2025 Hazard Mitigation Plan

Onondaga County, New York

Onondaga County Water Authority Annex

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This Annex details the hazard mitigation elements specific to the Onondaga County Water Authority (OCWA), a participating jurisdiction in the 2025 Onondaga County Hazard Mitigation Plan update. This Annex is not intended to be a standalone document but supplements the information contained in **Volume 1 (Countywide Planning Elements)**. Therefore, all sections of **Volume 1**, including the planning process, hazard identification and risk assessment, mitigation strategy (includes mitigation goals and objectives), and plan maintenance, apply to and were met by OCWA. This Annex provides additional information specific to the Authority, with a focus on providing additional details on the hazard risk assessment and mitigation strategy (i.e., mitigation actions) for this special district.

1. HAZARD MITIGATION LOCAL PLANNING TEAM

The following individuals have been identified as the OCWA Local Planning Team for the 2025 Onondaga County Hazard Mitigation Plan. These individuals participated in all aspects of the planning process and developed a risk and vulnerability assessment, capability assessment, and mitigation strategy (including mitigation actions) specific to the jurisdiction.

Name	Title	Department
Geoffrey Miller	Executive Director of Operations	Onondaga County Water District
Kelly Caramanna	Director of Safety	Onondaga County Water District
Jeffrey Brown	Executive Director	Onondaga County Water District

2. DISTRICT PROFILE

The Onondaga County Water Authority (OCWA) is a public benefit corporation created by the New York State Legislature and is responsible for supplying and selling potable water in Onondaga, Oswego, Madison, Oneida, and Cayuga counties. OCWA provides water on a retail basis to about 280,000 people, primarily in the suburban areas surrounding the City of Syracuse, and on a wholesale basis to another 220,000 people in the towns of Clay and Dewitt, daily, and to the City of Syracuse on an as-needed basis. OCWA currently has a staff of 180 employees. The Authority's mode of operation is based on the sales of water to 106,000 residential, commercial, industrial, and municipal wholesale customers.

OCWA operates a 20 million gallons per day (MGD) treatment plant in Marcellus, which filters and chlorinates an average of 18 MGD of Otisco Lake water. Additionally, the Authority operates the Lake Ontario water treatment plant in the Town of Oswego, capable of delivering 50 MGD to Onondaga County and currently averaging 20 MGD of potable, filtered water. OCWA can also purchase up to three (3) MGD from the Syracuse Water Department, with current daily purchases averaging 1.2 MGD.

The OCWA distribution system comprises 48 pumping stations, 63 storage tanks, and 2,215 miles of water main, serving roughly 106,000 meter accounts and 14,150 hydrants. OCWA's infrastructure and equipment (i.e., distribution system) have a total gross value of $457,966,806 with a net value (after depreciation) of $306,011,560. **Table 1** lists the infrastructure and equipment that comprise OCWA's distribution system.

Table 1. OCWA Infrastructure and Equipment

Type	Quantity
Miles of Main	2,215
Hydrants in Service	14,150
Metered Connections	106,000
Residential	97,642

Type	Quantity
Commercial	6,811
Industrial	48
Wholesale	21
Storage Tanks in Service	63
Storage Capacity *(millions of gallons)*	170
Pump Stations in Service	48

OCWA serves east to the Madison and Oneida counties, including the villages of Chittenango, Canastota, and Sylvan Beach; and the towns of Vienna, Lincoln, Lenox, Sullivan, Verona, and Annville. Manlius and Pompey are supplied from OCWA's Salt Springs pump station, with small booster stations at Academy Hill and Pompey Pines.

Connections along the Western Branch supply Van Buren, North Geddes, Radisson, West Phoenix, Lysander, and Clay. The major consumers are WestRock Solvay, LLC (i.e., Solvay Paper) at 2.2 MGD and Anheuser-Busch at 1.8 MGD. Controllable connections on the Central Branch supply Clay and Liverpool. The 6th North Street connection can supply the Park Street and Wolf Street pump stations.

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

2.1. Service Area

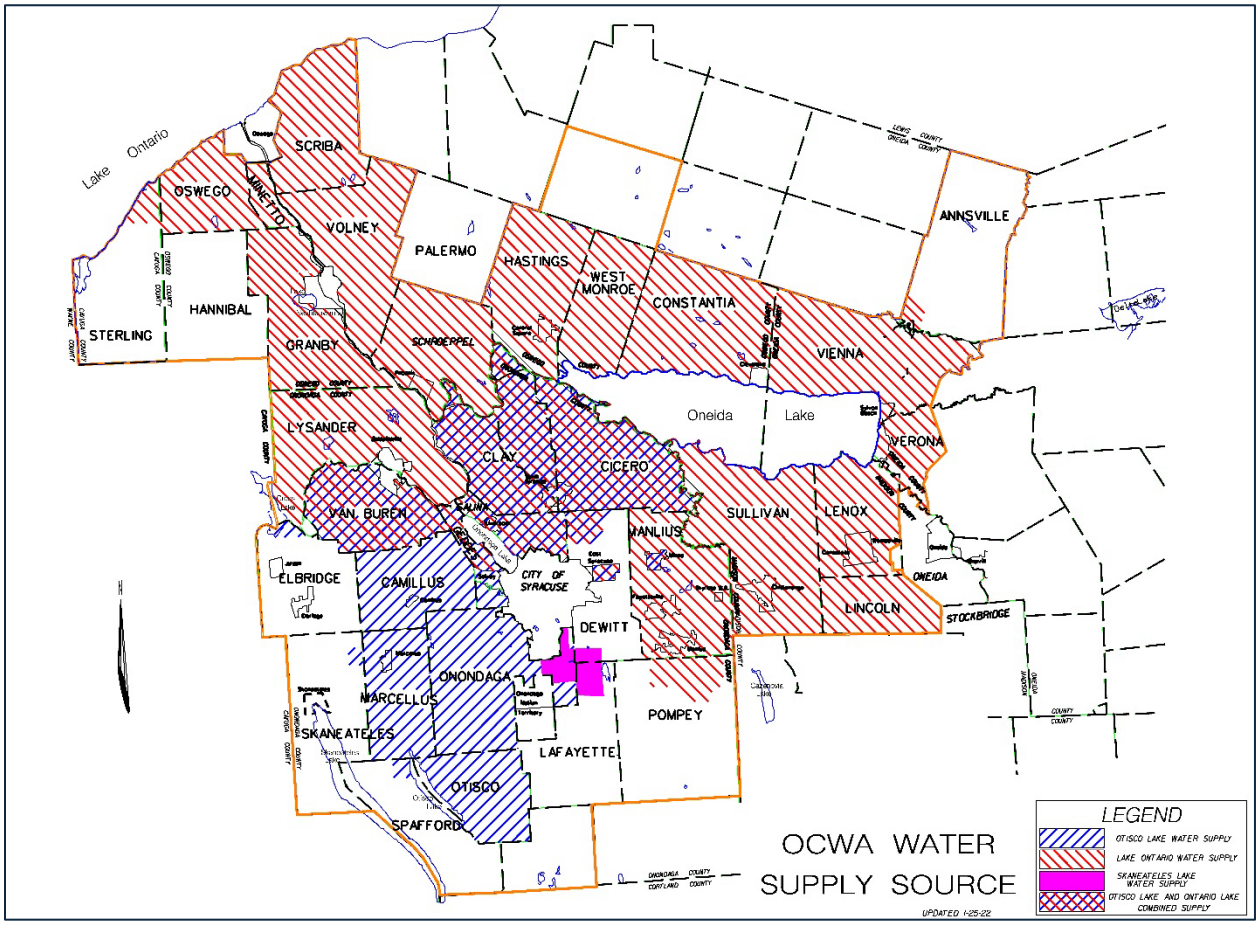
The OCWA services parts of Onondaga, Madison, Oneida, Oswego, and Cayuga counties (**Figure 1**). The Authority owns approximately 708 acres of land. **Table 2** outlines the jurisdictions within Onondaga County that are served by OCWA (approximately 1,879 square miles).

