Gathered By McIntosh Perry

Source	Data
Fish Online	St. Lawrence River surrounds the study area and contains the following species: Black Crappie, Bluegill, Brown Bullhead, Brown Trout, Common Carp, Lake Whitefish, Largemouth Bass, Northern Pike, Pumpkinseed, Rainbow Smelt, Rock Bass, Sauger, Smallmouth Bass, Walleye, White Perch, White Sucker, Yellow Perch
ARA Data	St. Lawrence River Thermal Regime: warm Fish Species Summary: Alewife, Banded Killifish, Black Crappie, Blackchin Shiner, Bluegill, Bluntnose Minnow, Bowfin, Brassy Minnow, Brook Silverside, Brook Stickleback, Brown Bullhead, Burbot, Central Mudminnow, Channel Catfish, Common Carp, Common Shiner, Emerald Shiner, Fallfish, Fantail Darter, Fathead Minnow, Freshwater Drum, Gizzard Shad, Golden Shiner, Largemouth Bass, Logperch, Longnose Dace, Longnose Gar, Mimic Shiner, Mooneye, Mottled Sculpin, Muskellunge, Northern Pike, Pumpkinseed, River Chub, Rock Bass, Round Goby, Sea Lamprey, Smallmouth Bass, Spotfin Shiner, Spottail Shiner, Tessellated Darter, White Perch, White Sucker, Yellow Perch
LIO Data	Unevaluated Wetlands: several unevaluated wetlands (marsh and swamp) are present within 2 km of the study area; however, the following are present within a 500 m radius of the study area: marsh approximately 230 m southeast, swamp approximately 320 m north, marsh approximately 220, 310, and 500 to the west and southwest Evaluated Wetlands: none exist within 2 km of the study area Provincially Significant Wetlands: Hill Island East, provincially significant wetland consisting of open water, swamp and marsh surrounds the study area Wildlife Activity Area: none Well Data: One (1) well present on Club Island approximately 860 m northeast of provided coordinates (well ID: 3601712, domestic use, 36 m max depth) ANSI: Hill Island present within 500 m of subject property Blandings Turtle 1 km Grid: occurrences overlapping with subject property Gray Ratsnake 1 km Grid: occurrences overlapping with subject property Provincial Parks: None present within 2 km of study area National Parks: Thousand Islands National Park adjacent to Club Island NHIC 1 km Grid ID: 18VQ2412 Conservation Authority: Cataraqui Region Conservation Authority NDMNRF District: Kemptonville (southern region) Eco Region: Lake Simcoe - Rideau (6E); Eco District: Charleston Lake (6E-10); Eco Zone: Mixedwood Plains
NHIC Data	The following Significant species have been reported within 5 km of the Study Area: A Lichen, American Eel, American Water-willow, Bank Swallow, Blanding's Turtle, Bobolink, Bitternut, Downy Goldenrod, Eastern Meadowlark, Eastern Milksnake, Eastern Ribbonsnake, Eastern Wood-pewee, Eight-flowered Fescue, Forked Panicgrass, Golden-winged Warbler, Grass Pickerel, Gray Ratsnake (Frontenac Axis population), Hairy Bedstraw, Halberd-leaved Smartweed, Henslow's Sparrow, Lake Sturgeon (Great Lakes - Upper St. Lawrence River population), Least Bittern, Long's Sedge, Midland Painted Turtle, Narrow Triangle Moonwort, Northern Map Turtle, Panicked Hawkweed, Piping Plover, Pitch Pine, Pugnose Shiner, Round-leaved Tick-trefoil, Snapping Turtle, Soil Ruby Lichen Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population, White-tinged Sedge, Wood Thrush
DFO SAR Mapping	No critical habitat found within a 1km buffer zone of proposed work site; Extirpated/Endangered/Threatened species at risk found within 1km buffer of proposed work site

