Vessel Waste No Discharge Zone Designation Petition

For

Lake Seneca and Lake Cayuga, New York -

Prepared by the New England Interstate Water Pollution Control Commission on behalf of the New York - State Department of Environmental Conservation -

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1. Introduction

Approximately two million years ago cyclic glacial action began as monstrous frozen formations from the Laurentide Ice Sheet began to melt and travel southward. A series of valley streams flowing in present-day New York State were cut wide and deep by constant glacial assault into what we now call the Finger Lakes, so named due to Native American myths in which the lakes are a handprint where the creator placed his palm to rest.

The Finger Lakes are in the Oswego River Watershed, a 5122 square mile area drained by the Oswego River. Upland waters flow into the Finger Lakes and their associated tributaries, and in turn feed low elevation rivers and ultimately flow out to Lake Ontario. These lakes and their surrounding watersheds provide fresh drinking water, hydroelectric power, prime residential real estate, and wildlife refuge. Additionally, the region is a large source of tourism revenue supported by boating, fishing, diving, swimming and all other forms of lakeside recreation. The area's unique geology allows prolific grape production and is taken advantage of by over 100 wineries and vineyards. Additionally, numerous pastures, dairies, and farms thrive in the area. It can be seen that the residents and industries in the Finger Lakes region are dependent on their sources of clean water.

The Finger Lakes region is home to two of North America's deepest lakes: Lake Seneca and Lake Cayuga. The New England Interstate Water Pollution Control Commission (NEIWPCC) has developed this petition on behalf of the New York State Department of Environmental Conservation (NYSDEC) in order to establish a vessel waste No Discharge Zone (NDZ) in Lake Seneca, Lake Cayuga, and their associated tributaries. NYSDEC will submit the final petition to EPA for approval. A combined petition for both Lake Seneca and Lake Cayuga was deemed appropriate due to their connection by the Seneca River. Lake Seneca feeds into Lake Cayuga via the Seneca River and as such the two lakes share environmental concerns.

Many existing NDZs in New York State have been granted upon finding that the waterbody requires greater environmental protection and that there are adequate vessel waste pump-out facilities available. NDZ's may also be granted on the basis of human health if the established waters are drinking water intake zones. This type of NDZ, known as a 312(f) (4) (B) NDZ, may be granted without the need to demonstrate sufficient pump-out facilities. This type of NDZ was granted in 1996 for the Class A (Drinking) waters of the Hudson River. While both Lake Seneca and Lake Cayuga are used for drinking water, only portions of each lake are designated as Class A waters. Therefore, additional justification for this petition is being provided on the basis of sufficient pump-out facilities for the amount of vessel traffic the lakes support.

1.1 Lake Seneca

Lake Seneca, named for the Seneca nation of Native American people, is the largest and deepest of all the Finger Lakes at 4.2 trillion gallons in volume and 291 feet in average depth. The maximum depth of the lake is 618 feet. The Lake Seneca Watershed comprises 14% of the greater Oswego River Watershed.

The water quality of Lake Seneca is generally good. However, the lake is on the New York State Department of Environmental Conservation (NYSDEC) Priority Waterbody List (PWL) as *Water with Minor Impacts*. This means that the current uses of the lake are fully supported but some water quality impacts have been observed and action must be taken to ensure that the water will continue to support its uses in the future. Prominent pollutants include pathogens and oxygen demand from the Watkins Glen WWTP and general lakeside activities as well as sediment from eroding stream banks and steep slopes surrounding the lake.[1]

Overall water quality in Seneca Lake is heavily influenced by circulation patterns and thermal stratification. The degree of stratification varies with the season and the weather. Vertical water profiles developed in the month of June show a mixing-dominated scenario with only a small temperature difference between the lake surface and its depths, while a profile from August shows fully developed stratification with the hypolimnion boundary occurring at a depth of 35 meters.[2] This contributes to a long retention time in the lake, estimated to be 23 years. Pollutants that enter the lake tend to stay for a long time.

The trophic status of Lake Seneca is somewhere between oligotrophic and mesotrophic, that is, low productivity to moderately productive. Phosphorus controls implemented in the 1970's such as the phosphorus-based detergent ban have been effective in keeping the nutrient content of the lake down. Current phosphorus levels in the lake are 7.3-9.8 µg/L. As the controlling nutrient for algal and plant growth in the lake, phosphorus is related to water clarity.

As an oligotrophic lake, Seneca supports a diverse aquatic community. It has been stocked with three varieties of trout (lake, brown, and rainbow) as well as landlocked salmon. Wild fish include smallmouth and largemouth bass, yellow perch, and northern pike. Forage fish—alewives and smelt—also reside in the lake in large numbers. The current population of rainbow trout is self-sustaining, while it is believed that 60% of the lake trout population is naturally occurring. This has led to reductions in stocking efforts. However, many fish in Lake Seneca fall victim to predation by sea lampreys, a jawless fish that hooks onto its prey and drinks their blood. Countermeasures to sea lampreys, such as the application of lampricides to spawning areas, have been met with moderate success. Another species of note is the zebra mollusk, a non-native bivalve that is a remarkably efficient filter feeder. Recent increases in water clarity are thought to be caused by this mollusk, and its effect on the lake's ecosystem must be carefully monitored.

In 2000 the Finger Lakes Association reported 22.2 million tourist visitations per year to the Finger Lakes region. Many of these tourists were lured by the fishing prospects of Lake Seneca. In 2007 there were 340,000 angler-days, making the lake the 8th most fished waterbody in New York State and the most of the Finger Lakes. These anglers spent approximately $8.5 million during their visits. [3] The overall tourism revenue of the Finger Lakes area has been measured to be $1.5 billion per year. Tourism is one

[1] Seneca Lake Watershed Management Plan (2012) pg. 40
[2] Water Quality Study of the Finger Lakes (2001) pgs. 21 & 32
[3] Seneca Lake Watershed Management Plan (2012) pg. 79

of the region's largest industries and is entirely dependent on maintaining clean lakes. Contaminating the lakes would mean damaging a significant economic resource for the region.

Besides being a tourism hotspot, the lands around Lake Seneca also boast significant natural resources. A Marcellus shale formation breaks through the earth's surface at the northern tip of the lake and continues deep underground and to the south. This shale formation at depths of 3000 feet or greater contain reservoirs of natural gas. Recent advances in hydraulic fracturing of horizontal wells as well as the demand for cheap energy means the Lake Seneca Watershed will likely see major natural gas harvesting operations in the future. NYSDEC has already permitted dozens of gas wells not considered "high volume" in the Lake Seneca Watershed. This is in addition to the 40 permitted mining operations, which are mostly open-pit ventures focusing on sand, gravel, and limestone.

The 2010 US Census reported the population of the Seneca Watershed to be 58,897. Most of these people are concentrated in the urban areas around the lake such as the cities of Geneva and Penn Yan. Land use in the watershed influences the water quality of Lake Seneca. These urban areas contribute stormwater runoff and effluent sewage from treatment plants. The rural areas used for agriculture and industry may contribute non-point pollutants such as nutrients and pesticides. The current basin land use is shown in Table 1.1.

