NEW YORK STATE OF OPPORTUNITY. | Office of Planning and Development

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

Intermunicipal Watershed Management Program

Component of the Local Waterfront Revitalization Program

An Office of New York Department of State

November 10, 2021

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

NYS DOS Watershed Planning Framework

- Introduction: Watershed Plan Overview
  - Watershed Advisory Committee & Consultants
    - Watershed Vision, Goal, and Characterization
    - Watershed Management Recommendations
    - Implementation Strategy
    - Monitoring and Tracking
  - Public involvement in vision, characterization, projects & actions, plan review
- Contract Elements:
    - Biological Study
    - Monitoring Protocol
    - Watershed Plan

Watershed Plan Overview

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

WAC & Consultants

- Task 2 & 7 – WAC meetings
- Task 6 – Outreach/Participation Plan & Implementation
- Task 8, 9, 11, & 12 – Initial Watershed Vision, Goal, Characterization, and Abilities for Best Management Practices (BMP) Implementation
  - Assess waterbodies & resources in the watershed and describe
  - Assess ability of local laws and programs to implement BMPs for water quality (WQ) protection and describe
  - Draft Watershed Characterization Report produced with maps and graphics

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

Watershed Plan Overview

WAC & Consultants

- Task 2 & 7 – WAC meetings
- Task 6 – Outreach/Participation Plan & Implementation
- Task 8, 9, 11, & 12 – Initial Watershed Vision, Goal, Characterization, and Abilities for BMP Implementation
  - Assess waterbodies & resources in the watershed and describe
  - Assess ability of local laws and programs to implement BMPs for WQ protection and describe
  - Draft Watershed Characterization Report produced with maps and graphics

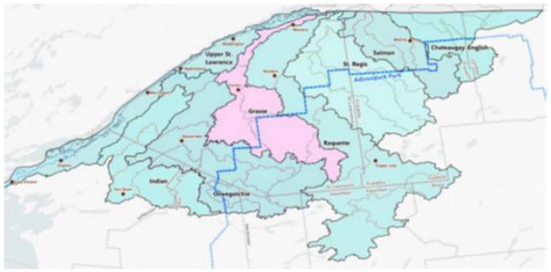
Public Implementation

- Task 13 – 1st Public Meeting

Watershed Plan Overview

Public Implementation

- Task 13 – 1st Public Meeting
  - Include public involvement in review and discussion of:
    - ✓ Watershed and waterbody characterization for identifying pollution issues
    - ✓ Shape goals, objectives, and vision of the plan
    - ✓ Water quality
    - ✓ Watershed protection and restoration issues



Above: Grasse River watershed highlighted in pink.

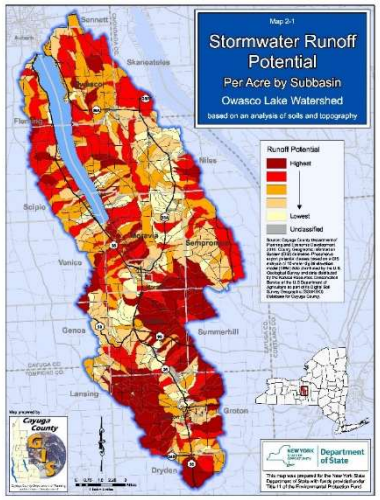


Table 2-1. Land Cover Statistics for the Nine Major Subwatersheds to Owasco Lake (*Source: NRCS 2011*)

Land Use/Cover	Forested		Developed		Cultivated Crop		Hay/Pasture		Wetlands/Water		Scrub/Shrub		Total	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
INLET-Main Stem	984	40%	93	4%	361	15%	482	20%	257	11%	272	11%	2,448	100%
INLET-Headwaters	1,397	36%	227	6%	531	14%	1,237	32%	223	6%	304	8%	3,918	100%
DIRECT DRAINAGE	603	18%	199	6%	1,149	33%	1,088	32%	162	5%	242	7%	3,442	100%
MILL	1,384	43%	148	5%	514	16%	792	25%	110	3%	242	8%	3,189	100%
VENESS	14	6%	6	3%	79	36%	98	44%	17	8%	7	3%	222	100%
SUCKER	82	8%	48	5%	352	35%	348	34%	165	16%	24	2%	1,019	100%
FILLMORE	438	64%	13	2%	28	4%	142	21%	17	2%	45	7%	683	100%
DUTCH HOLLOW	680	22%	142	5%	1,085	35%	891	29%	117	4%	167	5%	3,082	100%
HEMLOCK	499	26%	64	3%	497	26%	557	29%	184	10%	106	6%	1,907	100%
WATERSHED-WIDE	6,080	31%	940	5%	4,596	23%	5,636	28%	1,252	6%	1,406	7%	19,910	100%