OBBA	The following SAR species have been reported within the vicinity of the Study Area: Bank Swallow, Barn Swallow, Bobolink, Eastern Wood-Pewee, Eastern Meadowlark, Eastern Whip-poor-will, Golden-winged Warbler, Least Bittern, Wood Thrush
ORAA	The following SAR species have been reported within the vicinity of the Study Area: Blanding's Turtle, Eastern Musk Turtle, Northern Map Turtle, Five-lined Skink, Gray Ratsnake, Midland Painted Turtle, Snapping Turtle, Eastern Ribbonsnake, Eastern Milksnake, Western Chorus Frog
OBA	The following SAR species have been reported within the vicinity of Clayton Lake: Monarch
Official Plan	Leeds and Grenville Official Plan identify the study area as "Rural Lands" designation and surrounding area as "Provincially Significant Wetland" designation. https://www.leedsgrenville.com/en/government/official-plan.aspx
	Township of Leeds and Thousand Islands Official Plan identify the study area as "Rural" designation and surrounding area as "National Park" designation.
SAR Master List	
Common Name	Scientific Name
American Eel	<i>Anguilla rostrata</i>
American Water-willow	<i>Justicia americana</i>
Bank Swallow	<i>Riparia riparia</i>
Barn Swallow	<i>Hirundo rustica</i>
Blanding's Turtle	<i>Emydoidea blandingii</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Butternut	<i>Juglans cinerea</i>
Eastern Meadowlark	<i>Sturnella magna</i>
Eastern Milksnake	<i>Lampropeltis triangulum</i>
Eastern Musk Turtle	<i>Sternotherus odoratus</i>
Eastern Ribbonsnake	<i>Thamnophis sauritus</i>
Eastern Whip-poor-will	<i>Antrostomus vociferous</i>
Eastern Wood-Pewee	<i>Contopus virens</i>
Golden-winged Warbler	<i>Vermivora chrysoptera</i>
Grass Pickerel	<i>Esox americanus</i>
Gray Ratsnake (Frontenac Axis populat	<i>Pantherophis spiloides pop. 1</i>
Henslow's Sparrow	<i>Ammodramus henslowii</i>
Five-lined Skink	<i>Plestiodon fasciatus</i>
Lake Sturgeon (Great Lakes - Upper St.	<i>Acipenser fulvescens pop. 3</i>
Least Bittern	<i>Ixobrychus exilis</i>
Midland Painted Turtle	<i>Chrysemys picta marginata</i>
Northern Map Turtle	<i>Graptemys geographica</i>
Piping Plover	<i>Charadrius melodus</i>
Pugnose Shiner	<i>Notropis anogenus</i>
Snapping Turtle	<i>Chelydra serpentina</i>
Western Chorus Frog - Great Lakes - St	<i>Pseudacris maculata pop. 1</i>
Wood Thrush	<i>Hylocichla mustelina</i>

Breeding Evidence						Point Counts					
Region	Square	Species	Max BE	Categ	#Sq	Atlasser Name	#PC	%PC	Abun	#Sq	
21	18VQ21	Canada Goose	FY	CONF	1	Paul Mackenzie	3	9.38	0.9688	1	
21	18VQ21	Wood Duck	FY	CONF	1	Paul Mackenzie	2	6.25	0.0938	1	
21	18VQ21	Mallard	FY	CONF	1	Paul Mackenzie	4	12.5	0.6875	1	
21	18VQ21	Ruffed Grouse	H	POSS	1	Paul Mackenzie					
21	18VQ21	Wild Turkey	H	POSS	1	Stew Hamill					
21	18VQ21	Common Loon	FY	CONF	1	Paul Mackenzie	2	6.25	0.0625	1	
21	18VQ21	Pied-billed Grebe	S	POSS	1	Paul Mackenzie					
21	18VQ21	Double-crested Cormorant	H	POSS	1	Paul Mackenzie	1	3.13	0.0625	1	
21	18VQ21	American Bittern	H	POSS	1	Paul Mackenzie	1	3.13	0.0313	1	
21	18VQ21	Least Bittern	T	PROB	1	Carrie Sadowski					
21	18VQ21	Great Blue Heron	H	POSS	1	Paul Mackenzie	5	15.63	0.2188	1	
21	18VQ21	Green Heron	P	PROB	1	Paul Mackenzie					
21	18VQ21	Turkey Vulture	P	PROB	1	Paul Mackenzie	1	3.13	0.0313	1	
21	18VQ21	Osprey	AE	CONF	1	Paul Mackenzie	1	3.13	0.0625	1	
21	18VQ21	Northern Harrier	H	POSS	1	Paul Mackenzie					
21	18VQ21	Sharp-shinned Hawk	CF	CONF	1	Paul Mackenzie					
21	18VQ21	Cooper's Hawk	H	POSS	1	Stew Hamill					
21	18VQ21	Northern Goshawk	T	PROB	1	Stew Hamill					
21	18VQ21	Red-shouldered Hawk	H	POSS	1	Paul Mackenzie					
21	18VQ21	Red-tailed Hawk	FY	CONF	1	Stew Hamill					
21	18VQ21	American Kestrel	H	POSS	1	Paul Mackenzie	1	3.13	0.0313	1	