Table 1 – Seneca Basin Land Use (expressed as a percentage of the total Seneca Watershed)

Use	Percentage of Watershed
Agriculture	42.2%
Residential	27.5%
Vacant	14.4%
Commercial	1.2%
Recreational	1.1%
Community	5.1%
Industrial	0.5%
Public Service	0.8%
Conservation and Fishing/Hunting Grounds	5.9%
Unclassified	1.3%

1.2 Lake Cayuga

Lake Cayuga shares many qualities with its sister lake. Extending a distance of 38 miles, it is the longest of the Finger Lakes. Lake Cayuga has a maximum depth of 435 feet, a maximum width of 3.5 miles, and a volume of about 2.5 trillion gallons. The Lake Cayuga Watershed covers an area of 785 square miles, or 15% of the greater Oswego River Watershed.

Overall, the water quality of Lake Cayuga is good. The northern to mid-south portions of the lake are on the NYSDEC Priority Waterbody List (PWL) as *Threatened Segments* not because of any specific threat but because of the waters significant value as a drinking water resource. NYSDEC's decision to place these waters on the PWL reflects the need to preserve excellent water quality to maintain their use as

drinking waters with minimal required treatment. The southern end of the lake is on the PWL as an *Impaired Segment.* Its uses for public swimming and recreation are impaired by bacterial contaminants and limited water clarity. As a segment with numerous pollutant loadings from sources such as treatment plants, agricultural runoff, and stream bank erosion, this waterbody is a priority for the development of a Total Maximum Daily Load (TMDL).

Lake Cayuga has very similar thermal characteristics to Lake Seneca. Stratification begins to develop in June, and the lake will become fully stratified by August with the hypolimnion boundary occurring at 35 meters below the surface. During the winter, there is a fairly uniform temperature gradient throughout the lake which allows for complete mixing from top to bottom by wind. Lake Cayuga has a relatively long estimated retention time at 10 years.[4] Note that this is considerably shorter than the estimated retention time for Lake Seneca (23 years). This is related by Lake Cayuga's smaller volume.

The trophic status of most of Lake Cayuga is somewhere between oligotrophic and mesotrophic, that is, low productivity to moderately productive. The current total phosphorus levels in the mid to northern lake are 9.7 µg/L, which is below the NYSDEC water quality guidance value of 20 µg/L. The southern segment of the lake is at 17.2 µg/L, evidenced by the excessive and weed and algal growth found in that area.[5]

As of a 1998 study, there are 16 different species of macrophytes (rooted aquatic plants and algae) in Lake Cayuga. These plants are an important part of the lakes littoral zone—the warm and shallow waters along the shorelines. The plants provide a bottom link on the food chain and function as a habitat for invertebrates and juvenile fish. Lake Cayuga has two distinct communities of fish: the littoral zone species and the deep water species. The littoral zone is mostly dominated by smallmouth bass preying on yellow perch, pumpkinseeds, and minnows. A lucky angler will also encounter largemouth bass and northern pike in these areas. The deep water zone is dominated by the larger salmonids: rainbow trout, brown trout, lake trout, and landlocked Atlantic salmon. All four of these species have their populations maintained by stocking, as necessitated by excessive juvenile mortality.

Lake Cayuga has also been subject to invasion by zebra mussels and sea lampreys. Similar controls for the lampreys have been implemented as in Lake Seneca. As of today, no controls have been enforced on the zebra mussels as their impact on the lake ecology is not yet fully realized. The effects of these species on the aquatic community must be carefully monitored.

The 1992 Census of Agriculture estimated the farming revenues of the Cayuga Watershed to be $176,423,000. Corrected for inflation, this figure approaches $300 million. Farming revenues from field crops, nurseries, orchards, vineyards, and livestock make up a significant portion of the Cayuga Watershed economy. This land use is well dispersed, with the heaviest concentration of farming activity near the southern end of the lake. Note that this segment of the lake has the highest pollutant loadings and is categorized as an *Impaired Segment* by NYSDEC.

[4] Water Quality Study of the Finger Lakes (2001) pgs. 21 & 32
[5] Ibid. pg. 38

As with Lake Seneca, tourism is one of Cayuga Watershed's prominent industries. Lured by fishing, boating, swimming, diving, and "agri-tourism" businesses like the Cayuga Lake wineries, millions of tourists visit each year to enjoy the scenic beauty of the area.

The land use around Lake Cayuga affects the health of the lake. Since it is surrounded by agriculture and urban zones, sources of pollution include fertilizer runoff, treatment plant discharge, storm water runoff, and combined sewer overflow discharge. Table 1.2 shows the current basin land use.[6]

Table 2 – Basin Land Use (expressed as a percentage of the total Cayuga Watershed)

Use	Percentage of Watershed
Agriculture	34.2%
Residential	26.9%
Vacant	26.9%
Commercial	1.6%
Community	3.2%
Industrial	0.6%
Public Service	1.6%
Conservation and Fishing/Hunting Grounds	5.0%

1.3 No Discharge Zones in New York State

No Discharge Zone designations are a key component of a larger strategy for protecting all navigable waters of New York State. In 2010, New York State and the United States Environmental Protection Agency Region 2 (EPA) announced a joint initiative to establish NDZs in the remaining coastal waters and navigable connecting waterways of the State. At that time, efforts were underway to establish NDZs for the entire length of the New York State Canal System and the New York State portion of Long Island Sound (both have since been established). The remaining coastal waters without NDZs are Lake Erie (soon to be approved), Saint Lawrence River, New York Harbor waters, and easternmost Long Island South Shore. Approval of this petition will expand NDZ coverage to the navigable waters that are of great cultural and economic significance to New York State and advance the goal of NDZs in all New York waterways by eliminating discharge of boating wastes in the waters of New York State.

Table 3 – Existing No Discharge Zones in New York State (date established)	
Hempstead Harbor (2008) Hudson River, water intake zones (1995) Hudson River Estuary (2003) Huntington-Northport Bay Complex (2000) Jamaica Bay (2011) Lake Champlain (1976) Lake George (1976) Lake Ontario (2011)	Long Island Sound (2011) Mamaroneck Harbor (1997) New York State Canal System (2010) Oyster Bay/Cold Spring Harbor (2008) Peconic Estuary (2002) Peconic Waters, East Hampton (1999) Port Jefferson Complex (2001) South Shore Estuary Reserve (2009)

[6] Cayuga Lake Watershed Preliminary Watershed Characterization (2000) pg. 2—26

2. Greater Protection and Enhancement Certification

Microbial pathogens, one of the harmful elements of raw sewage, degrade water quality and pose direct threats to human health. Wastes treated by marine sanitation devices (MSD) and discharged by vessels to surface water do not pose the same level of pathogen risk as raw sewage, but they contain chemical additives, such as formaldehyde, phenols, and chlorine, all of which threaten public health and the marine environment.

According to the federal Clean Vessel Act of 1992, "sewage discharged by recreational vessels because of an inadequate number of pump-outs is a substantial contributor to localized degradation of water quality in the United States." In 1995, as a follow up to the federal law, New York State enacted legislation to encourage NDZs, in order to "allow the State and those municipalities participating in this program to improve the cleanliness of their regional waters constituting no-discharge zones." While the discharge of untreated sewage wastes from vessels is prohibited within all of the State's waters, in the absence of an NDZ designation, federal law allows the discharge of wastes treated by federally approved marine sanitation devices. Conferring the protections of an NDZ on the waters of Lake Seneca and Lake Cayuga will augment the myriad efforts that towns, cities, and the state are currently making to curb pollution from other sources.

