

New Jersey. Many New York and New Jersey members of the Club live in the Hudson River watershed.

4. Sierra Club members fish in the East River, the Hudson River Harbor Estuary and the Hudson River and are adversely affected by the actions complained of in this petition. Their ability to fish in these waters is adversely affected by the project complained of herein.

5. The protection of water resources is a key aspect of the Sierra Club's work, at the national, state and local levels. The Sierra Club and its members have worked to educate the public to assure healthy water resources for its members and the public, have lobbied for laws to protect water resources and have brought numerous lawsuits to protect water resources under various federal, state and local laws.

6. One water issue on which the Sierra Club has focused is the issue of fish kills by thermoelectric power plants, including power plants in the Hudson River watershed. In 2011, the Club released a report, *Giant Fish Blenders: How Power Plants Kill Fish & Damage Our Waterways (And What Can Be Done to Stop Them)* as part of a campaign to end the devastating impacts that large water withdrawals can have upon aquatic ecosystems. A copy of the report is attached as **Exhibit A**.

7. I have personal experience in fish entrainment and impingement issues. From 1996 -2006 I served as project manager for a shad (*Alosa sapidissima*) restoration effort on the Hudson River, which involved the harvesting, fertilization and care of fish eggs. In addition, I collected data on spawning behavior, habitat and egg mortality in support of this project to restore a wild shad population to the Susquehanna River using stock from the Hudson River. As a result of that expertise I became interested in fish entrainment and impingement issues involving the cooling water Hudson River power plants. I participated in public comment periods for SPDES permits, legal challenges and environmental impact statements for electrical generating facilities that use vast quantities

of water from the river. In general, I have advocated that the long term health of Hudson River fisheries will be jeopardized if we continue to destroy generations of shad, striped bass, Atlantic sturgeon and winter flounder through cooling intake structures.

8. My expertise on this issue has been useful in work on behalf of the Sierra Club Atlantic Chapter. Chapter members have done substantial work on fish entrainment and impingement issues over the years.

9. In 2011, as Conservation Director for the Sierra Club Atlantic Chapter, I worked with others in the Club to lobby for passage of A5318A/S3798, amending New York's water resources law. The amendments require any entity that withdraws more than 100,000 gallons of water a day to apply for a water withdrawal permit. Such a permit requires any user to responsibly withdraw water in a way that conserves the resource, protects the needs of aquatic ecosystems, and promotes equity among all users.

10. New York's previous water withdrawal permitting requirements applied only to public water supplies.

11. The purposes for which the law was enacted are described in the Assembly Sponsor's memorandum in support of the bill. A copy of this memo is attached as **Exhibit B**. The memo is contained in the Bill Jacket for A5318A/S3798 2012, which I downloaded from <http://iarchives.nysed.gov/PubImageWeb/viewImageData.jsp?id=185892>.

12. Identical statements regarding the purposes of the legislation are contained in a Memorandum to Mylan L. Denerstein, Esq., Counsel to the Governor, by Maureen A. Coleman, DEC Legislative Counsel, dated August 3, 2011, recommending approval for the legislation. A true and correct copy of the Coleman memo is attached as **Exhibit C**. The memo is also contained in the Bill Jacket for A5318A/S3798 2012.

13. The legislation allowed New York to meet its responsibilities under the Great Lakes-St. Lawrence River Basin Water Resources Compact (the "Compact"),

ECL § 21-1001, to implement a regulatory program for water withdrawals in the Great Lakes Basin.

14. Sierra Club committees at the national, state and local levels have been active in pushing for the adoption and implementation of the Compact.

15. A copy of the Governor's press release announcing the signing of the legislation is attached as **Exhibit D**. *Governor Cuomo to Sign Law to Protect New York's Waters: New Legislation Creates a Comprehensive Conservation Management System for Significant Withdrawals from New York's Rivers, Lakes, Streams and Groundwater Law's Requirements Fulfill New York's Obligation to the Great Lakes Compact*, Press Release Governor's Press Office, August 15, 2011, downloaded from <http://www.governor.ny.gov/press/08152011LawtoProtectNewYorksWaters>.

16. Following the enactment of the legislation, DEC promulgated new water withdrawal regulations, 6 NYCRR Part 601. The new regulations became effective April 1, 2013. Selected pages from DEC's responses to public comments on proposed regulations are attached as **Exhibit E**.

17. The new water permitting statute and regulations provide that existing water users who registered their use with the New York State Department of Environmental Conservation ("DEC") before February 2012 are entitled to an expedited permitting procedure. A list of users registered with DEC in 2012 obtained from DEC in 2013 through a Freedom of Information Law request is posted on the New York Water Action website at <http://nywateraction.org/withdrawals/2012waterregis.xlsx>. A copy of the list is attached as **Exhibit F**.

18. The list shows that about 1600 users registered their average and maximum daily water withdrawals in 2012. A number of these users are public water supplies who were permitted under the previous law. I estimate that about a 1,000 of the registered water

users are non-public users who are required to obtain permits for the first time under the new law.

19. The first water withdrawal permit applications under the new regulations were due June 1, 2013. As of July 1, 2015, notice of 188 applications has been given in the DEC's Environmental Notice Bulletin ("ENB"). The pace of permitting picked up this year. Notice of 134 applications has been given since January 1, 2015. See table listing all the ENB notices of water withdrawal applications published since the new water regulations became effective on April 1, 2013, attached as **Exhibit G**.

20. As shown in Exhibit G, the first non-public water withdrawal application under the new regulations for which notice was published in the ENB was the application of TransCanada LLC to take up to 1.528 billion gallons billion gallons per day from the East River for operation of the once-through cooling systems at its Ravenswood Generating Station in Long Island City. A copy of the Ravenswood application, which we obtained from DEC to assist us in making comments on the application, is attached as **Exhibit H**.

21. Copies of the initial and revised ENB notices of the Ravenswood application dated August 7, 2013 and August 28, 2013, are attached as **Exhibit I**.

22. I submitted comments on the Ravenswood application on behalf of the Sierra Club Atlantic Chapter on September 11, 2013.

23. A true and correct copy of DEC's response to public comments on Ravenswood application is attached as **Exhibit J**.

24. The Ravenswood permit was issued on November 15, 2013, authorizing withdrawals of up to 1.39 billion gallons per day from the East River. A copy of the permit was provided by DEC in the Art. 78 proceeding described in the next paragraph, a copy of which is attached as **Exhibit K**.

25. Our concerns with the lack of environmental and coastal zone reviews and DEC's failure to make adequate determinations required by the new law led the Sierra Club to join with the Hudson River Fishermen's Association in bringing an Article 78 proceeding challenging the process for issuance of the Ravenswood water withdrawal permit application. The petition was filed in Queens County Supreme Court on December 6, 2013, and refiled on February 25, 2014, Index No. 002949/2014.

26. DEC modified the Ravenswood permit on March 7, 2014, to increase the permitted amount to 1.528 billion gallons per day. A copy of the modified permit was provided in the Ravenswood proceeding and is attached as **Exhibit L**.

27. Notice of the application of Consolidated Edison ("Con Ed") for a non-public water withdrawal application for its East River Generating Station to take up to 373.4 million gallons a day from the East River was published in DEC's Environmental Notice Bulletin ("ENB") on June 11, 2014. A copy of this notice is provided on pages 204-206 of the Administrative Record ("AR") in this proceeding.

28. The notice, which is a joint notice for Con Ed's water withdrawal permit application and its SPDES permit renewal application, states under the caption "State Environmental Quality Review (SEQR) Determination" that "Project is not subject to SEQR because it is a Type II action." AR 205.

29. Sierra Club joined with the Natural Resources Defense Council, Riverkeeper Inc. and Citizen's Campaign for the Environment in submitting comments on the proposed Con Ed water withdrawal permit. These comments objected to the Type II determination and stressed the obligation of DEC under the WRL to evaluate the need for closed cycle cooling and other "environmentally sound and economically feasible water conservation measures" at the East River Generating Station. A copy of these comments is provided in AR 216-222.

30. By its claim that issuance of the Con Ed permit was non-discretionary, DEC rendered Sierra Club's comments on the proposed permit meaningless, as there was no possibility DEC could, under its interpretation of the "initial permit" provision of WRL, find that anyone's public comments warranted the imposition of significant conditions in the proposed permit.

31. DEC's violation of SEQRA through its Type II determination and its failure to conduct an environmental review of the Con Ed permit application deprived Sierra Club and our members of an adequate 'airing' of the relevant issues and impacts of the proposed water withdrawal permit, as well as an accurate assessment of the environmental impacts involved.

32. As long as DEC maintains its pattern and practice of non-compliance with SEQRA and the water resources law, Sierra Club and its members are profoundly hindered in our ability to advocate on behalf of our members and serve the public.

33. As shown in Exhibit G, notices of the water withdrawal applications for four power plants drawing water from the East River have been published in the ENB. These plants are Ravenswood, Astoria, Con Ed and Brooklyn Navy Yard.

34. I have examined the DEC's online permit application database for each of these four permit applications to ascertain whether the permits have been issued, and have found that each permit has been issued. Screenshots of the permit application details from the page <http://www.dec.ny.gov/cfm/xtapps/envapps/index.cfm?> of the DEC website for Ravenswood, Astoria, Con Ed and Brooklyn Navy Yard permit applications, showing dates permits issued and expiration dates, are attached as **Exhibit M**.

35. As shown in the ENB notices linked in Exhibit G, DEC asserts that the Astoria, Con Ed and Brooklyn Navy Yard applications stated that the plants are not located in the Coastal Zone, as did the initial ENB notice of the Ravenswood application. However, in fact each of these plants is located in the Coastal Zone.

36. A copy of the Coastal Zone map encompassing the area of the Con Ed plant is attached as **Exhibit N**.

37. Copies of the Coastal Zone maps encompassing the areas of the Ravenswood, Astoria and Brooklyn Navy Yard plants are attached as **Exhibit O**.

38. As far as I have been able to ascertain from examining the ENB notices and checking on the status of the applications in the DEC's permit database, the Con Ed East River permit is the first non-public water withdrawal permit DEC has issued in New York County.

39. The Sierra Club, on its own behalf and in conjunction with other environmental groups, filed comments on ten of the first water withdrawal permit applications.

40. The Club joined with 17 other environmental groups in making comments on the water withdrawal application for the Eastman Business Park in Rochester to take up to 54 MGD from Lake Ontario on March 28, 2014.

41. The comments were covered in two articles in Rochester papers, "Environmental groups in standoff with Eastman park firm," Steve Orr, *Rochester Democrat and Chronicle*, April 11, 2014, <http://www.democratandchronicle.com/story/news/2014/04/11/environmental-groups-standoff-eastman-park-firm/7611051/> and "Eastman park permit could set precedent," Jeremy Moule, *Rochester City Paper*, April 1, 2014, <http://www.rochester-city-newspaper.com/rochester/eastman-park-permit-could-set-precedent/Content?oid=2356337>. Copies of these articles are attached as **Exhibit P**.

42. The *Democrat and Chronicle* article quotes Larry Levine, senior attorney for the Natural Resources Defense Council, as saying, "In all the permits they've considered so far, [DEC is] basically rubber-stamping the applications." The article notes

that many of the groups submitting comments on the Eastman park application submitted similar comments on other major water withdrawal permit applications, and again quotes Mr. Levine: “We certainly hope that DEC will take these comments seriously and will follow through ... to protect the state’s water resources.” *Id.*

43. Mr. Levine published an article about his concerns on his blog. His article states:

But there’s a very disturbing trend with [DEC’s] roll-out [of the new water permitting law]. The state should be ensuring that these water users are employing all “environmentally sound and economically feasible water conservation measures “ and avoiding “significant adverse environmental impacts “ — as required by the 2011 law. Instead, DEC has been issuing, or proposing to issue, permits that simply rubber-stamp existing practices, or even authorize major increases in existing water use — without consideration of more water-efficient alternatives and without regard to the environmental consequences.

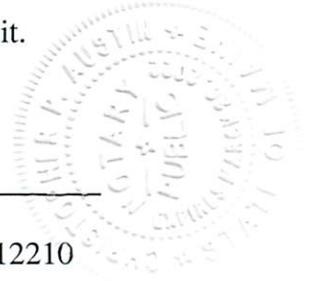
A copy of Mr. Levine’s article, captioned “To Maintain a ‘Competitive Advantage’ on Water Supply, New York Must Step-Up Its Game on Water Conservation,” Larry Levine, NRDC Switchboard, April 9, 2014, http://switchboard.nrdc.org/blogs/llevine/to_maintain_a_competitive_adva.html, is attached as **Exhibit Q**.

44. In my view, granting a water withdrawal permit to the Con Ed facility for 373.4 million gallons a day without an environmental assessment under SEQRA defies the intent and purpose of the water resources law —especially as there are many practical alternatives to once through wet cooling that use significantly less water without killing fish. The intent of the newly enacted legislation is not to duplicate existing SPDES permits, but to provide the DEC with tools to manage New York’s water resources in a comprehensive manner. A primary tool to facilitate this goal is the environmental impact assessment process.

45. I have personal knowledge of all facts set out in this affidavit.

Roger Downs

ROGER DOWNS
353 Hamilton Street, Albany, NY 12210



Sworn to before me this
6th day of July, 2015

[Signature]

Notary Public

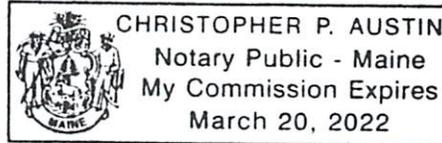


EXHIBIT A



GIANT FISH BLENDERS:

HOW POWER PLANTS KILL FISH & DAMAGE OUR WATERWAYS

(AND WHAT CAN BE DONE TO STOP THEM)





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GIANT FISH BLENDERS: HOW POWER PLANT INTAKE STRUCTURES KILL FISH AND DAMAGE ECOSYSTEMS (AND WHAT CAN BE DONE TO STOP THEM)

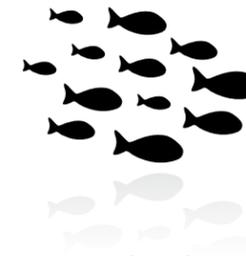
This report is a publication of the Sierra Club

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EXECUTIVE SUMMARY



From an airplane window, you might see power plants lining the banks of the Mississippi River, our coastal shores or the Great Lakes. It is no coincidence that power plants are located along some of our mightiest rivers and most treasured waterways: steam-electric power plants using older technologies need an extraordinary amount of water to operate. The power industry uses more water than any other sector in the United States, withdrawing more than 200 billion gallons of water each day. Nearly all this water is used for “once-through cooling,” an antiquated technology where power plants suck enormous volumes of water to cool down their systems and then discharge it at an elevated temperature.

