

9.37 SPECIAL PURPOSE DISTRICT – ONONDAGA COUNTY WATER AUTHORITY

This section presents the jurisdictional annex for the Onondaga County Water Authority.

A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
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B.) DISTRICT PROFILE

The Onondaga County Water Authority is a public benefit corporation created by the New York State Legislature and has the responsibility of supplying and selling potable water in Onondaga, Oswego, and Madison and Oneida Counties. OCWA serves about 340,000 people primarily in the suburban areas surrounding the City of Syracuse. The Authority currently has a staff of 128 employees. The Authority’s mode of operation is from user fees collected from the more than 91,000 customers.

The Water Authority operates a treatment plant in Marcellus, which filters and chlorinates an average of 17 MGD of Otisco Lake water. Another 21 MGD of potable filtered water is purchased from the Metropolitan Water Board, an Onondaga County agency.

The Otisco Lake system operates 11 pump stations, and 15 tanks with a total of 19.25 MG of storage. Otisco Lake water flows by gravity through 20, 24, 30, and 36-inch mains from the treatment plant to a 10 million gallon reservoir in Fairmount. Two pump stations: East Hill in Marcellus, and Howlett Hill near Martisco, pump 1.4 MGD from these mains to the Onondaga Hill, Howlett Hill, and Taunton areas. The Camillus Consolidated Water District is supplied 1.8 MGD wholesale from the transmission mains. Warners, Solvay, and Westvale stations pump 2.0 MGD from the transmission mains, which run east through Solvay from Fairmount. Lakeland and parts of Solvay and Westvale are supplied by gravity from these mains. Two 24” mains then run along the south shore of Onondaga Lake to supply the Park St. and Wolf St. pump stations with 6.8 MGD. Park St. pumps into the Liverpool and Clay areas. Wolf St. supplies Mattydale, North Syracuse, and east to parts of the Town of Dewitt.

OCWA serves east to Chittenango, Canastota, Sylvan Beach and the town of Vienna, and west into Fayetteville from this main. Manlius and Pompey are supplied from OCWA’s Salt Springs pump station, with small booster stations at Academy Hill and Pompey Pines.

Connections along Western Branch supply Van Buren, North Geddes, Radisson, West Phoenix, Lysander, and Clay. The major consumer is Anheuser Busch at 4.4 MGD. Controllable connections on Central Branch supply Clay and Liverpool. The 6th North St. connection is capable of supplying Park St. and Wolf St. pump stations.

MWB’s Southern Branch supplies OCWA with City of Syracuse water (from Skaneateles Lake) to OCWA’s Nob Hill connections, which serve the Southwood and Jamesville areas.

The Westhill pump station and tank supply Skaneateles Lake water from the City’s 30” main to a development in the Ike Dixon Rd. area of the town of Camillus.



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

1.) Area Served: The OCWA services parts of Onondaga, Madison, Oneida and Oswego counties (see Section C). Within Onondaga County, the OCWA serves the following jurisdictions (~1,879 sq. mi.):

TOWNS / CITIES:	WATER SOURCE:	VILLAGES:	WATER SOURCE:
Camillus	Otisco / Skaneateles	Baldwinsville	Ontario ***
Cicero	Otisco / Ontario	Camillus	Otisco
Clay	Otisco / Ontario	E. Syracuse	Otisco / Ontario
Dewitt	Otisco / Ontario / Skaneateles	Fayetteville	Ontario
Geddes	Otisco / Ontario / Skaneateles	Liverpool	Otisco / Ontario
LaFayette	Ontario	Manlius	Ontario
Lysander	Ontario	Marcellus	Otisco ***
Manlius	Ontario / Skyridge Wells	Minoa	Otisco / Ontario
Marcellus	Otisco	N. Syracuse	Otisco / Ontario
Onondaga	Otisco / Skaneateles	Solvay	Otisco
Otisco	Otisco		
Pompey	Ontario		*** Emergency Connection Only
Salina	Otisco / Ontario		
Spafford	Otisco		
Syracuse	Otisco / Ontario ***		
Tully	Tully Valley Springs		
Van Buren	Otisco / Ontario		

2.) Population Served: ~ 340,000 people primarily in the suburban areas surrounding the City of Syracuse.

3.) Land Area Owned: ~708 acres

4.) List of Critical Facilities, Infrastructure and Equipment: Table 1 provides an inventory of all OCWA critical facilities, infrastructure and equipment. Those critical facilities within Onondaga County are highlighted in yellow. Further, those Onondaga County OCWA facilities considered vulnerable to either high wind activity or flooding (due to heavy rains, excessive snow melt or dam failure) are identified.