New York State has established water classification designations for most water bodies within the state based upon best usage of the water body or water body "segment". A detailed description of the classification system can be found in Water Quality Regulations – Part 700-705. In summary: Class AA waters are drinking water sources that will meet New York State Department of Health drinking water standards if subjected to approved disinfection; Class A waters are drinking water sources which will meet the drinking water standards if subjected to approved treatment equal to coagulation, sedimentation, filtration, and disinfection; Class B waters are suitable for primary and secondary contact recreation and fishing.

2.1 Lake Seneca Watershed Characterization Project

Seneca Lake Area Partners in Five Counties (SLAP-5) was formed July 3, 1996 as area mayors, supervisors, state legislators, county agency staff and others pledged to work together:

> *To develop a watershed management plan for Seneca Lake that will protect and improve water quality and is supported by the citizens and communities in the watershed. To provide representation of all important sectors in the Seneca Lake Watershed and keep in contact with people in their areas of expertise to ensure the watershed program reflects and responds to the people represented.*

The Seneca Lake management planning process began in 1996 with the development of a Seneca Lake Watershed Study, and was updated in 2010 by the *Seneca Lake Characterization and Subwatershed*

Evaluation. The middle portion of the lake was identified as the area of greatest concern and is on the NYSDEC Priority Waterbodies List as threatened waters. This area is under AA classification as drinking waters requiring only disinfection treatment to meet NYS Department of Health drinking water standards. The evaluation states: "…the total amount of wastewater discharged to surface water in this area is high enough to raise the potential for contamination."

2.2 Lake Cayuga Restoration and Protection Plan (RPP)

The Cayuga Lake Watershed Restoration and Protection Plan (RPP) process began in 1998 with the creation of the Cayuga Lake Intermunicipal Organization. The central focus from the beginning of the process was to identify priority issues and solutions on a watershed-wide basis and have all of the local governments and organizations in the watershed agree on the priorities and work together to access funding in order to implement the recommendations of the RPP.

Some of the goals of the Lake Cayuga RPP are:

- remediation of existing pollution and degradation;
- the preservation of open space and natural resources;
- understanding ecosystem dynamics within the watershed in an effort to prevent and/or respond to threats to its integrity.

The RPP emphasizes that portions of Lake Cayuga are classified as A and AA drinking waters, and are on the NYSDEC Priority Waterbody List because of their significant resource value rather than any specific threat. As waters with high public interest, the RPP recommends the highest level of preservation efforts.

2.3 Recreational Resources

The waters of both Lake Seneca and Lake Cayuga host numerous recreational resources. These facilities are a source of revenue for the regional economy, bringing people to the shoreline where they patronize local businesses. Such facilities also stir an appreciation for the natural resources of the lakes. The many marinas offer opportunities for recreational boaters to set out for day trips, again stimulating the economy. The lakes are also some of New York State's most popular fishing destinations.

The numerous state, county, and municipal recreational facilities on the lakes in Cayuga, Tompkins, Seneca, Schuyler, and Ontario counties provide access to and support for water-dependent activities, such as recreational boating, swimming, fishing, and nature observation, and contribute to the livability of communities in the Lake Seneca and Lake Cayuga watersheds. See Appendix A for a list of public recreational sites on Lakes Seneca and Cayuga.

2.4 Drinking Water Supply

Large portions of both Lake Seneca and Lake Cayuga are classified by New York State as Class A. As such, the best usages of these waters are as "a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. The waters shall be suitable for fish,

shellfish, and wildlife propagation and survival." Furthermore, this classifications states that such waters, if subjected to treatment typical of and appropriate for water supply use, will meet New York State Department of Health (DOH) drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

Currently, there are 4 municipal water supplies that draw water from Lake Seneca, with total permitted withdrawal of 9 million gallons per day. There are 6 waters supplies on Lake Cayuga with total permitted withdrawals of 25.1 million gallons per day. See Appendix C for a list and approximate locations of the permitted drinking water intakes on both Lake Seneca and Lake Cayuga.

Section 312 of the Clean Water Act sets out three ways to establish an NDZ. The first occurs when a state determines that a waterbody requires greater environmental protection and EPA finds that adequate pump-out facilities are available. The type of NDZ is commonly known as a 312(f)(3) NDZ, a reference to the applicable section of the federal Clean Water Act. Most of the NDZs in New York State are of this type.

In a second type of NDZ, EPA, upon application by a state, determines that the protection and enhancement of a water body requires establishment of an NDZ. Unlike the 312(f)(3) NDZ, for a No Discharge Zone established under this provision (commonly known as a 312(f)4(A) NDZ), the state does not have to show that adequate pump-out facilities are reasonably available prior to the NDZ designation.

A third type concerns drinking water intake zones. In these cases (commonly known as 312(f)(4)(B) NDZs), EPA, upon application by a state, prohibits the discharge of sewage from vessels within waters identified as a drinking water intake zones. The purpose of this type of NDZ is to safeguard human health. The state does not need to show that adequate pump-out facilities are reasonably available to establish this type of NDZ. A 312(f)(4)(B) NDZ was established for the Class A waters of the Hudson River in 1996.

The last type of NDZ is appropriate for large portions of both Lake Seneca and Lake Cayuga. However, in order to address those areas that are not Class A, and to provide further basis and justification for the action, additional information regarding the resources of the lake, as well as vessel traffic and vessel pump-out facilities have been included.

2.5 Water Quality Assessment of Lake Seneca

The water quality issues of Lake Seneca are typical of other New York and northeast waters. These include excessive nutrient loadings from various point and non-point sources, atmospheric deposition of pollutants (particularly mercury), the impacts of invasive species such as the zebra mussel, and inadequate on-site wastewater treatment and/or municipal collection systems.

In 2010 the Seneca Lake Watershed Management Plan identified the following sources of pollution in the lake: agricultural activities, forestry, urban landscapes, chemical and petroleum storage, spills, landfills and solid waste disposal, mining activities, road salt, road-bank erosion, boating activities, on-

site and municipal liquid waste disposal, storm water runoff, construction activities, energy development, and air quality.

NYSDEC has broken the lake down into three distinct parts, each with their own water quality threat category and classification. The waterbodies that compose Lake Seneca are:

Table 4 – Waterbody Segments of Lake Seneca

Waterbody (Segment ID)	Threat Category	Surface Water Classification
Seneca Lake, North (0705-0026)	No Known Impacts	B
Seneca Lake, Middle (0705-0021)	Threatened	AA
Secena Lake, South (0705-0014)	Threatened	B

The middle portion of Lake Seneca may experience minor threats due to various activities in the watershed, meaning the total amount of wastewater discharged to surface water in this area is high enough to raise the potential for contamination.[7] The segment is considered a highly valued water resource due to its designation of Class AA drinking water supply, which is to maintain such that the water can be used as a potable source with limited treatment. The inclusion of this waterbody on the DEC/DOW Priority Waterbodies List as a Threatened water is a reflection of its particular resource value and the need to provide additional protection, rather than any specifically identified threats.

