

Figures

Figure 1.21: Study Area Map

STUDY AREA MAP



**City of Ogdensburg
(Subject of Seperate Study)**

Lisbon

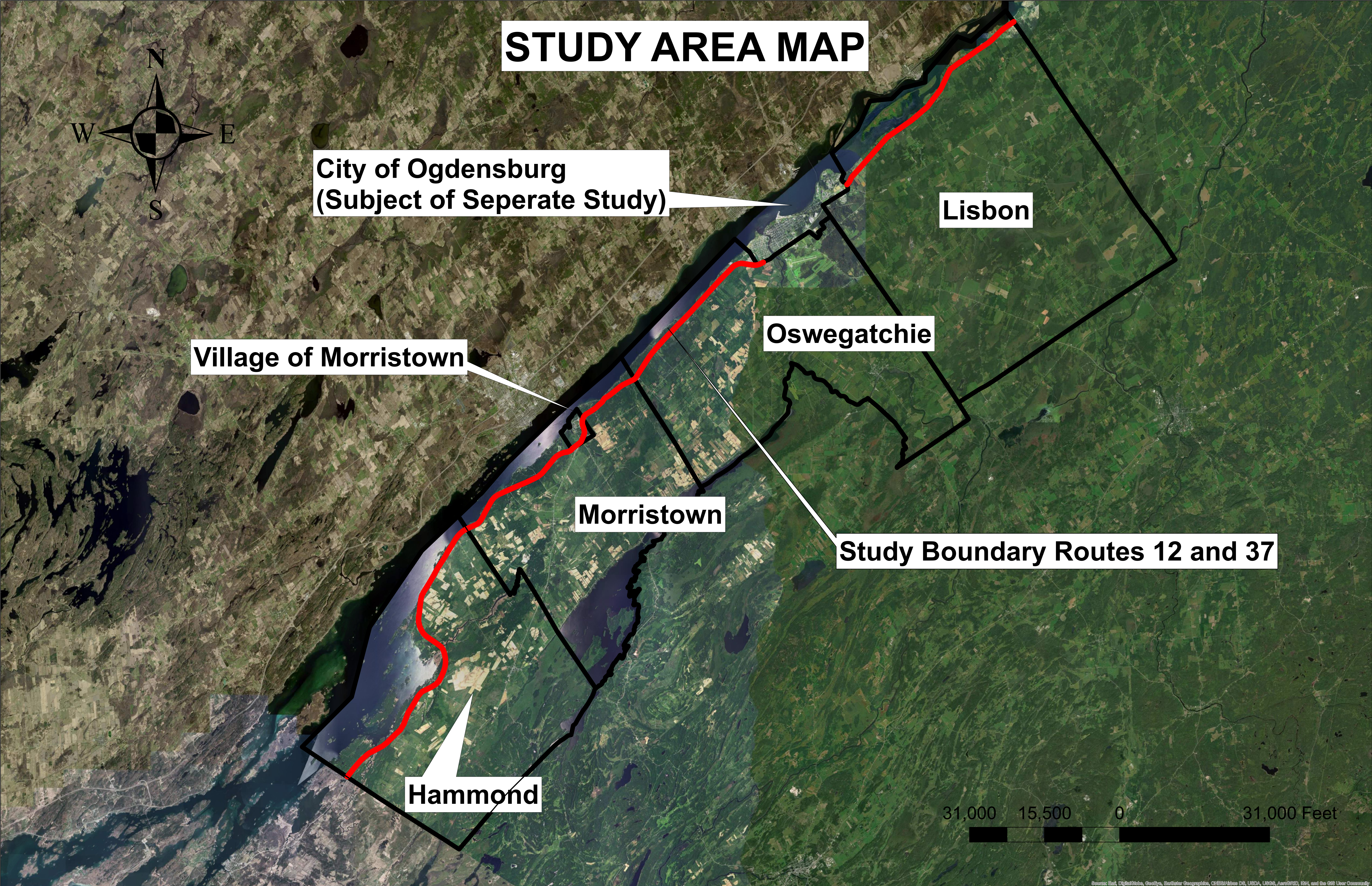
Village of Morristown

Oswegatchie

Morristown