Miles of Main		1,773
Hydrants in Service		1,149
Metered Connections		89,806
Residential	84,652	
Commercial	4,995	
Industrial	48	
Wholesale	39	
Hydrant	72	
Storage Tanks In Service		44
Storage Capacity (Million Gallons)		50.5
Pump Stations In Service		36

5.) Value of Critical Facilities, Infrastructure and Equipment: Gross Value \$252,260,194
 Net Value (after depreciation) \$178,432,562



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

TABLE 1: OCWA FACILITIES (OCTOBER 1, 2009) FACILITIES HIGHLIGHTED IN YELLOW CONSIDERED TO BE CRITICAL FACILITIES

Facility Name	Facility Location	Vulnerable Facility	Town/Village	Electric Power	Gas	Phone	Generator	Other Utility
OCWA Headquarters								
Northern Concourse	200 Northern Concourse	Yes	Salina	1	1	3	Y	N
Large Pump Stations								
East Hill P.S.	South side of Route 175 800' west of Rt 174		Marcellus	2	N	4	Y	N
Howlett Hill P.S.	Lyons Rd Ext, approx 300' south of Lyons Rd		Camillus	1	N	N	Y	N
Park St P.S.	Onondaga Lake Pkwy 1000' North of Rt 81		Salina	1	N	N	N	N
Salt Springs P.S.	Salts Springs Rd 400' SW of N Eagle Village Road		Manlius	1	N	N	Y	N
Solvay P.S.	Milton Ave. at Bailey Rd.		Geddes	10	N	N	Y	N
Wolf St P.S.	East side of Wolf Street 800' north of Dippold Ave		Salina	1	N	N	N	N
Thurber St. P.S.	Thurber St. east of Briton Ave.		Syracuse	1	N	N	11	N
Seneca P.S.	Route 173 east of Briton Ave.		Onondaga	1	N	N	11	N
Small Pump Stations								
Abbey P.S.	Abbey tank access road.		Onondaga	1	1	N	Y	N
Academy Hill P.S.	8135 E Seneca Turnpike		Manlius	1	1	N	Y	N
Caughdenoy P.S.	County Route 12 west of County Route 33		Hastings	1	1	N	Y	N
Coye Rd P.S.	East side of Coye Rd 100' North of Gordon Cooper Rd		Dewitt	1	N	4	N	N
East Syracuse P.S.	NYS Route 290 next to Ricco's Restaurant		Dewitt	1	N	N	N	N
Glover Rd P.S.	North side of Glover Rd 300' west of Kelly Rd		Marcellus	2	N	4	N	N
Granby P.S.	Pendergast Rd.		Granby	1	N	N	Y	N
Green Hills P.S.	5901 S Salina St		Onondaga	1	N	3	N	N
Groiler Rd P.S.	Intersection of Groiler Rd and Route 173		Onondaga	1	N	N	N	N
Hastings P.S.	Corporate Park Dr across from 46 (Ace Hardware)		Hastings	1	9	N	N	N
Lakeland P.S.	Bridge St. 1,200' north of Milton Ave.		Geddes	1	N	N	N	N
Limeledge P.S.	Under Construction		Marcellus	N	N	N	Y	N
Makyes Rd P.S.	West side of Makyes Rd 400' south of Fawn Hill		Onondaga	1	1	N	N	N
Marcellus Village P.S.	Under Construction		Marcellus	N	N	N	Y	N
North Bay P.S.	Corner of Rt 49 and Mulholland Rd		Vienna	1	N	N	N	N
Otisco Valley	Route 174 near the OCWA Water Treatment Plant		Marcellus	2	2	N	Y	N



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

Facility Name	Facility Location	Vulnerable Facility	Town/Village	Electric Power	Gas	Phone	Generator	Other Utility
Pompey Pines P.S.	West side of Pompey Ctr Rd 1000' south of Pompey Pines Dr		Pompey	1	N	N	N	N
Salina Gardens P.S.	North side of Court St. west of Railroad Overpass.		Salina	1	N	N	N	N
<i>Scenic Meadows P.S.</i>	<i>Raspberry Lane north of Scenic Drive</i>		Camillus	1	N	N	Y	N
Skyridge Upper Well	Horsehoe Lane 800' east of Gulf Road		Manlius	1	N	N	N	N
Skyridge Lower Well	Gulf Rd approx 1400' South of Horseshoe Lane		Manlius	1	N	N	N	N
South Ave P.S.	600' Northeast of Broad Rd on South Ave		Onondaga	1	N	3	N	N
<i>Vienna P.S.</i>	<i>Route 13 - Sylvan Beach tank access road</i>		Vienna	1	1	N	Y	N
<i>Volney Airport P.S.</i>	<i>Route 176 south of Gillespie Rd.</i>		Volney	1	N	N	N	N
Volney P.S.	<i>Vacuum Cooler Rd.</i>		Volney	1	N	N	N	N
Warners Rd P.S.	South side of Warners Road 110' west of Pottery Rd		Camillus	1	1	N	Y	N
Westhill P.S.	West side of Cobbler Way 400' south of Route 5		Camillus	1	N	N	N	N
Westvale P.S.	North side of Route 5 1100' west of N Terry Road		Geddes	1	N	N	N	N
<u>Elevated Tanks</u>								
Brewerton	West side of Route 11 250' North of Bartel Road		Cicero	1	N	N	N	6
Central Square	Rt 49 west of Rt 11		Hastings	1	N	N	N	6
Clay	7250 Henry Clay Blvd		Clay	1	N	N	N	N
<i>Granby</i>	<i>Peat Bed Rd off County Route 8</i>		Granby	1	N	N	N	N
Hastings	Corporate Park Dr across from 46 (Ace Hardware)		Hastings	1	N	4	N	N
Liverpool	401 Alder St		Liverpool	1	N	N	Y	6,8
<i>Makyes</i>	<i>Makyes Rd.</i>		Onondaga	1	N	N	N	N
North Syracuse	106 Tuller Rd		N Syracuse	1	N	N	N	5
<i>Pompey Pines</i>	<i>Indian Hill - tank site</i>		Pompey	1	N	N	N	N
<i>Thompson Road</i>	<i>James Street</i>		Dewitt	1	N	N	N	N
<i>Van Buren</i>	<i>Winchell Rd.</i>		Van Buren	1	N	N	N	N
<i>Vienna</i>	<i>Yager Rd. west of NYS Route 13</i>		Vienna	1	9	N	Y	N
<i>Volney Airport</i>	<i>Howard Rd east of County Route 176</i>		Volney	1	N	N	N	N
Volney	Manor Dr @ Seneca Hill Medical Center		Volney	1	N	N	N	N