Watershed Plan Overview

WAC & Consultants continued

- Task 14 – Refinement of Watershed Vision and Goals per public input
- Task 15 – Finalize Draft Watershed Characterization Report per public input
- Task 16 – Watershed Management Recommendations
  - Identify management strategies and recommendations, and describe
  - Prioritize identified restoration and protection projects, and describe
  - Maps, graphics, and other visuals developed
  - Combine into a draft Watershed Management Recommendation Report

Stewards inspect boats and educate boaters throughout the Adirondacks, helping to prevent the spread of invasive species.
Photo source: Adirondack Explorer

Watershed Plan Overview

WAC & Consultants continued

- Task 14 – Refinement of Watershed Vision and Goals per public input
- Task 15 – Finalize Draft Watershed Characterization Report per public input
- Task 16 – Watershed Management Recommendations
  - Identify management strategies and recommendations, and describe
  - Prioritize identified restoration and protection projects, and describe
  - Maps, graphics, and other visuals developed
  - Combine into a draft Watershed Management Recommendation Report

Public Involvement continued

- Task 17 – 2nd Public Meeting

Example of Mapped Drainage Areas

NEW YORK STATE OF OPPORTUNITY. Office of Planning and Development

Watershed Plan Overview

Public Involvement continued

- Task 17 – 2nd Public Meeting
  - ☐ Include public involvement in review and discussion of:
    - ✓ Watershed management recommendations and prioritization projects
    - ✓ Finalized Draft Watershed Characterization Report & draft Watershed Management Recommendation Report.
  - ☐ Include public review of biological study** and input on monitoring pilot*

NOTE: Public comments are obtained, and a written summary should be provided to DOS from this meeting

NEW YORK STATE OF OPPORTUNITY. Office of Planning and Development

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

Watershed Plan Overview

WAC & Consultants continued

- Task 18 – Refinement and Finalization of Draft Watershed Management Recommendation Report per public input
- Task 19 – Implementation strategy and schedule of identified watershed management practices, approaches, projects, and action
- Task 20 – Draft tracking and monitoring plan for the watershed
- Task 21 – Draft Watershed Management Plan, including all maps and graphics

Table 5.1 Sample Watershed Implementation Strategy

Management Recommendation	Goal	Target Sub-watershed	Project Leader* & other involved organizations	Potential Funding Sources	Potential Cost†	Implementation Timing		
						1 year	2-5 years	5 + years
Build capacity of watershed organization and coordinator	1, 2, 4, 5	All	Watershed Task Force* SWCD, County Planning Dept., Town A, Town B	NYS DOS, NYS DEC, EPA	$15,000	X		
Adopt local laws for environmental protection	10, 13, 14	All	Town A*, Town B*, NYSDOS, Regional Planning Council	NYS DOS	$20,000-$60,000	X		
Implement priority stream restoration	7, 10	A, C, E	Watershed Task Force*, NYS DEC, SWCD, Town B,	NYS DEC; Hudson River Estuary Program	$260,000		X	
Install priority stormwater retrofit	11, 12	B, D, E	SWCD*, Watershed Task Force, Town A, NYS DOS, NYS DEC	NYS DEC; NYS DOS; NYS DOT	$350,000		X	
Illicit discharge detection and elimination	11	C, E, F	Watershed Task Force*, Town B, County DOH	NYS DEC, NYS DOH, EPA	$7,200	X		
Monitoring and project tracking	2, 3	All	Watershed Task Force*, NYS DEC, USGS			X	X	X