Public bathing and water supply use in the southern portion of Lake Seneca is thought to be threatened by pathogens and other pollutants from the inadequate Watkins Glen wastewater treatment plant. The Watkins Glen WWTP has a history of SPDES permit violations dating back to 2007 for various parameters including settleable solids, fecal and total coliform, and total residual chlorine. The plant is currently undergoing upgrades in an attempt to curb these issues.[8]

2.6 Water Quality Assessment of Lake Cayuga

Lake Cayuga, with the exception of its southern end, has similar water quality and faces similar threats as Lake Seneca. The Cayuga Lake Watershed Restoration and Protection plan has identified the following as the most significant threats to water quality in the basin: sediment, phosphorus, fertilizers and pesticides, organic compounds, trace elements, pathogens, and exotic species.

Invasive species are a significant concern in the lake, though there are currently no known impacts on recreational or other uses. The introduction of *Dreissena polymorpha*, commonly known as the zebra mussel, has caused dramatic increases in water clarity by their filter feeding mechanism. Their overall effect on the lake's ecology is still unknown. Lake Cayuga has also faced invasions by *Hydrilla verticillata*, which is an invasive water plant known to choke out native plants and negatively impact fish populations. This plant has been subject to very aggressive extermination to prevent its spread throughout the lake.

[7] The Oswego River Finger Lakes Basin Waterbody Inventory and Priority Waterbody List (2008) pg. 211
[8] Ibid. pg. 213

NYSDEC breaks down the lake into four distinct parts, each with their own water quality threat category and classification. The waterbodies that compose Lake Cayuga are:

Table 5 – Waterbody Segments of Lake Cayuga

Waterbody (Segment ID)	Threat Category	Surface Water Classification
Cayuga Lake, North (0705-0030)	No Known Impact	B
Cayuga Lake, Mid-North (0705-0025)	Threatened	A
Cayuga Lake, Mid-South (0705-0050)	Threatened	AA
Cayuga Lake, South (0705-0040)	Impaired	A

Water supply uses in the mid-north and mid-south portions of Cayuga Lake may experience minor threats due to various activities in the watershed. The amount of agricultural lands in the assessment area results in elevated potential for phosphorus, DBP precursors, and pesticide contamination. In addition, the moderate density of concentrated animal feeding operations (CAFOs) in the assessment area may add to the potential for contamination. It appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to seriously raise the potential for contamination.[9] Although there are no known water quality impacts in these portions of Cayuga Lake, these segments are considered highly valued water resources due to the drinking water supply classification. The inclusion of these waterbodies on the NYSDEC Priority Waterbody List as Threatened water is reflective of the need to protect their particular resource value, rather than any specifically identified threats.

The southern portion of Lake Cayuga has its uses for public bathing recreation impaired by excessive weed growth, nutrients, pathogens, and sediments. Agricultural activity in the southern area is significant and includes dairy farming, poultry farms, and cropland. Multiple municipal wastewater discharges and urban/storm runoff from the City of Ithaca also impact the lake. Increasing development, stream erosion and roadbank erosion are also identified as contributors of pollutant loadings to the lake.[10]

2.7 Greater Protection and Enhancement Certification

The open waters and tributaries of Lake Seneca and Lake Cayuga require greater protection than is afforded by applicable federal standards. An NDZ designation covering the waters of each lake represents one component of a comprehensive approach to water quality management. This wider effort includes initiatives to control point and non-point source pollution, including that associated with municipal discharges, CSOs, and stormwater runoff.

Protecting Lake Cayuga and Lake Seneca, waterbodies of unique natural and economic significance, as well as drinking water sources, warrants this greater level of environmental protection in order to maintain excellent water quality, prevent future degradation, and speed the recovery of impaired segments.

[9] The Oswego River Finger Lakes Basin Waterbody Inventory and Priority Waterbody List (2008) pgs. 181-184
[10] Ibid. pg 186

CERTIFICATION

The proposed Vessel Waste No Discharge Zone for Lake Seneca and Lake Cayuga in New York State includes the waters of the lakes, the connecting waters of the Seneca River, and all associated shorelines and tributaries. The proposed No Discharge Zone encompasses approximately 150 square miles, including the entire surface area of the lakes from their southern points to the northern, and the waters of the Seneca River from its beginning at Lake Seneca up to its confluence with Lake Cayuga. The area encloses habitats and waterways of local, state, and national significance.

As the crux of the local economy and among New York State's most pristine waterbodies, Lake Seneca and Lake Cayuga support a remarkable diversity of uses—fish spawning areas, animal habitats, commercial and recreational boating, recreational activities, tourism, agriculture, and more. Maintaining the renowned water quality of the lakes is paramount to the continued success of the industries that depend on that clean water, and for the high quality of life the watershed's residents enjoy.

A No Discharge Zone designation will not obviate the need for other water quality improvement efforts. The various state agencies and municipalities with jurisdiction in the watershed work on many levels—independently and in coordination—to address municipal and industrial point sources of pollution and non-point source runoff. A No Discharge Zone designation would complement these efforts, not supplant them. Such a designation would, however, have a tangible effect, amplifying the benefits of other resource improvements, and round out a comprehensive approach to water quality protection.

In accordance with the requirements set forth in 40 CFR 140.4(a)(1) and on behalf of the State of New York, the Department of Environmental Conservation certifies that the protection and enhancement of the waters described above require greater environmental protection than the applicable federal standard. I certify that to the best of my knowledge all of the above statements are true and factual.

Joseph J. Martens, Commissioner
New York State Department of Environmental Conservation

3. Vessel Population and Usage in Proposed Area

There is no single definitive source of information on the number of boats, or boats with marine sanitation devices (MSD), that frequent Lake Cayuga and Lake Seneca. The number and distribution likely fluctuates depending on the time of year, day of the week, weather conditions, and special events.

The primary source of information used to develop a reasonable estimate of the recreation vessel population on the lakes was the 2012 New York State Office of Parks, Recreation and Historic Preservation's 2012 Boating Report (OPRHP Report) for the counties of Ontario, Seneca, Cayuga, Tompkins, Schuyler, and Yates. These are all the counties that directly surround the lakes. It is very unlikely that every single vessel registered in these counties operates on either Lake Cayuga or Lake Seneca. However, to be conservative, this petition will consider all boats registered in these counties.

The OPRHP Report provides a breakdown of the vessel registration by boat length for each of the counties. This information was used to estimate the number of vessels likely to have MSDs, using guidelines adopted by the EPA (Clean Vessel Act, Pumpout and Dump Station Technical Guidelines, Federal Register Vol. 59, No 47, March 10, 1994). EPA estimated that 20% of boats between 16 and 26 feet, 50% of boats between 26 and 40 feet, and all vessels over 40 feet in length have an installed toilet with some type of MSD. Vessels below 16 feet in length are generally presumed not to have an MSD onboard. Applying this guidance to the data in the OPRHP Report yields an estimate of 3,967 vessels with MSDs in the respective counties, all of which were assumed to operate in the lakes.

Table 6 – Vessel Registrations by County and Length[11]

County	16-25'	26-40'	40'+	MSD's
Cayuga	3002	247	9	733
Ontario	4592	276	19	1076
Schuyler	931	68	3	224
Seneca	1610	135	13	403
Stueben	2989	133	4	636
Tompkins	2041	242	19	549
Yates	1575	60	4	349
			Σ =	3970 boats with MSD's

Example Calculation for Cayuga County:

(0.20 * 3002) + (0.50 * 247) + (1.0 * 9) = 732.9

Rounded up to nearest whole figure: 733 boats

According to the 1996 DOS "Statewide Plan", Lake Seneca and Lake Cayuga were identified as "smaller, and in some cases, more confining in terms of pollutant buildup".[12] However, the purpose of the Statewide Plan was to characterize pumpout adequacy across New York State coastal waters. As such, the enclosed waters of Lake Cayuga and Lake Seneca were not included in the analysis but were mentioned as waters of significant value.