Table 2. Service Area Within Onondaga County

Municipality *(towns, cities, villages)*	Water Source
City of Syracuse	Otisco Lake, Lake Ontario*
Town of Camillus	Otisco Lake
Town of Cicero	Otisco Lake, Lake Ontario
Town of Clay	Otisco Lake, Lake Ontario
Town of DeWitt	Otisco Lake, Lake Ontario, Skaneateles Lake
Town of Elbridge	Lake Ontario
Town of Geddes	Otisco Lake, Lake Ontario, Skaneateles Lake
Town of LaFayette	Skaneateles Lake
Town of Lysander	Lake Ontario
Town of Manlius	Lake Ontario, Skyridge Water District wells
Town of Marcellus	Otisco Lake
Town of Onondaga	Otisco Lake, Skaneateles Lake
Town of Otisco	Otisco Lake
Town of Pompey	Lake Ontario
Town of Salina	Otisco Lake, Lake Ontario
Town of Spafford	Otisco Lake
Town of Van Buren	Otisco Lake, Lake Ontario

Municipality *(towns, cities, villages)*	Water Source
Village of Baldwinsville	Lake Ontario*
Village of Camillus	Otisco Lake
Village of East Syracuse	Otisco Lake, Lake Ontario
Village of Fayetteville	Lake Ontario
Village of Liverpool	Otisco Lake, Lake Ontario
Village of Manlius	Lake Ontario
Village of Marcellus	Otisco Lake
Village of Minoa	Otisco Lake, Lake Ontario
Villate of North Syracuse	Otisco Lake, Lake Ontario
Village of Solvay	Otisco Lake
* *Emergency Connection Only*	

Figure 1. Service Area Map



2.2. Population

OCWA serves approximately 500,000 people primarily in the suburban areas surrounding the City of Syracuse.

3. GROWTH/DEVELOPMENT TRENDS

Understanding development trends can help evaluate whether the jurisdiction's vulnerability has increased, decreased, or remained the same. **Table 3** summarizes the total housing units built in Onondaga County between 2019 and 2023.[1]

Table 3. Housing Units Built (2019 – 2023)

Type	2019	2020	2021	2022	2023
Single-Family Units	317	280	281	236	253
Multi-Family Units	652	593	250	609	866
Total Units	**969**	**873**	**531**	**845**	**1,086**

Projections provided by the New York State's economic development agency indicate that the five (5) counties within the central New York region could have an additional 60,000 residents by 2040, which is above and beyond what the population in the region would otherwise be. Onondaga County, home to over half of the population of the five (5) counties, is in a position to add over 30,000 residents by 2040. This population increase is mostly due to Micron Technology, Inc. (Micron) arriving in the County. Micron is a world leader in innovative memory solutions that transform how people use information. In 2022, Micron announced plans to build its newest and largest microchip manufacturing facility in central New York, and access to OCWA's abundant and reliable potable water was a key factor in the decision. The projected population increase will drive residential and commercial development throughout the County and OCWA's service area. As a result, OCWA anticipates an increase in water use of up to 45 MGD over the next five (5) years.

3.1. Changes in Priority

The overall hazard mitigation priorities for OCWA have not changed significantly since the last Plan update. However, mitigation actions from the previous Plan were updated, and a more concerted effort to achieve equitable outcomes for all communities, including underserved communities and socially vulnerable populations, has been implemented.

4. CAPABILITY ASSESSMENT

Federal regulations require hazard mitigation plans to identify goals for reducing long-term vulnerabilities to the identified hazards in the planning area (Section 201.6(c)(3)(i)). A critical step in developing specific hazard mitigation actions and projects is assessing existing authorities, policies, programs, and resources and capabilities, and using or modifying local tools to reduce losses and vulnerability from profiled hazards.

A capability assessment was conducted for OCWA's authorities, policies, programs, and resources. Goals and mitigation actions were developed using input from this assessment. Information regarding the Authority's implementation of and continued participation in the National Flood Insurance Program (NFIP) can be found in Section 5 of this Annex.

