

**Table 4-1
Implementation Strategies for the Management Recommendations**

LEADERS/PARTNERS/FUNDING SOURCES LIST, ABBREVIATIONS		CATEGORIES OF COST		
ACEP	Agricultural Conservation Easement Program	\$	=	\$1-\$1,000
AEM	Agricultural Environmental Management	\$\$	=	\$1,001-\$10,000
AGNPS	Agricultural Nonpoint Source Abatement and Control Program	\$\$\$	=	\$10,001-\$100,000
Bond Act	Clean Water, Clean Air and Green Jobs Environmental Bond Act	\$\$\$\$	=	\$100,001-\$500,000
CCE	Cornell University Cooperative Extension	\$\$\$\$\$	=	>\$500,000
CFA	Consolidated Funding Application			
CLA	Conesus Lake Association			
CLWC	Conesus Lake Watershed Council			
CREP	Conservation Reserve Enhancement Program			
CRF	Climate Resilient Farming Program			
CRP	Conservation Reserve Program			
CWSRF	Clean Water State Revolving Fund			
EPA	Environmental Protection Agency			
EPF	Environmental Protection Fund (administered by several NYS agencies)			
EQIP	Environmental Quality Incentives Program			
FEMA	Federal Emergency Management Agency			
FLLOWPA	Finger Lakes - Lake Ontario Watershed Protection Alliance			
FL-PRISM	Finger Lakes Partnership for Regional Invasive Species Management			
FPIG	Farmland Protection Implementation Grants Program			
GIGP	NYSDEC Green Innovation Grant Program			
GLRI	Great Lakes Research Initiative			
Hwy Depts	Highway Departments			
ISGP	Invasive Species Grant Program			
LCDOH	Livingston County Department of Health			
LCPD	Livingston County Planning Department			
LCSWCD	Livingston County Soil and Water Conservation District			
LCWSA	Livingston County Water and Sewer Authority			
LWRP	Local Waterfront Revitalization Program			
NPG	Non-Agricultural Nonpoint Source Planning and MS4 Mapping			
NPSM	Nonpoint Source Management Program			
NRCS	Natural Resources Conservation Service			
NYSAGM	New York State Department of Agriculture and Markets			
NYSCDEA	New York State Conservation District Employees' Association			
NYSDEC	New York State Department of Environmental Conservation			
NYSDOH	New York State Department of Health			
NYSDOS	New York State Department of State			
NYSEFC	New York State Environmental Facilities Corporation			
NYSG	New York Sea Grant			
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation			
REDC	Regional Economic Development Council			
SGCP	Smart Growth Community Planning and Zoning Program			
TNC	The Nature Conservancy			
UFI	Upstate Freshwater Institute			
USACE	U.S. Army Corps of Engineers			
USDA	U.S. Department of Agriculture			
USFS	U.S. Forest Service			
WHIP	Wildlife Habitat Incentive Program			
WQIP	Water Quality Improvement Project Program			
		GOALS FOR THE WATERSHED		
		<p>1. Manage the Conesus Lake watershed in ways that control inputs of sediment and minimize entry of phosphorus, sodium and chloride, and other potential pollutants into the Lake.</p> <p>2. Maintain Conesus Lake as a dependable source of high-quality water that meets water supply needs and meets or exceeds public health standards for potable water and recreational uses.</p> <p>3. Continue efforts to detect, prevent, and mitigate harmful algal blooms (HABs) and their associated beneficial use impairments.</p> <p>4. Improve and enhance recreational access to and use of Conesus Lake while managing for and maintaining a balance between multiple uses, without overcrowding the Lake.</p> <p>5. Continue and expand efforts focused on prevention, early detection, and rapid response to terrestrial and aquatic invasive species to protect the health of the Lake. Support management efforts to conserve and/or restore habitats for a diverse and resilient assemblage of native species.</p> <p>6. Maintain and strengthen the effective intermunicipal partnerships fostered through the Conesus Lake Watershed Council and continue to take actions that will increase resilience to changes in climate, population, and land use.</p> <p>7. Continue to work with the federal, state, regional, county, and local resources to make management decisions that reflect the best available information regarding Conesus Lake and watershed.</p> <p>8. Employ multiple approaches to outreach and education that enhance community awareness of how human activities affect water resources, opportunities for nature-based solutions, and the effectiveness of local actions</p>		

Goals and Corresponding Management Recommendations		Priority Subwatershed(s)	Project Leader* and Potential Partners	Potential and Existing Funding Sources	Potential Cost	Priority (High, Medium, Low)	Implementation Timing (Years)		
							1	2-5	5+
Goal 1: Manage the Conesus Lake watershed in ways that control inputs of sediment and minimize entry of phosphorus, sodium and chloride, and other potential pollutants into the Lake.									