A power plant with once-through cooling draws hundreds of millions, in some cases billions, of gallons of water each day from the closest lake, river or ocean and indiscriminately sucks in whatever aquatic life is near the intake pipe. In this process, fish and other aquatic life are smashed and mutilated against crude screens (known as “impingement”) or are sucked into the cooling system itself (known as “entrainment”). It is estimated that billions of fish and other aquatic organisms at all stages of life are killed each year by power plants’ water-intake systems.

The full spectrum of aquatic species are impacted by once-through cooling, as are the other wildlife that rely on the complex food web—from phytoplankton to fish, birds, and marine mammals, including species that are threatened or endangered. Power plants’ intake structures kill billions of fish and destabilize wildlife populations. A single power plant can obliterate billions of fish eggs and larvae and millions of adult fish in a single year, and the heated water it discharges also alters surrounding ecosystems, compounding the damage. The death toll of wildlife from power plant intakes is staggeringly high. Some areas face devastating economic impacts as fisheries are threatened and recreational uses are diminished.

This report looks at the impact of once-through cooling systems on some of the nation’s most iconic waterways: the Great Lakes; the Gulf of Mexico; the Mississippi River; the Hudson

River, New York Harbor and Long Island Sound; the California Coast; and the Chesapeake Bay. These great American waterways are at risk of losing untold species and ecosystems that have shaped the history, economy and culture of the surrounding areas.

We also look at the history of and actions taken by decision makers in regulating once-through cooling systems. Almost 40 years after Congress identified cooling water intake as a threat to our waterways and the life sustained by them, the U.S. Environmental Protection Agency (EPA) has failed to force the owners of power plants—the nation’s largest water users—to reduce their destructive impact.

Today, the EPA is proposing regulations that, unfortunately, fail to set a clear, consistent national policy and fail to modernize our electric sector by phasing out once-through cooling systems. Even though the EPA has identified cost-effective alternatives, which are already being used in new power plants across the country, industry lobbyists are fighting hard to prevent any modernization of the outdated cooling systems at power plants, many built more than 30 years ago. This report highlights why the EPA must move quickly to strengthen proposed regulations and phase out the most destructive water-cooling practices by putting in place common-sense protections for fisheries and waterways across the United States.

INTRODUCTION

POWER PLANTS USE WATER—and lots of it. In the United States, more than 500 power plants withdraw billions of gallons of water each day to use in the most antiquated and destructive type of cooling system, known as “once-through cooling.” Once-through cooling systems draw water from a nearby waterbody and then discharge it at an elevated temperature, causing severe ecosystem destruction.

Collectively, steam-electric power plants have the capacity to withdraw more than 370 billion gallons per day—more than 135 trillion gallons per year—from our nation’s waters for cooling.¹ Currently, those plants’ average withdrawal exceeds 200 million gallons each day.² This accounts for 93 percent of the country’s total saltwater use, 41 percent of total freshwater use, and 49 percent of all water use. That’s more water than all irrigation and public water supplies combined.³

One-through cooling systems use large pipes as water-intake structures. These pipes sit below the water’s surface and suck in not only water but also anything else in the vicinity. After the water is drawn through the power plant to help cool systems that have generated heat during the energy-making process, it is discharged at an elevated temperature back into the waterbody. This process affects the full spectrum of wildlife in the aquatic ecosystem at all life stages—eggs, larvae, juveniles and adults—from tiny photosynthetic organisms to fish, shrimp, crabs, birds and marine mammals, including threatened and endangered species.⁴

How Power Plant Intake Structures Harm Our Waterways

Power plants’ intake structures kill billions of fish and destabilize wildlife populations. Since intake structures sit well below the surface of the water, fish and other aquatic life are hit the hardest. A single power plant can destroy billions of fish eggs and larvae and millions of adult fish in a single year, and its heated discharges alter the surrounding ecosystems, compounding the damage. In addition to fish, these outdated intake structures also kill or harm sea turtles, seals, sea lions and numerous other larger animals.⁵

This excessive mortality occurs despite rudimentary attempts to filter extraneous materials, including fish, from the cooling water stream. Fish eggs, larvae and other organisms are too small to be filtered out by even the best screens. The destruction is twofold: Larger fish and wildlife must fight against “impingement,” or getting trapped on intake screens. And aquatic organisms too small to be trapped against these screens become “entrained,” or sucked through plants’ heat exchangers, where most are smashed and boiled to death before being dumped back into a waterbody.

The EPA has found that the loss of large numbers of aquatic wildlife may affect the overall health of ecosystems.⁶ Once-through cooling not only reduces adult populations of the species, but also kills their eggs and larvae, causing disruptions to the food chain. These antiquated intake structures also reduce the species’ ability to survive other unfavorable environmental conditions such as drought and climate change.⁷

The History of Once-through Cooling Destruction

In the late 1960s, Congress first considered the impacts of power plants’ massive water usage during extensive hearings on the effects of waste heat discharged from industrial facilities.⁸ Senator Warren Magnuson warned that “by 1980 thermal power plants throughout the nation will require an amount of cooling water greatly in excess of the average flow of the mighty Mississippi at St. Louis.”⁹ Around the same time, the White House issued

a report explaining that “the large volumes of water withdrawn in once-through cooling processes [can have] as much or more effect on aquatic life than the waste discharges on which control measures are required.”¹⁰

In the early 1970s, a number of well-publicized massive fish kills occurred at intake structures around the country. In response to the fish kills and other threats to our waterways, Congress voted overwhelmingly to pass the Clean Water Act of 1972 into law. While it focuses mostly on the discharge of pollution, the law also specifically regulates cooling water intake structures.

Section 316(b) of the Clean Water Act requires the EPA to issue regulations requiring that “the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.”¹¹ Those adverse environmental impacts are primarily the entrainment and impingement of fish, shellfish and other forms of aquatic life, along with thermal pollution in the discharge of cooling water.

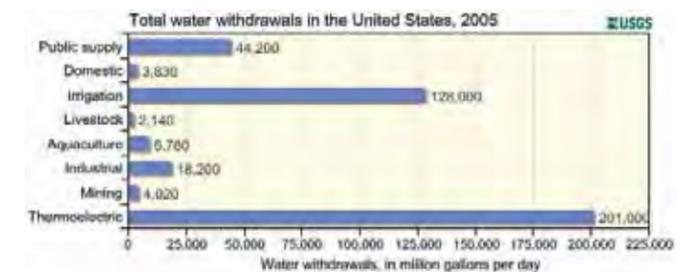
In 2001, after decades of delay, the EPA took an important step forward by ordering new plants to use “closed-cycle cooling” and prohibiting once-through cooling for new projects except in extremely limited circumstances.¹² In a closed-cycle cooling system, water withdrawn from a natural waterbody is circulated through condensers to remove the plant’s excessive heat, then circulated through cooling towers, and then recirculated (i.e., recycled) back to the condensers. Compared with a once-through system—in which water is drawn into the condenser and then sent back to the waterbody from which it came—closed-cycle cooling can reduce total water withdrawals by about 95 percent. Because closed-cycle cooling is a better and newer technology, Clean Water Act permits issued by states and the EPA’s regional offices for the construction of new power plants invariably require that it be installed.

However, the EPA has failed to follow through on its legal obligation to require existing power plants to modernize and phase out once-through cooling. Industry lobbyists have successfully stalled EPA action for a decade after it set new standards for new power plants. As a result, outdated power plants across the U.S. continue to kill billions of fish and other aquatic organisms annually on our nation’s most iconic waterways.

About This Report

In the pages that follow, we provide specific examples of how antiquated cooling water intake structures are directly impacting some of our nation’s most iconic waterways and their ecosystems: the Gulf of Mexico; the Mississippi River; the Hudson River, New York Harbor and Long Island Sound; the California Coast; the Great Lakes and the Chesapeake Bay. While we discuss only a handful of examples, there are many other waterways around the country being similarly harmed by antiquated power plants.

We must stop the giant fish blenders that line our shores, lakes and rivers. By phasing out once-through cooling, the EPA can help begin the process to restore and preserve our waterways for generations to come.



LEFT: Just one outdated power plant can trap and kill millions of fish and other aquatic animals against crude water intake screens, like the ones shown here.

PHOTO: PISCES CONSERVATION, LTD



THE GREAT LAKES

THE GREAT LAKES—Superior, Michigan, Huron, Erie and Ontario—and their connecting channels form the largest freshwater system on Earth. Covering more than 94,000 square miles, and draining twice as much land area, these freshwater bodies hold about 6 quadrillion gallons of water, about one-fifth of the world's fresh surface water supply and 90 percent of the U.S. freshwater supply. The Great Lakes provide drinking water to more than 40 million people.¹³

The Great Lakes region possesses a mosaic of connected ecosystems containing diverse communities of species, including about 180 native fish species such as brook trout, lake sturgeon, lake trout, lake herring, largemouth bass, northern pike, whitefish, smallmouth bass, walleye and yellow perch.

Each species within the Great Lakes has its place within the food chain and is dependent on the abundance and health of the whole ecosystem. At the base of the food chain are the primary producers, like algae, that collect energy from light. Feeding on these are the small zooplankton amphipods and other organisms that are, in turn, eaten by larger invertebrates such as shrimp. The next link includes fishes such as alewives, shiners and lake

herring, which provide sustenance to the predatory fish, like lake trout and bass. All these fish then provide food for birds, reptiles, amphibians and mammals that live by the Great Lakes, including humans.

The Great Lakes are linked to coastal wetland and bordering terrestrial ecosystems that support many threatened and endangered animals, including the whooping crane, Canadian lynx, gray wolf, bog turtle, as well as plants such as the dwarf lake iris. They also provide essential habitat to a symbol of our country, the once-endangered bald eagle.

Because of the importance of these lakes, many underwater preserves and parks have been established throughout the area, and outdoor recreation is a major part of life in the region. With pristine wilderness in close proximity to major cities in eight states—Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin—as well as the Canadian province of Ontario, the Great Lakes region provides abundant opportunities for fishing, boating, swimming, bird-watching and tourism.

The Great Lakes states have about 3.7 million registered recreational boats, about a third of the nation's total,¹⁴ and the commercial and sport fishing industry is collectively valued at more than \$7 billion annually.¹⁵



PHOTO: LAKE ERIE WATERKEEPER

A 2007 report by the Brookings Institution determined that a healthy, restored Great Lakes could generate some \$50 billion in long-term economic benefits for the region, not only for industries like fishing, which rely on clean, healthy ecosystems, but also for the tourist industry and for homeowners, in the form of higher property values.¹⁶

Most lake ecosystems are dependent on their shores and shallows for their productivity, and the Great Lakes are no different. However, the Great Lakes are unique because of their size: Only a small proportion of their volume is within these productive shallow zones. The Great Lakes are therefore particularly vulnerable to any damage to their shallows, where shoreline power plant intake structures are located.

How Power Plant Intake Structures Harm the Great Lakes

At least 42 power plants using once-through cooling systems ring the Great Lakes. Lake Michigan has the largest number of these plants, with 19, followed by Lake Erie's 11, Lake Huron's six, Lake Ontario's five, and Lake Superior's one. Thirty-three of the plants run on coal, six are nuclear, and the rest burn natural gas or oil. These plants withdraw massive volumes of water, ranging from the relatively small Harbor Beach

plant on Lake Huron, which can withdraw 129 million gallons per day, to the behemoth D.C. Cook plant on Lake Michigan and the Monroe plant on Lake Erie, both of which can withdraw more than 2 billion gallons.¹⁷ The 42 Great Lakes plants have a combined intake flow of more than 30 billion gallons per day. (See Appendix, Table 1, for a full list of Great Lakes plants and their intake flow rates.)

These plants' intake structures kill huge numbers of fish and shellfish of virtually every species present and at every life stage. All links in the Great Lakes food chain are adversely affected by these power plants. For example, when operating at full capacity, the Bayshore plant in Ohio sucks up more than 700 million gallons of water per day from the middle of Maumee Bay, in western Lake Erie, the most productive fishery in the Great Lakes.

LEFT: Scenic Lake Erie has 12 antiquated power plants on its shores that use almost 10 billion gallons of water everyday.

ABOVE: Bayshore power plant in Ohio has been known to kill 60 million fish in just one year because of outdated water intake structures.

A 2005–6 study conducted by Bayshore’s owner estimated that more than 60 million adult fish and more than 2.5 billion fish eggs and larvae were killed per year.¹⁸ A later study of the Bayshore plant by the University of Toledo put the number of fish eggs and larvae killed at more than 12 billion per year. The plant’s once-through cooling system also dumps hot water into western Lake Erie, contributing to foul-smelling, toxic algal blooms and causing further harm to fish populations in a vital but already heavily stressed ecosystem.

On the shores of Lake Michigan in Wisconsin, the Oak Creek power plant was estimated by its operator to impinge well over 2 million fish weighing 57-plus tons in a single year on its intake screens. In addition, between April and October of 2002, it entrained over 6 million larvae and over 9 million fish eggs.¹⁹

New York’s Huntley Generating station, located along the Niagara River, which connects Lake Ontario to Lake Erie near the world-famous Niagara Falls, is estimated to entrain over 105 million fish eggs and larvae per year, with annual impingement of well over 96 million adult and juvenile fish—the largest of any power plant in the state.²⁰

A clear illustration of the ecological benefits that could be obtained by installing closed-cycle cooling at the 42 Great Lakes plants is evident from the experience of the Palisades nuclear power plant on Lake Michigan, which was built with once-through cooling and later installed closed-cycle cooling. When operating in once-through mode, the plant impinged almost half a million fish per year, but this figure was reduced by an astounding 98 percent once the plant switched to closed-cycle cooling.²¹

Ecosystems in the Great Lakes face many other stresses, including pollution and destructive invasive species. This makes mortality from once-through intake structures more potentially detrimental to native species than it would be in healthy ecosystems. Since so many fish and other aquatic creatures are killed, their populations become smaller, weaker, and more vulnerable to collapse.

The Great Lakes are an important resource for the nation. The region’s unique environment includes wetlands, marshes, swamps and bogs that play a critical role in linking land with water. These lakes enrich the lives of communities around them and define the region. They are a haven for hunters, anglers and all outdoor enthusiasts, and also an economic driver of the nation. Updating the 42 power plants on the shores of the Great Lakes would help ensure that they remain clean and healthy for future generations.



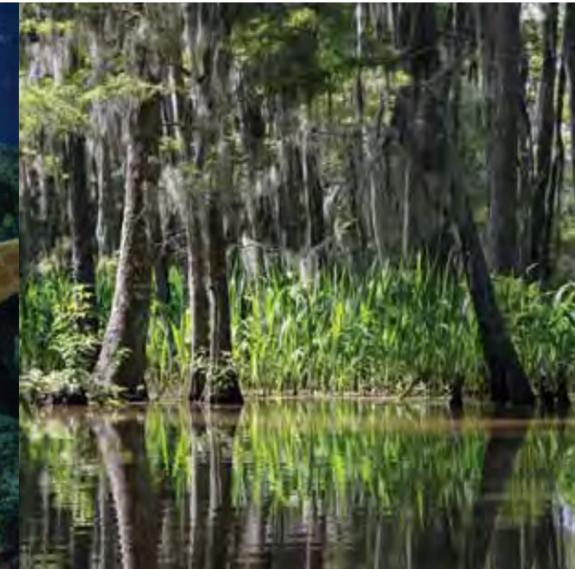
ABOVE: Endangered whooping cranes, like these, are dependent on healthy fish populations in the Great Lakes.