21	18VQ21	Virginia Rail	P	PROB	1	Paul Mackenzie				
21	18VQ21	Sora	S	POSS	1	Paul Mackenzie				
21	18VQ21	Killdeer	FY	CONF	1	Paul Mackenzie	2	6.25	0.2188	1
21	18VQ21	Rock Pigeon	P	PROB	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Spotted Sandpiper	H	POSS	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Common Snipe	S	POSS	1	Paul Mackenzie	2	6.25	0.0625	1
21	18VQ21	American Woodcock	S	POSS	1	Paul Mackenzie				
21	18VQ21	Ring-billed Gull	H	POSS	1	Paul Mackenzie	2	6.25	0.375	1
21	18VQ21	Herring Gull	H	POSS	1	Paul Mackenzie	2	6.25	0.0625	1
21	18VQ21	Common Tern	NE	CONF	1		1	3.13	0.1875	1
21	18VQ21	Mourning Dove	P	PROB	1	Paul Mackenzie	3	9.38	0.125	1
21	18VQ21	Yellow-billed Cuckoo	S	POSS	1	Paul Mackenzie				
21	18VQ21	Black-billed Cuckoo	P	PROB	1	Paul Mackenzie				
21	18VQ21	Eastern Screech-Owl	H	POSS	1	Paul Mackenzie				
21	18VQ21	Whip-poor-will	S	POSS	1	Paul Mackenzie				
21	18VQ21	Ruby-throated Hummingbird	H	POSS	1	Paul Mackenzie				
21	18VQ21	Belted Kingfisher	H	POSS	1	Paul Mackenzie	2	6.25	0.0625	1
21	18VQ21	Red-bellied Woodpecker	T	PROB	1	Stew Hamill				
21	18VQ21	Downy Woodpecker	FY	CONF	1	Paul Mackenzie	2	6.25	0.0938	1
21	18VQ21	Hairy Woodpecker	FY	CONF	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Northern Flicker	CF	CONF	1	Paul Mackenzie	7	21.88	0.2188	1
21	18VQ21	Pileated Woodpecker	H	POSS	1	Paul Mackenzie	2	6.25	0.0625	1