Recommended Actions - Agricultural Lands									
1.1	Encourage and support farmers' participation in the tiered AEM program and progression through the implementation and evaluation phases.	Applicable watershed-wide; highly suggested for Cottonwood, Long Point, Sand Point, North End, No Name, Central, and Hanna's Creek	LCSWCD*, NYSAGM, USDA NRCS, CLWC, Farmers	County Department and/or agency budgets; EPF NYSAGM & NYSDEC	\$\$	High	X		
1.2	Promote and support agricultural education events with the non-farming community to seek a renewed understanding of the local agricultural working landscape and connect the community.	Applicable watershed-wide	LCSWCD*, NYSAGM, USDA NRCS, CLWC, CCE, Farmers	County Department and/or agency budgets	\$	Medium	X		
1.3	Promote and support adoption of BMPs a) to reduce loss of nutrients and sediments during the winter and early spring, such as planting winter cover crops on tilled lands b) to establish natural systems such as Riparian Buffer Systems, with a focus on establishing native vegetation that supports site adaptability and species diversity, including pollinators. c) to reduce erosion from lands, including field terracing on slopes, stormwater management, and nutrient management actions. d) to reduce streambank erosion and sediment runoff (e.g., livestock access control and associated practices) as well as implementing buffers along riparian areas.	Applicable watershed-wide; highly suggested for Cottonwood, Long Point, Sand Point, North End, No Name, Central, and Hanna's Creek	LCSWCD*, NYSAGM, USDA NRCS, CLWC, Farmers	County Department and/or agency budgets; BOND Act; EPF NYSAGM AGNPS, CREP; NYSDEC WQIP; FLOWPA	\$\$	High	X		
1.4	Identify and pursue opportunities for BMP installation at the subwatershed scale for downstream capture and infiltration of stormwater runoff from agricultural lands.	Applicable watershed-wide; highly suggested for Cottonwood, Long Point, Sand Point, North End, No Name, Central, and Hanna's Creek	LCSWCD*, NYSAGM, USDA NRCS, CLWC, Farmers	County Department and/or agency budgets; BOND Act; EPF NYSAGM AGNPS & CREP; NYSDEC WQIP; FLOWPA	\$\$\$\$	High	X		
1.5	Support research and monitoring of the impact of rainfall intensity on BMP performance and incorporate findings into farm planning efforts and design considerations.	Applicable watershed-wide	LCSWCD*, NYSAGM, USDA NRCS, CLWC, Farmers	County Department and/or agency budgets; BOND Act; EPF NYSAGM AGNPS; NYSDEC WQIP; NYSAGM CRF	\$\$	Medium	X		
1.6	Provide additional resources to LCSWCD to support watershed farmers as they strive to reduce nutrient and sediment export to the waterways	Applicable watershed-wide	LCSWCD*, NYSAGM, USDA NRCS, CLWC, Farmers	NRCS ACEP, CRP, EQIP, WHIP, CSP; NYSDEC WQIP, NPG, GLRI; NYSAGM AGNPS, AEM, CRF, Source Water Buffer Program, Agricultural and Farmland Protection Implementation Grants	\$\$\$\$	High		X	
1.7	Identify additional funding sources to help support agricultural BMP implementation.	Applicable watershed-wide	LCSWCD*, NYSAGM, USDA NRCS, CLWC, Farmers	Finger Lakes Regional Economic Development Council, EPF FPIG, AGNPS; BOND Act	\$\$	High	X		
Recommended Actions - Built Environment (Refer to Appendix A details on local law recommendations)									
1.8	Provide proactive training, outreach, and assistance to Code Enforcement Officers, highway department staff, and other municipal staff and board/planning/zoning board members to ensure effective and consistent application and enforcement of regulations and requirements.	Applicable watershed-wide	County, Municipalities, CLWC*, Watershed Inspector	EPF NYSDOS; County department, agency, and municipal budgets	\$\$	High		X	
1.9	Encourage watershed municipalities to review the Institutional Framework: Roles and Responsibilities and Nongovernmental Agencies (Appendix A) and consider incorporating recommendations specific to their community to improve their resilience to extreme hydrologic events.	Applicable watershed-wide	County, Municipalities*	County Department, and municipal budgets; NYSDEC Resilient NY Program; FEMA Flood Mitigation Assistance; EPA CWSRF	\$	High		X	
1.10	Incorporate specific and enforceable stormwater management provisions into site plan review criteria, subdivision regulations, erosion and sediment control laws, and construction and design specifications to limit creation of impervious surfaces and support "low impact development," consistent with the NYSDEC Stormwater Management Design Manual.	Applicable watershed-wide	County, Municipalities*, CLWC	State, Federal and Regional grant programs via CFA; Community Risk & Resiliency Act; EPF NYSDOS programs; NYSDEC; County Department, and municipal budgets	\$\$\$\$	High		X	
1.11	Minimize variances granted to sites requesting an increase in impervious area to maximize protection for floodplains, watershed properties, and other critical areas.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	Municipalities*, County	County Department and municipal budgets	\$	High		X	

Goals and Corresponding Management Recommendations		Priority Subwatershed(s)	Project Leader* and Potential Partners	Potential and Existing Funding Sources	Potential Cost	Priority (High, Medium, Low)	Implementation Timing (Years)		
							1	2-5	5+