The Local Planning Team assessed OCWA's capabilities that can contribute to the reduction of long-term vulnerabilities to hazards. The capabilities include the following categories:

- Planning and Regulatory Capabilities
- Administrative and Technical Capabilities

[1] Data provided by the Onondaga County Department of Planning based on Real Property Data (2024).

- Fiscal Capabilities
- Education and Outreach Capabilities

Additionally, ways to expand and improve these existing policies and programs to integrate hazard mitigation into the Authority's day-to-day activities were considered.

4.1. Planning and Regulatory Capabilities

Table 4 includes local ordinances, policies, and laws to manage growth and development (e.g., land use plans, capital improvement plans, transportation plans, emergency preparedness and response plans, building codes, and zoning ordinances).

Table 4. Planning and Regulatory Tools

Capability Category	Yes/No	Authority *(local, county, state, federal)*	Responsible Department/ Agency	Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)*
Planning Capability				
Comprehensive Plan	No	N/A	N/A	N/A
Capital Improvements Plan	Yes	Authority	OCWA	Capital Improvement Program
Floodplain Management / Basin Plan	No	N/A	N/A	N/A
Stormwater Management Plan	No	N/A	N/A	N/A
Open Space Plan	No	N/A	N/A	N/A
Stream Corridor Management Plan	No	N/A	N/A	N/A
Watershed Management or Protection Plan	Yes	Authority	OCWA	Updated in April 2022
Economic Development Plan	No	N/A	N/A	N/A
Comprehensive Emergency Management Plan	Yes	Authority	OCWA	Updated in December 2024
Emergency Operation Plan	Yes	Authority	OCWA	Updated in December 2024
Evacuation Plan	No	N/A	N/A	N/A
Post-Disaster Recovery Plan	Yes	Authority	OCWA	Emergency Response Plan (December 2024)
Transportation Plan	No	N/A	N/A	N/A
Strategic Recovery Planning Report	No	N/A	N/A	N/A
Climate Adaptation Plan	No	N/A	N/A	N/A

Capability Category	Yes/No	Authority *(local, county, state, federal)*	Responsible Department/ Agency	Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)*
Resilience Plan	Yes	Authority	OCWA	Emergency Response Plan (December 2024)
Regulatory Capability				
Building Code	No	State, Local	N/A	Chapter 16 of the New York State Building Code Regulated by each municipality
Zoning Ordinance	No	Local	N/A	Regulated by each municipality
Subdivision Ordinance	No	Local	N/A	Regulated by each municipality
NFIP Flood Damage Prevention Ordinance	No	Local	N/A	Regulated by each municipality
NFIP: Cumulative Substantial Damages	No	Local	N/A	Regulated by each municipality
NFIP: Freeboard	No	Local	N/A	Regulated by each municipality
Growth Management Ordinances	No	N/A	N/A	N/A
Site Plan Review Requirements	No	N/A	N/A	N/A
Stormwater Management Ordinance	No	N/A	N/A	N/A
Municipal Separate Storm Sewer System (MS4)	No	N/A	N/A	N/A
Natural Hazard Ordinance	No	N/A	N/A	N/A
Post-Disaster Recovery Ordinance	No	N/A	N/A	N/A
Real Estate Disclosure Requirement	No	N/A	N/A	N/A
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	N/A	N/A	N/A

4.2. Administrative and Technical Capabilities

The administrative and technical capabilities listed in **Table 5** include Authority (i.e., public and private) staff, their skills, and tools that can be used for mitigation planning and implementation. This capability includes engineers, planners, emergency managers, Geographic Information System (GIS) analysts, building inspectors, grant writers, and floodplain managers. Small communities and special districts (e.g., OCWA) may rely on other government entities, such as counties or municipalities, for resources.

Table 5. Administrative and Technical Capabilities

Capability	Yes/No	Position/Department/Agency
Administrative Capability		
Planning Board	No	N/A
Mitigation Planning Committee	No	N/A
Environmental Board/Commission	No	N/A
Open Space Board/Committee	No	N/A
Economic Development Commission/Committee	No	N/A
Maintenance programs to reduce risk	Yes	OCWA Operations Division
Mutual aid agreements	Yes	New York Water/Wastewater Agency Response Network (NYWARN)
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	No	N/A
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Engineering Staff
Planners or engineers with an understanding of natural hazards	Yes	Engineering Staff
NFIP Floodplain Administrator	No	N/A
Surveyor(s)	Yes	Engineering Staff
Personnel skilled or trained in GIS applications	Yes	GIS Analyst, Information Technology Division
Scientist familiar with natural hazards	Yes	Water Quality Staff
Warning systems/services	Yes	Onondaga County Emergency Communications (911)
Emergency Manager	Yes	Director of Safety & Training
Grant writer(s)	Yes	Administrative Staff
Staff with expertise or training in benefit/cost analysis	Yes	Accounting Staff
Professionals trained in conducting damage assessments	Yes	Engineering Staff Operations Staff

4.3. Fiscal Capabilities

Table 6 lists fiscal capabilities available to OCWA that may be used to implement mitigation activities to reduce risk and enhance resiliency. This capability includes available funding sources from local budgets, state and federal grants, potential cost-sharing arrangements with private entities, existing insurance policies, and the ability to generate additional revenue through fees and bonds related to mitigation.

Table 6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use
Community Development Block Grants (CDBG, CDBG-DR)	No

Financial Resources	Accessible or Eligible to Use
Federal Hazard Mitigation Assistance Program *(i.e., Hazard Mitigation Grant Program (HMGP), HMGP Post Fire, Flood Mitigation Assistance (FMA) Program)*	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	No

4.4. Education and Outreach Capabilities

Table 7 lists the OCWA's education and public outreach capabilities that can be used to inform residents about potential hazards, educate on mitigation strategies, and encourage proactive actions to reduce the service area's impacts to disasters. These capabilities include fire safety programs, hazard awareness campaigns, public information, and communications offices.