21	18VQ21	Blackburnian Warbler	CF	CONF	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Pine Warbler	CF	CONF	1	Paul Mackenzie	7	21.88	0.2813	1
21	18VQ21	Black-and-white Warbler	T	PROB	1	Paul Mackenzie	5	15.63	0.1563	1
21	18VQ21	American Redstart	CF	CONF	1	Paul Mackenzie	12	37.5	0.4688	1
21	18VQ21	Ovenbird	DD	CONF	1	Paul Mackenzie	12	37.5	0.4688	1
21	18VQ21	Northern Waterthrush	S	POSS	1	Paul Mackenzie				
21	18VQ21	Common Yellowthroat	CF	CONF	1	Paul Mackenzie	15	46.88	0.8438	1
21	18VQ21	Eastern Towhee	FY	CONF	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Chipping Sparrow	CF	CONF	1	Paul Mackenzie	19	59.38	0.75	1
21	18VQ21	Field Sparrow	FY	CONF	1	Paul Mackenzie				
21	18VQ21	Savannah Sparrow	FY	CONF	1	Paul Mackenzie	2	6.25	0.0938	1
21	18VQ21	Song Sparrow	CF	CONF	1	Paul Mackenzie	20	62.5	0.9063	1
21	18VQ21	Swamp Sparrow	FY	CONF	1	Paul Mackenzie	7	21.88	0.3125	1
21	18VQ21	White-throated Sparrow	T	PROB	1	Paul Mackenzie				
21	18VQ21	Scarlet Tanager	CF	CONF	1	Paul Mackenzie	4	12.5	0.125	1
21	18VQ21	Northern Cardinal	FY	CONF	1	Paul Mackenzie	4	12.5	0.125	1
21	18VQ21	Rose-breasted Grosbeak	FY	CONF	1	Paul Mackenzie	3	9.38	0.0938	1
21	18VQ21	Indigo Bunting	CF	CONF	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Bobolink	FY	CONF	1	Paul Mackenzie	2	6.25	0.0625	1
21	18VQ21	Red-winged Blackbird	CF	CONF	1	Paul Mackenzie	16	50	1.4063	1
21	18VQ21	Eastern Meadowlark	CF	CONF	1	Paul Mackenzie	2	6.25	0.0938	1

21	18VQ21	Common Grackle	CF	CONF	1	Paul Mackenzie	14	43.75	0.9063	1
21	18VQ21	Brown-headed Cowbird	FY	CONF	1	Paul Mackenzie	16	50	0.7188	1
21	18VQ21	Baltimore Oriole	FY	CONF	1	Paul Mackenzie	15	46.88	0.625	1
21	18VQ21	Purple Finch	S	POSS	1	Paul Mackenzie				
21	18VQ21	House Finch	FY	CONF	1	Paul Mackenzie	1	3.13	0.1875	1
21	18VQ21	American Goldfinch	P	PROB	1	Paul Mackenzie	15	46.88	1.2188	1
21	18VQ21	House Sparrow	AE	CONF	1	Paul Mackenzie	2	6.25	0.25	1

21	18VQ21	Eastern Wood-Pewee	AE	CONF	1	Paul Mackenzie	11	34.38	0.4063	1
21	18VQ21	Alder Flycatcher	CF	CONF	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Willow Flycatcher	T	PROB	1	Paul Mackenzie				
21	18VQ21	Least Flycatcher	T	PROB	1	Paul Mackenzie	2	6.25	0.0625	1
21	18VQ21	Eastern Phoebe	NY	CONF	1	Paul Mackenzie	12	37.5	0.375	1
21	18VQ21	Great Crested Flycatcher	AE	CONF	1	Paul Mackenzie	8	25	0.25	1
21	18VQ21	Eastern Kingbird	AE	CONF	1	Paul Mackenzie	7	21.88	0.25	1
21	18VQ21	Yellow-throated Vireo	CF	CONF	1	Paul Mackenzie	3	9.38	0.0938	1
21	18VQ21	Blue-headed Vireo	T	PROB	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Warbling Vireo	CF	CONF	1	Paul Mackenzie	9	28.13	0.375	1
21	18VQ21	Red-eyed Vireo	CF	CONF	1	Paul Mackenzie	17	53.13	0.8125	1
21	18VQ21	Blue Jay	FY	CONF	1	Paul Mackenzie	8	25	0.3125	1
21	18VQ21	American Crow	FY	CONF	1	Paul Mackenzie	23	71.88	1.4063	1
21	18VQ21	Common Raven	FY	CONF	1	Paul Mackenzie				
21	18VQ21	Purple Martin	AE	CONF	1	Paul Mackenzie	2	6.25	0.1563	1
21	18VQ21	Tree Swallow	AE	CONF	1	Paul Mackenzie	8	25	0.4688	1
21	18VQ21	Northern Rough-winged Swallow	H	POSS	1	Paul Mackenzie				
21	18VQ21	Bank Swallow	AE	CONF	1	Paul Mackenzie	1	3.13	0.0625	1
21	18VQ21	Cliff Swallow	AE	CONF	1	Paul Mackenzie				
21	18VQ21	Barn Swallow	AE	CONF	1	Paul Mackenzie	8	25	0.4688	1
21	18VQ21	Black-capped Chickadee	CF	CONF	1	Paul Mackenzie	9	28.13	0.3438	1