1.12	Provide information to homeowners regarding measures to reduce the transport of sediment, nutrients, and salt into the waterways, such as incorporating green infrastructure, implementing de-icing BMPs, and implementing fertilizer use BMPs.	Applicable watershed-wide	County, CLWC*, CLA, NYSDOH, NYSDEC	County Department, agency, and municipal budgets; EPA Environmental Education Grants; FLOWPA	\$	Medium	X		
1.13	Engage with watershed municipalities to consider updating zoning laws and ordinances to reduce maximum lot coverage by 5-10% for zoning districts in the watershed.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	County, CLWC, Municipalities*	EPF NYSDOS SGCP; County Department, and municipal budgets; NYSDEC Resilient NY Program, EPA CWSRF;	\$\$\$\$**	Medium		X	
1.14	Encourage watershed municipalities to consider updating and making consistent the definitions of lot coverage, impervious surface, and green infrastructure among local regulations.	Applicable watershed-wide	Municipalities*, County, CLWC	EPF NYSDOS SGCP; County Department, and municipal budgets; NYSDEC Resilient NY Program; EPA CWSRF	\$\$\$\$**	Medium	X		
1.15	Incorporate specific and enforceable requirements for incorporating low impact development and green infrastructure measures outlined in the NYSDEC Stormwater Management Design Manual into the County Erosion and Sediment Control Model Law. Encourage watershed municipalities to adopt the updated model law.	Applicable watershed-wide	Municipalities, County*, NYSDEC, CLWC	NYSEFC GIGP; County Department, agency, and municipal budgets; SGCP; EPF NYSDOS programs	\$\$\$	High		X	
1.16	Encourage watershed municipalities to consider updating comprehensive plans to include goals and strategies that guide land use decisions and enhance the protection of water resources.	Applicable watershed-wide	County, Municipalities*, CLWC	EPF NYSDOS SGCP; County Department and municipal budgets	\$\$\$\$	High		X	
1.17	Encourage lakefront municipalities to consider increasing the minimum shoreline setback requirements, where feasible.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	County, Municipalities*, CLWC	EPF NYSDOS SGCP; County Department and municipal budgets	\$\$\$\$**	High		X	
1.18	Watershed municipalities to consider including cluster development (conservation subdivisions) in zoning regulations including incentives and specific requirements to identify open space conservation measures.	Applicable watershed-wide	Municipalities*, County, CLWC	EPF NYSDOS SGCP; County Department and municipal budgets	\$\$\$\$**	Low		X	
1.19	Encourage watershed municipalities to consider adding guidance in zoning regulations for incorporating green infrastructure (i.e., rain gardens, bioswales, porous pavers) when any new impervious surface is created for lots in the watershed (.g., deck, stone patio, driveways, parking areas).	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	Municipalities*, County, CLWC	EPF NYSDOS SGCP; County Department and municipal budgets	\$\$\$\$**	High		X	
1.20	Encourage watershed municipalities to consider amending parking regulations in each zoning ordinance to require low impact development and green infrastructure measures using guidance in the NYSDEC Stormwater Management Design Manual.	Applicable watershed-wide	County, Municipalities*, CLWC	EPF NYSDOS SGCP; NYSDEC GIGP; County Department and municipal budgets	\$\$\$\$**	High		X	
1.21	Identify and pursue opportunities for regional BMP installations for downstream capture and infiltration of stormwater runoff from the built environment.	Applicable watershed-wide	LCSWCD, NYSDEC, Municipalities*, County, CLWC	County Department, agency, and municipal budgets; NYSDEC WQIP	\$\$\$\$\$	High		X	
1.22	Encourage watershed municipalities to consider establishing a transfer of development rights (TDR) program that transfers development potential from environmentally sensitive areas, called sending zones, to specific areas designated for growth, called receiving zones.	Applicable watershed-wide	County, Municipalities*	County Department and municipal budgets; EPF NYSDEC; BOND Act	\$\$\$	Low			X
Recommended Actions - Wastewater Management									
1.23	Encourage watershed municipalities to develop and implement a uniform septic system inspection program that requires inspection at realty transfer, at applying for a building permit that would result in increased residential capacity, as well as periodic inspections of all systems at defined intervals.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	Municipalities*, CLWC, LCDOH, NYSDEC	County Department, agency, and municipal budgets	\$\$\$	High		X	
1.24	Encourage participation in NYSDEC septic system replacement program for qualifying systems.	Applicable only to the specific properties that qualify for the program	Municipalities, CLWC, LCDOH*, NYSDEC, NYSDOH	NYSDEC NYSEFC Septic System Replacement Program and/or others	\$	Medium	X	X	X
1.25	Implement an inspection program in areas served by sanitary sewers to identify and eliminate illicit storm sewer connections and reduce the risk of combined sewer overflow events.	Applicable watershed-wide	Municipalities*, CLWC, LCWSA, LCDOH*, NYSDEC	County Department and/or agency budgets; NYSDEC NPG	\$\$\$	Medium			X