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

Facility Name	Facility Location	Vulnerable Facility	Town/Village	Electric Power	Gas	Phone	Generator	Other Utility
Ground Tanks								
Abbey Road	West side of Abbey Road 1200' south of Route 174		Onondaga	1	N	N	N	N
Canastota	1000' east of Oxbow Rd on ROW		Lenox	1	N	N	N	N
Fairmount (10 MG Steel Tank)	313 Hinsdale Rd		Camillus	1	N	3	N	N
Howlett Hill	South end of City View Dr		Onondaga	1	N	N	N	N
Indian Hill	500' North of Indian Hill Rd on Pompey Center Rd		Pompey	1	N	N	N	N
Meadowridge	Approx 200' north of Rt 173 on Meadowridge Dr.		Manlius	1	N	N	N	N
Salt Springs	Salts Springs Rd 400' SW of N Eagle Village Road		Manlius	1	N	N	N	Y
Seneca Turnpike (2 Tanks)	Route 173 east of Briton Ave.		Onondaga	1	N	N	N	N
Sentinel Heights (2 Tanks)	Sentinel Heights Rd.		Onondaga	1	N	N	N	N
Southwood	South of Derringer Dr		Onondaga	1	N	N	N	N
Warners	Behind Warners Road		Camillus	1	N	N	N	N
Westhill	Ike Dixon Rd		Camillus	1	N	N	N	N
Westvale	West end of Daleview Drive		Geddes	1	N	N	N	N
Water Treatment Plant (2 Tanks)	Clearwells	Yes	Marcellus	2	N	N	N	N
Water Treatment Plant	Backwash	Yes	Marcellus	2	N	N	N	N
Standpipes								
Coye Rd	800' west of Lafayette & Onondaga Rd		Dewitt	1	N	3	N	N
Eagleview	South Eagle Village Rd, approx 3500' South of Rt 173		Manlius	1	N	3	N	3
East Hill	5701 East Seneca Trpk		Marcellus	1	N	4-Jan	N	N
Linda Rd	West of 4733 Linda Dr		Onondaga	1	N	N	N	8
Otisco Valley	Kenyon Rd		Otisco	2	N	N	N	N
Skyridge	Horshoe Lane 400' East of Gulf Rd		Manlius	1	N	N	N	N
Solvay	North end of Daleview Drive		Solvay	1	N	3	N	N
Sylvan Beach	600' east of NYS Rt 13 on the North side of Rt 49		Vienna	1	N	N	N	N



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

Facility Name	Facility Location	Vulnerable Facility	Town/Village	Electric Power	Gas	Phone	Generator	Other Utility
Tug Hill	3600' west of NYS Route 104 on Tug Hill Rd		Oswego	1	N	N	N	N
Van Buren	South of O'Brien Rd 100' west of Hosmer Drive		Van Buren	1	N	3	N	N
Reservoirs								
Chittenango(underground)	Between 1355 & 1315 Salt Springs Rd		Sullivan	N	N	3	N	N
Fairmount (Back up open Reservoir)	313 Hinsdale Rd		Camillus	1	N	3	N	N
OCC(underground)	OCC 4941 Onondaga Rd		Onondaga	1	N	N	N	N
Chlorination Facilities								
<i>Abbey P.S.</i>	<i>Abbey tank access road.</i>		Onondaga	Y	N	N	N	N
<i>Caughdenoy P.S.</i>	<i>County Route 12 west of County Route 33</i>		Hastings	N	Y	N	Y	N
<i>Granby P.S.</i>	<i>Peat Bed Rd off County Route 8</i>		Granby	1	N	N	N	N
<i>Hastings P.S.</i>	<i>Corporate Park Dr across from 46 (Ace Hardware)</i>		Hastings	1	9	N	N	N
Lakeport	North side of Route 31 100' east of School St		Sullivan	1	N	3	N	Y
North Bay,Sylvan Beach	Northeast corner of Rt 49 and Mulholland Rd		Vienna	1	N	N	N	N
<i>Skyridge Upper Well</i>	<i>Horsehoe Lane 800' east of Gulf Road</i>		Manlius	1	N	N	N	N
<i>Skyridge Lower Well</i>	<i>Gulf Rd approx 1400' South of Horseshoe Lane</i>		Manlius	1	N	N	N	N
Phosphate Feed Facilities								
Farrell Road	North side of Farrell Rd 800' east of Route 48		Geddes	1	N	N	N	N
Kirkville Road (OOS)	South side of Kirkville Rd 1600' East of 481 off ramp		Dewitt	1	N	N	N	N
Control Valves								
<i>Abbey Rd. PRV</i>	<i>Abbey Rd. south of Norton Rd.</i>		Onondaga	N	N	N	N	N
<i>Alverna</i>	<i>Private Rd. near Eastern Reservoir</i>		Manlius	N	N	N	N	N
<i>Avery Ave. - PRV</i>	<i>Avery Ave. at Yale Ave.</i>		Geddes	N	N	N	N	N
Bartell Rd (2)	<i>Bartell Rd on the east side of Route 81</i>		Hastings	N	N	N	N	N
<i>Belle Isle - PRV</i>	<i>Belle Isle Rd north of Warners Rd.</i>		Camillus	N	N	N	N	N