Table 7. Education and Outreach Resources

Resource	Yes/No	Position/Department/Agency
Public Information Officer	Yes	Director of Public Affairs, OCWA
Personnel skilled or trained in website development	Yes	Director of Public Affairs, OCWA
Hazard mitigation information available on the jurisdiction's website	Yes	Director of Public Affairs, OCWA
Utilize social media for hazard mitigation education	Yes	Director of Public Affairs, OCWA ***Facebook:*** *facebook.com/OCWACNYsWaterAuthority/*
Citizen boards or commissions that address issues related to hazard mitigation	No	N/A
Other programs already in place that could be used to communicate hazard-related information	Yes	Onsolve Alert System
An established warning system for hazard events	Yes	Onsolve Alert System

4.5. Community Classifications

The community classification relates to the community's ability to provide effective services to reduce its vulnerability to the identified hazards. These classifications can be viewed as a gauge of the community's capabilities across all phases of emergency management (i.e., preparedness, response, recovery, and mitigation) and

are used as underwriting parameters to determine the costs of various insurance forms. **Table 8** summarizes classifications for community programs available to OCWA.

Table 8. Community Classifications

Program	Yes/No	Classification *(if applicable)*	Date Classified *(if applicable)*
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No	N/A	N/A
Public Protection (ISO Fire Protection Classes 1 to 10)	No	N/A	N/A
New York State Department of Environmental Conservation Climate Smart Community	No	N/A	N/A
Storm Ready Certification	No	N/A	N/A
Firewise Communities classification	No	N/A	N/A
Natural disaster/safety programs in/for schools	No	N/A	N/A
Organizations with mitigation focus (advocacy group, non-government)	No	N/A	N/A
Public private partnership initiatives addressing disaster-related issues	No	N/A	N/A

4.6. Self-Assessment of Capability

Table 9 provides an approximate measure of OCWA's capability to work in a hazard mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9. Self-Assessment Capability for the Municipality

Capability Area	Degree of Hazard Mitigation Capability		
	Limited *(If limited, what are your obstacles?)*	***Moderate***	***High***
Planning and Regulatory Capabilities		**X**	
Administrative and Technical Capabilities			**X**
Fiscal Capabilities		**X**	
Education and Outreach Capabilities		**X**	
Authority Political Capabilities	***N/A***	***N/A***	***N/A***
Authority Resiliency Capabilities		**X**	
Capability to integrate mitigation into municipal processes and activities			**X**

4.7. Needs to Expand/Improve Capabilities

Based on the capability self-assessment in Section 4.6, OCWA identified existing authorities, policies, programs, funding, and/or resources that need to be expanded and/or improved in order to support the implementation of the hazard mitigation initiatives identified in this Plan (e.g., mitigation actions).

- To increase OCWA's capability to implement hazard mitigation, the Authority needs to expand its staffing with more engineers and maintenance personnel.
- Expand/improve its grant writing capabilities by potentially hiring more grant writers to increase its capabilities to apply for hazard mitigation grant funding that will help fund priority projects such as generators, stream bank armoring, and pipeline construction and relocation.
- Improve the allocation of capital funding to prioritize and support the implementation of hazard mitigation projects.

5. NATIONAL FLOOD INSURANCE PROGRAM

As a special district, the OCWA is not eligible to participate in FEMA's National Flood Insurance Program (NFIP). Further information on Onondaga County's NFIP and Community Rating System (CRS) participation is available in **Volume 1** of this Plan.

6. HAZARD MITIGATION PLAN INTEGRATION

For a community to successfully reduce long-term risk, hazard mitigation must be integrated into day-to-day planning mechanisms and initiatives. Plan integration is the process by which communities critically assess the existing planning framework and align efforts with the goal of reducing long-term risks and building a more resilient community. It involves a two (2) way exchange of information and incorporation of ideas and concepts between hazard mitigation plans and other community plans. In particular, plan integration involves incorporating hazard mitigation principles and actions into other plans and integrating planning mechanisms into hazard mitigation plans. Plan integration involves community plans, policies, codes, and programs that guide development, roles, and responsibilities in implementing these capabilities. Additionally, plan integration is achieved through the involvement of key staff and community officials in collaborative hazard mitigation planning.

6.1. Existing Plan Integration

A hazard mitigation plan must explain how the jurisdiction incorporated the previous Plan update over the last five (5) years to demonstrate progress in local mitigation efforts. During the performance period since the adoption of the previous Hazard Mitigation Plan, OCWA has made progress in integrating components of the hazard mitigation strategy (e.g., goals, objectives, and actions) into planning initiatives and mechanisms. **Table 10** highlights the planning mechanisms/initiatives in which the previous Plan was integrated and the information integrated.

Table 10. Current Plan Integration

Planning Initiative	Current Integration Description
Capital Improvement Program	The Capital Improvement Program, updated annually, identifies and prioritizes improvements to the OCWA distribution system that mitigate drought, flood, severe weather, and winter weather. Mitigation actions identified in the Hazard Mitigation Plan will be incorporated into the Capital Improvement Program to achieve local cost savings.

6.2. Potential Future Integration

A hazard mitigation plan must explain how the jurisdiction intends to incorporate this Plan update into planning mechanisms over the next five (5) years. The capability assessment presented in Section 4 of this Annex identifies codes, plans, and programs that provide opportunities for integration. **Table 11** outlines planning mechanisms/initiatives that do not currently integrate the goals and recommendations of this Plan but provide opportunities to do so in the future.

Table 11. Potential Future Integration

Planning Initiative	Potential Integration Description
Emergency Plan	OCWA's emergency plan is reviewed and updated annually. Natural hazard risks outlined in this Hazard Mitigation Plan, including blue-green algae hazards (i.e., harmful algal bloom), will be included in the annual review.
Capital Improvement Plan	OCWA will ensure consistency between this Hazard Mitigation Plan and future updates of the Capital Improvement Plan. The Hazard Mitigation Plan may identify new funding sources for capital improvement projects and may result in modifications to proposed projects based on the risk assessment results.
Public Outreach	OCWA could develop outreach and education programs and include information on natural hazards and hazard mitigation on the Authority's website.

OCWA's Local Planning Team will identify all relevant planning initiatives scheduled for update in the next year and during the annual update process of the Hazard Mitigation Plan. Additionally, the Local Planning Team will identify opportunities to integrate key elements of the Hazard Mitigation Plan, specifically relevant strategies, into the planning initiatives. Mitigation actions were identified to promote plan integration in future revisions of this Plan.