[11] New York State 2012 Recreational Boating Report (2012)
[12] New York State Clean Vessel Act Plan (1996) pg. 5

Commercial vessel population was more difficult to estimate. Phone calls and emails to the Genesee Finger Lakes Regional Planning Board and the Finger Lakes Institute, cross referenced with internet searches, yielded a list of businesses likely to operate boats on the waters of Lake Seneca and Lake Cayuga. The list can be found in Appendix B. A majority of the commercial vessel traffic comes from charter services which operate fishing boats that can be towed and deployed anywhere. Many of these boats have MSD's on board. There are at least 18 charter services that operate primarily in Lake Seneca and Lake Cayuga, as well as 11 cruise services. Many of these businesses own one vessel, and some own as many as three. There also may be other businesses in the area that are not listed online or members of the local chambers of commerce. A conservative assumption of 40 businesses with 3 vessels each gives a total of 120 commercial vessels. These enterprises are seasonal and rarely operate in the cold months of September to April.

There does not appear to be any significant shipping, transport, or other types of commercial traffic on the lakes beyond cruises and fishing charters. During the peak of the tourist season, it is reasonable to assume dozens of commercial boat trips per day. In the offseason, commercial traffic is negligible.

4. Vessel Waste Discharge Facility Information

4.1 Existing Recreational Pumpouts and Determination of Pumpout to Boat Ratios

The federal Clean Vessel Act of 1992 made grants available to states for construction, replacement, and renovation of recreation vessel pumpouts. New York State applied for the first federal grant in 1994 and initiated a statewide program known as the Clean Vessel Assistance Program (CVAP), managed and administered by New York State Environmental Facilities Corporation (EFC). EFC provides three distinct grant programs: CVAP Construction Grants (for new installation or replacement), CVAP Upgrade Grants (improvements to existing pumpouts) and CVAP Operation & Maintenance Grants (annual upkeep of pumpouts). EFC also provides funding for information and education on the benefits, use and availability of pumpouts.

CVAP has helped establish and support 16 pumpout facilities that serve Lake Seneca and Lake Cayuga; 2 pumpout boats and 14 dockside. An additional 4 are available to the public but are not funded through CVAP. The following analysis looks at the availability of services if all (CVAP and non-CVAP) facilities are considered, and if only CVAP facilities are counted. Using only CVAP facilities is a more conservative approach. If all pumpouts are considered the availability of services is greater. Additional information on these pumpout facilities is available in Appendix C.

Table 7: Recreational Pumpouts by County

County	Total Pumpouts	Non-CVAP Funded	CVAP Funded
Seneca	6 (+2 pumpout boats)	0	6
Schuyler	4	1	3
Tompkins	4	1	3
Cayuga	4	2	2

4.2 Commercial Vessel Pumpouts

There are no fixed commercial vessel pumpouts on either Lake Seneca or Lake Cayuga. However, a majority of the commercial vessel traffic is charter boats small enough to use any pumpout. Additionally, there are two pumpout boats available on Lake Seneca. The cruise businesses listed in Appendix B were polled regarding pumpout availability. The tour boats that had bathroom facilities on board pump their waste to holding tanks with pumpouts at their home ports. The fishing charters use small vessels that can use any recreational pumpout. These charters most often launch from suitable docking areas where pumpouts are available. Figure 1 on page 16 shows a map of available recreational pumpouts.

The commercial enterprises that operate on Lakes Seneca and Lake Cayuga are largely tourist driven. As such, they are entirely dependent on maintaining excellent water quality and the natural beauty of their location.

4.3 Summary

One option to designate a waterbody as an NDZ requires that there be an adequate number of pumpout facilities to support the designation. Typically, one pumpout facility for every 300-600 is considered adequate. As discussed above, the recreational vessel population was estimated using the 2012 OPRHP Boating Report, which lists the total amount of recreational vessels by length for each county surrounding the lakes. This number was adjusted using EPA guidance to account for vessels likely to have an MSD. Added to this figure is the assumption of 120 small commercial charter vessels operating in the area (see page 14). Additionally, the number of pumpout facilities was calculated two different ways: one includes all pumpouts, and another includes only CVAP-funded facilities. The following table contains the resulting pumpout to boat ratios.

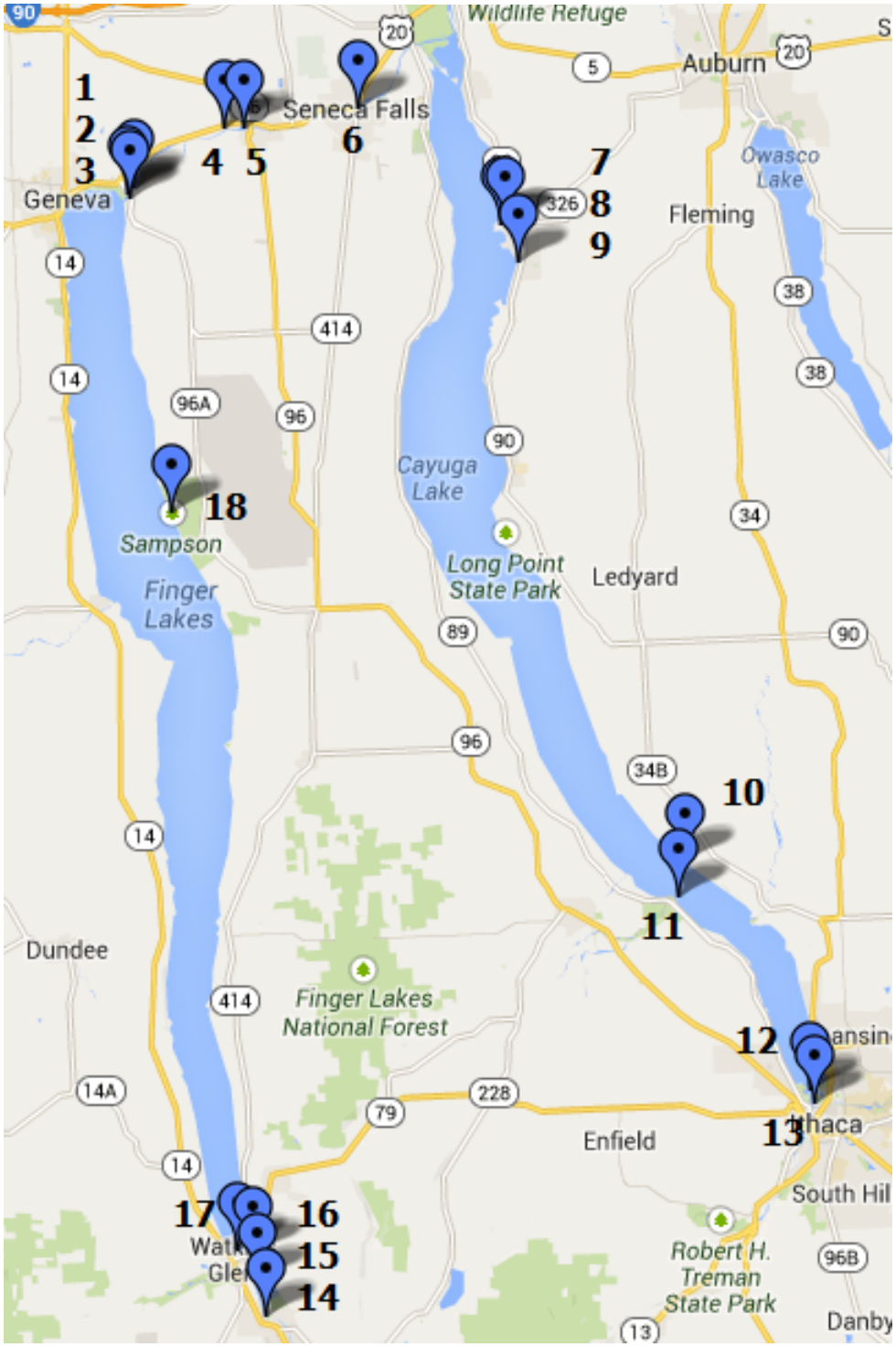
Table 8: Ratios of Pumpouts to Recreational Boats on Lake Seneca and Lake Cayuga