1.26	Seek funding for financial incentives to encourage septic system upgrades and use of alternative septic systems that achieve greater pollutant reduction.	Applicable watershed-wide	Municipalities*, CLWC, LCDOH*, NYSDEC	County Department and/or agency budgets	\$\$\$-\$\$\$\$	Medium			X
1.27	Investigate feasibility and funding for a cost-sharing program to implement a septic system repair and replacement program for qualifying households, and a funding program to connect private systems to municipal sewer systems if they are located beyond the required connection distance.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	Municipalities*, CLWC, LCWSA, LCDOH*, NYSDEC	County Department and/or agency budgets	\$\$	Medium		X	

Goals and Corresponding Management Recommendations		Priority Subwatershed(s)	Project Leader* and Potential Partners	Potential and Existing Funding Sources	Potential Cost	Priority (High, Medium, Low)	Implementation Timing (Years)		
							1	2-5	5+
Recommended Actions - Managed Woodlands									
1.28	Survey for forest pests that affect hemlock, ash, spruce, and other tree species that are currently integral to watershed stabilization. Forest research and management should address identifying and controlling these and other pests. Strategic planting of species less susceptible to impacts of infestation, while prioritizing native species, should be undertaken in areas where canopy loss will result in significant system destabilization.	Applicable watershed-wide	FL-PRISM*, CLWC, Universities, NYSDEC, USFS	County Department and/or agency budgets, EPF NYSDEC Invasive Species grant; AGNPS; NRCS; BOND Act; USDA	\$\$\$	Medium	X		
1.29	Provide support for reforestation efforts, such as NYSDEC programs, and grant applications to conservation organizations.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	CLWC, NYSDEC, FL-PRISM, USFS, conservation organizations	County Department and/or agency budgets; EPF NYSDEC Invasive Species grant; NYS AGNPS; NRCS; BOND Act; USDA	\$\$	Medium	X		
1.30	Consider developing a model local law requiring advance review and permitting of timber harvest and site restoration plans (certain agricultural activities exempted to prevent conflicts with NYS Ag and Markets regulations). Encourage watershed municipalities to adopt the model local law.	Applicable watershed-wide	Municipalities*, LCPD, NYSDEC, SWCD, USFS, CLWC	County Department and/or agency budgets	\$	Medium			X
Recommended Actions - Tributary Streambanks and Lake Shoreline									
1.31	Continue to inventory the condition of streambanks and seek funding to create an engineered solution and implement stabilization methods along priority segments.	Applicable watershed-wide. Wilkins Creek and North McMillan Creek are high priority subwatersheds.	CLWC*, LCPD*, USDA NRCS, LCSWCD, Universities	County Department and/or agency budgets; EPF NYSDEC WQIP; FLOWPA	\$\$\$	High	X		
1.32	Seek funding opportunities that support streambank stabilization projects.	Applicable watershed-wide. Wilkins Creek and North McMillan Creek are high priority subwatersheds.	CLWC*, LCPD, LCSWCD, Universities	EPF NYSDEC WQIP, Non-Ag Nonpoint Source Abatement Program, FLOWPA	\$\$\$\$	High	X		
1.33	Provide educational resources to homeowners along the Lake and tributaries regarding BMPs to reduce nutrient, sediment, and salt loading into the Lake and tributaries, such as living shorelines as an alternative to hardening shorelines, maintaining riparian and lakeshore buffers, and implementing de-icing BMPs.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	CLA, CLWC*, Municipalities, NYSDEC, CCE	FLOWPA, County Department and/or agency budgets	\$\$	Medium	X		
1.34	Increase education on and enforcement of safe boating practices and boat and personal watercraft laws to reduce shoreline erosion caused by boating activities.	Priority for lakeshore areas, including boat launches and other public areas.	CLA, CLWC, NYSDEC, Municipalities, LC Sheriff Marine Patrol*	County Department and/or agency budgets	\$\$	Medium		X	
Recommended Actions - Conservation Lands									
1.35	Explore opportunities to enhance, restore, protect, or create wetlands and floodplains within the watershed to reduce nutrient and sediment loads.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	LCPD, CLWC, Landowners, LCSWCD*, NYSDEC	County Department and/or agency budgets; EPF NYSDEC WQIP	\$	High		X	
1.36	Identify cooperative landowners to facilitate acquisition of conservation easements to implement watershed protection strategies, building on available funding opportunities for land acquisition for water quality protection.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	Genesee Valley Conservancy*, LCPD, CLWC, LCSWCD, Landowners	County Department and/or agency budgets; NYSDEC WQIP; NYSAGM Source Water Buffer Program	\$	Medium			X
1.37	Inventory parcels for their potential to capture and infiltrate runoff and consider opportunities for their protection such as easements or acquisition by land trust.	Applicable watershed-wide, with a priority for properties located adjacent to streams and/or the Lake	Genesee Valley Conservancy*, LCPD, CLWC, LCSWCD, TNC, Landowners	TNC; NYSDEC	\$\$	High			X