7. SIGNIFICANT HAZARD PAST EVENTS

A complete risk assessment, including past incidents, for each identified hazard of concern, can be found in **Volume 1** of this Plan. A summary of past events is provided under each hazard profile and includes a chronology of events that have affected the County and its municipalities. **Table 12** provides information on significant hazard events that uniquely impacted OCWA.

Table 12. Hazard Event History

Date	Event Type *(Disaster Declaration, if applicable)*	Description
September 2017	Harmful Algal Bloom	A harmful algal bloom was identified in Skaneateles Lake, leading to the detection of microcystin, a cyanotoxin, in raw and treated water samples collected from the Syracuse Water Department lake intakes.
February 2015	Winter Weather	An Arctic air mass moved into the Northeast over Valentine's Day weekend, bringing the coldest temperatures of the 2015 winter. These extreme temperatures led to a significant number of customers experiencing frozen pipes and multiple water main breaks throughout the jurisdiction.

8. HAZARD VULNERABILITY AND IMPACT ASSESSMENT

Exposure and vulnerability to certain hazards affect the entire County, and others are geographically defined. Although the entire County may be vulnerable to these hazards, their impacts may vary based on existing community conditions (e.g., underserved populations or those with access and functional needs may be more susceptible under certain conditions).

Table 13 outlines the ***unique vulnerabilities and impacts*** for OCWA and addresses only the hazards relevant to the jurisdiction. A complete risk assessment for each identified hazard of concern is in **Volume 1** of this Plan.

Table 13. Hazard Vulnerability and Impact Assessment

Hazard	Vulnerabilities and Impacts
Drought	Otisco Lake is one of OCWA's main water sources. The Lake is extremely vulnerable to drought events because water levels can decrease due to a lack of rainfall, and the water quality can be impacted.
Earthquake	The Local Planning Team determined that OCWA does not have unique vulnerabilities and impacts to earthquake events; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Heat Wave/Extreme Heat	The Local Planning Team determined that OCWA does not have unique vulnerabilities and impacts to heat wave/extreme heat events; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	The Otisco Water Treatment Plant dam is inspected regularly per State and Federal requirements; however, it can potentially fail during heavy rainfall and/or severe weather events.
Geological Hazards *(landslides, land subsidence, mudboils)*	The Local Planning Team determined that OCWA does not have unique vulnerabilities and impacts to geological hazards; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.
Harmful Algal Bloom	Skaneateles Lake is the primary water source for the City of Syracuse, and Otisco Lake is the primary water source for several towns and villages in the County. Harmful algal bloom events in these water sources would impact OCWA's ability to supply water to residents within the service area.
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Hemlock woolly adelgid could significantly impact the water quality in Otisco Lake by potentially killing a significant number of hemlock trees in the watershed, which play an important role in the Lake's water quality. Hemlocks are typically found growing along streams, providing shade that cools the water and supports aquatic organisms. Additionally, the shade provided keeps soil from drying out and creates a cool habitat for plants and animals. Additionally, their branches also protect areas from snow and wind in the winter, and the trees serve as a food source for many animals.
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Severe weather could impact the water quality of Skaneateles Lake.
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Power outages during winter weather events that exceed the generator's fuel capacity or fuel delivery can impact the Lake Ontario Water Treatment Plant, Otisco Water Treatment Plant, Park Street Pump Station, Wolf Street Pump Station, and Lakeland Pump Station. If these facilities are not operational, OCWA's ability to deliver water will be compromised.
Wildfire *(wildfire smoke)*	The Local Planning Team determined that OCWA does not have unique vulnerabilities and impacts to wildfire; rather, the jurisdiction's vulnerability and impacts are consistent with those experienced throughout the County.

OCWA evaluated whether vulnerability in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, changes in population, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices

in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics (e.g., underserved population) were taken into consideration.

Table 14 outlines whether climate change has increased or decreased the Authority's vulnerability (i.e., exposure) and impact to each natural hazard over the past five (5) years, and the effect of climate change on the future probability of occurrence and impacts from each natural hazard.

Table 14. Climate Change Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Drought	Increased
Earthquake	Remained the Same
Heat Wave/Extreme Heat	Increased
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Increased
Geological Hazards *(landslides, land subsidence, mudboils)*	Remained the Same
Harmful Algal Bloom	Increased
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Increased
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Increased
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Increased
Wildfire *(wildfire smoke)*	Remained the Same
Future Vulnerability and Impact	
Drought	Increase
Earthquake	No Change Anticipated
Heat Wave/Extreme Heat	Increase
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Increase
Geological Hazards *(landslides, land subsidence, mudboils)*	No Change Anticipated
Harmful Algal Bloom	Increase
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Increase
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Increase
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Increase
Wildfire *(wildfire smoke)*	No Change Anticipated

Table 15 outlines whether changes in population within the Authority's service area over the past five (5) years have increased or decreased the vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in population may have on the future probability of occurrence and impacts from these natural hazards.

Table 15. Changes in Population Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Drought	Remained the Same
Earthquake	Remained the Same
Heat Wave/Extreme Heat	Remained the Same
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Remained the Same
Geological Hazards *(landslides, land subsidence, mudboils)*	Remained the Same
Harmful Algal Bloom	Remained the Same
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Remained the Same
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Remained the Same
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Remained the Same
Wildfire *(wildfire smoke)*	Remained the Same
Future Vulnerability and Impact	
Drought	Increase
Earthquake	No Change Anticipated
Heat Wave/Extreme Heat	Increase
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	No Change Anticipated
Geological Hazards *(landslides, land subsidence, mudboils)*	No Change Anticipated
Harmful Algal Bloom	No Change Anticipated
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	No Change Anticipated
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	No Change Anticipated
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	No Change Anticipated
Wildfire *(wildfire smoke)*	No Change Anticipated

Table 16 outlines whether development over the past five (5) years has increased or decreased the Authority's service area vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts from these natural hazards.