Study Boundary Routes 12 and 37

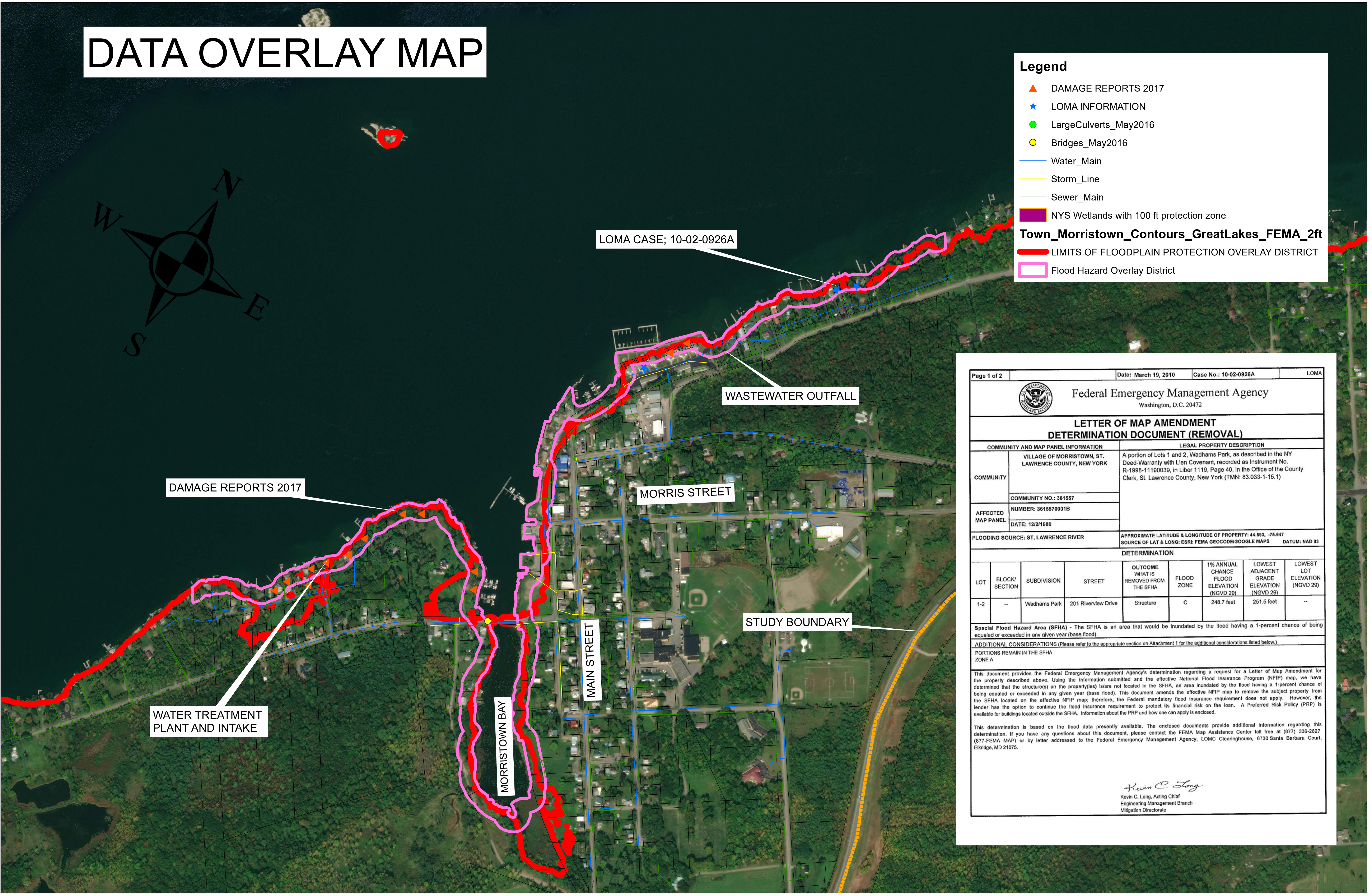
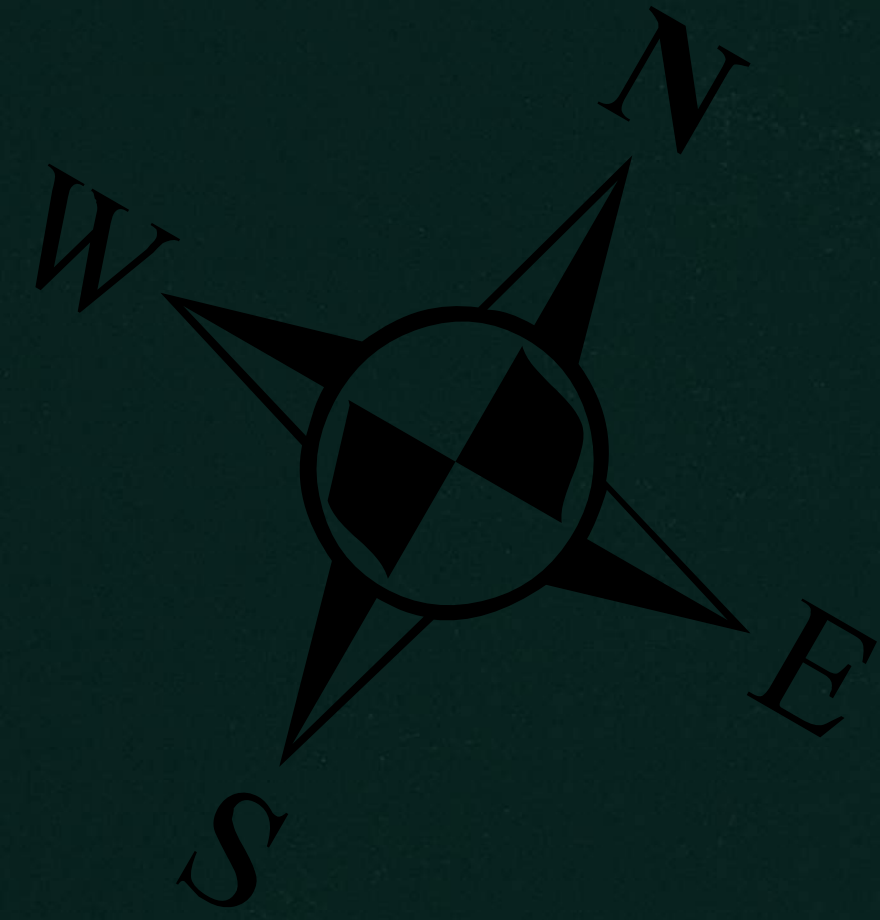
Hammond