1.38	Consider becoming actively engaged in the NYSDEC Open Space Conservation Planning efforts, or other similar planning efforts.	Applicable watershed-wide	NYSDEC, LCPD*, Genesee Valley Conservancy	County Department and/or agency budgets; NYSDEC	\$	Medium	X		
Recommended Actions - Monitoring and Assessment									
1.39	Continue to monitor water quality conditions of the tributaries included in the USDA study of BMP effectiveness, along with other major tributaries.	Applicable watershed-wide, particularly where monitoring is currently underway	Universities*, CLWC, CLA, NYSDEC, USDA NRCS, LCSWCD	County Department and/or agency budgets; NYSDEC FLOWPA	\$\$	High	X		
1.40	Continue to collaborate with academic partners and NYSDEC biologists to evaluate stream health using a range of metrics, including the benthic macroinvertebrate community.	Applicable watershed-wide, particularly where monitoring is currently underway	Universities*, CLWC, CLA, NYSDEC	County Department and/or agency budgets; NYSDEC FLOWPA	\$	High	X		
1.41	Review and compile all tributary monitoring results to create a long-term dataset of nutrients, salts, sediment, and other water quality parameters.	Applicable watershed-wide	Universities*, CLWC, CLA, NYSDEC, USDA NRCS, LCSWCD	County Department and/or agency budgets; NYSDEC FLOWPA	\$\$	High		X	

Goals and Corresponding Management Recommendations		Priority Subwatershed(s)	Project Leader* and Potential Partners	Potential and Existing Funding Sources	Potential Cost	Priority (High, Medium, Low)	Implementation Timing (Years)		
							1	2-5	5+
Goal 2: Maintain Conesus Lake as a dependable source of high-quality water that meets water supply needs and meets or exceeds public health standards for potable water and recreational uses.									
Recommended Actions - Water Quantity									
2.1	Develop outreach materials related to water conservation.	Applicable watershed-wide	CLA*, CLWC, CCE, Local schools	LCWSA; County Department budgets	\$	Medium	X		
2.2	Survey the outlet channel and develop a hydraulic model of Conesus Creek. This will better define the relationship between Lake level and limit of gravity flow from the Lake into Conesus Creek.	Not applicable	CLWC*, NYSDEC	LCWSA; NRCS EQIP	\$\$-\$\$\$	High			X
2.3	Maintain the streamgage sited on Conesus Inlet to provide local data to support water and nutrient budgets. Consider additional streamgage sites on Conesus Lake tributaries.	Conesus Inlet, South McMillan Creek, North McMillan Creek, No Name Creek, Long Point Creek, Sand Point Gully, Hanna's Creek, Wilkins Creek, North Gully, South Gully, Densmore Creek, and Southwest Creeks subwatersheds	CLWC, CLA*, Universities	FLOWPA; LCWSA	\$\$	High		X	
2.4	Consider electrically actuating the outlet gates and implementing remote operations capabilities and/or a Supervisory Control and Data Acquisition system for real time gate control and improved ability to control Lake water levels.	Not applicable	CLWC, NYSDEC, USACE, LCWSA*	LCWSA	\$	Medium			X
2.5	Implement programs to detect and repair pipeline leaks.	Applicable watershed-wide	Water purveyors*, CLWC, Municipalities	LCWSA	\$\$\$	High			X
2.6	Implement recommendations of the 2021 Safe Yield Analysis (Schnabel Engineering 2021), including discussions with the USACE to clarify meeting the Rule Curve targets and options to modify the Rule Curve during periods of extreme conditions (both flooding and drought) and update the Safe Yield Analysis as the hydrologic record expands, demand for water changes, water systems are upgraded, or regulatory requirements are modified.	Applicable watershed-wide	LCPD*, NYSDEC, USACE	County Department, agency, and municipal budgets; USACE; NYSDEC	\$\$\$-\$\$\$\$	Medium			X
Recommended Actions - Water Quality									
2.7	Support research to investigate sources and effects of increasing levels of sodium and chloride in Conesus Lake and its drinking water.	Watershed-wide, areas with road crossings and where roads follow close to the lakeshore; subwatersheds with higher amounts of impervious surfaces (Wilkins Creek, North End, Hanna's Creek, Central, and NW Creeks).	CLWC*, CLA, Universities	FLOWPA; LCWSA	\$\$	High	X		
2.8	Work with the Conesus Lake Watershed Council and local government authorities to identify, seek funding, and implement BMPs for road salt. This may include BMPs and education related to highway salting practices and technologies, homeowner de-icing practices, and de-icing practices on sidewalks and parking lots.	Watershed-wide, areas with road crossings and where roads follow close to the lakeshore; subwatersheds with higher amounts of impervious surfaces (Wilkins Creek, North End, Hanna's Creek, Central, and NW Creeks).	Municipalities, CLWC*, LCPD, LCSWCD, LCDOH, Hwy Depts	County Department, agency, State, and municipal budgets; EPF NYSDEC WQIP, NPG and NYSEFC	\$\$-\$\$\$	High		X	
2.9	Continue to monitor for emerging contaminants and organic compounds in Conesus Lake and its drinking water, including cyanotoxins and broad-spectrum insecticides, and evaluate water treatment technologies that may enhance removal of or minimize the levels of these contaminants.	Not applicable	Water purveyors*, NYSDOH, Industry groups	County Department, agency, State, and municipal budgets	\$	Medium			X
Goal 3: Continue efforts to detect, prevent, and mitigate cyanobacterial blooms (HABs) and their associated beneficial use impairments.									