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

Facility Name	Facility Location	Vulnerable Facility	Town/Village	Electric Power	Gas	Phone	Generator	Other Utility
Bear Road	South east corner of Bear & Buckley Roads		Clay	1	N	N	N	N
<i>Bolivar Rd. - PRV</i>	<i>Bolivar Rd. Elementary School</i>		Sullivan	N	N	N	N	N
<i>Breed Rd. - PRV</i>	<i>Breed Rd. south of Canal Rd.</i>		Camillus	N	N	N	N	N
Briar Brooke	<i>Brior Brook Run</i>		Manlius	Y	N	N	N	N
Buckley III	<i>Buckley Rd on the north side of the NYS Thruway</i>		Salina	Y	N	N	N	N
<i>Buckley North</i>	<i>Buckley Rd east of Henry Clay Blvd.</i>		Clay	Y	N	N	N	N
<i>Buckley South</i>	<i>Buckley Rd. south of the Thruway</i>		Salina	Y	N	N	N	N
<i>Burdick St. - PRV</i>	<i>Burdick St. north of Kennedy Ln.</i>		Manlius	N	N	N	N	N
Butternut III	West side of Butternut Drive 700' South of Route 290		Dewitt	1	N	3	N	N
<i>Butternut South</i>	<i>Off Route 290 on the ROW</i>		Manlius	Y	N	N	N	N
Buxton Woods	<i>Sherwood Dr. north of Buxton Dr.</i>		Onondaga	N	N	N	N	N
Caughdenoy	<i>Caughdenoy Rd. south of NYS Route 31</i>		Clay	N	N	N	N	N
Cedarvale	South east corner of Kasson Rd & Howlett Hill Rd		Onondaga	1	N	N	N	N
Cemetery Rd (Oswego)	<i>Cemetary Rd. NW of Bunker Hill Rd.</i>		Oswego	N	N	N	N	N
<i>Cemetery PRV - S. Onon</i>	<i>Makyas Rd north of NYS Route 80</i>		Onondaga	N	N	N	N	N
<i>Chittenango Control Bld</i>	<i>West side of Fly Rd 400' North of Clay Hill Road</i>		Sullivan	1	N	3	N	N
<i>Churchill La (2)</i>	<i>Churchill Ln south of Cahill Rd.</i>		Manlius	N	N	N	N	N
Control Valves (Continued)								
Cicero								
<i>Cole Rd. PRV</i>	<i>Cole Rd. east of Makyas Rd.</i>		Onondaga	N	N	N	N	N
<i>Community Hospital</i>	<i>NYS Route 173 and Broad Rd</i>		Onondaga	N	N	N	N	N
<i>Corporal Welch - PRV</i>	<i>Corporal Welch Rd south of Perry Rd</i>		Onondaga	N	N	N	N	N
<i>Court St. - PRV</i>	<i>Court St at the City of Syracuse</i>		Salina	N	N	N	N	N
<i>Duguid Rd.</i>	<i>Duguid Rd. 2,000' south of NYS Route 5</i>		Manlius	N	N	N	N	N
<i>Eight J</i>	<i>Milton Ave. west of Knowel Rd</i>		Camillus	Y	N	N	N	N
<i>Excalibur Rd.</i>	<i>Excalibur Rd west of Cleveland Rd.</i>		Onondaga	N	N	N	N	N
<i>Falls Rd - PRV</i>	<i>Falls Rd & Howlett Hill Rd.</i>		Marcellus	N	N	N	N	N