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 2.11: Data Overlay Map

DATA OVERLAY MAP



Legend

- ▲ DAMAGE REPORTS 2017
- ★ LOMA INFORMATION
- LargeCulverts_May2016
- Bridges_May2016
- Water_Main
- Storm_Line
- Sewer_Main
- NYS Wetlands with 100 ft protection zone
- Town_Morristown_Contours_GreatLakes_FEMA_2ft
- LIMITS OF FLOODPLAIN PROTECTION OVERLAY DISTRICT
- Flood Hazard Overlay District

Page 1 of 2		Date: March 19, 2010	Case No.: 10-02-0926A	LOMA				
Federal Emergency Management Agency Washington, D.C. 20472								
LETTER OF MAP AMENDMENT								
DETERMINATION DOCUMENT (REMOVAL)								
COMMUNITY AND MAP PANEL INFORMATION		LEGAL PROPERTY DESCRIPTION						
COMMUNITY	VILLAGE OF MORRISTOWN, ST. LAWRENCE COUNTY, NEW YORK	A portion of Lots 1 and 2, Wadhams Park, as described in the NY Deed-Warranty with Lien Covenant, recorded as Instrument No. R-1998-11190039, in Liber 1119, Page 40, in the Office of the County Clerk, St. Lawrence County, New York (TMN: 83.033-1-15.1)						
AFFECTED MAP PANEL	NUMBER: 3616570001B DATE: 12/2/1980							
FLOODING SOURCE: ST. LAWRENCE RIVER		APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 44.693, -76.647 SOURCE OF LAT & LONG: ESRI: FEMA GEOCODE/GOOGLE MAPS DATUM: NAD 83						
DETERMINATION								
LOT	BLOCK/SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NGVD 29)	LOWEST ADJACENT GRADE ELEVATION (NGVD 29)	LOWEST LOT ELEVATION (NGVD 29)
1-2	--	Wadhams Park	201 Riverview Drive	Structure	C	248.7 feet	251.5 feet	--
Special Flood Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).								
ADDITIONAL CONSIDERATIONS (Please refer to the appropriate section on Attachment 1 for the additional considerations listed below.) PORTIONS REMAIN IN THE SFHA ZONE A								
This document provides the Federal Emergency Management Agency's determination regarding a request for a Letter of Map Amendment for the property described above. Using the information submitted and the effective National Flood Insurance Program (NFIP) map, we have determined that the structure(s) on the property(ies) is/are not located in the SFHA, an area inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood). This document amends the effective NFIP map to remove the subject property from the SFHA located on the effective NFIP map; therefore, the Federal mandatory flood insurance requirement does not apply. However, the lender has the option to continue the flood insurance requirement to protect its financial risk on the loan. A Preferred Risk Policy (PRP) is available for buildings located outside the SFHA. Information about the PRP and how one can apply is enclosed.								
This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, LOMC Clearinghouse, 6730 Santa Barbara Court, Elkridge, MD 21075.								
Kevin C. Long, Acting Chief Engineering Management Branch Mitigation Directorate								

Figure 2.71: Water Levels

Water Levels

GAUGE	Daily Data (1960-2018)				Agencies
	Max		Min		
	(m, IGLD-85)	(ft)	(m, IGLD-85)	(ft)	
Kingston	75.85	248.79	73.73	241.83	OPG & CHS
Ogdensburg	75.53	247.74	73.41	240.78	NYPA & NOAA
Cardinal	75.08	246.26	73.02	239.51	OPG
Iroquois HW	75.23	246.75	72.51	237.83	OPG
Iroquois TW	75.23	246.75	72.44	237.60	OPG & CHS
Waddington	74.35	243.87	71.73	235.27	NYPA
Morrisburg	74.37	243.93	71.60	234.85	OPG
Long Sault SS	74.25	243.54	71.07	233.11	NYPA
Moses HW	74.21	243.41	70.89	232.52	NYPA
Saunders HW	74.21	243.41	70.91	232.58	OPG
Moses TW	49.25	161.54	47.20	154.82	NYPA
Saunders TW	49.01	160.75	47.07	154.39	OPG
International TW	49.20	161.38	47.17	154.72	OPG

OPG = Ontario Power Generation

CHS = Canadian Hydrographic Service

*NYPA's value

NYPA = New York Power Authority

Canadian gauges

NOAA = National Oceanic & Atmospheric Administration

U.S. Gauges

HW = headwater

TW = tailwater

NOAA's GAUGE	Daily Data (POR varies-see below)				Agency
	Max		Min		
	(m, IGLD-85)		(m, IGLD-85)		
Cape Vincent	75.85 (1 Jun 2017)	248.79	74.15 (14 Jan 1999)	243.21	NOAA
Alexandria Bay	75.69 (15 May 2017)	248.26	74.02 (30 Nov 2012)	242.79	NOAA
Ogdensburg	75.59 (9 Jun 1952)**	247.94	73.41 (4 Dec 1964)	240.78	NOAA