CENTER: On Lake Michigan in Wisconsin, the Oak Creek power plant was estimated by its operator to impinge well over 2 million fish weighing 57-plus tons in a single year.

BELOW: The Great Lakes communities have about 3.7 million registered recreational boats, about a third of the nation’s total.

FAR RIGHT: A healthy Great Lakes, such as Lake Heron pictured here, could yield \$50 billion in long-term economic benefit for the region.





GULF OF MEXICO

THE GULF OF MEXICO is the ninth-largest body of water in the world, covering 600,000 square miles, and it receives water from 33 major rivers, including the Mississippi and Rio Grande.²² More than half of the coastal wetlands within the continental United States are in the Gulf of Mexico, including 15,316 square miles of estuarine habitat along the shoreline in the Gulf Coast states of Alabama, Florida, Louisiana, Mississippi and Texas. This important coastal habitat is essential for healthy fisheries, migrating waterfowl, seabirds and wading birds. Wetlands also play an irreplaceable role in protecting shoreline communities from increasingly dangerous storms.

The Gulf's estuaries, with their associated mangrove and seagrass habitats, are essential feeding and nursery grounds for large numbers of fish and other wildlife, including threatened and endangered species such as sea turtles, Gulf sturgeon and manatees. Mangroves defend coastlines from flooding and erosion and provide essential habitat for reptiles such as the American crocodile and American alligator; sea turtles such as the loggerhead; fish such as snapper and tarpon; crustaceans such as shrimp and crabs; and coastal and migratory birds, including pelicans, spoonbills and bald eagles. Seagrass beds are also fish nurseries, where manatees and sea turtles feed and thrive. Additionally, the Gulf of Mexico yields more shrimp and shellfish annually than the mid-Atlantic, Chesapeake and New England areas combined.²³

Of the 28 species of marine mammals known to inhabit the Gulf of Mexico, three are protected species of dolphin (Atlantic spotted, Risso's and bottlenose).²⁴ A number of endangered fish live in the coastal and estuarine waters, including the Gulf sturgeon, Alabama shad, saltmarsh topminnow and mangrove rivulus. The Gulf's threatened and endangered sea turtles include the loggerhead and leatherback, which thrive in the Gulf's expansive and unique waterways.

Besides being home to all types of wildlife, the Gulf supports major fishing industries.²⁵ Gulf fisheries are among the most productive in the world, with commercial fish and shellfish valued at \$661 million annually.²⁶ In 2008, recreational fishers took more than 24 million trips, catching 190 million fish, in the Gulf of Mexico and surrounding waters.²⁷ The Gulf of Mexico's shores and beaches, an ideal location for swimming, sun and all water sports, support a \$20 billion tourism industry.²⁸

How Power Plant Intake Structures Harm the Gulf of Mexico

The Gulf coastal region has at least 17 power plants that use once-through cooling systems: seven in Florida, seven in Texas, two in Louisiana, and one in Mississippi. Four of the plants—the Big Bend, Crystal River and Lansing Smith plants in Florida, and the Jack Watson plant in Mississippi—burn coal; the Crystal River plant site also has a nuclear reactor. The rest of the plants along the Gulf burn natural gas or oil.

These plants withdraw billions of gallons of water each day from the Gulf

of Mexico and its coastal bays, entraining and impinging huge numbers of fish and shellfish of virtually every species present—at every life stage—and discharging heated water back into the Gulf. The largest-flow plants are the Anclote plant, north of St. Petersburg, Florida, at more than 2.8 billion gallons per day; the Crystal River plant complex, just 50 miles up the west coast of Florida from Anclote, at more than 2.1 billion gallons per day; and the P. H. Robinson power plant in Galveston Bay, Texas, which is designed to take in more than 1.7 billion gallons per day. Combined, the 17 Gulf plants can withdraw nearly 13 billion gallons of water per day, and there are many other power plants withdrawing even larger volumes of freshwater from the rivers that feed the Gulf, killing aquatic life and discharging heated water back into the ecosystem as well. (See Appendix, Table 2, for a full list of Gulf plants and their intake flow rates.)

In the Gulf especially, thermal pollution can directly impact plants and animals, degrading habitat and reducing biodiversity. Both mangrove and seagrass beds are sensitive to power plants' thermal pollution. For example, the *Thalassia* seagrass beds in Florida estuaries are drastically affected when contacted by discharges 41 degrees Fahrenheit or more above the ambient summer temperature. These overly warm discharges on the seagrass beds can result in total destruction of this plant life and in turn damage the populations of wildlife that depend on it.²⁹

A number of protected fish and sea turtle species live in waters impacted by power plants and are impinged or trapped on intake

screens. For example, the Crystal River plant has impinged five species of endangered sea turtles—loggerhead, green, Kemp's ridley, leatherback and hawksbill.³⁰ At the Big Bend generating station in Tampa Bay, Florida, the annual impingement from 1976 to 1977 was estimated to be more than a quarter of a million fish.³¹

Entrainment of young species is a major problem in productive coastal and estuarine waters. At the Big Bend plant, the annual entrainment of a single species, the bay anchovy, was estimated at more than 68 billion from 1976 to 1977.³² The Big Bend power plants still uses that same once-through cooling system today, 30-plus years later.

The Gulf of Mexico is one of the most biodiverse bodies of water on the planet and one of the most economically productive regions in the world.³³ It is home to a range of sea life including dolphins, oysters and coral reefs. Its coastline encompasses wetlands and includes tidal flats, mangrove swamps, estuaries and bays. Power plants along the Gulf should be required to update their cooling system technologies to protect aquatic life, coastal communities, tourism and commercial fishing in the region.

CLOCKWISE FROM UPPER LEFT: The Gulf of Mexico yields more shrimp and shellfish annually than the mid-Atlantic, Chesapeake and New England areas combined. However, outdated water intake structures can trap and kill them, as shown here. Not only fish are killed by power plants. Turtles, like the endangered loggerhead shown here can become trapped on crude intake screens. The Gulf is not only known for its wildlife, but also as a destination for many outdoor enthusiasts such as beach combers and boaters.

PHOTO: PISCES CONSERVATION, LTD

MISSISSIPPI RIVER



ONE OF THE MOST FAMOUS RIVERS in the world, the Mississippi is the largest river system in North America, draining almost one-third of the total U.S. land mass. At approximately 2,350 miles long, the Mississippi is the third-longest river in North America,³⁴ is the fifth largest river in the world by volume and has the third largest drainage basin in the world,³⁵ covering more than a million square miles.³⁶ The river basin drains all or parts of 31 states and two Canadian provinces, and flows through ten states: Arkansas, Illinois, Iowa, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Tennessee, and Wisconsin.

By virtue of its great size and other geographic factors, the Mississippi river system is one of North America's most important environmental resources, containing a variety of habitats and an extraordinarily great aquatic biodiversity. The river basin supports at least 375 species of native fish, which are rather evenly distributed across the region.³⁷

The Mississippi is noted for its numerous large river fish, which include the shovelnose sturgeon, gar, and bowfin. Other native fish of the Mississippi are the shad, chub, perch and bass.³⁸ Migratory birds visiting the river include Canadian geese, swans, bluebirds, and pelicans, many types of songbirds, and mallard, widgeon, pintail and ring-necked ducks.

The upper river valley contains large wetland areas, magnificent hardwood forests and some of the richest soils and most pristine habitats for wildlife found in the United States. Species living within the upper river

valley's catchments include white-tailed deer, wild turkeys, mink, muskrats and otters—all of which depend on a healthy Mississippi River.

The Lower Mississippi, below the Ohio River confluence, lies within the lowland gulf coastal plain, a basin between the Appalachians to the east and the Ozark and Ouachita Mountains to the west. The Lower Mississippi is distinguished by its extraordinary richness of species, particularly fish, shellfish and crayfish. It is also home to nearly 70 species of amphibians and aquatic reptiles, including the American alligator and two common turtles—the ringed map turtle and yellow-blotched map turtle. Among the numerous marine species commonly recorded in the Mississippi's lower reaches, where it meets the saltwater environment of the Gulf of Mexico, are minnows, catfish, killifish and darters.

Because of its rich diversity and beautiful scenery, the Mississippi River has seven National Park sites along its banks; in 1997, two portions of the Mississippi were designated as American Heritage Rivers. In 2009, the Upper Mississippi River floodplains, which include the 240,000-acre Upper Mississippi River National Wildlife and Fish Refuge, were designated as a Wetland of International Importance.

In addition to its ecological and social values, the Mississippi has significant economic value as the nation's chief navigable water route for commerce. It provides many states with drinking water and has spurred the growth of its neighboring cities and economies. The Mississippi provides abundant hunting, fishing, canoeing, camping and other recreational

opportunities for millions of Americans. Its riverside parks and trails are popular spots for hiking, biking, fishing and bird-watching. A healthy Mississippi River is vital to the quality of life in its nearby communities.

How Power Plant Intake Structures Harm the Mississippi River

At least 28 power plants still using once-through cooling systems are located on the Mississippi River. Louisiana is home to six of these plants; Iowa has five; Minnesota, Missouri and Wisconsin each have four; Illinois has two; and Arkansas, Mississippi and Tennessee each have one. Seventeen of these plants burn coal; seven burn natural gas or oil; three are nuclear; and one, the Waterford plant in Louisiana, has a nuclear unit as well as oil or gas units. These 28 plants have a combined cooling water withdrawal capacity of more than 15 billion gallons per day, and their massive water withdrawals entrain and impinge enormous numbers of fish and shellfish of virtually every species and at every life stage. (See Appendix, Table 3, for a full list of Mississippi River plants and their intake flow rates.)

Mississippi power plants using once-through cooling range from the relatively small Burlington plant in Iowa, which can withdraw 116 million gallons per day, to the behemoth Nine Mile Point plant in Illinois and the Quad Cities plant in Louisiana, which each withdraw well more than a billion gallons per day.³⁹

As just one example of the impact of these power plants on fish, consider the coal-fired Meramec power plant, located 16 miles south of St. Louis,

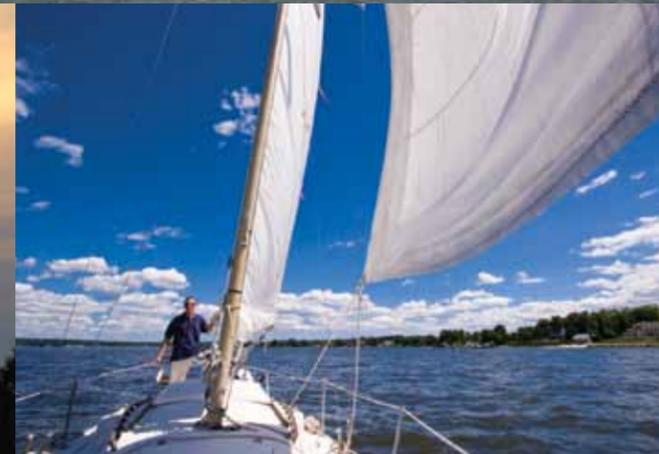
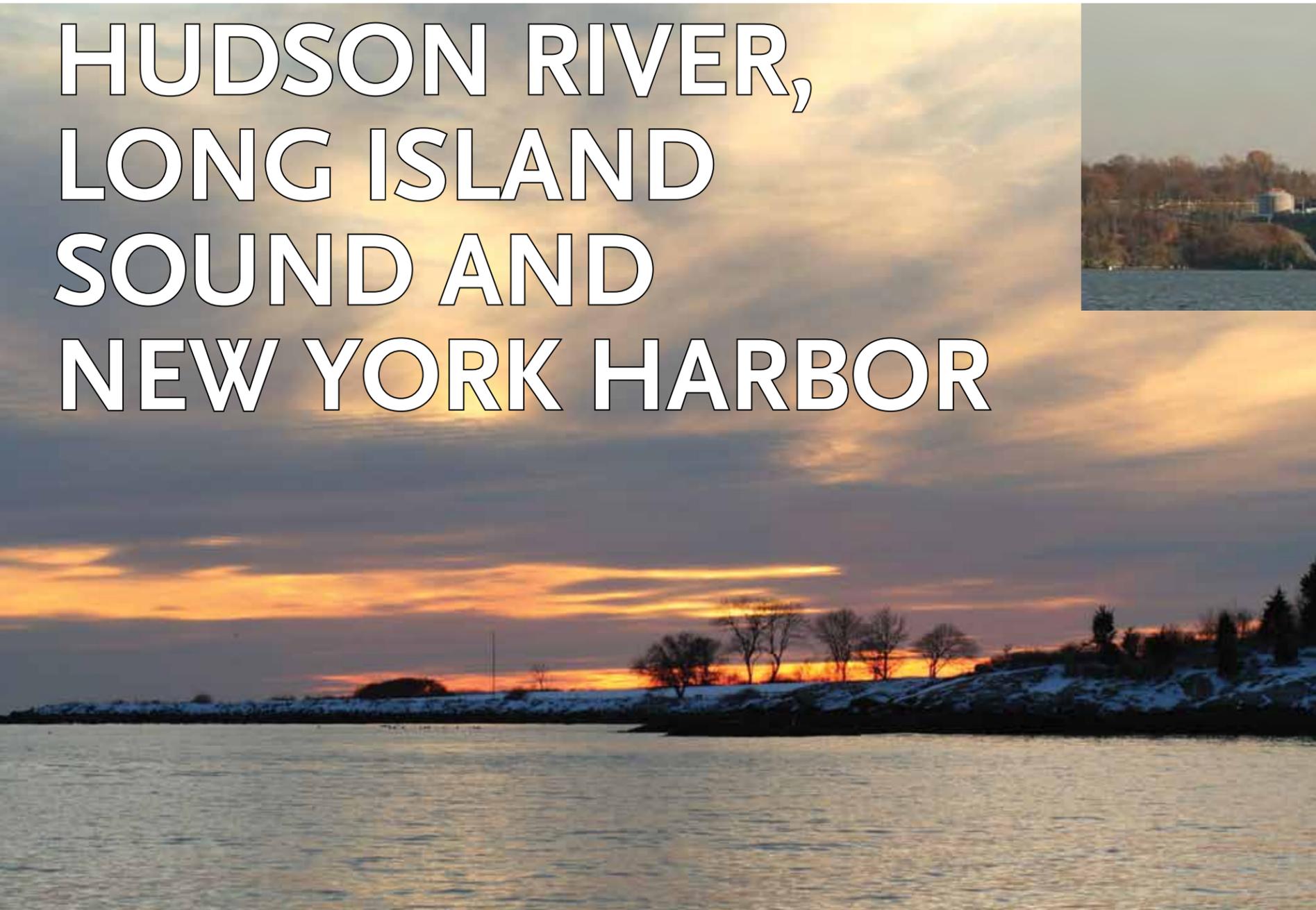
Missouri, at the confluence of the Mississippi with the Meramec Rivers. Impingement and entrainment studies conducted there in the 1970s, when the plant's maximum flow was about 550 million gallons per day, an estimated annual impingement of almost a million fish, including the vulnerable shovel-nosed sturgeon.