Recommended Actions - Research and Monitoring									
3.1	Continue to deploy trained community scientists to survey Lake shoreline areas for potential HABs and report to County and NYHABS.	Applicable watershed-wide	NYSDEC, LCDOH*, CLA, CLWC	County Department and/or agency budgets	\$\$	High	X		
3.2	Continue monitoring Conesus Lake to track trophic state indicator parameters, the Lake's phytoplankton community, HABs, and attainment of beneficial uses.	Lake-wide	Universities*, CLWC, NYSDEC, CLA	County Department and/or agency budgets; research grants	\$\$	High	X		
3.3	Monitor TP concentrations in the lake outlet to improve understanding of status and trends of internal (legacy) phosphorus load.	Lake-wide	Universities*, NYSDEC, CLA, UFI, CLWC	County Department and/or agency budgets; research grants	\$\$	High	X		
3.4	Supplement the understanding of the plankton species and toxins contributing to blooms through taxonomic analysis of samples collected during conditions favorable for HABs formation (i.e., quiescent conditions, warm water, recent nutrient inputs).	Lake-wide	Universities*, CLA, CLWC, NYSDEC	County Department and/or agency budgets; research grants	\$\$\$	High		X	

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3.5	Support research to investigate the role of environmental changes on Lake metabolism, primary production and phytoplankton dynamics, nutrient cycling, and carbon chemistry.	Applicable watershed-wide	Universities*, CLWC, NYSDEC, CLA	County Department and/or agency budgets; research grants	\$	High			X
Recommended Actions - Risk Communication									
3.6	Continue to build and deploy effective communication tools to alert recreational users regarding suspicious or confirmed HABs and appropriate response.	Applicable watershed-wide	CLA, CLWC*, NYSDEC, LCDOH	County Department and/or agency budgets	\$\$\$	High	X		
3.7	Continue to have the LCDOH Conesus Lake Watershed Inspector manage advisories regarding water contact recreation.	Applicable watershed-wide	LCDOH*, CLWC, CLA, NYSDEC	County Department, municipal, and/or agency budgets	\$\$	High	X		
3.8	Collaborate with CLA and others to provide consistent information regarding the factors affecting HABs formation, recommended measures to reduce risk of exposure, strategies for living safely with HABs, and near-real time data on Lake conditions.	Applicable watershed-wide	CLA, CLWC, NYSDEC, LCDOH*	County Department and/or agency budgets; NYSDEC FLOWPA	\$\$	High	X		
Recommended Actions - Mitigation									
3.9	Continue to collaborate with NYSDEC, NYSDOH, USACE, and research institutions as they evaluate emerging technologies for predicting HABs and mitigating their persistence and toxicity in the Lake environment.	Applicable watershed-wide	CLWC*, NYSDEC, USACE, NYSDOH, Universities	County Department and/or agency budgets; NYSDEC WQIP	\$\$	High	X		
3.10	Continue to track efforts of NYSDEC and others to mitigate internal phosphorus load and evaluate the potential for rehabilitation of Conesus Lake.	Lake-wide	NYSDEC*, LCPD, CLWC, LCDOH	County Department and/or agency budgets; NYSDEC WQIP	\$\$	Medium	X		
Goal 4: Improve and enhance recreational access to and use of Conesus Lake while managing for and maintaining a balance between multiple uses, without overcrowding the Lake.									