** 75.54 (8 May 2017)

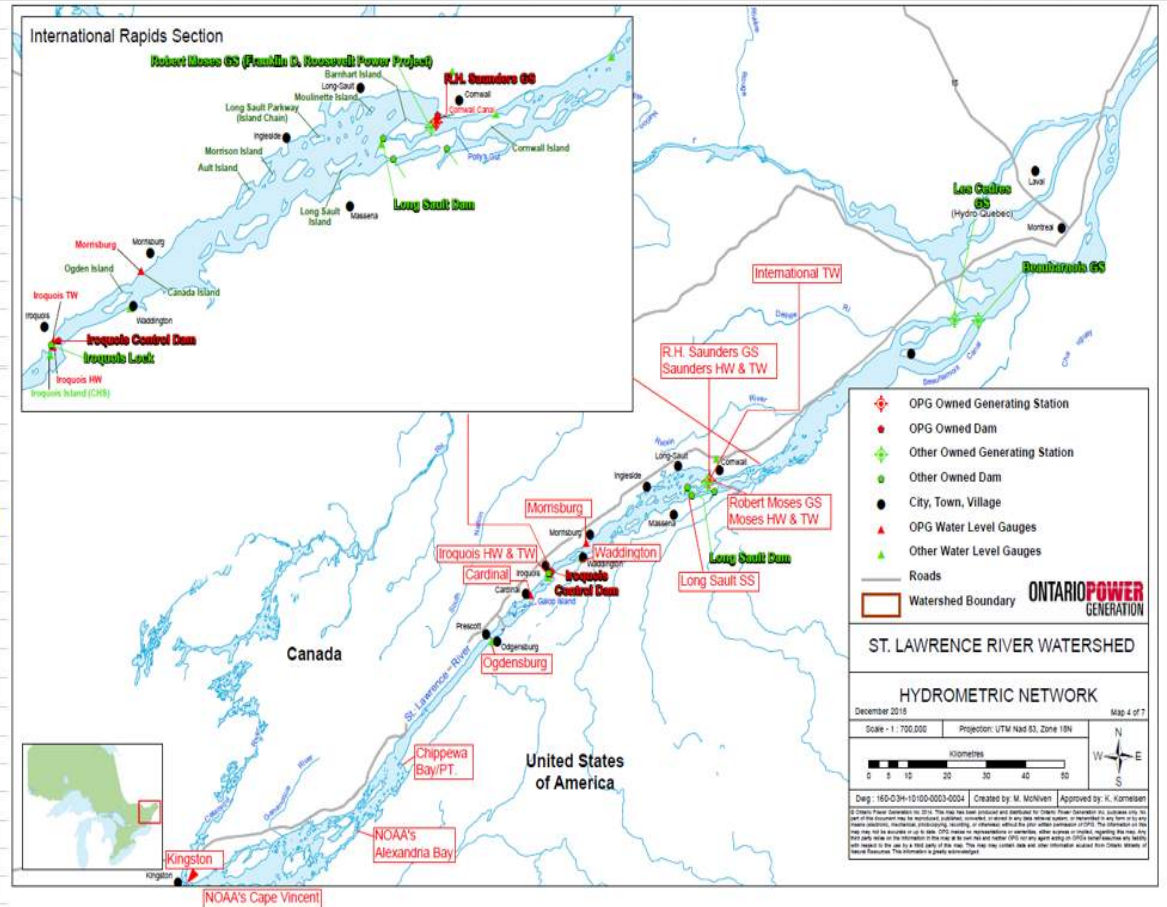
For NOAA's gauge: Periods of Record (POR)

Cape Vincent 14-May-1982 through 30-Nov-2018

Alexandria Bay 1-Jun-1983 through 30-Nov-2018

Ogdensburg 1-Jun-1914 through 30-Nov-2018***

*** (data unavailable from 1-Nov-1914 through 31-May-1934)



Legend

- OPG Owned Generating Station
- OPG Owned Dam
- Other Owned Generating Station
- Other Owned Dam
- City, Town, Village
- OPG Water Level Gauges
- Other Water Level Gauges
- Roads
- Watershed Boundary