Meramec's entrainment of fish eggs was greatest in July, when an average of 70.7 fish eggs was entrained per 100,000 gallons. Given that the plant utilized more than 9.5 billion gallons of cooling water in July 1974 during the study period, the estimated entrainment for that one month alone was well over a half a million eggs.⁴⁰ Since Merrimac's intake capacity has increased to 675 million gallons per day, with no change to its outdated intake structures, the impingement and entrainment impacts are likely even worse today.

The Mississippi River, from the small headwaters in the Northwoods of Minnesota to the large ecosystem of the Gulf of Mexico, is a true national treasure that has played a large role in shaping American culture and history. Power plants along the Mighty Mississippi should use the best and most modern technology to protect the wildlife and the economy the river provides.

CLOCKWISE FROM UPPER LEFT: Meramec power plant, located 16 miles south of St. Louis, Missouri, at the confluence of the Mississippi with the Meramec Rivers, impinges and entrains almost a million fish per day. The Mississippi River needs healthy fish populations for the next generation of anglers. The 28 power plants on the mighty Mississippi have a combined cooling water withdrawal capacity of more than 15 billion gallons of water per day. A healthy Mississippi River is vital to the quality of life in its nearby communities and wildlife.

HUDSON RIVER, LONG ISLAND SOUND AND NEW YORK HARBOR



Hudson River

Known as “America’s First River,” the Hudson begins at Lake Tear of the Clouds in the Adirondack Mountains and flows more than three hundred miles before emptying into New York Harbor at the southern tip of Manhattan. Called *Muhbeakantuck* (“the river that flows both ways”) by Native Americans and now named for the British explorer Henry Hudson, the historic Hudson River played a starring role in the American Revolution and provided a crucial transportation link from the eastern seaboard through the Erie Canal to the country’s interior.

The lower Hudson’s unique configuration as a narrow, 154-mile-long estuary creates a huge, diverse nursery that supports a mix of freshwater and saltwater fish. The river’s marshes and tidal flats contribute essential minerals and nutrients to the food chain, allowing its quiet backwaters

to become an essential nursery habitat for many types of wildlife. In fact, the Hudson is one of the two principal spawning grounds for aquatic life in the East Coast.

More than two hundred species of fish are found in the Hudson and its tributaries, which make up one of the most biodiverse temperate estuaries on the planet. The river is a refuge for rare and endangered species such as the shortnose sturgeon and heartleaf plantain.⁴¹ The Hudson is also part of the great Atlantic flyway for migratory birds; and ducks, geese and osprey, among others, stop to feed in its shallows.

The ecological influence of the Hudson estuary extends far into the Atlantic Ocean and along the coast. For vast schools of migratory sturgeon, herring, blue crab, mackerel and striped bass, the Hudson is a nearly unimpeded corridor from the Atlantic to their ancestral spawning

grounds. These fish support a 350-year-old recreational and commercial fishery along the Atlantic coast that’s worth hundreds of millions of dollars.⁴²

In 1998, the Hudson River was designated as one of the nation’s first American Heritage Rivers, a much-deserved recognition of its central place in American history and culture. The New York State Legislature has declared the estuary “of statewide and national importance as a habitat for marine, anadromous, catadromous, riverine and freshwater fish species,”⁴³ and two federal agencies—the U.S. National Oceanographic and Atmospheric Administration and the U.S. Fish and Wildlife Service—have designated the Hudson as an Essential Fish Habitat because it sustains large numbers of commercially important fish species.⁴⁴

CLOCKWISE FROM LEFT: Long Island Sound, pictured here has eight outdated power plants that use over 5 billion gallons of water per day. At the Indian Point power plant, situated in a narrow section of the Hudson River estuary and pictured here, has entrained 1.2 to 1.3 billion fish eggs and larvae in a year. Ospreys, like these in Long Island, depend on healthy fish populations for survival. The Long Island Sound isn’t only a sanctuary for wildlife, like the starfish pictured here, but also for people and communities who enjoy the outdoors. The Hudson River, pictured here has four outdated power plants on its shores that use well over 4 billion gallons of water per day.

INDIAN POINT PHOTO: RIVERKEEPER, INC.



Long Island Sound

The Long Island Sound is a 110-mile-long estuary bordered by the Connecticut coastline and the north shore of Long Island, New York. It receives the flow of several major rivers that drain freshwater from Massachusetts, New Hampshire, Vermont and other states. The Sound is a unique estuary in that it has two connections to the sea: to the east, it opens to the Atlantic Ocean, and to the west, it connects to New York Harbor and the Hudson and East Rivers. The Sound provides feeding, breeding, nesting and nursery areas for a broad diversity of plant and animal life, including marine fish and shellfish species such as winter flounder, Atlantic menhaden, blue crab, shrimp and lobster.

The extensive tidal marshes bordering the sound are some of the most productive biological systems in the world. They produce between three and seven tons per acre per year of vegetation; much of this eventually enters the waters of the sound to support fish and shellfish habitat.

More than eight million people live in the Long Island Sound watershed, which contributes an estimated \$8 billion per year to the regional economy through boating, commercial fishing and sportfishing, swimming and tourism.⁴⁵ Long Island Sound was designated as an Estuary of National Significance, and some of its harbors have been designated

as a Significant Coastal Fish and Wildlife Habitat Area or Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act.

New York Harbor

In the shadow of Manhattan's skyscrapers, New York Harbor and the East River connect the metropolitan area's two major estuary systems, the Hudson and Long Island Sound. The National Marine Fisheries Service has noted that four species of sea turtles may inhabit the vicinity of New York: Kemp's Ridley, green, leatherback and loggerhead; the first three are listed as endangered.

How Power Plant Intake Structures Harm the Hudson River, Long Island Sound and New York Harbor

A total of 17 power plants using once-through cooling are located in the region: four on the Hudson River, eight on the Long Island Sound and five in New York Harbor. New York has 12 of these plants, and Connecticut five. Two of these plants are nuclear, and the rest burn natural gas or oil, with the exceptions of the Bridgeport Harbor plant in Connecticut and Danskammer plant in New York, both of which have coal-fired units. All these plants use exorbitant amounts of water. The two nuclear plants, the Indian Point plant on the Hudson and the Millstone plant on the Sound, can withdraw 2.5 billion and 2.19 billion gallons per day, respectively.

The Hudson River plants have a combined intake capacity of nearly 5 billion gallons per day; the Long Island Sound plants have a combined

intake capacity exceeding 5 billion gallons per day; and the New York Harbor and East River plants have a combined intake capacity of more than 3.5 billion gallons per day. Altogether, the 17 plants can withdraw almost 14 billion gallons per day from the two estuaries and the harbor. (See Appendix, Table 4, for a full list of the Hudson River, Long Island Sound and New York Harbor plants and their intake flow rates.)

Because of these waters' importance as spawning and nursery grounds, it is unsurprising that entrainment of eggs and larvae occur in astronomic numbers.

According to Soundkeeper's calculations, based on available data, the Millstone plant is responsible for killing 154 billion fish in all life stages over the span of more than three decades.⁴⁶ These calculations are very conservative, considering that the data only include seven species found in the Sound—winter flounder, cunner, bay anchovies, tautog, menhaden, grubby and American sand lance—and do not include lobsters, crabs, shellfish and other area fish.⁴⁷ In particular, Millstone killed nearly 42 billion tautog eggs and larvae between 1979 and 2002 and well over 4 billion winter flounder between 1976 and 2003.⁴⁸

Huge numbers of fish are also entrained at the Indian Point power plant, situated in a narrow section of the Hudson River estuary just south of Peekskill. As reported by the New York State Department of Environmental Conservation, 1.2 to 1.3 billion fish eggs and larvae are entrained at Indian Point each year.⁴⁹ Further, an average of 1.18 million fish per year was impinged by Indian Point from 1986 to 1990.⁵⁰ The Indian Point plant impinges the endangered shortnose sturgeon

and the Atlantic sturgeon, a candidate for threatened species status, thereby negatively contributing to the already low populations of these fish.⁵¹ These devastating impacts were understood decades ago: In the 1970s, the Atomic Energy Commission, and its successor, the Nuclear Regulatory Commission, directed the owners of Indian Point to install closed-cycle cooling because of the anticipated damage to the Hudson's fisheries and ecosystem.⁵²

Indian Point and the other three power plants using once-through cooling on the Hudson have a huge, detrimental impact on the ecology of the estuary—and this impact goes well beyond the loss of large numbers of individual fish. In a 2007 report, New York State found that the cumulative impact of multiple facilities on the river substantially reduces the population of young fish in the entire river. In certain years those plants have entrained between 33 and 79 percent of the eggs and larvae spawned by striped bass, American shad, Atlantic tomcod and five other important species.⁵³ Over the time the plants have been operating, the ecology of the Hudson River has been altered, with many fish species in decline and populations becoming less stable. Of the 13 key species subject to intensive study, ten have declined in abundance, some greatly.⁵⁴ Power plants have played a considerable role in that decline.

The power plants that rely on outdated once-through cooling to generate electricity affect the full spectrum of wildlife in the aquatic ecosystem at all life stages. New York's iconic Hudson River, New York Harbor and Long Island Sound are not only home to countless wildlife species but are also vital waterways for the cities and communities around them.

LEFT: New York Harbor, pictured here, has five antiquated power plants on its shores that use well over 3 billion gallons of water per day.

RIGHT: Outdated coal power plants on our rivers, like Danskammer on the Hudson River, suck in almost half a billion gallons of water per day.

PHOTO: GILES ASHFORD

CALIFORNIA COAST



THE SPECTACULAR 840-MILE Pacific Coast of California, legendary to surfers and beachcombers around the world, offers an incredible variety of shoreline habitats—exposed rocky shores, kelp forests, sandy beaches, sheltered muddy estuaries and hypersaline lagoons. The Pacific Ocean supports a rich diversity of species and habitats, including populations of seabirds and shorebirds; marine mammals like humpback whales, elephant seals and sea lions; and fish such as barracuda, mackerel, salmon, albacore, bluefin and yellowfin tuna, and sardine and rainbow trout, to name just a few. A number of threatened and endangered fish species live in California's coastal waters.

The northern portion, stretching from the Oregon border to San Francisco, is a landscape of rugged coastlines and towering majestic redwoods at or near the water's edge, with incredible vistas and opportunities for hiking, kayaking, river rafting, mountain biking, wildlife-watching, rock climbing, fishing and camping. Tidelands and marshes in this area provide important habitat for many species of waterfowl, shorebirds and marine invertebrates, as well as nursery areas for fish and crustaceans. The Point Reyes peninsula alone supports 45 percent of North American bird species and almost 15 percent of Californian plant species, including 23 threatened and endangered species.⁵⁵

The San Francisco Bay and Delta is one of the largest estuarine systems on the West Coast and a highly dynamic and complex environment. The delta is a maze of river channels and diked islands covering over 1,000 square miles, including 78 square miles of water, formed by the

confluence of the Sacramento and San Joaquin Rivers, which ultimately drain into San Francisco Bay.⁵⁶

San Francisco Bay is made up of deepwater channels, tidelands, marshlands, freshwater streams and rivers that provide a wide variety of habitats that sustain a highly biologically diverse ecosystem. More than half of the endangered species in San Francisco Bay depend on wetlands to survive, including the California clapper rail and salt marsh harvest mouse. Local fish species on the federal endangered and threatened species list include the winter-run chinook salmon and the Sacramento splittail. Nearly all of the San Francisco Bay region beaches form part of the Golden Gate National Recreation Area, one of the most visited National Parks, with more than 13 million visitors each year.⁵⁷

The central and southern coasts extend from the Monterey Peninsula to the Mexican border. Here one finds wildlife refuges, state parks and pristine beaches popular for surfing, hiking and camping. There are graceful, towering sand dunes that protect bays, coastal lagoons, harbors and coves popular for kayaking and fishing.

The angle of the Southern California coastline creates a huge backwater eddy in which equatorial waters flow north near the shore, and subarctic waters flow south offshore. The mixing of these waters creates a highly diverse system that supports about 500 fish and more than 5,000 invertebrate species.⁵⁸ This scenic and diverse region contains numerous wilderness areas, nature reserves, wildlife preserves and open-space areas.

California's commercial fishing operations rank higher than any other state in the nation. Tuna is the most valuable fish caught, followed by

swordfish. Halibut, herring, mackerel, rockfish, sablefish, salmon and sole are also important to the fishery, as are crabs, shrimp and squid.⁵⁹

As a mark of this waterway's importance, the California Coastal National Monument, encompassing the entire coastline, was created by presidential proclamation in 2000 to ensure the protection of all islets, reefs and rock outcroppings from the coast to a distance of 12 nautical miles.

How Power Plant Intake Structures Harm the California Coast

There are 17 coastal Californian power plants using once-through cooling systems. These plants can withdraw more than 14 billion gallons per day from the Pacific Ocean. Nearly 5 billion gallons of that flow is withdrawn by two nuclear plants: the San Onofre Nuclear Generating Station near San Clemente and the Diablo Canyon plant near San Luis Obispo. (See Appendix, Table 5, for a full list of California plants and their intake flow rates.)

These power plants kill an astounding number of fish. The annual entrainment of larval fish at the Diablo Canyon plant at average flow is estimated to be over 1.5 billion individuals.⁶⁰ At the San Onofre Nuclear Generating Station on the Southern California coast, 121 tons of midwater fish are entrained, causing a 34 to 70 percent decline in Pacific Ocean fish populations within about two miles (three kilometers).⁶¹ Unit 3 of the San Onofre plant alone is estimated to entrain an average of over 3.1 billion individual aquatic organisms.

The Pittsburg and Contra Costa plants in the San Francisco Bay Delta impinge and entrain more than 300,000 endangered and threatened fish per year, including the Sacramento splittail, Chinook salmon and

steelhead trout. The Contra Costa and Pittsburg power plants entrain and impinge threatened Delta smelt and endangered Longfin smelt.⁶²

In addition to the entrainment of young life stages, Californian coastal plants impinge and kill huge numbers of older fish on their filter screens. At average flow rates, San Onofre's Units 2 and 3 combined were estimated to impinge 1.3 million fish with a total weight of over 14 tons.⁶³ This is the worst example on the California coast, but other plants also impinge significantly large numbers of fish. Units 6 and 7 at the Moss Landing plant were estimated to annually impinge a quarter of a million fish weighing 4,060 pounds, even though the plant's average intake flow is a relatively modest 387 million gallons per day.⁶⁴

In May 2010, California adopted a strong state policy requiring most coastal power plants to upgrade over the next decade to achieve protections equivalent to those offered by closed-cycle cooling. However, the dirty energy industry continues to fight these requirements.