Table 16. Changes in Development Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Drought	Remained the Same
Earthquake	Remained the Same
Heat Wave/Extreme Heat	Remained the Same
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	Remained the Same
Geological Hazards *(landslides, land subsidence, mudboils)*	Remained the same

Hazard	Vulnerability and Impact
Harmful Algal Bloom	Remained the Same
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	Remained the Same
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	Remained the Same
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	Remained the Same
Wildfire *(wildfire smoke)*	Remained the Same
Future Vulnerability and Impact	
Drought	Increase
Earthquake	No Change Anticipated
Heat Wave/Extreme Heat	Increase
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	No Change Anticipated
Geological Hazards *(landslides, land subsidence, mudboils)*	No Change Anticipated
Harmful Algal Bloom	No Change Anticipated
Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	No Change Anticipated
Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm)*	No Change Anticipated
Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold, nor'easter)*	No Change Anticipated
Wildfire *(wildfire smoke)*	No Change Anticipated

8.1. Future Major Assets

Community assets should include anything that is important to a community's character and function. Assets include people (i.e., underserved population); structures (i.e., new and existing buildings); community lifelines and other critical facilities; natural, historic, and cultural resources; and the economy and other activities that have value to the community. Although all assets may be affected by the hazards identified in this Hazard Mitigation Plan, the jurisdiction has identified future major assets that may be more vulnerable and impacted by these hazards.

- Micron has become a significant driver for improvements and expansions to the OCWA water distribution infrastructure. In the next five (5) years, residential and commercial development is expected to increase, potentially exposing more people to the natural hazards identified in this Plan, particularly drought, flooding, heat waves/extreme heat, and winter weather. Furthermore, the expected population growth will require expansion of the Authority's Lake Ontario water system infrastructure, potentially exposing more critical facilities to drought, flooding, harmful algal blooms, invasive species and infestations, severe weather, and winter weather.
- Any new assets (e.g., new construction in hazard-prone areas) will be constructed to adhere to the latest building codes and standards, and mitigation to protect them from identified and anticipated hazards, especially those that are expected to increase due to climate change.

9. CRITICAL FACILITIES FLOOD RISK

New York State Department of Environmental Conservation (NYSDEC) Title 6, Chapter V, Subchapter A, Part 502 sets forth local floodplain management criteria for State projects located within flood hazard areas. The law

states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless built according to certain mitigation specifications, including being raised two (2) feet above the Base Flood Elevation (BFE).[2] While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding.

Jurisdictions must identify all critical facilities, assess their vulnerabilities, and ensure they are protected against a 0.2% chance (500-year) flood event. Critical facilities that are located in an SFHA and/or have been previously flooded must be protected against a repeat of that flood or the 0.2% chance flood event, whichever provides the greater protection. The Plan must document that those critical facilities are protected to a 0.2% flood event, or the previous worst-case flood event. For those that do not meet this level of protection, the Plan must include a mitigation action that meets or exceeds this criterion, or explain why it is not feasible to do so.[3]

Table 17 identifies critical facilities in the community located in the 100-year and 500-year floodplain.

Table 17. Potential Flood Losses to Critical Facilities

Section 10. Name	Address	Type	Exposure		Potential Loss from 100-Year Flood Event		Facility Protected	Addressed by Proposed Action
			100-Year	*500-Year*	*% Structure Damage*	*% Content Damage*		
None identified								

10. HAZARD RISK RANKING

Table 18 presents the local hazard ranking for OCWA of all hazards of concern listed in **Volume 1** of this Plan. This ranking summarizes how hazards vary for this jurisdiction. As thoroughly described in **Volume 1** of this Plan, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy. For further details on how the probability, extent, vulnerability, and impact factors in **Table 18** were calculated, please refer to Section 4.3 in **Volume 1** of this Plan.

It is important to note that the sub hazards for severe weather (i.e., strong winds/damaging winds, severe thunderstorms, tropical storm/hurricane, hail, and tornado), geological hazards (i.e., landslide, land subsidence, and mudboils), flood (i.e., riverine/creek flooding and ice jam, and urban/flash flooding), and winter weather (i.e., blizzards, lake effect snow, nor'easter, and ice storm, and cold wave/extreme cold) were individually ranked in the hazard risk ranking; however, severe weather, geological hazards, flood, and winter weather are each considered as the main hazard throughout this Annex and **Volume 1**.

Table 18. Onondaga County Water Authority Hazard Risk Ranking

Hazard Event	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	Total Risk Score *(Probability x Consequence)*
Flood (Urban/Flash Flood)	3	12	11	29	52	73

[2] New York State Department of Environmental Conservation. (n.d.). Chapter V – Resource Management Services. Retrieved from https://dec.ny.gov/regulatory/regulations/chapter-v.
[3] New York State Division of Homeland Security and Emergency Services. (2022). 2022 New York State Hazard Mitigation Planning Standards. Retrieved from https://www.dhses.ny.gov/system/files/documents/2023/11/2022-nys-mitigation-planning-standards-final.pdf

Hazard Event	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	Total Risk Score *(Probability x Consequence)*
Winter Weather (Blizzards, Lake Effect Snow, Nor'easter, Ice Storm)	3	12	14	21	47	67
Severe Thunderstorm *(Severe Weather)*	3	12	16	15	43	62
Flood (Riverine/Creek, Ice Jam)	2	15	11	29	55	54
Drought	2	15	12	28	55	54
Strong Winds/ Damaging Winds *(Severe Weather)*	3	12	6	16	34	51
Harmful Algal Bloom	2	12	15	24	51	51
Cold Wave/Extreme Cold *(Winter Weather)*	2	12	14	21	47	48
Heat Wave/Extreme Heat	2	9	11	19	39	41
Tropical Storm/Hurricane *(Severe Weather)*	1	9	16	24	49	27
Dam and Levee Failure *(Flood)*	1	12	6	27	45	25
Invasive Species and Infestation	1	12	9	21	42	24
Hail *(Severe Weather)*	1	6	16	14	36	21
Earthquake	1	6	16	12	34	20
Tornado *(Severe Weather)*	1	6	6	22	34	20
Mudboils *(Geological Hazards)*	1	6	6	12	24	15
Landslide *(Geological Hazards)*	1	3	6	12	21	13
Land Subsidence *(Geological Hazards)*	1	3	6	12	21	13