ONTARIO POWER GENERATION

ST. LAWRENCE RIVER WATERSHED

HYDROMETRIC NETWORK

December 2018 Map 4 of 7

Scale - 1:750,000 Projection: UTM Nad 83, Zone 18N

0 10 20 30 40 50 Kilometres

0 10 20 30 40 50 Miles

Diag: 160-03H-10100-0003-0004 Created by: M. McEwen Approved by: K. Karmelien

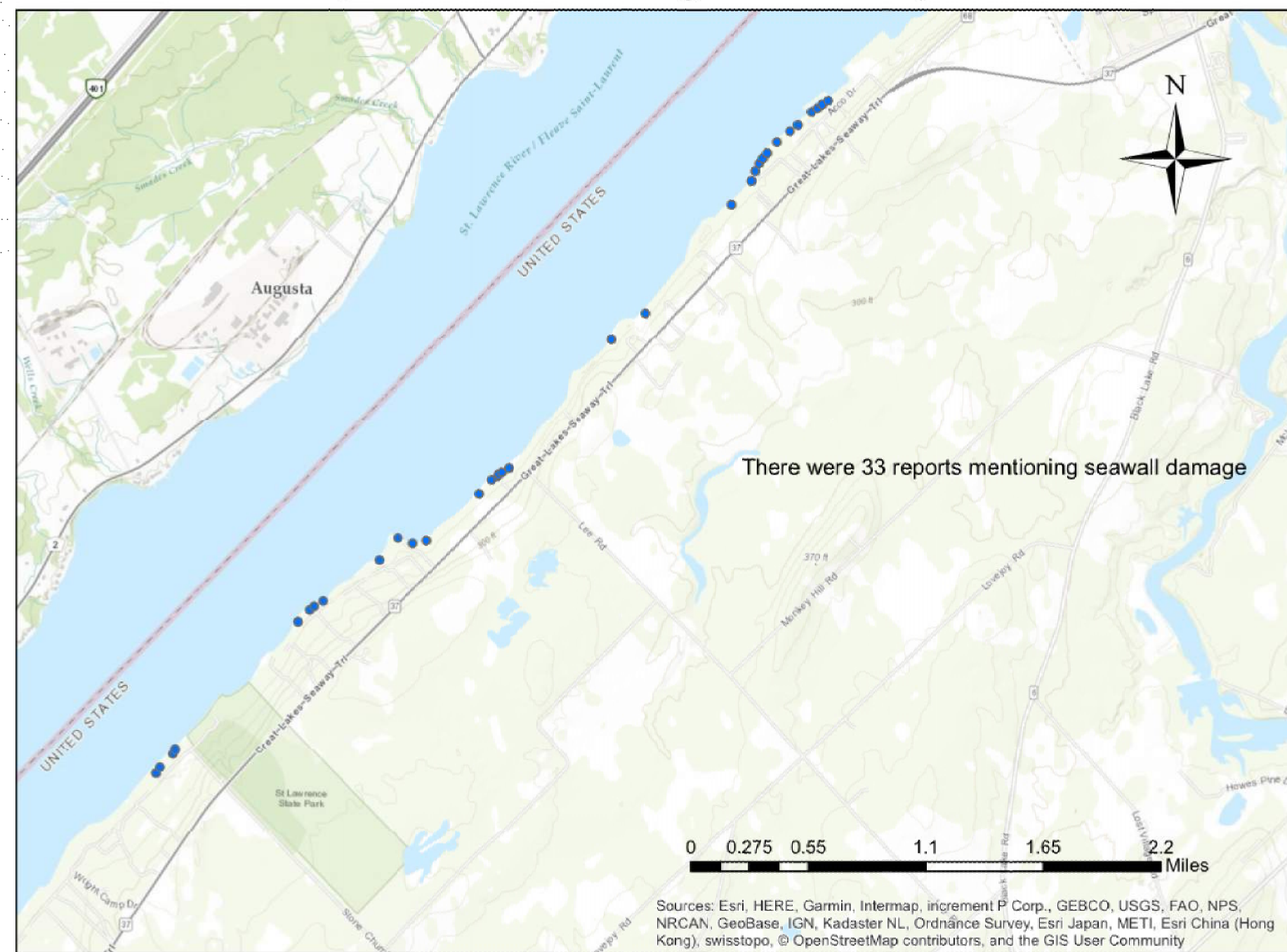
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Figure 2.72: Proposed Floodplain
Protection Overlay District