When contemplating the beauty of the Golden State, admirers invariably point to the breathtaking shoreline that has shaped California both culturally and historically. Power plants must help protect the beauty and economic vitality of the California Coast by using modern cooling system technologies.

CLOCKWISE FROM LEFT: On the California coast, there 17 antiquated power plants that suck in over 15 billion gallons of water every day. While smaller aquatic life is killed by outdated power plants, the affects move up the food chain to larger animals like whales that pass the California coast. California's shores are known not only for its amazing wildlife, but also its outdoor activities like scuba diving and surfing. Healthy tuna shoals, like the one shown here, are vital to economy of California.

SAN ONOFRE PHOTO © 2010 DARRILL CLARKE, COURTESY SIERRA CLUB LIBRARY

CHESAPEAKE BAY



STRETCHING 200 MILES across Maryland and Virginia—and with a watershed also encompassing Pennsylvania, Delaware, West Virginia, New York and the District of Columbia—Chesapeake Bay is the largest estuary in the United States and the third-largest in the world. The Chesapeake was formed about 12,000 years ago, as glaciers melted and flooded the Susquehanna River valley. The Chesapeake Bay watershed is 64,000 square miles and includes more than 10,000 miles of tidal shoreline, including tidal wetlands and islands.

The Chesapeake Bay is fed by five major rivers: the Susquehanna, Potomac, Rappahannock, York and James. The Chesapeake holds more than 15 trillion gallons of water and, although its length and width are dramatically expansive, its average depth is only about 21 feet, making it sensitive to temperature changes and discharges.⁶⁵ Approximately 17 million people live in the watershed, 10 million of them along its shores or near them.⁶⁶

Together with the rivers, creeks and streams that feed it, the Chesapeake Bay provides a vital habitat for many aquatic species. Within the sheltered waters of the Chesapeake, underwater seagrass beds support the base of the food chain. These beds offer food and protection for a large number of small animals and a nursery for young fish. More than 300 species of fish, 170 species of shellfish and 2,700 species of plants are found in the Chesapeake.⁶⁷

The Chesapeake's fish species include striped bass, trout, flounder, bluefish, Spanish mackerel, channel bass, yellow and white perch, herring and American shad. The Chesapeake is a key component in the Atlantic flyway: More than a million ducks, geese and swans spend winters here each year and it provides stopover habitat to thousands of other migrating birds.⁶⁸ This delicate, complex ecosystem is home to a number of plant and animal species that are currently designated as threatened or endangered, including the peregrine falcon, loggerhead and Atlantic Ridley turtles and the shortnose sturgeon. The once-endangered bald eagle lives in the region, too, appropriately in close proximity to our nation's capital.

Along with being a vital ecosystem with a rich diversity of species, the Chesapeake offers wonderfully scenic places to visit. The shallow, protected waters of the Chesapeake Bay and its tributaries are ideal for canoeing and kayaking. The region offers opportunities for water recreation sports, including fishing, boating and swimming, as well as excellent trails along the water for bird-watching, hiking and mountain biking.

One of the Chesapeake's most significant contributions to the region's economy is its seafood industry. The Chesapeake is especially renowned for its blue crabs, clams, oysters and striped bass. More than 500 million pounds of seafood are harvested from the Chesapeake every year.⁶⁹ A 2008 U.S. National Oceanic and Atmospheric Administration report indicated that the commercial seafood industry in Maryland and Virginia

contributed \$3 billion and more than 41,000 jobs to the local economy.⁷⁰

How Power Plant Intake Structures Harm Chesapeake Bay

At least seven power plants in Maryland and six in Virginia use once-through cooling systems on the shoreline of the Chesapeake Bay or on saline or brackish waters in immediate proximity to the bay. Of these 13 plants, two are nuclear (Calvert Cliffs in Maryland and Surry in Virginia), four are coal-fired (the Chesapeake, Chesterfield and Potomac River plants in Virginia and the Morgantown plant in Maryland), and seven burn natural gas or oil. The Calvert Cliffs nuclear plant is the largest cooling water user in the Chesapeake, with a design intake flow rate of more than 2.2 billion gallons per day. It is followed by Virginia's Surry and Yorktown plants and Maryland's Morgantown and Herbert A. Wagner plants, each of which can withdraw between 1 and 1.5 billion gallons of water per day. Together, these 13 power plants can withdraw more than 8 billion gallons of water per day. (See Appendix, Table 6, for a full list of Chesapeake plants and their intake flow rates.)

The removal of large volumes of water from a habitat as rich in wildlife as the Chesapeake Bay inevitably leads to environmental degradation. For example, Calvert Cliffs plant in Maryland was estimated to impinge an average of 1.3 million fish a year between 1975 and 1995 with a total weight of about 10 tons.⁷¹ The plant also impinges an average of 627,000 blue crab per year.⁷² In certain environmental conditions, Calvert Cliffs

has caused fish impingement incidents of staggering proportion: On August 28, 1984, the plant impinged 146,000 spot fish in just one hour, and on August 2, 1984, 12,650 blue crab were collected from its Unit 1 screens in one hour.⁷³ Such massive fish kills have also caused operational problems like blockages and damage to the screens.⁷⁴

Entrainment losses of Chesapeake populations are also considerable. The Chalk Point power plant on the Patuxent River estuary in Prince George's County, Maryland, has two units that use once-through cooling, which together extract 500,000 gallons per minute from the estuary.⁷⁵ The Power Plant Research Program of the Maryland Department of Natural Resources estimated that Chalk Point's entrainment of bay anchovies could be as high as 76 percent of the local stock.⁷⁶

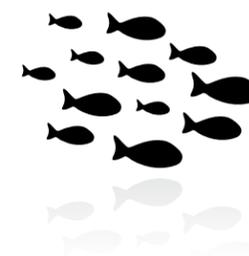
The Chesapeake Bay and its tributaries are broadly recognized as a national treasure and vital resource. The Chesapeake creates opportunities for recreational and commercial fishing; is a beautiful place to swim, hike and boat; and is a world-class ecosystem for an untold number of species. The power plants along the Bay must upgrade their outdated systems to protect this iconic waterbody.

Famous for its blue crabs, the fishing communities around the Chesapeake Bay are dependent on healthy populations for their livelihoods. The Chesapeake creates opportunities for recreational and commercial fishing; is a beautiful place to swim, hike and boat. Once endangered bald eagles living in the Bay, like the ones shown here, are reliant on strong healthy fish populations. The 13 antiquated power plants on the Bay can withdraw more than 8 billion gallons of water per day.



PHOTO: PISCES CONSERVATION, LTD

CONCLUSION



The six examples in this report illustrate the real and immediate impacts of cooling water intake structures. The massacre caused by this antiquated technology is clear: The full spectrum of aquatic species and wildlife that rely on complex food chains in our lakes and rivers and on our shores—from phytoplankton to fish, birds, and marine mammals, and including species that are already threatened or endangered—is impacted by once-through cooling. Some areas face devastating economic impacts as fisheries are threatened and recreational uses are diminished.

The Environmental Protection Agency is charged with implementing Section 316(b) of the Clean Water Act, which requires the use of the best available technologies to minimize the environmental impact of power plants' cooling water withdrawals.

The modern closed-cycle cooling technology reduces the impacts of cooling water systems, is cost-effective, and is in use at many power plants across the country. It reduces water intakes by approximately 95 percent, drastically reducing the amount of water needed for power plant operations, thus resulting in a corresponding reduction in their impact on fish and other species.

Unfortunately, the EPA, under intense pressure from powerful industry interests, has ducked its responsibilities by not requiring existing power plants to upgrade to closed-cycle cooling or similar systems. Instead, in March 2011, the EPA proposed a rule that largely maintains the status quo, mandating little to no improvement in the technologies necessary to protect our waterways and our wildlife. The EPA's proposed rule sets a goal for impingement reductions that is already being achieved by 75 percent of U.S. power plants, thus requiring only marginal improvement in fish impingement across the country, and fails to set a performance standard for entrainment of wildlife.

Worse yet, the EPA left decisions about modernizing existing power plants to already overstrained state permitting

agencies. These are the same state permitting agencies that have been authorized to order improvements for more than 30 years but have instead done almost nothing to reduce the impact power plants have on aquatic ecosystems. Today, almost half of the water permits for existing coal-fired power plants are expired because state agencies have either abandoned their obligation to faithfully uphold and enforce our clean water protections or are too overburdened to comply.

Almost 40 years after Congress identified cooling water intake as a threat to our waterways, the EPA has failed to force the owners of existing power plants—the nation's largest water users—to reduce their destructive impact. With its recent proposed rule, the EPA perpetuates this missed opportunity by leaving decisions about technology improvements to overburdened states that have proven incapable or unwilling to require power plants to phase out once-through cooling.

A clear, consistent national policy that restores and protects our waterways by phasing out once-through cooling is long overdue. The simple and cost-effective step of phasing out this outdated and destructive technology would represent a huge step forward in the nation's unfinished business of ensuring clean, safe and abundant waterways for all Americans.

APPENDIX

POWER PLANTS USING ONCE-THROUGH COOLING

TABLE 1: GREAT LAKES FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
LAKE ERIE			
Ashtabula	Ohio	Coal	1,017
Avon Lake	Ohio	Coal	1,608
Bay Shore	Ohio	Coal	742
Conners Creek	Michigan	Coal	323
Dunkirk	New York	Coal	579
Eastlake	Ohio	Coal	1,158
J. R. Whiting	Michigan	Coal	308
Lake Shore	Ohio	Coal	623
Mistersky	Michigan	Oil/Gas	198
Monroe	Michigan	Coal	2,013
River Rouge	Michigan	Coal	648
Total Lake Erie facilities (12)			9,217
LAKE MICHIGAN			
B. C. Cobb	Michigan	Coal	558
Bailly	Indiana	Coal	443
Crawford	Illinois	Coal	552
Dean H. Mitchell	Indiana	Coal	746
Donald C. Cook	Michigan	Nuclear	2,143
Edgewater	Wisconsin	Coal	407
Fisk	Illinois	Coal	302
J. H. Campbell	Michigan	Coal	886
Kewaunee Nuclear	Wisconsin	Nuclear	460
Michigan City	Indiana	Coal	230
Point Beach Nuclear	Wisconsin	Nuclear	1,025
Port Washington	Wisconsin	Gas	594
Pulliam	Wisconsin	Coal	565
South Oak Creek	Wisconsin	Coal	1,137
State Line	Indiana	Coal	606
Trenton Channel	Michigan	Coal	516
Valley	Wisconsin	Coal	162
Waukegan	Illinois	Coal	852
Will County	Illinois	Coal	1,292
Total Lake Michigan facilities (18)			13,476

LAKE HURON			
Belle River	Michigan	Coal	950
Dan E. Karn	Michigan	Coal	465
Harbor Beach	Michigan	Coal	129
J. C. Weadock	Michigan	Coal	345
Marysville	Michigan	Coal	609
St. Clair	Michigan	Coal	1,344
Total Lake Huron facilities (6)			3,842
LAKE ONTARIO			
Genoa	New York	Nuclear	490
Huntley	New York	Coal	846
James A. Fitzpatrick	New York	Nuclear	596
Nine Mile Point	New York	Nuclear	490
Oswego Harbor Power	New York	Oil/Gas	1,399
Total Lake Ontario facilities (5)			3,821
LAKE SUPERIOR			
Presque Isle	Michigan	Coal	415
Total Great Lakes facilities (42)			30,771

Sources: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; New York State Department of Environmental Conservation, Best Technology Available (BTA) for Cooling Water Intake Structures, draft policy, March 4, 2010, App. A, Table 1; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991.

Note: Includes plants located on the shore of a Great Lake or on a tributary in close proximity.

TABLE 2: GULF OF MEXICO FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
A. B. Paterson	Louisiana	Oil/Gas	216
Anclote	Florida	Oil/Gas	2,864
Barney M. Davis	Texas	Oil/Gas	337
Big Bend	Florida	Coal	1,395
Crystal River, Units 1, 2 & 3	Florida	Coal/Nuclear	2,168
Deepwater	Texas	Oil/Gas	125
Jack Watson	Mississippi	Coal	125
Fort Myers	Florida	Oil/Gas	563
Lansing Smith	Florida	Coal	274
Michoud	Louisiana	Oil/Gas	748
Nueces Bay	Texas	Oil/Gas	528
P. H. Robinson	Texas	Oil/Gas	1,715
P. L. Bartow	Florida	Oil/Gas	561
S. O. Purdom	Florida	Oil/Gas	62
Sabine	Texas	Oil/Gas	443
Sam Bertron	Texas	Oil/Gas	736
Webster	Texas	Oil/Gas	115
Total Gulf of Mexico facilities (17)			12,975

Source: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009.
Note: Includes plants located on the Gulf of Mexico or in coastal bays or other marine waters in immediate proximity.

TABLE 3: MISSISSIPPI RIVER FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
Allen Steam Plant	Tennessee	Coal	497
Alma	Wisconsin	Coal	182
Baxter Wilson	Mississippi	Oil/Gas	592
Big Cajun 2	Louisiana	Coal	362
Burlington	Iowa	Oil/Gas	116
Genoa	Wisconsin	Coal	244
High Bridge	Minnesota	Gas	202
John P. Madgett	Wisconsin	Coal	322
Lansing	Iowa	Coal	331
LaO Energy Systems	Louisiana	Gas	131
Little Gypsy	Louisiana	Oil/Gas	934
Meramec	Missouri	Coal	675
Milton L. Kapp	Iowa	Coal	175
Monticello	Minnesota	Nuclear	367
Muscatine, Unit 1	Iowa	Coal	301
Nelson Dewey	Wisconsin	Coal	144
New Madrid	Missouri	Coal	956
Nine Mile Point	Louisiana	Coal	1,497
Prairie Island	Minnesota	Nuclear	911
Quad Cities	Illinois	Nuclear	1,353
Riverside	Iowa	Coal	247
Riverside	Minnesota	Coal	277
Robert E. Ritchie	Arkansas	Oil	443
Rush Island	Missouri	Coal	863
Sioux	Missouri	Coal	705
Waterford, Units 1, 2 & 3	Louisiana	Oil/Gas/Nuclear	2,021
Willow Glen	Louisiana	Gas	1,292
Wood River	Illinois	Coal	589
Total Mississippi River facilities (28)			16,428

Sources: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991.
Note: Includes plants located on the main stem of the Mississippi. Where there is more than one cooling system at a plant site, the table gives the intake capacity for the units using once-through cooling. The Monticello nuclear plant uses mechanical draft cooling towers from May through September.