Total Boat Registrations	Pumpout:Boat Ratio (all pumpouts)	Pumpout:Boat Ratio (CVAP only)
4090	1:205	1:256

Calculations: 3970 (from Table 6) + 120 (estimated small commercial charter vessels operating in the area) = 4090. All pumpouts = 20, CVAP only = 16 (from Table 7)

By each method, there are currently sufficient pumpout facilities to meet the more stringent 1:300 ratio advised by the EPA. Although there were no fixed commercial pumpouts identified, the low level of commercial traffic on the lakes, the seasonal nature of its operation, and much of it being capable of utilizing recreational pumpouts means that pumpout capacity for commercial vessels is adequate.

Figure 1: Map of Pumpouts



1	Seneca Lake State Park	**7**	Hibiscus Harbor	**13**	Johnson Boat Yard
2	Stiver's Marine	**8**	Samson State Park	**14**	Montour Falls
3	Barret Marine	**9**	Frontenac Harbor	**15**	Ervay's Marina
4	Waterloo Harbor	**10**	Pinney's Marina	**16**	Glen Harbor Marina
5	Oak Island	**11**	Taughannock Falls	**17**	Village Marina
6	Seneca Falls	**12**	Allen Treman State Park	**18**	Sampson State Park

5. Other Information

5.1 Enforcement

Once the EPA has determined that the waterbody meets the criteria for an NDZ, or contains an adequate number of pumpouts, the water body is automatically a State-designated NDZ, pursuant to Section 3-33(e)(1) of the New York State Navigation Law. Within the State-designated NDZ, discharges from marine toilets are prohibited and marine sanitation devices on board vessels must be secured to prevent discharges.

This statute may be enforced by any police officer or peace officer acting pursuant to their special duties, including New York State Police, Environmental Conservation Police, State Park Police, Navigation Inspectors, and local Police Officers, Harbor Masters, and Bay Constables. In practice, Town Harbormasters and Bay Constables are expected to be the primary contact with the boaters for enforcement of the NDZ.

Pursuant to Section 3-33(c)(10) of the New York State Navigation Law, where State designated vessel waste NDZs have been established, a municipality may adopt and enforce local laws prohibiting the discharge of vessel wastes in such waters within the municipality, or in such waters adjacent to the municipality to a distance of 1,500 feet from the shore. Either State statue or local law may be enforced by State or local police or peace officers.

5.2 Public Education/Information Plan

As part of instituting an NDZ, state agencies will coordinate with local municipalities and environmental groups to launch a public education program for boaters emphasizing the advantages of clean, attractive waters for local users and visitors alike. Materials will emphasize best management practices to protect and improve water quality, including locations and procedures for using pumpout equipment and maintaining MSDs and bilge systems.

This coordinated NDZ educational program will encourage the use of onshore facilities for laundry, dishwashing, showers, and hygiene. Through CVAP, NYSEFC will provide signs and brochures to educate the public regarding the benefits, use, and availability of pumpouts.

The CVAP Information & Education (I&E) Grants provide assistance for municipalities and not-for-profit organizations to produce a wide variety of outreach materials for boaters and the general public regarding pumpouts. These grants, along with NYSEFC's administrative use of I&E funds, will supplement outreach regarding NDZs.

Once the NDZ designation is established, the CVAP will produce signs to alert boaters that pumpout use is required for the disposal of septic waste and where to get additional information.

Appendix A: Recreational Sites On Lakes Seneca and Cayuga

Recreational Sites On or Near Lake Seneca

Seneca Lake State Park
Lakefront Park
Kashong Conservation Area
Lakeside Park
Clute Park and Campground
Catherine Creek Wildlife Management Area
Smith Memorial Park
Lodi Point Marine Park
Finger Lakes National Forest
Bonavista
Sampson State Park

Recreational Sites On or Near Lake Cayuga

Montezuma National Wildlife Refuge
Cayuga Lake State Park
Dean's Cove Boat Launch
Taughanock Falls State Park
Allan Treman State Marine Park
Cass Park
Buttermilk Falls State Park
Stewart Park
Finger Lakes National Forest
Myers Park
Long Point State Park

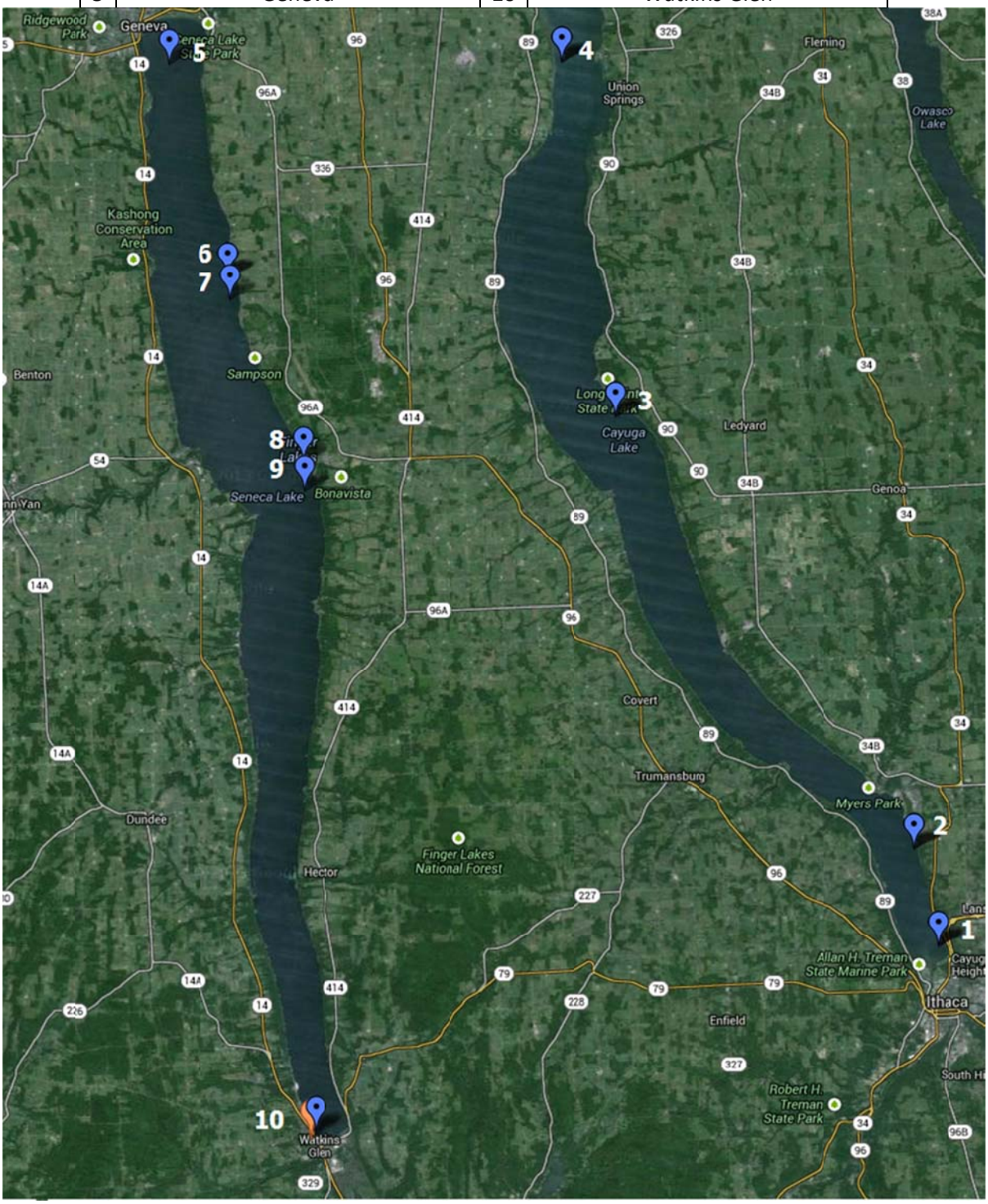
Appendix B: Commercial Enterprises Operating on Seneca and Cayuga Lakes