Recommended Actions									
4.1	Provide for public swimming areas, considering access, safety, and water quality monitoring needs.	Applicable watershed-wide; subwatersheds with existing parks and public access would be prioritized (e.g., Inlet, Long Point, North End, South Gully, and Hanna's Creek)	Municipalities*, CLWC, LCPD, LCDOH, CLA	County Department, municipal, and/or agency budgets	\$\$-\$\$\$	Medium		X	
4.2	Review "no wake" zone guidelines and watercraft speed limits to evaluate whether they are adequately protective of Conesus Lake recreational users and shoreline erosion.	Applicable watershed-wide	CLA, CLWC*, NYSDEC, LC Sheriff Marine Patrol, Municipalities	County Department and/or agency budgets	\$	High	X		
4.3	Enhance signage and public information regarding safe and courteous boating practices that minimize environmental impacts and conflicts among recreational uses.	Applicable watershed-wide	CLA, CLWC*, NYSOPRHP, LC Sheriff Marine Patrol, Municipalities	County Department and/or agency budgets; NYSDEC FLOWPA; NYSDOS NYSG	\$\$-\$\$\$	Medium	X		
4.4	Collect survey data from weekend and weekday boat traffic on Conesus Lake and compare with public safety guidelines for boat density.	Not applicable	CLA, CLWC*, NYSOPRHP, LC Sheriff Marine Patrol, Municipalities	County Department and/or agency budgets	\$\$	Medium		X	
4.5	Develop a plan to monitor public boat launch capacity and evaluate actions to protect public safety when launch is near capacity.	South Gully	NYSOPRHP*, CLA, CLWC, LC Sheriff Marine Patrol, Municipalities	County Department and/or agency budgets	\$\$	High		X	
Goal 5: Continue and expand efforts focused on prevention, early detection, and rapid response to terrestrial and aquatic invasive species to protect the health of the Lake. Support management efforts to conserve and/or restore habitats for a diverse and resilient assemblage of native species.									
Recommended Actions									
5.1	Implement Conesus Lake response plans (update as needed) and other State plans/initiatives to address invasive species and associated impacts.	Applicable watershed-wide	CLWC*, NYSDEC, FL-PRISM, CLA	County Department and/or agency budgets; NYSDEC NYSG, EPF, ISGP, FLOWPA	\$\$	High	X		
5.2	Continue to support the Watercraft Steward program and increase hours of watercraft stewards and inspections at Lake access points. Promote and improve participation in boat decontamination services to reduce the introduction and dispersal of invasive species.	The priority subwatersheds for the Watercraft Steward program recommendation include those with existing parks and public access (e.g., Inlet, Long Point, North End, South Gully, and Hanna's Creek).	CLWC*, NYSDEC, FL-PRISM, NYSOPRHP, SUNY ESF, CLA	County Department and/or agency budgets; EPF CFA, EPF NYSDOS LWRP; FLOWPA	\$\$-\$\$\$	High	X		
5.3	Continue to enlist and train community scientists to conduct periodic monitoring and surveillance, and report observations of invasive species to collaborative data management systems, including iMapInvasives.	Applicable watershed-wide	CLWC, NYSDEC, FL-PRISM*, CLA	County Department and/or agency budgets	\$\$	High	X		

Goals and Corresponding Management Recommendations		Priority Subwatershed(s)	Project Leader* and Potential Partners	Potential and Existing Funding Sources	Potential Cost	Priority (High, Medium, Low)	Implementation Timing (Years)		
							1	2-5	5+
5.4	Continue partnerships and collaboration with the FL-PRISM and other resources to remain on alert for spread of high impact or priority species, such as <i>Hydrilla</i> .	Applicable watershed-wide	CLWC*, NYSDEC, FL-PRISM, CLA	County Department and/or agency budgets; NYSG, EPF ISGP, WQIP, GLRI	\$\$	High	X		
5.5	Collaborate with Cornell Cooperative Extension, local schools, and others to continue efforts to educate the watershed community on invasive species prevention.	Applicable watershed-wide	CLWC*, NYSDEC, LCDOH, FL-PRISM, CCE, CLA	County Department and/or agency budgets; EPF ISGP, NYSDEC	\$\$	High	X		
5.6	Modify local codes to encourage planting native species and discourage or prohibit planting of invasive or aggressive species.	Applicable watershed-wide	CLWC*, LCPD, FL-PRISM, Municipalities	County Department and/or agency budgets; EPF ISGP, EQIP, CREP	\$\$	Medium		X	
Goal 6: Maintain and strengthen the effective intermunicipal partnerships fostered through the Conesus Lake Watershed Council and continue to take actions that will increase resilience to changes in climate, population, and land use.									
Recommended Actions									
6.1	Continue to support the Conesus Lake Watershed Council and the positions of Watershed Manager and Watershed Inspector.	Applicable watershed-wide	LCPD*, CLA, LCDOH, Municipalities	County Department, municipal, and/or agency budgets	\$	High	X		
6.2	Continue active participation in state, regional and local groups to continue to build understanding of existing and emerging best practices and share the accomplishments of the Conesus Lake Watershed Management Plan (CLWMP).	Applicable watershed-wide	CLWC*, CLA, LCPD, LCDOH, Municipalities	County Department and/or agency budgets; NYSDEC WQIP; EPF NYSDOS LWRP	\$\$	High	X		
6.3	Continue to pursue funding opportunities to advance the goals of the updated CLWMP.	Applicable watershed-wide	CLWC*, CLA, LCPD, LCDOH, LCSWCD, Municipalities	County Department and/or agency budgets; NYSDEC WQIP; EPF NYSDOS LWRP	\$\$	High	X		
6.4	Continue to prepare an annual report card of projects and progress, emerging issues, and new technologies toward meeting the goals of the CLWMP.	Applicable watershed-wide	CLWC*, CLA, LCPD, Municipalities	County Department, municipal, and/or agency budgets	\$\$	High	X		
6.5	Advocate for support of FLOWPA and other watershed management funding programs in the New York State budget.	Applicable watershed-wide	CLWC*, CLA, LCPD, Municipalities	County Department and/or agency budgets	\$	High	X		
6.6	Advocate for additional resources to support the Livingston County Soil & Water Conservation District (SWCD) and the NYS Department of Agriculture & Markets in their key role protecting the lands and waters and the continued viability of agricultural enterprises.	Applicable watershed-wide	CLWC*, CLA, LCPD, LCDOH, NYSDEC, NYSOPRHP, Municipalities, LCSWCD, NYSAGM	County Department and/or agency budgets	\$\$	High	X		
Goal 7: Continue to work with the federal, state, regional, county, and local resources to make management decisions that reflect the best available information regarding Conesus Lake and watershed.									