TABLE 4: HUDSON RIVER, LONG ISLAND SOUND, AND NEW YORK HARBOR FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
HUDSON RIVER			
Bowline	New York	Oil/Gas	912
Danskammer	New York	Coal	457
Indian Point	New York	Nuclear	2,500
Roseton	New York	Oil	926
Total Hudson River facilities (4)			4,795
LONG ISLAND SOUND			
Bridgeport Harbor	Connecticut	Coal/Oil	541
Devon	Connecticut	Oil	262
Glenwood	New York	Oil/Gas	179
Millstone	Connecticut	Nuclear	2,190
New Haven Harbor	Connecticut	Oil/Gas	404
Northport	New York	Oil/Gas	939
Norwalk Harbor	Connecticut	Oil	298
Port Jefferson	New York	Oil/Gas	399
Total Long Island Sound facilities (8)			5,212
NEW YORK HARBOR			
Arthur Kill	New York	Oil	713
Astoria Generating	New York	Oil/Gas	1,254
Brooklyn Navy Yard	New York	Gas	55
East River Generating	New York	Oil/Gas	369
Ravenswood	New York	Oil/Gas	1,391
Total New York Harbor facilities (5)			3,782
Total River, Sound & Harbor facilities (19)			13,789

Sources: New York State Department of Environmental Conservation, Best Technology Available (BTA) for Cooling Water Intake Structures, draft policy, March 4, 2010, App. A, Table 1; U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991; Dominion Nuclear Connecticut Millstone Power Station, NPDES permit, Revised Fact Sheet, December 10, 2007, http://www.ct.gov/deep/lib/deep/public_notice_attachments/draft_permits/071210_millstone_revised_fact_sheet.pdf (last visited May 11, 2011). Note: Includes plants on the tidal estuary portion of the Hudson River, the shoreline of the Long Island Sound or on saline or brackish waters in immediate proximity to the Sound, and on the East River and Arthur Kill.

TABLE 5: CALIFORNIA COAST FACILITIES

PLANT NAME	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
Alamitos	Oil/Gas	1,273
Contra Costa Units 6 & 7	Oil/Gas	440
Diablo Canyon	Nuclear	2,528
El Segundo	Oil/Gas	399
Encina	Oil/Gas	857
Harbor	Gas	108
Haynes	Oil/Gas	968
Huntington Beach	Oil/Gas	514
Mandalay	Oil/Gas	253
Morro Bay	Oil/Gas	668
Moss Landing Units 1, 2, 6 & 7	Oil/Gas	1,226
Ormond Beach	Oil/Gas	685
Pittsburg Units 5, 6 & 7	Oil/Gas	462
Redondo Beach Units 5, 6, 7 & 8	Oil/Gas	892
San Onofre Units 2 & 3	Nuclear	2,438
Scattergood	Oil/Gas	495
South Bay	Oil/Gas	601
Total California facilities (17)		15,038

Source: Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, Final Substitute Environmental Document, State Water Resources Control Board, California Environmental Protection Agency, May 4, 2010, pp. 36–38, Section 2.4, Table 4. http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/docs/cwa316may2010/sed_final.pdf. Note: The following plants were not included because they are retiring or repowering with dry cooling: Hunters Point plant (retiring); South Bay plant (retiring); Humboldt Bay (repowering).

TABLE 6: CHESAPEAKE BAY FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
Calvert Cliffs	Maryland	Nuclear	2,233
Chalk Point	Maryland	Oil/Gas	731
Chesapeake	Virginia	Coal	514
Chesterfield	Virginia	Coal	846
Gould Street	Maryland	Oil/Gas	99
Herbert A. Wagner	Maryland	Oil/Gas	1,098
Morgantown	Maryland	Coal	1,442
Possum Point	Virginia	Oil/Gas	224
Potomac River	Virginia	Coal	450
Riverside	Maryland	Oil/Gas	54
Sparrows Point	Maryland	Gas	297
Surry	Virginia	Nuclear	1,550
Yorktown	Virginia	Oil/Gas	1,445
Total Chesapeake Bay facilities (13)			10,983

Sources: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991. Note: Includes plants located on Chesapeake Bay or on other saline or brackish waters in immediate proximity to the bay.

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EXHIBIT B

A5318



ROBERT K. SWEENEY
Assemblyman 11TH District

THE ASSEMBLY
STATE OF NEW YORK
ALBANY

CHAIRMAN
Environmental Conservation

COMMITTEES
Education
Rules
Veterans' Affairs

June 21, 2011

Governor Andrew Cuomo
Executive Chamber
Albany, NY 12224

A.5318A: An act to amend the Environmental Conservation Law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

Dear Governor Cuomo,

I write you now regarding the above captioned bill, which authorizes the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program to regulate the use of the State's water resources. This is a Departmental Bill.

Under current law, which hasn't been updated in nearly 50 years, the DEC only has the authority to regulate withdrawals for public drinking water suppliers. As a result, use of water for commercial and industrial purposes remains largely unregulated.

New York State has plentiful water resources. The preservation and protection of these resources is vital to New York's residents and businesses, which rely on them for drinking water, and to support agriculture, manufacturing, other industries and recreation in the State.

Demand for New York's freshwater is increasing: population growth, maintaining fisheries and wildlife habitats, and the increasing use of water for commercial, industrial and other purposes have all put pressure on water resources. In addition, potential impacts from climate change, and proposals to export vast amounts of water from New York to other states and abroad could pose new threats to the State's water supply.

000005

These issues have served to highlight the need to better regulate the State's water and modify the DEC's currently very limited ability to regulate water withdrawals for most purposes.

Enclosed are the following documents your office requested:

- copies of the bill and sponsor's memorandum in support of this bill
- copies of memoranda from outside organizations

I respectfully urge that you sign this bill into law.

Very truly yours,



Robert K. Sweeney
Member of Assembly

RKS/amd

000006

**NEW YORK STATE ASSEMBLY
MEMORANDUM IN SUPPORT OF LEGISLATION
submitted in accordance with Assembly Rule III, Sec 1(f)**

BILL NUMBER: A5318A

SPONSOR: Sweeney (MS)

TITLE OF BILL: An act to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

Purpose: The purpose of this bill is to authorize the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program to regulate the use of the State's water resources.

Summary of provisions: Section 1 of the bill would amend Environmental Conservation Law (ECL) § 15-1501 to simplify the existing water supply permit program and to expand the program to require permits for the most significant water uses. Specifically, ECL § 15-1501 would be amended to: (1) require that, once DEC adopts regulations, all persons that operate or propose to operate a water withdrawal system with a capacity equal to or greater than the "threshold volume" of 100,000 gallons per day (gpd) obtain a permit from DEC, except that a water withdrawal for agricultural purposes would require a permit if it exceeded an average of 100,000 gpd over any 30-day period; (2) provide that all valid public water supply permits or approvals issued by DEC or its predecessors remain in full force and effect for purposes of satisfying the new permit requirement; (3) provide that existing water withdrawals would be entitled to an initial permit based on their maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law; (4) clarify that a supplier of public water may not install or construct a public water supply system until it has received approval from the New York State Department of Health (DOH) as may be required by the State Sanitary Code; (5) require DEC to adopt regulations to implement a permitting program for water withdrawals equaling or exceeding the threshold volume; (6) authorize DEC to consolidate existing multiple public water supply permits covering a single existing water withdrawal system for administrative efficiency; and (7) exempt certain water withdrawals from permitting requirements, including withdrawals for agricultural purposes that have been registered or reported to DEC on or before February 15 2012.

Section 2 of the bill would amend ECL § 15-1502 to add definitions for the following terms: "agricultural purpose," "compact basin commission," "environmentally sound and economically feasible water conservation measures," "interbasin diversion," "person," "potable water," "public water supply system," "threshold volume," "water withdrawal system" and "withdrawal."

Section 3 of the bill would amend ECL § 15-1503 to: (1) make conforming amendments necessitated by other amendments to Title 15 made by the bill; (2) clarify the information that must be provided with a permit application; (3) require that, in making its permit decisions, DEC shall determine whether a proposed withdrawal takes into consideration other sources of supply that are or may become available, will be adequate for

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the proposed use, is just and equitable to all affected municipalities and their inhabitants, cannot be reasonably avoided through efficient use and conservation of existing water supplies, is limited to quantities that are considered reasonable for the 'purposes for which the water use is proposed, will be implemented in a manner that ensures it will result in no significant individual or cumulative adverse impacts, incorporates environmentally sound and economically feasible water conservation - measures, and is consistent with applicable municipal, state and federal laws and regional and international agreements; and (4) provide that a new permit for a water withdrawal system and any renewal thereof will be valid for a period not to exceed ten years.

Section 4 of the bill would add a new ECL § 15-1504 to make the provisions in existing Titles 16 and 33 of ECL Article 15, which would be repealed by sections 8 and 9 of the bill, applicable to water withdrawals for agricultural purposes that are registered or reported to DEC under such titles on or before February 15, 2012. While such existing, agricultural withdrawals would not require a water withdrawal permit, they must continue to be registered and reported under the new ECL § 15-1504 in the same manner as required under Titles 16 and 33.

Section 5 of the bill would amend ECL § 15-1505 to: (1) provide that no person may make a new or increased interbasin diversion of water which results in a diversion in excess of one million gpd until the person has registered the diversion with DEC; (2) provide that no later than February 15, 2013, all existing diversions in excess of one million gpd must be registered with DEC; and (3) provide that no person shall make a new or increased interbasin diversion which results in a significant adverse impact on the water quantity of the source New York major drainage basin. This section would exempt from the registration requirement an interbasin diversion which is part of a water withdrawal permitted by DEC or its predecessors.

Section 6 of the bill would amend ECL § 15-1521 to provide that the Public Service Commission has jurisdiction to set the rates for the supply of water by one public water supply system to another and make technical and conforming amendments necessitated by other amendments to Title 15 made by the bill.

Section 7 of the bill would amend ECL § 15-1529 to provide that, in lieu of DEC inspection and approval, the construction of any water withdrawal system must be supervised by a licensed professional engineer that will certify to DEC that the system has been fully completed in accordance with the approved engineering report, plans and specifications, and the permit.

Section 8 of this bill would repeal Title 16 of ECL Article 15 (Title 16), related to Great Lakes water conservation and management, because the provisions of Title 16 will be incorporated into the permitting requirements of Title 15 as amended by this bill.

Section 9 of the bill would repeal Title 33 of ECL Article 15 (Title 33), which was added by Chapter 59 of the Laws of 2009 to enable the State to gain information about large water withdrawals, because the information collected pursuant to Title 33 will be incorporated into the permitting requirements of Title 15 as amended by this bill.

Section 10 of the bill would amend ECL § 71-1127 to increase the maximum civil penalty for violations of ECL Article 15 from \$500 to \$2,500 per violation and from \$100 to \$500 for each day during which the violation

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continues.

Section 11 of the bill would provide for an effective date of February 15, 2012, except that section 4 of the bill would take effect immediately, and sections 7 and 8 of the bill, which would repeal Title 16 and Title 33, would take effect on December 31, 2013.

Existing law: ECL Article 15 sets forth New York's water resources program. Title 15 sets forth then provisions related to regulating water supply. ECL § 15-1501 requires public water suppliers to obtain a permit from DEC. ECL § 15-1502 provides the definitions applicable to Title 15. ECL § 15-1503 sets forth the criteria applicable to DEC's decision to grant or deny a permit. ECL § 15-1505 requires a permit for supplying water to other states. ECL § 15-1521 authorizes DEC to require that an applicant for a water supply permit make provisions for and supply water to other areas of the state if the areas should be supplied by the water source sought by the applicant. ECL § 15-1529 requires DEC approval of completed construction before a project may be operated. ECL § 71-1127 establishes the maximum civil penalty for any person who violates the provisions of ECL Article 15 or any rule, regulation, order or permit issued thereunder.

Legislative history: A similar bill, 2010 Governor's Program Bill 451, passed the Senate (S.8280-A) and was introduced in the Assembly (A.11436-13).

Statement in support: New York State is fortunate to have plentiful water resources. The preservation and protection of these resources is vital to New York's residents and businesses, who rely on these resources for drinking water supplies, and to support agriculture, manufacturing and other industries and recreation in the State. Aquatic and terrestrial flora and fauna are also dependent on these critical resources to maintain healthy populations. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs now and into the future.

Pursuant to ECL Article 15, DEC has been entrusted with the responsibility to conserve and control New York State's water resources for the benefit of all the inhabitants of the State. However, the water supply provisions of Title 15 derive primarily from statutes written in the first half of last century, and therefore are outdated. Under the provisions of Title 15, DEC's regulatory authority is largely limited to public water supplies to ensure adequate quantities of potable water. As a result, consumptive uses of water for agricultural, commercial, and industrial purposes remain largely unregulated by the State.

Moreover, since the provisions of Article 15 were enacted, population growth, pressures to keep water instream for fisheries and the environment, and increased use of water for commercial, industrial and other purposes have resulted in substantially increased demands on the State's water resources. In addition, potential impacts from climate change, and proposals to export vast amounts of water from New York to other states and abroad could pose new threats to the State's water supply. These issues have served to highlight the limitations on the State's water resources program and DEC's limited ability to regulate water withdrawals for many purposes. In contrast, neighboring states of Connecticut, New Jersey, Rhode Island, and Massachusetts all have programs that regulate industrial, commercial and agricultural water withdrawals.

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Another important recent development is enactment of the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact) which includes a number of provisions to preserve and protect the water resources of the Great Lakes-St. Lawrence River Basin (Great Lakes Basin). The Great Lakes Basin is home to 20 percent of New York's population and covers approximately 50 percent of New York State by area. A key provision of the Compact requires New York to regulate all water withdrawals occurring in the New York portion of the Great Lakes Basin.

This bill, by authorizing DEC to implement a permitting program for all water withdrawal systems with a capacity equal to or greater than 100,000 gpd, would allow New York to meet its Compact obligation to implement a regulatory program for water withdrawals in the Great Lakes Basin. Moreover, application of the program statewide assures consistent requirements throughout New York and creates an even regulatory playing field while at the same time protecting the State's finite water resources. Further, this bill would result in a strengthening of the water conservation elements of the current permitting program and encourage water reuse, consistent with the Compact and sound resource management.

Finally, by focusing DEC's jurisdiction on significant withdrawals, DEC would no longer be required to issue permits for smaller public water supplies. This change would allow DEC to focus its attention on large withdrawals that have the potential to have significant impact on the quantity and quality of the State's water resources, while relieving smaller communities of the regulatory burden of obtaining a permit from DEC. Although small public water supplies would be exempt from DEC's permitting process, DOH would continue to regulate them to ensure their adequacy and the protection of public health.

Budget Implications: This bill would not have any significant fiscal impact on the State because DEC would implement the new requirements with existing resources.

Effective date: This bill would take effect February 15, 2012; provided, however, that section 4 would take effect immediately; sections 8 and 9 would take effect December 31, 2013; and that any proceeding commenced prior to February 15, 2012 pursuant to ECL § 151521 shall remain under the jurisdiction of DEC.