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

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Farrell Road	North side of Farrell Rd 800' east of Route 48		Geddes	1	N	N	N	N
Fly Road	East side of Fly Road 800' North of Clay Hill Road		Sullivan	1	N	N	N	N
Hastings C.V.	NYS Route 11 at Fort Brewerton		Hastings	Y	N	N	N	N
Hinsdale Road	Southwest corner of Hinsdale Road & Milton Ave		Camillus	N	N	N	N	N
Hoag Ln - PRV	Hoag & Churchill Ln		Manlius	N	N	N	N	N
Hunt Ln - PRV	NYS Route 92 & Hunt Ln		Manlius	N	N	N	N	N
Kasson Road	Southwest corner of Route 175 & Kasson Road		Camillus	1	N	N	N	N
Kelly's Corners - PRV	Kasson Rd. north of Howlett Hill Rd		Onondaga	N	N	N	N	N
Lakeport	North side of Route 31 100' east of School St		Sullivan	1	N	N	N	N
Main St. - PRV	Main & James St.		Lenox	N	N	N	N	N
Makyes Rd. PRV	Makyes Rd north of Abbey Rd		Onondaga	N	N	N	N	N
Maple Dr. - PRV	Maple Dr east of Timber Ridge Dr.		Camillus	N	N	N	N	N
McDonald Rd. - PRV	McDonald & Ball Rd.		Onondaga	N	N	N	N	N
McKinley	MCKinley Rd. east of Pardee Rd		Cicero	N	N	N	N	N
Munro Rd. - PRV	Munro Rd. south of Lyons Rd.		Camillus	N	N	N	N	N
Mott Rd	Mott Rd. at the Mott Rd. School		Manlius	N	N	N	N	N
Mud Mill	200' north of Mud Mill Rd on west side of Rt 11		Cicero	1	N	N	N	N
Nixon C.V.	Nixon Park Dr. behind Onondaga DOT		Onondaga	Y	N	N	N	N
Nob Hill	South side of 173 east of Nob Hill Apartments		Onondaga	1	N	N	N	N
OCC	North side of Route 173 800' west of Iroquois Ave		Onondaga	1	N	N	N	N
Old Rout 49 - PRV	ONYS Route 49 & Old Route 49		Vienna	N	N	N	N	N
Onondaga Blvd. - PRV	Onondage Blvd. east of Onondaga Rd.		Onondaga	N	N	N	N	N
Onondaga Road	North side of Howlett Hill Road 300' west of Route 173		Onondaga	N	N	N	N	N
Owl Wire	North east corner of 3127 Seneca Tpk		Lenox	1	N	N	N	N
Pardee	Pardee Rd. south of Carmenica Dr		Cicero	N	N	N	N	N
Park St	Park St. P.S.		Salina	N	N	N	N	N
Peterboro St. - PRV	Peterboro St. south of the railroad overpass		Lenox	N	N	N	N	N
Pleasant St	375' North of Rt 173 on the west side Pleasant St		Manlius	1	N	3	N	N



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

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Rathurburn Rd. - PRV	Oswego Meter Pit (Maintained by MWB)		Oswego	N	N	N	N	N
Rockwell Pit #1	Rockwell Rd. on the east side of I-81		Onondaga	N	N	N	N	N
Rockwell Pit #2	Rockwell Rd. south of Rockwell Ln.		Onondaga	Y	N	N	N	N
Route 104 Oswego	Route 104 south of Crestwood Dr.		Oswego	N	N	N	N	N
Route 5 - Fayetteville - PRV	Route 5 west of Warren St.		Manlius	N	N	N	N	N
Control Valves (Continued)								
Route 5 - Lyndon	Route 5 at the Dewitt Town Line		Manlius	N	N	N	N	N
Schuyler Rd	Schuyler Rd on the Transmission Main ROW		Marcellus	N	N	N	N	N
Seal Rd.- PRV (OOS)	NYS Route 174 south of Seal Rd.		Marcellus	N	N	N	N	N
Seneca Beach	East side of Maple Road 200' North of Village Blvd		Van Buren	1	N	3	N	N
Signal Hill - PRV	NYS Route 5 & White Heron Circle		Manlius	N	N	N	N	N
Sixth North St.	Sixth North St. west of Hiawatha Blvd.		Salina	Y	N	N	N	N
Solvay Paperboard - PRV	Milton Ave. west of Orchard Rd		Geddes	N	N	N	N	N
Soule Rd. - PRV (OOS)	Soule Rd ant the railroad tracks		Clay	N	N	N	N	N
South Bay	South Bay Rd. south of Cobblestone Dr.		Clay	N	N	N	N	N
Taft Rd.	Taft Rd sout of Bear Rd.		Clay	N	N	N	N	N
Teal Ave. - PRV	Teal Ave. North of Grant Blvd.		Salina	N	N	N	N	N
Tanner Rd. - PRV	Makyes Rd. north of Tanner Rd.		Onondaga	N	N	N	N	N
Thompson Rd.	Thompson Rd south of NYS Route 104		Oswego	N	N	N	N	N
Tuscarora	South west corner of Murray Dr & Tuscarora		Sullivan	1	N	3	N	N
Unity Mutual - PRV	NYS Route 173 at the OCC Excel Center		Onondaga	Y	N	N	N	N
Van Duyn	NYS Route 173 west off Loop Rd.		Onondaga	Y	N	N	N	N
West Taft Road	North side of West Taft Road 300' west of Bear Road		Clay	1	N	N	N	N
Western Lights. - PRV	Onondaga Blvd. west of Velasko Rd.		Geddes	N	N	N	N	N
Meter Pits								
Alverna Heights -Moved to Control Valves	1600' South of Route 290 on Private Drive		Manlius	1	N	N	N	N
Bamerick Road	SW corner of Bammerick and Apulia Roads		Dewitt	N	N	N	N	N
Beach Rd.	Beach Rd. 700' west of Birch Rd.		Geddes	N	N	N	N	N