† Potential costs are for illustrative purposes only * Denotes project leader

NEW YORK STATE OF OPPORTUNITY. Office of Planning and Development

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

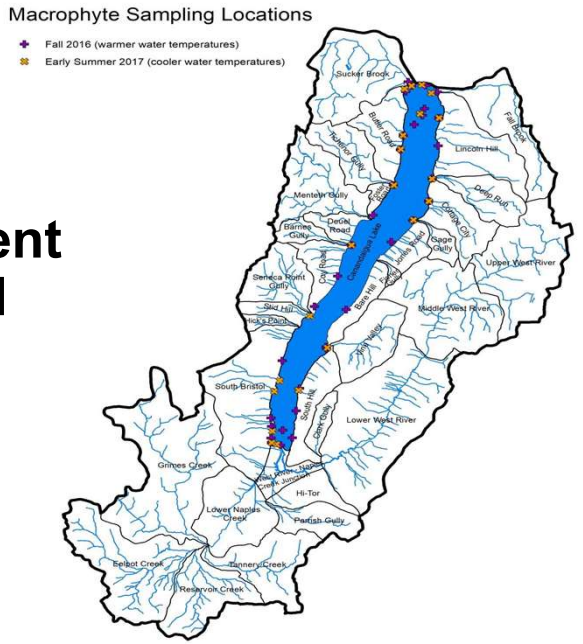
Watershed Plan Overview

WAC & Consultants continued

- Task 18 – Refinement and Finalization of Draft Watershed Management Recommendation Report per public input
- Task 19 – Implementation strategy and schedule of identified watershed management practices, approaches, projects, and action
- Task 20 – Draft tracking and monitoring plan for the watershed
- Task 21 – Draft Watershed Management Plan, including all maps and graphics