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EXHIBIT C

New York State Department of Environmental Conservation

Office of Legislative Affairs, 14th Floor
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Website: www.dec.ny.gov



Joseph Martens
Commissioner

August 3, 2011

MEMORANDUM

TO: Mylan L. Denerstein, Esq.
Counsel to the Governor

RE: A5318-A/S.3798—Assemblymember Sweeney/Senator Grisanti
Recommendation: Approval

The Department of Environmental Conservation (DEC) submits the following comments on A.5318-A, which has passed both houses of the Legislature and will be delivered to the Governor for his consideration.

This bill, which is DEC departmental bill #01-11, would amend several provisions of Article 15 of the Environmental Conservation Law (ECL) to authorize DEC to implement a comprehensive permitting system for significant water withdrawals across the state, to enhance DEC's ability to manage the State's water resources to promote economic growth and address droughts. The bill would take effect February 15, 2012; however, permits for withdrawals other than for public water supplies (that are already subject to permitting) would not be required until DEC adopts implementing regulations. In addition, the provisions applicable to withdrawals for agricultural purposes take effect immediately.

Description of the bill:

More specifically, this bill would amend ECL §15-1501 to simplify the existing water supply permit program and to expand the program to require permits for the most significant water withdrawals. ECL §15-1501 as amended would require that, once DEC promulgates regulations, all persons that operate or propose to operate a water withdrawal system with a capacity equal to or greater than the "threshold volume" of 100,000 gallons per day (gpd) obtain a permit from DEC, with certain exceptions. The bill would amend ECL §15-1502 to add new definitions applicable to the new permitting program and ECL §15-0503 to set forth the criteria DEC shall use in making its permit decisions.

This bill would also add a new ECL §15-1504 to make the existing registration and reporting provisions in Titles 16 and 33 of ECL Article 15, which would be repealed by this bill, applicable to water withdrawals for agricultural purposes that are registered or reported to DEC under these titles on or before February 15, 2012. While these existing agricultural withdrawals would not require a water withdrawal permit, they must continue to register and report under the

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new ECL §15-1504. The threshold for reporting withdrawals for agricultural purposes would be consistent with the threshold for registrations of withdrawals in the Great Lakes Basin under existing Title 16: a withdrawal of water of a volume in excess of an average of 100,000 gallons per day in any consecutive 30-day period.

The bill makes amendments to several other provisions of ECL Article 15 to: prohibit a new or increased interbasin diversion of water which results in a diversion in excess of one million gpd until the person has registered the diversion with DEC; transfer to the Public Service Commission jurisdiction to set the water rates in the limited cases where DEC specifically requires that one public water supplier provide water service to another and they cannot agree upon a rate; and provide that, in lieu of DEC inspection and approval, the construction of any water withdrawal system must be supervised by a licensed professional engineer that will certify to DEC that the system has been fully completed in accordance with the approved engineering report, plans and specifications, and the permit. The bill also would repeal, effective December 31, 2013, Titles 16 and 33 of ECL Article 15, related to Great Lakes water conservation and management, and reporting of water withdrawals, respectively, because the information collected pursuant to these titles will be incorporated into the new permitting requirements of Title 15.

Finally, this bill would amend ECL §71-1127 to increase the maximum civil penalty for violations of ECL Article 15 from \$500 to \$2,500 per violation and from \$100 to \$500 for each day during which the violation continues.

Discussion:

New York State is fortunate to have plentiful water resources. The preservation and protection of these resources is vital to New York's residents, farmers, and businesses who rely on these resources for drinking water supplies, and to support agriculture, manufacturing and other industries and recreation in the State. Aquatic and terrestrial flora and fauna are also dependent on these critical resources to maintain healthy populations. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs.

Pursuant to ECL Article 15, DEC has been entrusted with the responsibility to conserve and manage New York State's water resources for the benefit of all the inhabitants of the State. The water supply provisions of Title 15 of ECL Article 15, however, derive primarily from statutes written in the first half of last century, and therefore are outdated. Under the provisions of Title 15, DEC generally only has authority to regulate public water supplies to ensure adequate quantities of potable water. As a result, consumptive uses of water for agricultural, commercial, and industrial purposes remain largely unregulated across the State.

This bill would allow DEC to comply with a significant commitment under the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact): regulation of all significant water withdrawals occurring in the New York portion of the Great Lakes Basin. This bill also directs DEC to establish a water conservation and efficiency program, another key responsibility of New York State under the Compact.

This bill would result in a strengthening of the water conservation elements of the current

permitting program for public water supplies and encourage water reuse, consistent with the Compact and sound resource management. Further, increasing the penalties applicable to violations of ECL Article 15 should deter violations that threaten the quality and quantity of the State's water resources.

DEC worked extensively with stakeholders, including agriculture, industry and environmental advocates, to resolve their concerns. As a result, existing agricultural withdrawals are exempt from the new permit requirement as long as these withdrawals are reported to DEC as required under current law. In addition, all existing water withdrawals would be entitled to an initial permit, subject to appropriate terms and conditions, based on the maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law. Language was also added to the bill to authorize DEC to establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of ECL Article 15. Further, the criteria that DEC must consider in making its permit decisions are based on the decision-making standard in the Compact.

This bill, by authorizing a comprehensive statewide permitting program for significant water withdrawals, would help ensure that water remains available for drinking water supply, agriculture, hydropower, manufacturing, wildlife and plant species, navigation, water-based recreation, wetlands, and other uses, while allowing DEC to regulate withdrawals of water that are unregulated now, like water taken by bottled water companies, or large withdrawals of water for hydraulic fracturing. It would help DEC to protect existing water users, especially for drinking water purposes, and help new businesses to know where to locate in New York, especially if the business is heavily water dependent.

This bill reflects a balanced approach to protecting the State's water resources. It recognizes the importance of regulating significant water withdrawals while not placing undue regulatory burdens on New York's farmers or businesses.

DEC strongly supports this legislation and recommends its approval.

/s/

Maureen A. Coleman
Legislative Counsel

c: Commissioner Martens
Steven Russo
James Tierney

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EXHIBIT D



AUGUST 15, 2011 Albany, NY

Governor Cuomo to Sign Law to Protect New York's Waters

Governor Andrew M. Cuomo today announced he will sign a new law to protect New York's waters and the Great Lakes by requiring a state permit for the withdrawal of large volumes of water from the state's rivers, lakes, streams and groundwater.

The new law is designed to foster responsible conservation practices and economic growth while protecting water bodies and wildlife habitats. The permitting process will ensure a continued water supply to existing municipal, agricultural and industrial users, and will help identify areas that could support new water-dependent businesses. Specifically, the law requires approval before operating or proposing a system with the capacity to withdraw 100,000 gallons or more per day of surface and groundwater.

"The preservation and protection of New York's water resources is vital to the state's residents, farmers and businesses," Governor Cuomo said. "This law will enhance the state's ability to manage its water to promote economic growth and address droughts while protecting the environment. My administration worked with a broad array of interests to ensure a balanced program that manages significant water withdrawals across the state and protects New York's farmers and

businesses from undue regulatory burdens."

The law ensures water withdrawals throughout the state are regulated with a holistic approach. DEC proposed this law to significantly enhance the state's ability to manage water supplies in response to climate change, droughts, natural resource protection, future water supply demands from outside New York and other unanticipated threats in the future.

Significantly, this law will enable DEC to comply with commitments under the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact) by regulating all significant water withdrawals occurring in the New York portion of the Great Lakes Basin. The law also directs DEC to establish an effective water conservation and efficiency program, which is another key responsibility of states under the Compact. This legislation also increases penalties to deter violations that threaten the quality and quantity of the state's water resources.

Department of Environmental Conservation Commissioner Joseph Martens said, "This new law will enable DEC to do its part to protect the valuable resources of the Great Lakes while also enhancing the state's ability to manage water resources in response to climate change, droughts and future demands. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water are available to meet the needs of the state's residents, businesses and farmers. Managing water withdrawals will help DEC protect existing water uses and help new water-dependent businesses know where to locate in New York."

Senator Mark Grisanti, Chairman of the Senate Environmental Conservation Committee, said, "Passage of this monumental legislation will protect our environment by regulating the amount of water that can be extracted. Under current law, the state does not have the proper oversight to regulate water withdrawals, and with this legislation they will be able to better protect our state's greatest natural resource its water. This protection is critical throughout New York, as well as in Western New York where the Great Lakes hold one-fifth of the world's fresh water. This legislation is supported by both the environmental and business community and shows how working together can achieve sound and necessary environmental policy. I thank Governor Cuomo for his leadership on this important issue, and I look forward to continuing to work together to protect our environment and all the citizens of New York."

Assemblyman Bob Sweeney, Chairman of Assembly Committee on Environmental Conservation said, "New York State is fortunate to have an abundant supply of water. This law will help the state to remain vigilant in the preservation and protection of this resource. Water is vital to New York's residents and businesses, for drinking, agriculture, commerce and recreation. The measure will help ensure that future generations of New Yorkers can enjoy a vibrant, healthy environment and a healthier and more prosperous future."

The Great Lakes and their watersheds contain more than 18 percent of the world's supply and nearly 90 percent of the United States' supply of fresh surface water. Only about one percent of the water volume is renewed or replaced by precipitation and tributary inflow each year. Consequently, Great Lakes levels can

be drawn down dramatically by sizeable water withdrawals. Large withdrawals could adversely affect wetland habitat, spawning grounds, municipal and agricultural water supplies, recreational boating access and hydropower production.

As the nation's population increases and water supplies in other regions are consumed, pressure to utilize Great Lakes water outside the region will grow. This valuable resource must be carefully managed to ensure that it continues to provide environmental and economic benefits for future generations. This law will ensure that New York upholds its commitments under the Compact.

EXHIBIT E

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ADOPTION OF WATER WITHDRAWAL REGULATIONS NOVEMBER 2012
ASSESSMENT OF PUBLIC COMMENTS**

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I. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) issued a Notice of Proposed Rule Making on November 23, 2011, to repeal the existing water withdrawal regulations at Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 601 and adopt a new Part 601. The proposed rule also repealed Part 675 and incorporated its salient provisions into Part 601, and modified subpart 621.4, Uniform Procedures, to ensure consistent use of terms and to include water withdrawal “initial permits” in the ‘minor’ project category. These regulations were proposed to harmonize the Department’s regulations with the water withdrawal bill (A.5318-A/ S.3798) signed into law by Governor Cuomo on August 15, 2011.

Three public information meetings were held regarding the proposed rule making on December 6, 8 and 12, 2012, in New Paltz, West Henrietta and Albany, respectively. The public comment period for the proposed rulemaking was scheduled to close on January 22, 2012, but was extended to February 6, 2012. During the public comment period, comments were received from a variety of sources through regular and electronic mail. NYSDEC received 186 submissions of public comments, comprising over 650 individual comments. The Department appreciates the input of the public and thoroughly considered each comment. As a result of the comments, changes were made to the regulations to reiterate or further clarify the original meaning for the benefit of the public and take questions into account. However, the changes made are non-substantive and do not require a revised or new rule making.

This Assessment of Public Comment (APC) presents all of the comments that were received during the public comment period, and summarizes and assigns a code to each in an effort to make the comments more accessible and searchable.

V. TABLE OF COMMENTS AND RESPONSES

The **Table of Comments and Responses** begins on the next page. It contains a complete listing of all comments and NYSDEC’s responses. The table allows readers to find answers to specific questions they have raised and is organized as follows:

- The first column lists the name of the individual or entity that submitted the comment.
- The second column identifies the alphanumeric code assigned to each comment (please see Section II, entitled “Methodology,” in this APC).
- The third column provides a summary of the comment.
- The fourth column provides the response to the comment or a reference to the specific Frequent Comment Response in Section III herein that addresses the comment.

Example:

Name	Comment Code	Content Summary	Response
Sanders, Kent	S-2.16	601.10(g) Why do they need to submit a copy of an annual report they already submitted to DEC?	The submittal of an annual report will be part of the application completeness determination.

In a few instances, the name of an individual or entity may appear in the Table of Comments and Responses more than once, because he or she sent more than one letter. For example, an individual who spoke for a group and then wrote a letter in his or her own name (or vice-versa) will find that these submissions were coded separately and that each appears in the Table of Comments and Responses.

It was not always clear if an individual made comments on his or her own behalf or on behalf of an organization. The reader is advised to examine both the group (G) listing for the name of the group, firm, or association used on the letterhead of a written submission and the individual (I) listing for his/her own name.

ASSESSMENT OF PUBLIC COMMENT: SECTION V -- TABLE OF COMMENTS AND RESPONSES

(sorted by 'Name/Organization')

	A	B	C	D
1	Name/ Organization	Comment Code	Comment Summary	Response
2	Adirondack Council Lorey, Scott	G-16.1	We are still concerned about several parts of the proposed regulation as currently drafted. First, some existing water withdrawals will not have to seek a permit for five years! While we understand that new sources and existing larger sources will be required to obtain a permit sooner, we do not believe DEC should allow these numerous smaller sources wait this amount of time for an initial permit	Please see Response to Frequent Comment #1.
3	Adirondack Council Lorey, Scott	G-16.2	We suggest that DEC can better implement the permit system and protect New York's water by staggering the permits into a three year phase-in cycle. For example, new permits and those over 5 million gpd would be issued in the first year (Class I) by the spring of 2013. Withdrawals between 1 and 4.99 million gpd (Class II) would be in the second year and any withdrawals between .1 and .99 million gpd (Class. III) would be permitted in the third year. Any new permits after the first year can then be placed in its respective class based on it size.	Please see Response to Frequent Comment #1.
4	Adirondack Council Lorey, Scott	G-16.3	DEC should reduce the length of permits down from the proposed 10 years to five. This will better ensure that any major changes in the amount of permits sought or water to be withdrawn can be more adequately addressed by DEC in less than a decade. While we understand that DEC has experienced a 25 percent reduction in staff over the last 21 years and that this is a new regulation it must enforce, that is not a good reason to shirk your responsibility to strongly protect the environment.	Please see Response to Frequent Comment #3.