21	18VQ21	Red-breasted Nuthatch	H	POSS	1	Paul Mackenzie				
21	18VQ21	White-breasted Nuthatch	FY	CONF	1	Paul Mackenzie	6	18.75	0.1875	1
21	18VQ21	Brown Creeper	CF	CONF	1	Paul Mackenzie				
21	18VQ21	Carolina Wren	T	PROB	1	Stew Hamill				
21	18VQ21	House Wren	FY	CONF	1	Paul Mackenzie	14	43.75	0.5625	1
21	18VQ21	Winter Wren	T	PROB	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Marsh Wren	CF	CONF	1	Paul Mackenzie	2	6.25	0.125	1
21	18VQ21	Eastern Bluebird	AE	CONF	1	Paul Mackenzie				
21	18VQ21	Veery	T	PROB	1	Paul Mackenzie	4	12.5	0.125	1
21	18VQ21	Hermit Thrush	T	PROB	1	Paul Mackenzie	5	15.63	0.1563	1
21	18VQ21	Wood Thrush	FY	CONF	1	Paul Mackenzie	11	34.38	0.3438	1
21	18VQ21	American Robin	CF	CONF	1	Paul Mackenzie	22	68.75	1.125	1
21	18VQ21	Gray Catbird	CF	CONF	1	Paul Mackenzie	8	25	0.25	1
21	18VQ21	Brown Thrasher	H	POSS	1	Paul Mackenzie				
21	18VQ21	European Starling	CF	CONF	1	Paul Mackenzie	7	21.88	0.5625	1
21	18VQ21	Cedar Waxwing	FY	CONF	1	Paul Mackenzie	4	12.5	0.1875	1
21	18VQ21	Golden-winged Warbler	S	POSS	1	Paul Mackenzie				
21	18VQ21	Yellow Warbler	CF	CONF	1	Paul Mackenzie	23	71.88	0.9063	1
21	18VQ21	Chestnut-sided Warbler	CF	CONF	1	Paul Mackenzie	2	6.25	0.0625	1
21	18VQ21	Yellow-rumped Warbler	P	PROB	1	Paul Mackenzie	1	3.13	0.0313	1
21	18VQ21	Black-throated Green Warbler	CF	CONF	1	Paul Mackenzie	2	6.25	0.0625	1

Species list in taxonomic order for square 18VQ21

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
1	Blanding's Turtle	20	1974	2019
2	Eastern Musk Turtle	109	1997	2010
3	Midland Painted Turtle	78	1973	2019
4	Northern Map Turtle	67	1973	2016
6	Snapping Turtle	76	1973	2019
10	Dekay's Brownsnake	26	1936	2019
12	Eastern Gartersnake	108	1973	2018
14	Eastern Ribbonsnake	40	1975	2015
15	Gray Ratsnake	127	1975	2018
18	Milksnake	53	1972	2018
19	Northern Watersnake	25	1939	2018
21	Red-bellied Snake	16	1977	2015
23	Northern Ring-necked Snake	6	1976	2003
24	Smooth Greensnake	18	1977	2018
25	American Bullfrog	127	1973	2018
27	Gray Treefrog	96	1973	2009
28	Green Frog	135	1972	2015
30	Northern Leopard Frog	129	1973	2017
31	Pickerel Frog	1	2003	2003
32	Spring Peeper	138	1974	2017
33	Western Chorus Frog	92	1983	2017
34	Wood Frog	20	1980	2006
35	American Toad	82	1973	2018
40	Red-spotted Newt	48	1973	2018
41	Eastern Red-backed Salamander	89	1972	2019
42	Four-toed Salamander	9	2016	2018
44	Mudpuppy	6	1973	1994
48	Spotted Salamander	57	1972	2018
49	Five-lined Skink	2	1984	1984