Cruise businesses are listed first, and the home port used by their vessels are given. Charter businesses are listed second. These businesses can transport and launch their boats anywhere, but operate primarily in Lake Seneca and Lake Cayuga.

DINNER/WINE/SIGHTSEEING	**HOME PORT**	
Cayuga Lake Cruises	708 W. Buffalo St., Ithaca, NY 14850	
Captain Bill's	1 North Franklin St., Watkins Glen, NY 14891	
School's Out Charters	1 Lansing Park Rd., Ithaca NY 14850	
Ithaca Boat Tours	381 Enfield Main Rd., Ithaca NY 14850	
Water to Wine Tours	7398 Wyers Point Rd., Ovid , NY 14521	
Playin' Hookey Charters	2990 Blakley Rd., Genoa, NY 13071	
Rose Lummis	35 Lakefront Dr., Geneva, NY 14556	
Experience! The Finger Lakes	105 Enfield Falls Rd., Ithaca, NY 14850	
Finger Lakes Water Adventures	401 Boody's Hill Rd., Geneva, NY 14456	
Schooner Excursions	Seneca Harbor Park Pier, Watkins Glen, NY 14891	
Tiohero Tours	435 Old Taughannock Blvd., Ithaca, NY 14850	
FISHING CHARTERS AND TOURS	**ADDRESS**	**PHONE**
Billy V Sport Fishing	15 Lief's Way, Ithaca NY 14850	607-592-9012
Eagle Rock Charters	5591 State Route 90 North, Cayuga, NY 13034	315-889-5925
Hookjaw Charters	None given	607-857-8314
Black Dog Adventures	None given	607-592-0556
Summit to Stream Adventures	None given	607-535-2701
Blue Moon Sport Fishing	594 Firelane 5, King Ferry, NY 13081	315-283-8878
NY BASSINACTION	None given	585-455-0001
Reel Hooked Up Charters	25 Sutton Rd., Horseheads, NY 14845	607-742-6287
First Class Bass Charters	70 Huetter Avenue, Tonawanda, NY 14207	716-875-4946
Reel Rippin' Charters	None given	607-684-4879
Tennity's Guide Service	5131 County Rd. 36, Honeoye, NY 14471	508-229-4843
Captain Joe's	5142 East Lake Rd., Romulus, NY 14541	315-440-4191
Fishing the Finger Lakes Guide Service	207 Wisteria Way, Horseheads, NY 14845	607-857-6269
Great White Charters	None given	315-567-1740
Captain Don's Charters	5412 East Lake Rd., Romulus, NY 14541	315-585-6704
Short Hook Charters	1084 Hoffman Hollow, Lowman, NY 14861	607-426-1915
Seneca Chief Charters	2250 Skinner Rd., Lodi, NY 14860	607-582-6089
Finger Lakes Angling Zone	None given	607-319-0450

Appendix C: Approximate Drinking Water Intakes on Seneca and Cayuga Lakes

1	Cayuga	**6**	Waterloo
2	Bolton Point	**7**	Seneca Army Depot
3	Wells College	**8**	Willard Psych Center
4	Seneca Falls	**9**	Ovid
5	Geneva	**10**	Watkins Glen



Appendix D: Marine Data Sheets

Name	**Seneca Lake State Park**
Waterbody	**Cayuga-Seneca – Lock CS1-4**
Lat/Long	42.870575/-76.939667
Phone	(716)-278-1775
VHF Channel	None
Dates of Operation	April 1 – September 30
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$2.00
Water Depth	6’
Maximum Vessel Size	40’
Pumpout Capacity	N/A
Disposal/Treatment	On-Site Septic System
Restrooms	Yes

Name	**Allan H Treman. State Marine Park**
Waterbody	**Cayuga Lake**
Lat/Long	42.458467/-76.513033
Phone	(716)-278-1775
VHF Channel	None
Dates of Operation	May 1 – October 15
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$2.00
Water Depth	7’
Maximum Vessel Size	50’
Pumpout Capacity	N/A
Disposal/Treatment	Connection to Municipal System
Restrooms	Yes

Name	**Frontenac Harbor**
Waterbody	**Cayuga-Seneca – Lck CS1-4**
Lat/Long	42.839778/-76.695769
Phone	(315)-889-5532
VHF Channel	16
Dates of Operation	April 15 – October 15
Hours of Operation	9:00AM – 4:30PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$5.00
Water Depth	4’
Maximum Vessel Size	40’
Pumpout Capacity	N/A
Disposal/Treatment	Connection to Municipal System
Restrooms	Yes

Name	**Barret Marine, Inc. – Boat**
Waterbody	**Seneca Lake**
Lat/Long	42.874176/-76.935906
Phone	(315)-789-9513
VHF Channel	None
Dates of Operation	April 15 – October 15
Hours of Operation	8:00AM – 7:00PM
Pumpout Services	Pumpout Boat
Facility Fee	$5.00
Water Depth	N/A
Maximum Vessel Size	Unlimited
Pumpout Capacity	275 gallons
Disposal/Treatment	Empty to existing pumpout
Restrooms	No

Name	**Barret Marine, Inc. – Stationary**
Waterbody	**Seneca Lake**
Lat/Long	42.874176/-76.935906
Phone	(315)-789-9513
VHF Channel	None
Dates of Operation	Year round
Hours of Operation	8:00AM – 7:00PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	5’
Maximum Vessel Size	50’
Pumpout Capacity	N/A
Disposal/Treatment	On-Site Septic System
Restrooms	Yes