Public Involvement continued

- Task 22 – 3rd Public Meeting



NEW YORK STATE OF OPPORTUNITY. Office of Planning and Development

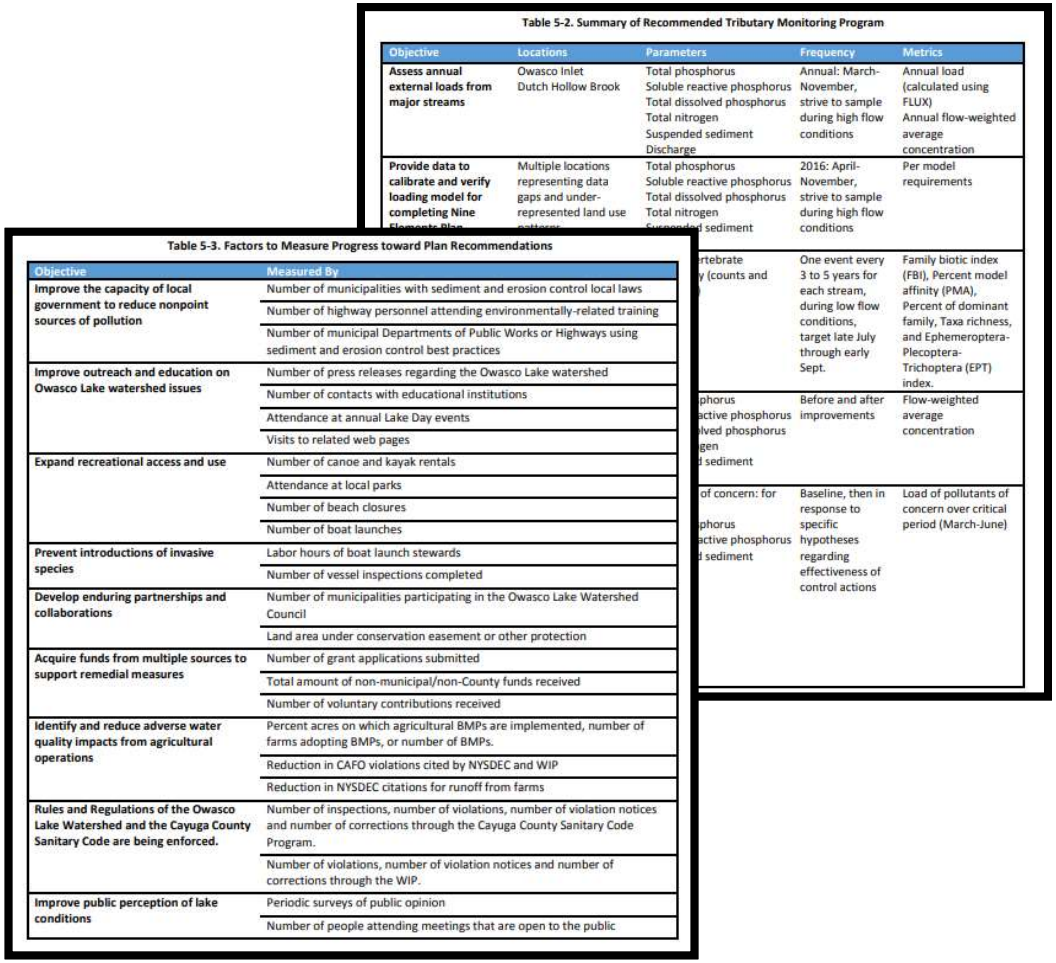


Table 5-2. Summary of Recommended Tributary Monitoring Program

Objective	Locations	Parameters	Frequency	Metrics
Assess annual external loads from major streams	Owasco Inlet Dutch Hollow Brook	Total phosphorus Soluble reactive phosphorus Total dissolved phosphorus Total nitrogen Suspended sediment Discharge	Annual: March-November, strive to sample during high flow conditions	Annual load (calculated using FLUX) Annual flow-weighted average concentration
Provide data to calibrate and verify loading model for completing Nine	Multiple locations representing data gaps and under-represented land use	Total phosphorus Soluble reactive phosphorus Total dissolved phosphorus Total nitrogen sediment	2016: April-November, strive to sample during high flow conditions	Per model requirements
		rtebrate (counts and	One event every 3 to 5 years for each stream, during low flow conditions, target late July through early Sept.	Family biotic index (FBI), Percent model affinity (PMA), Percent of dominant family, Taxa richness, and Ephemeroptera-Plecoptera-Trichoptera (EPT) index.
		phorus active phosphorus lved phosphorus gen sediment	Before and after improvements	Flow-weighted average concentration
		of concern: for phorus active phosphorus sediment	Baseline, then in response to specific hypotheses regarding effectiveness of control actions	Load of pollutants of concern over critical period (March-June)

Table 5-3. Factors to Measure Progress toward Plan Recommendations

Objective	Measured By
Improve the capacity of local government to reduce nonpoint sources of pollution	Number of municipalities with sediment and erosion control local laws
	Number of highway personnel attending environmentally-related training
	Number of municipal Departments of Public Works or Highways using sediment and erosion control best practices
Improve outreach and education on Owasco Lake watershed issues	Number of press releases regarding the Owasco Lake watershed
	Number of contacts with educational institutions
	Attendance at annual Lake Day events
	Visits to related web pages
Expand recreational access and use	Number of canoe and kayak rentals
	Attendance at local parks
	Number of beach closures
	Number of boat launches
Prevent introductions of invasive species	Labor hours of boat launch stewards
	Number of vessel inspections completed
Develop enduring partnerships and collaborations	Number of municipalities participating in the Owasco Lake Watershed Council
	Land area under conservation easement or other protection
Acquire funds from multiple sources to support remedial measures	Number of grant applications submitted
	Total amount of non-municipal/non-County funds received
	Number of voluntary contributions received
Identify and reduce adverse water quality impacts from agricultural operations	Percent acres on which agricultural BMPs are implemented, number of farms adopting BMPs, or number of BMPs.
	Reduction in CAFO violations cited by NYSDEC and WIP
	Reduction in NYSDEC citations for runoff from farms
Rules and Regulations of the Owasco Lake Watershed and the Cayuga County Sanitary Code are being enforced.	Number of inspections, number of violations, number of violation notices and number of corrections through the Cayuga County Sanitary Code Program.
	Number of violations, number of violation notices and number of corrections through the WIP.
Improve public perception of lake conditions	Periodic surveys of public opinion
	Number of people attending meetings that are open to the public

Public Involvement continued

- Task 22 – 3rd Public Meeting
  - Include public involvement in review and comment on the Draft Watershed Management Plan post-DOS comments
  - Include public comment of monitoring pilot,* including stand alone protocol

NOTE: Public comments are obtained, and a written summary should be provided to DOS from this meeting

NEW YORK STATE OF OPPORTUNITY. Office of Planning and Development

Contract Elements: Final Products

1. Final Watershed Management Plan incorporating public input (Task 23)

2. Watershed Monitoring Protocol and Pilot* incorporating public input (Task 24)
   - Finalize after public and DOS comments