Hazard Event	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	Total Risk Score *(Probability x Consequence)*
Wildfire (Wildfire Smoke)	1	3	6	11	20	13

Consequence: *Sum of all weighted factors.*
Extent: *Sum of the weighted Extent factors.*
Vulnerability: *Sum of the weighted Vulnerability factors.*
Impact: *Sum of the weighted Impact factors.*
Total Risk Score* *= Probability x Consequence*
** Normalized to 100*

Total Risk Score Legend

Classification	Probability Factor	Extent	Vulnerability	Impact	Consequence Score	Total Risk Score
Low (L)	1	0 – 6	0 – 6	0 – 12	0 – 24	0 – 24
Medium (M)	2	7 – 12	7 – 12	13 – 26	25 – 50	25 – 54
High (H)	3	13 – 18	13 – 18	27 – 39	51 – 75	55 and above

*The **legend**—specifically the assignment of low, medium, and high—provides an additional means to qualitatively assess the probability factor, sum of weighted factors, and the total risk scores for each hazard. The **Consequence Score** represents the sum of the Extent, Vulnerability, and Impact Factors. The **Total Risk Score** is a measure of Probability and Consequence.*

11. MITIGATION ACTIONS

This section includes the mitigation actions developed to address the risks and vulnerabilities to the hazards identified in this Plan. This Plan serves only to recommend mitigation measures based on the potential for risk reduction and available funding. Implementation of mitigation actions is dependent on risk reduction priorities, feasibility, and available funding. It is also dependent on the cooperation and support of the jurisdiction and/or department responsible for each action item. Additionally, all mitigation actions identified in the 2019 update or before were updated accordingly. Any new mitigation actions are listed as *New* (under Project Status).

OCWA agreed on **10** mitigation actions that apply to the jurisdiction's properties for which it has jurisdictional responsibility and authority. A summary of OCWA's mitigation actions status is listed in **Table 19**.

Note: The mitigation actions outlined in this Plan are designed only to address those natural hazards that received a risk ranking of *medium* or *high* during the hazard risk assessment (**Table 18**). Hazards that ranked *low* (earthquakes, geological hazards, and wildfires) may not have specific mitigation actions detailed in this document.

Table 19. Onondaga County Water Authority Mitigation Action Summary

Status	Mitigation Action Total
Continuous	4
In Progress/Not Yet Completed	1
No Progress/Not Yet Started	3
New	2
TOTAL	**10**
Complete	0
Discontinued	0

Mitigation Actions per Hazard			
Drought	4	Harmful Algal Bloom	7
Earthquake	1	Invasive Species and Infestation *(Emerald Ash Borer, Hemlock Woolly Adelgid, True Armyworm, Common Reed (Phragmites), Eurasian Watermilfoil, Water Chestnut, Tick-Borne Diseases, Mosquito-Borne Diseases)*	3
Heat Wave/Extreme Heat	3	Severe Weather *(severe thunderstorms – hail, strong winds/damaging winds, tornadoes, hurricane/tropical storm, nor'easter)*	6
Flood *(riverine, flash/urban, ice jam, dam and levee failure)*	6	Winter Weather *(blizzards, heavy snow, ice storms, cold wave/extreme cold)*	6
Geological Hazards *(landslides, land subsidence, mudboils)*	N/A	Wildfire *(wildfire smoke)*	N/A

A detailed explanation of the Mitigation Strategy can be found in Section 5 of **Volume 1**.

Mitigation Action	Actively support and participate in the implementation, monitoring, maintenance, and updating of this Hazard Mitigation Plan, as outlined and defined in Volume 1.				
Action Number	OCWA-1	**Goal(s) Addressed**	1, 2, 3, 4, 5, 6	**Prioritization Score**	15/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Heat Wave/Extreme Heat, Flood, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Develop, enhance, and implement existing OCWA emergency plans.				
Action Number	OCWA-2	**Goal(s) Addressed**	1, 6	**Prioritization Score**	15/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Heat Wave/Extreme Heat, Flood, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Develop, enhance, and maintain mutual aid agreements with surrounding municipalities and counties.				
Action Number	OCWA-3	**Goal(s) Addressed**	1, 5, 6	**Prioritization Score**	15/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Heat Wave/Extreme Heat, Flood, Harmful Algal Bloom, Invasive Species and Infestation, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Expand the Watershed Monitoring Program to consider the more frequent and severe storms. Accordingly, OCWA intends to monitor other nutrients that could make their way into the Lake from sources beyond the contiguous properties on the Lake shore. OCWA's concerns include the short-term and long-term impacts on overall water quality and the impact on OCWA's water treatment plant operations.				
Action Number	OCWA-4	**Goal(s) Addressed**	1, 2, 3	**Prioritization Score**	14/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Flood, Severe Weather, Winter Weather				
Project Status	Continuous	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	Medium	**Potential Funding Source**	General Operations Fund (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

Mitigation Action	Install a 54-inch parallel water supply line (24 miles) from Lake Ontario to the City of Syracuse and ensure it is built to seismic standards.				
Action Number	OCWA-5	**Goal(s) Addressed**	1, 3, 6	**Prioritization Score**	9/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Over 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Earthquake, Harmful Algal Bloom				
Project Status	No Progress/Not Yet Started	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	General Fund (Staff Time), HMGP, New York State Water Quality Funds		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*	The existing water supply line is more than 50 years old, vulnerable to damage, including seismic impacts, and has an inadequate redundant supply in the event of damage or loss.		

Mitigation Action	Southwestern Branch Pipeline Project: Install approximately seven (7) miles of a 48-inch water supply main to provide an alternate water supply for the City of Syracuse. Ensure it is built to seismic standards.				
Action Number	OCWA-6	**Goal(s) Addressed**	1, 3, 6	**Prioritization Score**	9/15
Year Added to Plan	2013	**Timeline** *(estimated)*	Over 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Earthquake, Harmful Algal Bloom				
Project Status	No Progress/Not Yet Started	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	General Fund (Staff Time), HMGP, New York State Water Quality Funds		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*	Water supply main needs to be built to seismic standards.		