Name	**Village Marina**
Waterbody	**Seneca Lake**
Lat/Long	42.3846306/-76.8716972222
Phone	(607)-546-7431
VHF Channel	16
Dates of Operation	June – October
Hours of Operation	11:00AM – 6:00PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$5.00
Water Depth	5’
Maximum Vessel Size	45’
Pumpout Capacity	N/A
Disposal/Treatment	Connection to Municipal System
Restrooms	Yes

Name	**Stivers (GPJ) Seneca Marine, Inc. II**
Waterbody	**Seneca Lake**
Lat/Long	42.868925/-76.939064
Phone	(315)-789-5520
VHF Channel	18
Dates of Operation	May 1 – Labor Day
Hours of Operation	
Pumpout Services	Pumpout Station – Portable
Facility Fee	$0.00
Water Depth	
Maximum Vessel Size	
Pumpout Capacity	
Disposal/Treatment	Connection to Municipal System
Restrooms	

Name	**Stivers Seneca Marine Boat**
Waterbody	**Seneca Lake**
Lat/Long	42.868889/-76.939444
Phone	(315)-789-5520
VHF Channel	18
Dates of Operation	May 1 – Labor Day
Hours of Operation	As scheduled
Pumpout Services	Pumpout Boat
Facility Fee	$0.00
Water Depth	N/A
Maximum Vessel Size	N/A
Pumpout Capacity	50 Gallons
Disposal/Treatment	Connection to Municipal System
Restrooms	No

Name	**Johnson Boat Yard (dba) – Pierce Cleveland, Inc.**
Waterbody	**Cayuga lake**
Lat/Long	42.452369/-76.510231
Phone	(607)-272-5191
VHF Channel	16
Dates of Operation	April 1 – November 1
Hours of Operation	9:00AM – 5:00PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	6’
Maximum Vessel Size	Unlimited
Pumpout Capacity	N/A
Disposal/Treatment	Connection to Municipal System
Restrooms	Yes

Name	**Montour Falls-V Municipal Marina**
Waterbody	**Seneca Lake**
Lat/Long	42.354167/-76.853333
Phone	(607)-535-7367
VHF Channel	None
Dates of Operation	May 2 – October 15
Hours of Operation	7:00AM – 7:00PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$5.00
Water Depth	4.5’
Maximum Vessel Size	Unknown
Pumpout Capacity	N/A
Disposal/Treatment	Connection to Municipal System
Restrooms	Yes

Name	**Waterloo-V Oak Island Marine Facility**
Waterbody	**Cayuga Seneca – Lock CS1-4**
Lat/Long	42.900983/-76.866894
Phone	(315)-539-9131
VHF Channel	None
Dates of Operation	April 1 – October 1
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	8’
Maximum Vessel Size	25’
Pumpout Capacity	N/A
Disposal/Treatment	Connection to Municipal System
Restrooms	Yes

Name	**Trade-a-Yacht, Inc. – Hibiscus Harbor**
Waterbody	**Cayuga Lake**
Lat/Long	42.856781/-76.706081
Phone	(315)-889-5086
VHF Channel	16
Dates of Operation	April 1 – November 1
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$5.00
Water Depth	12’
Maximum Vessel Size	60’
Pumpout Capacity	1300 gallons
Disposal/Treatment	Holding Tank
Restrooms	Yes

Name	**Ervay's Inc. Full Service Marina**
Waterbody	**Seneca Lake**
Lat/Long	42.370636/-76.859106
Phone	(607)-739-6989
VHF Channel	None
Dates of Operation	April – November
Hours of Operation	9:00AM – 5:00PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$5.00
Water Depth	5'
Maximum Vessel Size	Unlimited'
Pumpout Capacity	N/A
Disposal/Treatment	On-Site Septic System
Restrooms	Yes

Name	**Seneca Falls-V**
Waterbody	**Seneca Lake**
Lat/Long	42.909675/-76.79586838
Phone	(315)-568-2316
VHF Channel	None
Dates of Operation	May 1 – November 1
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$2.00
Water Depth	20'
Maximum Vessel Size	50'
Pumpout Capacity	150 gallons/week
Disposal/Treatment	Connection to Municipal System
Restrooms	No

Name	**River Park Commons**
Waterbody	**Cayuga-Seneca – Lock CS1-4**
Lat/Long	425403.6/-765236.36
Phone	(315)-789-5520
VHF Channel	None
Dates of Operation	May – September
Hours of Operation	N/A
Pumpout Services	Pumpout Station – Portable
Facility Fee	$5.00
Water Depth	6-10'
Maximum Vessel Size	Unlimted
Pumpout Capacity	N/A
Disposal/Treatment	Empty to Existing Pumpout
Restrooms	No

Name	**Waterloo Harbor**
Waterbody	**Cayuga-Seneca – Lock CS1-4**
Lat/Long	425401.72/-765242.37
Phone	(315)-539-8848
VHF Channel	None
Dates of Operation	May – September
Hours of Operation	
Pumpout Services	Pumpout Station – Portable
Facility Fee	$5.00
Water Depth	10’
Maximum Vessel Size	N/A
Pumpout Capacity	N/A
Disposal/Treatment	On-Site Septic System
Restrooms	No

Name	**Pinney’s Marina**
Waterbody	**Cayuga Lake**
Lat/Long	42.564683/-76.591064
Phone	
VHF Channel	None
Dates of Operation	May – October
Hours of Operation	24 hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	5’
Maximum Vessel Size	Unlimited
Pumpout Capacity	1500 gallons
Disposal/Treatment	Holding Tank
Restrooms	No

Name	**Glen Harbor Marina**
Waterbody	**Seneca Lake**
Lat/Long	42.383099/-76.861575
Phone	(607)-243-8737
VHF Channel	None
Dates of Operation	Unknown
Hours of Operation	Unknown
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	Unknown
Maximum Vessel Size	Unknown
Pumpout Capacity	Unknown
Disposal/Treatment	Unknown
Restrooms	Yes

Name	**Eagles Landing Marina**
Waterbody	**Cayuga Lake**
Lat/Long	42.072211/-76.548915
Phone	(315)-834-6829
VHF Channel	None
Dates of Operation	Unknown
Hours of Operation	Unknown
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	Unknown
Maximum Vessel Size	Unknown
Pumpout Capacity	Unknown
Disposal/Treatment	Unknown
Restrooms	Yes

Name	**Taughannock Falls State Park**
Waterbody	**Cayuga Lake**
Lat/Long	42.547636/-76.595714
Phone	(716)-278-1775
VHF Channel	None
Dates of Operation	March - October 15
Hours of Operation	Unknown
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	6’
Maximum Vessel Size	50’
Pumpout Capacity	N/A
Disposal/Treatment	On-Site Septic System
Restrooms	Yes

Name	**Samson State Park Marina**
Waterbody	**Cayuga Lake**
Lat/Long	42.4247/-76.9119
Phone	(716)-278-1775
VHF Channel	None
Dates of Operation	Unknown
Hours of Operation	Unknown
Pumpout Services	Pumpout Station – Stationary
Facility Fee	$0.00
Water Depth	Unknown
Maximum Vessel Size	Unknown
Pumpout Capacity	Unknown
Disposal/Treatment	Unknown
Restrooms	Yes

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