3. Biological Study** (Task 10)
   - Finalize after WAC, public and DOS comments

Source: https://www.dec.ny.gov/chemical/23847.html

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

Contracting Requirements:

- ❑ Semi-Annual Status Reports (Task 26)
- ❑ Payment Requests – See contract
- ❑ MWBE Reporting (Task 25)
- ❑ Project Tracking throughout the contract
- ❑ Deliverables/ Products (See Tasks – “Products”)
- ❑ Communication with DOS throughout contract
- ❑ Project Closeout (Task 27, 26, 25, Payment Request, all products)

NEW YORK STATE OF OPPORTUNITY. | Office of Planning and Development

Watershed Management Plan (WMP) Examples

An Office of New York Department of State

November 10, 2021

Owasco WMP

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

Recommendation B-3: Adopt or Amend Local Regulations Designed to Reduce Nonpoint Source Pollution from Developed Areas

Specific Recommendations	Goal	Target Sub-Watershed or Critical Area	Project Leader* & Potential Partners	Potential & Existing Funding Sources	Potential Cost +	Priority	Implementation Timing		
							1 Yr	2-5 Yrs	5+ Yrs
Regulatory and Programmatic Actions									
B-3-a. **Assist watershed municipalities in amending local laws** to control nonpoint source pollution.	2,5	Municipalities with lake shoreline and/or major tributaries	*CCPED, WIP, OLWMC	Department and agency budgets	$$$	HIGH		X	
B-3-b. **Continue to offer training** to municipalities on issues that can be addressed through local codes.	2, 5	Municipalities with lake shoreline and/or major tributaries	*CCPED, WIP	Department and agency budgets	$$$	HIGH	X		
B-3-c. **Seek funds** to assist municipalities with updates to local regulations.	5	Municipalities with lake shoreline and/or major tributaries	*CCPED, WIP	NYSDOS, CNYRPDB	$$$	HIGH		X	
B-3-d. Advocate that municipalities **incorporate projections of climate change.**	5, 9	Municipalities with lake shoreline and/or major tributaries	*CCPED, CNYRPDB, WIP, CCE, OLWMC	Department and agency budgets; CNYRPDB resources	$-$$	MED		X	

Upper Hudson WMP

Wednesday, November 10, 2021
Project Initial Scoping Meeting
Task #1

Table 2. List of Waterbodies, Impacted Uses, Types of Pollutants and Sources within the Upper Hudson River Watershed
Source: NYSDEC WI/PWL

HUC-10 Subwatershed	Waterbody	Municipality	Uses Impacted	Types of Pollutant	Source of Pollutant	Classification
Anthony Kill – Hudson River	Upper Hudson, main stem	Glens Falls to Schuylerville	Fish consumption	PCBs, pathogens	Contaminated sediment, municipal	Impaired
Anthony Kill – Hudson River	Upper Hudson, main stem	Schuylerville to Riverside	Fish consumption, public bathing	PCBs, pathogens	Contaminated sediment, municipal	Impaired
Anthony Kill – Hudson River	Upper Hudson, main stem	Riverside to Mechanicville	Fish consumption, public bathing	PCBs, pathogens	Contaminated sediment, municipal	Impaired
Anthony Kill – Hudson River	Upper Hudson, main stem	Mechanicville to Troy Dam	Fish consumption, water supply, public bathing	PCBs, pathogens	Contaminated sediment, municipal, industrial discharge	Impaired
Lower Schroon River	Brant Lake	Town of Horicon	Water supply	Other pollutants	Other sources	Threatened (possible)
Upper Schroon River	Schroon Lake	Towns of Chester and Horicon	Fish consumption, Recreation	Metals (mercury), Silt/Sediment	Atmospheric Deposition, Urban/Storm Runoff, Streambank Erosion, Road Bank Erosion, De-Icing Activities	Impaired

Questions?

NYS Department of State
Office of Planning Development & Community Infrastructure
99 Washington Ave, Suite 1010
Albany, NY 12231

Project Manager: Irene Holak | Irene.Holak@dos.ny.gov
Capital Region Supervisor: Lisa Vasilakos | Lisa.Vasilakos@dos.ny.gov

---

Resources:

- Water Resources Management
  Water Resources Management | Department of State (ny.gov)
- Model Local Laws to Increase Resilience
  Model Local Laws to Increase Resilience | Department of State (ny.gov)