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Chittenango Control Bld	West side of Fly Rd 400' North of Clay Hill Road		Sullivan	1	N	3	N	N
Green Lakes Road	East side of Kinderhook Road 1300' North of Green Lakes Rd		Manlius	N	N	N	N	N
Hopkins Road	100' East of Henry Clay Blvd on Hopkins Rd		Salina	1	N	N	N	N
<i>Lafayette Rd. - MWB Pit</i>	<i>Lafayette Rd. at Nationa Grid Powerlines</i>		Lafayette	N	N	N	N	N
<i>Lemoyne - Control Valve</i>	<i>Old Liverpool Rd at Lemoyne Inn</i>		Salina	Y	N	N	N	N
Manlius Center Road	Entrance Rd on Rt 290 approx 500' E of Butternut Dr ext		Manlius	1	N	3	N	N
Minoa	East side of Minoa Road 1100' north of Route 257		Manlius	N	N	N	N	N
<i>Mott Road - Moved to Control Valve</i>	North side of Mott Road 150' east of Route 92		Manlius	1	N	N	N	N
Onondaga Road	North side of Howlett Hill Road 300' west of Route 173		Onondaga	N	N	N	N	N
Seneca Beach	East side of Maple Road 200' North of Village Blvd		Van Buren	1	N	N	N	N
<i>Dog Cemetery - (OOS)</i>	North side of Route 175 600' east of Country View Terrace		Onondaga	N	N	N	N	N
<i>Peck Road - (OOS)</i>	West side of Kirkville Road 300' north of Peck Road		Sullivan	N	N	N	N	N
<i>Split Rock - PRV Station</i>	South side of Split Rock Road 1400' east of Aztec Path		Onondaga	N	N	N	N	N
<i>Rathburn Rd.</i>	MWB Meter Pit		Oswego	N	N	N	N	N
Remote Facilities:								
Marcellus Water Treatment Plant	Lawrence Road	Yes	Marcellus	2	2	4	Y	N
Fairmount Distribution Maintenance Garage	Hinsdale Blvd		Camillus	1	1	Y	N	N
Canastota Distribution Maintenance Garage			Canastota	1	1	Y	N	N
Oswego Distribution Maintenance Garage	County Route 7		Oswego	1	1	Y	N	N
Transmission Mains	Otisco Lake intake to WTP & WTP to Solvay (20", 24" & 30")	Yes	Multiple	N	N	N	N	N
Otisco Lake Dam & Facilities		Yes	Marcellus	2	2	4	Y	N
Radio Repeater Site	North East Townline Road	Yes	Marcellus	2	N	N	Y	N



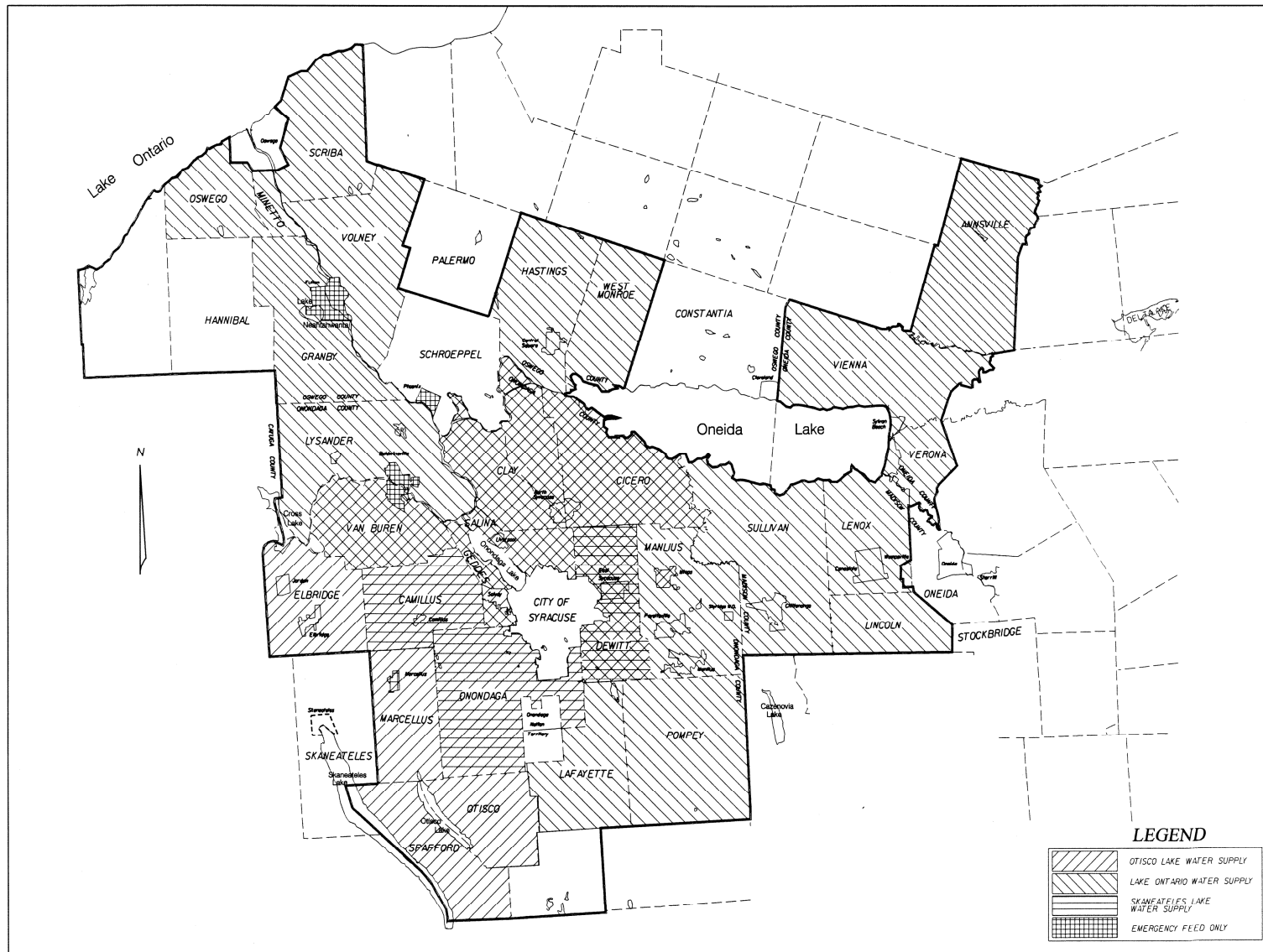
SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