Recommended Actions									
7.1	Continue to coordinate with local, regional, and state organizations and researchers to develop, pilot, implement, and evaluate emerging technologies designed to maintain and improve Conesus Lake water quality.	Applicable watershed-wide	CLWC, CLA, NYSDEC, Universities*	County Department and/or agency budgets; NYSEFC REDC; EPF CFA agency grant programs	\$	High	X		
7.2	Continue to partner with CLA and other groups on emerging technology to monitor environmental conditions affecting the Lake and watershed.	Applicable watershed-wide	CLWC, CLA*, NYSDEC, Universities	County Department and/or agency budgets; NYSDEC – EPF and others	\$	High	X		
7.3	Continue to support and provide targeted training (e.g., roadside ditch management, emergency stream intervention, erosion and sediment controls, winter road maintenance technologies, prescribed grazing, conservation skills, etc.) to municipal decision makers, SWCDs, and personnel in order to underscore the importance of water quality protection as well as associated tools and strategies.	Applicable watershed-wide	CLWC*, CLA, Municipalities	County Department and/or agency budgets; EPA NPSM; NYSDEC – EPF and others	\$	High	X		
7.4	Provide support for existing erosion and sediment control education & certification programs to ensure proper implementation. Pursue opportunities to enhance existing programs and introduce new education opportunities.	Applicable watershed-wide	LCSWCD*, NYSCDEA, NYSDEC, CLWC, Municipalities	County Department and/or agency budgets; LCSWCD; FLOWPA	\$\$	Medium		X	
7.5	Support the Conesus Lake Association (CLA) in their efforts to develop a publicly accessible database to preserve, archive, and utilize Conesus Lake water quality data.	Applicable watershed-wide	CLA*, CLWC, LCPD, Municipalities, NYSDEC, Universities	County Department, municipal, and/or agency budgets; CLA	\$	Medium			X
7.6	Support the CLA Water Quality Committee's initiative to develop an integrated data management platform service for current and future data and resources such as meteorological data, Lake level data, information from federal and state agencies, and results of local monitoring. Data visualization tools would be included, along with capability for real-time alerts of extreme conditions.	Applicable watershed-wide	CLA*, CLWC, LCPD, LCDOH, Municipalities, NYSDEC, Universities	County Department, municipal, and/or agency budgets; CLA	\$	High			X

Goals and Corresponding Management Recommendations		Priority Subwatershed(s)	Project Leader* and Potential Partners	Potential and Existing Funding Sources	Potential Cost	Priority (High, Medium, Low)	Implementation Timing (Years)		
							1	2-5	5+
Goal 8: Employ multiple approaches to outreach and education that enhance community awareness of how human activities affect water resources, opportunities for nature-based solutions, and the effectiveness of local actions.									
Recommended Actions									
8.1	Continue to promote watershed stewardship and the use of BMPs through the Watershed Education Center, Conesus Stewardship Initiative, and additional programming. Topics may include the use of zero phosphorus fertilizer, landscaping BMPs, invasive species spread prevention, green infrastructure practices, proper stormwater practice maintenance, shoreline restoration, winter salt use, and erosion control BMPs.	Applicable watershed-wide	CLWC*, CLA, CCE, LCSWCD, FL-PRISM, NYSDEC, Local schools	County Department and/or agency budgets	\$\$	High	X		
8.2	Continue to promote watershed education of primary and secondary school students.	Applicable watershed-wide	CLWC*, CCE, Local schools, LCDOH	County Department and/or agency budgets	\$	High	X		
8.3	Continue partnerships with groups promoting watershed stewardship throughout the community, including the CLA, FL-PRISM, WEC, and CCE.	Applicable watershed-wide	CLWC*, CLA, CCE, FL-PRISM, WEC	County Department and/or agency budgets	\$	High	X		

Notes:

* Project Leader. While the recommendations represent CLWC priorities from which their Work Plans will be developed, they will rely on project partners for the implementation of some of these recommendations.

** Indicates the recommendations for zoning ordinance updates that could be combined into one zoning update per municipality, the cost of which would be categorized as \$\$\$\$\$. Individually the cost of each recommendation would be categorized as \$.\$.