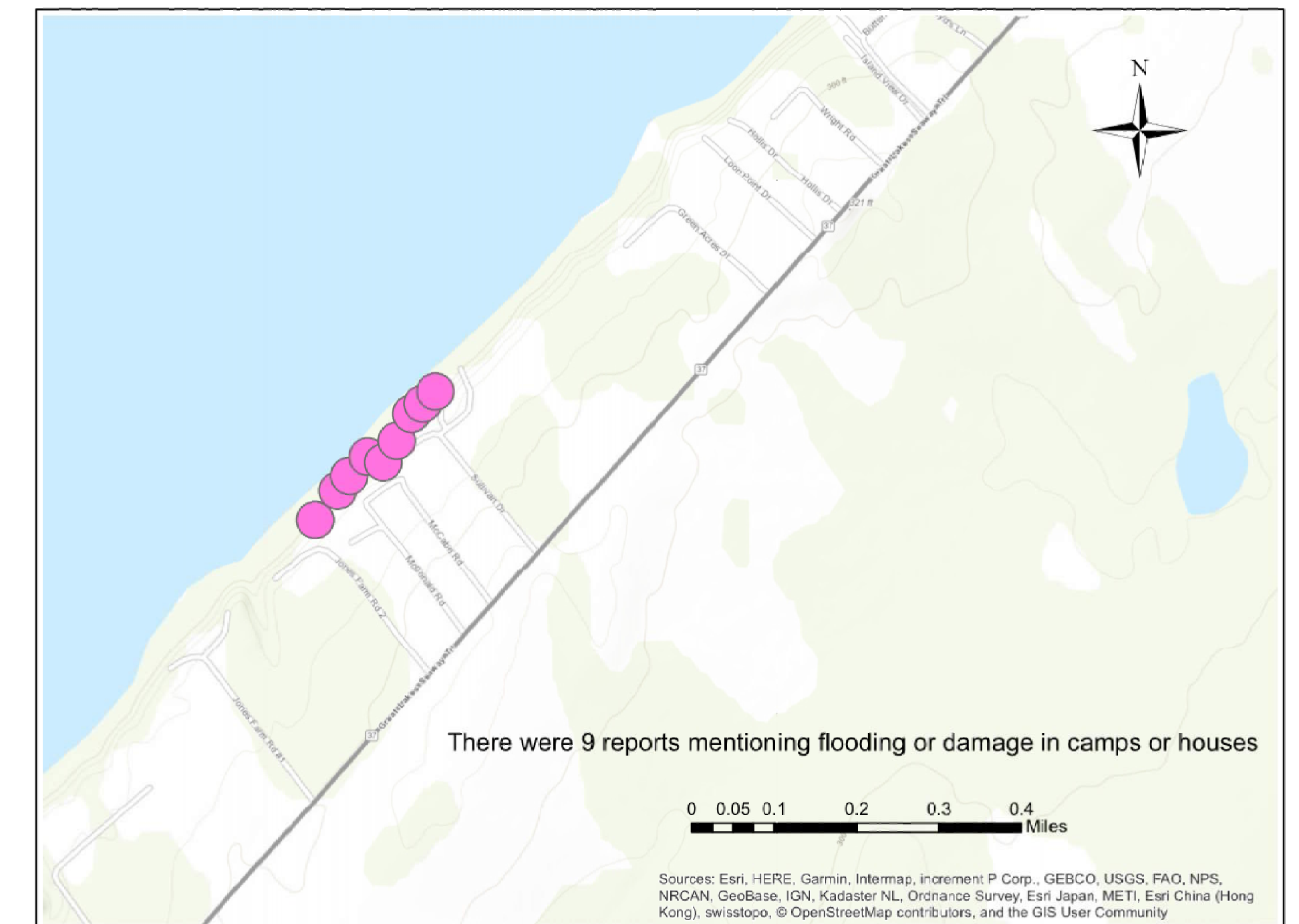
Floodplain Protection Overlay District



Reported Seawall Damage 2017- Oswegatchie



Reports of Camp/House Flooding or Damage 2017- Town of Lisbon



AREAS INUNDATED AT ELEVATION 246-252

39,000 19,500 0 39,000 Feet