Facility Name	Facility Location	Vulnerable Facility	Town/Village	Electric Power	Gas	Phone	Generator	Other Utility
KEY:	1 NIMO Propane	5 Sprint	9					
	2 NYSEG Electric	6 Cingular	10 Solvay					
	3 Telergy/Verizon pump	7 Spectrasite	11- Standby Direct Drive for single					
	4 Alltel	8 Cricket						

FACILITIES HIGHLIGHTED IN YELLOW CONSIDERED TO BE CRITICAL FACILITIES



C.) OUTLINE OF AREA SERVED



Source: Onondaga County Water Authority

D.) CURRENT AND ANTICIPATED SERVICE TRENDS

Current system growth has been running at a rate of 1% per year. Additional customer growth has been through the acquisition of existing water systems and the construction of new municipal systems that are subsequently leased to the Authority for operation and maintenance purposes. This trend is slowing, as the number of systems that can be practically served by the Authority has diminished greatly over the past 15 years.

E.) NATURAL HAZARD EVENT HISTORY SPECIFIC TO THE DISTRICT SERVICE AREA

Please refer to the Previous Occurrences and Losses section within the hazard profiles located in Section 5.4, Volume I.

F.) NATURAL HAZARD RISK RANKING

Rank #	Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a,c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
5	Earthquake	\$1,141,199,484	Rare	17	Low
3	Flood	\$1,914,229,000	Frequent	30	Medium
4	Ground Failure	Not available	Frequent	18	Low
1	Severe Storm	< \$500	Frequent	48	High
2	Severe Winter Storm	\$2,007,150,900	Frequent	48	High

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. High = Total hazard priority risk ranking score of 40 and above
Medium = Total hazard priority risk ranking of 20 - 39
Low = Total hazard risk ranking below 20
- c. The valuation of general building stock and loss estimates determined in Onondaga County were based on the default general building stock database provided in HAZUS-MH MR3 (RSMMeans 2006).
- d. Severe storm and severe winter storm hazard 500-year MRP loss estimate is structural value only; does not include the value of contents. For severe winter storm, the loss estimate is 5% of total general building stock value.
- e. Loss estimates for both structure and contents (500-year MRP for the flood hazard and 2,500-year MRP for the earthquake hazard).
- f. Approximately 47% of the County's general building stock is located within the landslide hazard area.
- g. Potential losses for severe storm are underestimated by HAZUS.

G.) EXISTING APPLICABLE HAZARD MITIGATION CODES, ORDINANCES OR POLICIES

H.) EXISTING APPLICABLE NATURAL HAZARDS MITIGATION ASSOCIATED PLANS AND/OR DOCUMENTS

I.) DISTRICT MITIGATION RELATED CLASSIFICATIONS Not applicable.

J.) PROPOSED HAZARD MITIGATION INITIATIVES

Initiative	Mitigation Initiative	Applies to New or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
OCWA-1a	Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.	Existing	Flood, Severe Storm	1-1, 1-2, 1-6; 2-5, 2-6; 3-2, 3-5, 6-1	OCWA with support from jurisdictions where facility or structure is located	High	FEMA Mitigation Grant Programs and OCWA and/or local jurisdiction match	Long-term DOF
OCWA-1b	Where appropriate, support purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for relocation based on cost-effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.	Existing	Flood, Severe Storm	1-1, 1-2, 1-6; 2-5, 2-6; 3-2, 3-5; 6-1	OCWA with support from jurisdictions where facility or structure is located	High	FEMA Mitigation Grant Programs and OCWA and/or local jurisdiction match	Long-term DOF
OCWA-2	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New & Existing	All Hazards	All Goals and Objectives	OCWA (through mitigation planning point of contacts)	Low	Local Budget, possibly FEMA Mitigation Grant Funding for 5-year update	Ongoing
OCWA-3	Continue to develop, enhance, and implement existing emergency plans.	New & Existing	All Hazards	1-4; 5-5; Goal 6 – All Objectives	OCWA Emergency Management with support from local and County OEMs and SEMO	Low - Medium	Local Budget	Ongoing
OCWA-4	Create/enhance/ maintain mutual aid agreements with neighboring communities.	New & Existing	All Hazards	3-3; 5-2, 5-3, 5-5, 5-6; 6-5, 6-6	OCWA Emergency Management with support from local	Low - Medium	OCWA, County and local budgets	Ongoing

SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

Initiative	Mitigation Initiative	Applies to New or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
					and County OEMs and SEMO			
OCWA-5	Support County-wide initiatives identified in Section 9.1 of the County Annex.	New & Existing	All Hazards	All Goals and Objectives	OCWA	Low – High (depending on specific initiative)	Dependent on specific initiative	Ongoing
OCWA-6	Create Inventory of OCWA Buildings – This will include risk and vulnerability information as applicable (typically including the elevation and construction type). However OCWA does not publish the majority of the information (mainly risk and vulnerability) for security purposes.	New	All Hazards	All Goals	OCWA	Low	OCWA, County and local budgets	Ongoing
OCWA-7	Otisco Lake Flood – Remove Lake Debris to address clean-up after a major storm incident. Ongoing maintenance typically removes branches and other small items. However after a major storm (for example the 2009 Labor Day storm) OCWA deals with a larger volume of branches, sometimes whole trees, and an occasional boat or two.	Existing	All Hazards	All Goals	OCWA	High	OCWA, County and local budgets	Ongoing
OCWA-8	Otisco Lake Level Operation Plan to develop written guidelines and possibly a software application that takes the historical data and all the variables into account to assist decision making and to ensure proper operation of the Lake level system in the future. Currently OCWA is using historical lake level data (50 year history available) with the goal of staying on the historical curve throughout the year, keeping in mind that the lake should be full on June 1 st of each year. OCWA currently also relies on the instinct and experience of our	New & Existing	All Hazards	All Goals	OCWA	High	OCWA, County and local budgets	Ongoing



SECTION 9.37: ONONDAGA COUNTY WATER AUTHORITY

	Water Plant Manager in maintaining the proper lake level in the absence of written guidelines.							
OCWA-9	Watershed Monitoring – Snow & Rain Levels. At the present, OCWA has a watershed monitoring program in place, but OCWA would like to expand the program to take more variables into account in the future. Currently factors including the number of people in the watershed, the number of farm animals, the amount of crop land, and pesticides, herbicides, fertilizers used are taken into account. In addition routine testing of residential septic systems around the lake is provided to ensure there is no septic effluent short-circuiting into the lake. OCWA would like to expand the program to take into account the more frequent and larger storms occurring (generally tied to global climate change by many experts, which may be the new “normal”). Accordingly OCWA plans to monitor other nutrients that could be making their way into the lake from further away than the contiguous properties on the lake shore. OCWA’s concern ties to overall water quality both during the short term event and the long term impact on overall water quality and the impact on OCWA water treatment plant operations.	New & Existing	All Hazards	All Goals	OCWA	Medium	OCWA, County and local budgets	Ongoing

Notes: DOF = Depending on Funding. FEMA = Federal Emergency Management Agency. Long = 5 years or greater. N/A = Not applicable. Short = 1 to 5 years. TBD = To be determined

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure?



G.) ANALYSIS OF MITIGATION ACTIONS

This table summarizes the participant’s mitigation actions by hazard of concern and the six mitigation types to illustrate that the Onondaga County Water Authority has selected a comprehensive range of actions/projects.

Hazard of Concern	Mitigation Type					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Earthquake	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-3, OCWA-4, OCWA-5	OCWA-2, OCWA-5
Flooding (riverine, flash, coastal and urban flooding)	OCWA-2, OCWA-4, OCWA-5	OCWA-1, OCWA-2, OCWA-5	OCWA-1, OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-3, OCWA-4, OCWA-5	OCWA-2, OCWA-5
Ground Failure	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-3, OCWA-4, OCWA-5	OCWA-2, OCWA-5
Severe Storms (windstorms, thunderstorms, hail, lightning and tornados)	OCWA-2, OCWA-4, OCWA-5	OCWA-1, OCWA-2, OCWA-5	OCWA-1, OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-3, OCWA-4, OCWA-5	OCWA-2, OCWA-5
Severe Winter Storm (heavy snow, blizzards, ice storms)	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-5	OCWA-2, OCWA-3, OCWA-4, OCWA-5	OCWA-2, OCWA-5

Notes:

- 1. Prevention:** Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- 2. Property Protection:** Actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- 3. Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
- 4. Natural Resource Protection:** Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- 5. Emergency Services:** Actions that protect people and property, during and immediately following, a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
- 6. Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.



K.) PRIORITAZATION OF MITIGATION INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
OCWA-1a	8	H	H	Y	Y	N	M-H*
OCWA-1b	8	H	H	Y	Y	N	M-H*
OCWA-2	38	M	M	Y	N (Yes for 5 year update)	Y	H
OCWA-3	8	M	L	Y	N	Y	H
OCWA-4	7	M	L	Y	N	Y	H
OCWA-5	38	M-H	L-M	Y	Dependant on specific initiative	Dependant on specific initiative	M-H (dependant)
OCWA-6							
OCWA-7							
OCWA-8							
OCWA-9							

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.

* This initiative has a “Medium” priority based on the prioritization scheme used in this planning process (implementation dependent on grant funding), however it is recognized that addressing repetitive and severe repetitive loss properties is considered a high priority by FEMA and SEMO (as expressed in the State HMP), and thus shall be considered a “High” priority for all participants in this planning process.

Explanation of Priorities:

- **High Priority:** A project that meets multiple plan objectives, benefits exceeds cost, has funding secured under existing programs or authorizations, or is grant eligible, and can be completed in 1 to 5 years (i.e., short term project) once project is funded.
- **Medium Priority:** A project that meets at least 1 plan objective, benefits exceeds costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded.
- **Low Priority:** Any project that will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, project is not grant eligible, and time line for completion is considered long term (5 to 10 years).

Prioritization of initiatives was based on above definitions: Yes

Prioritization of initiatives was based on parameters other than stated above: Not applicable.

L.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None identified at this time.

M.) ADDITIONAL COMMENTS

Hazard area extent and location maps have been generated for the Onondaga County Water Authority and Onondaga County to illustrate the probable areas impacted. These maps are based on the best available data at the time of the preparation of this Plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Onondaga County Water Authority has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.