Mitigation Action	Install permanent generators (backup power) at OCWA critical facilities for emergency power outages to improve the reliability and resiliency of electric service. Critical facilities requiring backup power include Park Street Pump Station, Wolf Street Pump Station, Lakeland Pumps Station, Raw Water Pump Station, Clearwater Pump Station, and Ontario Water Treatment Plant.				
Action Number	OCWA-7	**Goal(s) Addressed**	1, 6	**Prioritization Score**	12/15
Year Added to Plan	2019	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Severe Weather, Winter Weather				
Project Status	In Progress/Not Yet Completed	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	Capital Improvement Program Funds, HMGP		
Critical Facility *(Critical Facility located in 1% floodplain?)*	Yes	**Additional Details** *(optional)*	It is important to note that although this facility is a critical facility, it is not located in an SFHA; therefore, it is not listed in Section 9 of this Annex. **2025 Update:** The Raw Water Pump Station, Clearwater Pump Station, and Ontario Water Treatment Plant permanent generators have been installed. Designs and procurement have begun for Park Street, Wolf Street, and Lakeland pump stations.		

Mitigation Action	Extend the Central Branch and City of Syracuse intake into deeper water away from the shoreline to limit the impacts of harmful algal blooms.				
Action Number	OCWA-8	**Goal(s) Addressed**	2, 3, 4, 6	**Prioritization Score**	10/15
Year Added to Plan	2019	**Timeline** *(estimated)*	Over 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated		Harmful Algal Bloom			
Project Status		No Progress/Not Yet Started	If *Discontinued*, provide reason.	N/A	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization	Onondaga County Water Authority		**Supporting Agency / Organization** *(If applicable)*	Syracuse Water Department	
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	Capital Improvement Program Funds, County General Fund, HMGP		
Critical Facility *(Critical Facility located in 1% floodplain?)*	Yes	**Additional Details** *(optional)*	It is important to note that although this facility is a critical facility, it is not located in an SFHA; therefore, it is not listed in Section 9 of this Annex.		

Mitigation Action	Relocate the Otisco Lake Water Treatment Plant transmission mains away from Nine Mile Creek, as the Creek can meander and erode the banks, potentially damaging the transmission mains.				
Action Number	OCWA-9	**Goal(s) Addressed**	1, 2, 4, 6	**Prioritization Score**	11/15
Year Added to Plan	2025	**Timeline** *(estimated)*	Over 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated		Flood			
Project Status		New	If *Discontinued*, provide reason.	N/A	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization	Onondaga County Water Authority		**Supporting Agency / Organization** *(If applicable)*	N/A	
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	Capital Improvement Program Funds, County General Fund, HMGP		
Critical Facility *(Critical Facility located in 1% floodplain?)*	Yes	**Additional Details** *(optional)*	It is important to note that although this facility is a critical facility, it is not located in an SFHA; therefore, it is not listed in Section 9 of this Annex.		

Mitigation Action	Enhance watershed monitoring around Otisco Lake to maintain water quality that could be affected by extreme weather events.				
Action Number	OCWA-10	**Goal(s) Addressed**	2, 3, 4, 6	**Prioritization Score**	14/15
Year Added to Plan	2025	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Flood, Harmful Algal Bloom, Severe Weather, Winter Weather				
Project Status	New	If *Discontinued*, provide reason.	N/A		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	Onondaga County Water Authority	**Supporting Agency / Organization** *(If applicable)*	N/A		
Additional Participating Jurisdictions *(If applicable)*	N/A				
Estimated Cost	High	**Potential Funding Source**	General Operating Funds (Staff Time)		
Critical Facility *(Critical Facility located in 1% floodplain?)*	No	**Additional Details** *(optional)*			

APPENDIX A. LETTER OF INTENT

Statement of Intent to Participate in the
2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of this letter is to establish commitment from, and a cooperative working relationship between, all participating jurisdictions in the development and implementation of the 2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan (HMP). In addition, the intent of this form is to ensure that the Plan update is developed in accordance with Title 44 of the Federal Code of Regulations Part 201.6; that the planning process is conducted in an open manner involving community stakeholders; that it is consistent with each participating jurisdiction's policies, programs, and authorities; and that it is an accurate reflection of the community's values.

To meet this requirement and to help reduce the loss of life and damage to property in the event of a natural disaster, our municipality intends to participate in a federally funded grant initiative to update the 2024 Onondaga County Multi-Jurisdictional Hazard Mitigation Plan.

We understand that the planning process will include a limited number of meetings and/or calls between Planning Team representatives and representatives from participating municipalities and agencies. The subject of the meeting(s) will be to:

- Inform participants on the needs and methods for identifying and prioritizing hazards;
- Share information on hazards affecting local jurisdictions;
- Provide information related to local assets, plans/ordinances, hazard events and damages, new development, etc. within the jurisdiction; and
- Determine possible projects to reduce the impact of future incidents involving hazards which are prerequisites to municipalities later applying for hazard mitigation grant funds.

We recognize the importance of having an updated multi-jurisdictional hazard mitigation plan to help safeguard the lives and property of our citizens and commit to participating in this process with Onondaga County.

Name of Jurisdiction: Onondaga County Water Authority

Name of Authorized Representative:

Signature of Authorized Representative:

Primary Point-of-Contact (POC):

Name: Kelly Caramanna
Title: Director of Safety
Department: Safety
Phone Number: (315) 455-7061 X3169
Email: kcaramanna@ocwa.org

Secondary Point-of-Contact (POC):

Name: Geoffrey Miller
Title: Executive Director of Operations
Department: Administration
Phone Number: (315) 455-7061 X353
Email: gmiller@ocwa.org

Please return this form to jefferyharrop@ongov.net, or mail to the Onondaga County Dept. of Planning, 335 Montgomery St, Syracuse, NY 13202. Questions, call Jeff at (315)435-2673.

APPENDIX B. PLAN ADOPTION

[Placeholder for adoption documentation after State and FEMA Approval]