ASSESSMENT OF PUBLIC COMMENT: SECTION V -- TABLE OF COMMENTS AND RESPONSES

(sorted by 'Name/Organization')

	A	B	C	D
145	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.5	A determination to ensure a proposed project "will result in no significant individual or cumulative adverse impacts on the ... <i>quality</i> of the water" is duplicative of the SPDES permit program standards. Similarly, a determination on "environmentally sound" and "economically feasible" conservation measures for reducing water withdrawals overlaps with §704.5 of the SPDES permit program governing the location, design, construction and capacity of cooling water intake structures. <i>See</i> 6 NYCRR§ 704.5.	Please see Response to Frequent Comment #8.
146	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.6	Importantly, open-cycle cooling systems do not interfere with water conservation, and their cooling water intake structures, including the capacity of such structures, are regulated under the Best Technology Available ("BTA") standard set forth in §704.5, which ensures that the structures will minimize adverse environmental impact.	Please see responses to Frequent Comments #8 and #11.
147	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.7	As noted above, we respectfully submit that the proposed exemption is narrowly tailored to ensure NYSDEC's right of review of substantial consumptive water users, including those with SPDES permits.	Please see response to Frequent Comment #8. Large cooling water facilities often consumptively use significant amounts of water. However, initial permits for withdrawals above the threshold are to be issued to existing facilities that reported their water use to the Department prior to 2/15/12, but only for a withdrawal equal to the maximum withdrawal capacity reported by 2/15/12 per 601.7(d).
148	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.8	The initial permits for existing facilities are purportedly meant to reduce the cost and time associated with a permit hearing by classifying the initial permit as a "minor action" under 6 NYCRR § 621.4 (b). There appears to be, however, no provision in the Proposed Regulations prohibiting substantive review of initial permits, and therefore no reason to believe NYSDEC will refrain from substantively reviewing initial permits for existing facilities or requiring that new substantive provisions be included in initial permits.	ECL §15-1501(9) requires that the Department issue an initial permit for the maximum capacity reported or registered with the Department on or before February 15, 2012; however, it also provides that the permit will be subject to appropriate terms and conditions as required under ECL Article 15. While the Department expects the initial permit process to be an expedited and less costly permit process, it will review the permit applications and include in the permit appropriate conditions, including water conservation measures.

ASSESSMENT OF PUBLIC COMMENT: SECTION V -- TABLE OF COMMENTS AND RESPONSES

(sorted by 'Name/Organization')

	A	B	C	D
149	Entergy Nuclear Operations, Inc. - Zoli, Elise	C-10.9	Further, the Proposed Regulations do not provide different standards for the issuance of initial permits and new permits. Instead, the Proposed Regulations make clear that an initial permit for existing facilities must include "all terms and conditions of a water withdrawal permit." <i>Id.</i> at §601.7(e). Without a definitive statement that initial permits for existing facilities are subject to different issuance standards, it is logical to assume that initial permits are subject to the same issuance standards as new permits. Entergy therefore requests that NYSDEC provide clarification on the standards for issuance of initial permits for existing facilities and whether the standards will be the same as those for new permits for proposed facilities.	ECL §15-1503 establishes permit application requirements and standards for permit issuance. This Section applies to all permits. The statute does not authorize the Department to apply different standards for the issuance of initial permits. It requires only that the applicant obtain a permit for the maximum withdrawal capacity reported to the Department.
150	Env. Energy Alliance of NY - Calazza, Roger	G-14.1	The Alliance requests an explicit exemption for once through cooling withdrawals because existing regulations under 6 NYCRR 704.5 adequately protect the environment and existing rules already require the reporting of substantially similar data. Alliance member companies require the use of cooling water for its electric generating facilities. The DEC has a long history – dating back to the passage of the Clean Water Act almost 40 years ago - in regulating the use of the State's water for cooling purposes through its State Pollutant Discharge Elimination System (SPDES) permitting process. Most recently; DEC has updated its policy on the uses of cooling water, and many electrical generating facilities have conducted exhaustive studies on the ways in which cooling water intakes structures can minimize the impact of impingement and entrainment.	The Department does not agree that these withdrawals should be exempt from Part 601 permitting requirements. The water withdrawal statute and regulations concern the withdrawal and location of return or possible transfer of the water. The quantity analysis must meet criteria under ECL article 15 title 15 that previously applied only to public water supplies. This is not duplicative with SPDES, but the permitting requirements of each may be satisfied by similar documentation so as to avoid duplicative work product development. Section 601.7(f) expressly provides that the initial permit application will be reviewed in coordination with the SPDES permit or other permit program. Section 601.7(b)(3) provides that the initial permit application is not due until 180 days prior to the date the SPDES permit is due to expire, absent renewal. These help ensure consistency. The final regulations have been clarified in Section 601.11(h).

EXHIBIT F

Water Withdrawal Registrations 2012, <http://nywateraction.org/withdrawals/2012waterregis.xls>

#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W	Units_Ave_Max	Day_Max	Units_Max
1	Shaker Ridge Country Club	Colonie (T)	Albany	33563	GPD	0.12	MGD
2	Pinehaven Country Club	Guilderland (T)	Albany	109000	GPD	0.4	MGD
3	Voorheesville, Vg	New Scotland (T)	Albany	0.348	MGD	0.547	MGD
4	Mohawk Fine Papers - Cohoes	Cohoes (C)	Albany	0.9	MGD	1.42	MGD
5	Watervliet, City	Guilderland (T)	Albany	2.84	MGD	3.195	MGD
6	Guilderland, Tn	Guilderland (T)	Albany	2.757	MGD	4.9	MGD
7	Lydall Thermal	Green Island (T)	Albany	1.74	MGD	4.902	MGD
8	Bethlehem Energy Center	Bethlehem (T)	Albany	2.52	MGD	5.25	MGD
9	Lafarge Building Materials	Coeymans (T)	Albany	3.2	MGD	6.4	MGD
10	Bethlehem Water District #1	New Scotland (T)	Albany	5.367	MGD	9.057	MGD
11	Albany Water Filtration	Coeymans (T)	Albany	19.6	MGD	23.6	MGD
12	Empire State Plaza	Albany (C)	Albany	25.117	MGD	67.39	MGD
13	Northeast Water District (New Scotland)	New Scotland (T)	Albany	22068	GPD	38300	GPD
14	Van Schaick Island Country Club	Cohoes (C)	Albany	32000	GPD	55000	GPD
15	Clarksville Water District	New Scotland (T)	Albany	28415	GPD	81260	GPD
16	Norlite Corporation	Colonie (T)	Albany	60000	GPD	90000	GPD
17	Altamont Orchards	Guilderland (T)	Albany	1000	GPD	120000	GPD
18	Colonie Golf and Country Club	New Scotland (T)	Albany	43906	GPD	220000	GPD
19	Capital Hills at Albany Golf Course	Bethlehem (T)	Albany	14429	GPD	250000	GPD
20	Altamont, Vg	Guilderland (T)	Albany	158000	GPD	279000	GPD
21	Schuyler Meadows Club	Colonie (T)	Albany	48329	GPD	300000	GPD
22	Normanside Country Club	Albany (C)	Albany	92720	GPD	302570	GPD
23	Clover-Leaf Nursery	Colonie (T)	Albany	155737	GPD	311474	GPD
24	Guilderland Parks & Recreation	Guilderland (T)	Albany	175000	GPD	337500	GPD
25	Albany Country Club	Guilderland (T)	Albany	33415	GPD	482143	GPD
26	Wolferts Roost Country Club	Albany (C)	Albany	46575	GPD	561000	GPD
27	Green Island, Vg	Green Island (T)	Albany	499949	GPD	705800	GPD
28	Orchard Creek Golf Club	Guilderland (T)	Albany	24758	GPD	1152000	GPD
29	Callanan - Bethlehem Site	Coeymans (T)	Albany	341223	GPD	3197643	GPD
30	Cohoes, City	Cohoes (C)	Albany	674160	GPD	3856000	GPD
31	Canaseraga, Vg	Burns (T)	Allegany	0.074	MGD	0.096	MGD
32	Friendship Dairies LLC	Friendship (T)	Allegany	0.37	MGD	0.55	MGD
33	Friendship, Tn	Friendship (T)	Allegany	0.31	MGD	0.864	MGD
34	Wellsville, Vg	Wellsville (T)	Allegany	0.701	MGD	1.4	MGD
35	Hume, Tn	Hume (T)	Allegany	59963	GPD	100000	GPD
36	Scio Water Dept	Amity (T)	Allegany	75175	GPD	124000	GPD
37	Belfast Water District	Belfast (T)	Allegany	57000	GPD	180000	GPD
38	Angelica, Vg	West Almond (T)	Allegany	121334	GPD	228000	GPD
39	Empire Cheese	Cuba (T)	Allegany	152126	GPD	248446	GPD
40	Belmont, Vg	Amity (T)	Allegany	228000	GPD	318000	GPD
41	Bolivar, Vg	Bolivar (T)	Allegany	170553	GPD	337000	GPD
42	Andover, Vg	Andover (T)	Allegany	194660	GPD	392000	GPD
43	Cuba, Vg	Cuba (T)	Allegany	221512	GPD	399000	GPD
44	Wellsville Country Club	Wellsville (T)	Allegany	170441	GPD	414425	GPD
45	Allegany Station	Hume (T)	Allegany	86500	GPD	499000	GPD
46	Houghton Water District	Caneadea (T)	Allegany	167000	GPD	558000	GPD
47	Alfred, Vg	Alfred (T)	Allegany	363500	GPD	600000	GPD
48	Van Cortlandt Park Golf Course	Bronx (T)	Bronx	53384	GPD	167543	GPD
49	Pelham-Split Rock Golf	Bronx (T)	Bronx	39725	GPD	450000	GPD
50	Chenango, Tn - Applewood	Chenango (T)	Broome	0.0988	MGD	0.165	MGD
51	Hillcrest Water District #1	Fenton (T)	Broome	0.275	MGD	0.319	MGD
52	Windsor, Vg	Windsor (T)	Broome	0.168	MGD	0.36	MGD
53	Former IBM - Endicott	Union (T)	Broome	0.842	MGD	1.01	MGD
54	Chenango, Tn - Northgate	Chenango (T)	Broome	0.511	MGD	1.026	MGD
55	Tri City - Broad Street Industrial	Dickinson (T)	Broome	1.06	MGD	1.3	MGD
56	Tri City - Yary's Quarry	Fenton (T)	Broome	1.06	MGD	1.3	MGD
57	Huron Campus	Union (T)	Broome	0.24	MGD	2.3	MGD
58	Tri City - Gorick Route 369 Pit	Chenango (T)	Broome	1.85	MGD	2.31	MGD
59	Tri City - Route 369 Pit	Kirkwood (T)	Broome	1.85	MGD	2.31	MGD
60	Johnson City, Vg	Union (T)	Broome	2.7	MGD	4.4	MGD
61	Vestal, Tn	Vestal (T)	Broome	2.16	MGD	4.6	MGD
62	Endicott Water District	Union (T)	Broome	4.82	MGD	8.2	MGD
63	AES Westover LLC	Union (T)	Broome	50.7	MGD	57.6	MGD
64	Pauls Garden	Fenton (T)	Broome	7222	GPD	60000	GPD
65	Winsor Acres	Colesville (T)	Broome	86676	GPD	95893	GPD
66	Saunders - Lisle Aggregate Plant	Lisle (T)	Broome	92571	GPD	144000	GPD
67	Saunders - Whitney Point	Barker (T)	Broome	20042	GPD	144000	GPD
68	Conklin, Tn	Conklin (T)	Broome	221000	GPD	381000	GPD
69	Deposit, Vg	Sanford (T)	Broome	217700	GPD	563300	GPD
70	Kirkwood, Tn	Kirkwood (T)	Broome	750000	GPD	953000	GPD
71	Binghamton, City	Binghamton (C)	Broome	6.5	MGD		
72	Whitney Point, Vg	Triangle (T)	Broome				
73	Cattaraugus County Department of Public W	Little Valley (T)	Cattaraugus	0.25682	MGD	0.25682	MGD
74	Franklinville, Vg	Franklinville (T)	Cattaraugus	0.521	MGD	0.588	MGD
75	Salamanca, City	Salamanca (C)	Cattaraugus	1.16	MGD	2.03	MGD
76	Randolph Hatchery	Cold Spring (T)	Cattaraugus	2.74	MGD	3.01	MGD
77	Corbett Hill Gravel Products	Randolph (T)	Cattaraugus	2.86	MGD	3.71	MGD
78	Olean, City	Olean (C)	Cattaraugus	2.34	MGD	4.23	MGD
79	Win-Sum Ski Corp	Ellicottville (T)	Cattaraugus	340157	GPD	6.9	MGD
80	Allegany State Park - Barton Weller	Cold Spring (T)	Cattaraugus	15.6	GPM	230	GPM

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#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W	Units_Ave_Max	Day_Units_Max
81	Gernatt - Gowanda	Persia (T)	Cattaraugus	1650	GPD	1800 GPD
82	Gernatt - South Dayton	Dayton (T)	Cattaraugus	2500	GPD	2880 GPD
83	Gernatt - Freedom	Freedom (T)	Cattaraugus	2800	GPD	3600 GPD
84	Gernatt - Great Valley	Great Valley (T)	Cattaraugus	3200	GPD	3630 GPD
85	Arcade, Vg, Sandusky Water	Freedom (T)	Cattaraugus	11688	GPD	18677 GPD
86	Edelweiss Farms	Freedom (T)	Cattaraugus	90950	GPD	95088 GPD
87	South Dayton, Vg	Dayton (T)	Cattaraugus	68616	GPD	115000 GPD
88	Central Water District (Perrysburg)	Perrysburg (T)	Cattaraugus	35000	GPD	125000 GPD
89	Hinsdale, Tn	Hinsdale (T)	Cattaraugus	63600	GPD	140000 GPD
90	East Randolph	Cold Spring (T)	Cattaraugus	152075	GPD	161000 GPD
91	Yorkshire Water District	Yorkshire (T)	Cattaraugus	78600	GPD	174000 GPD
92	West Valley Demonstration Project	Ashford (T)	Cattaraugus	93278	GPD	195552 GPD
93	Delevan, Vg	Yorkshire (T)	Cattaraugus	141920	GPD	223000 GPD
94	Elkdale Country Club	Little Valley (T)	Cattaraugus	31968	GPD	250000 GPD
95	West Valley Crystal Water Company, Inc.	Ashford (T)	Cattaraugus	250000	GPD	250000 GPD
96	Portville, Vg	Portville (T)	Cattaraugus	134000	GPD	351000 GPD
97	Little Valley, Vg	Little Valley (T)	Cattaraugus	263000	GPD	364000 GPD
98	Randolph, Tn	Randolph (T)	Cattaraugus	255181	GPD	379000 GPD
99	Olean Advanced Products	Olean (T)	Cattaraugus	322060	GPD	520000 GPD
100	Allegany, Vg	Allegany (T)	Cattaraugus	462199	GPD	548200 GPD
101	Lafarge Freedom Pit	Freedom (T)	Cattaraugus	43500	GPD	648000 GPD
102	Holimont Ski Resort	Ellicottville (T)	Cattaraugus	34000	GPD	8640000 GPD
103	Allegany State Park - Route 1 (Red House)	Red House (T)	Cattaraugus		GPD	GPD
104	Ellicottville, Tn Water District #1	Ellicottville (T)	Cattaraugus			
105	Ellicottville, Vg	Ellicottville (T)	Cattaraugus	415000	GPD	
106	Gowanda, Vg	Persia (T)	Cattaraugus			
107	Machias, Tn	Machias (T)	Cattaraugus			
108	Hanson Aggregates - Oakwood Plant	Springport (T)	Cayuga	0	GPD	0 GPD
109	Syracuse - Sennett Pit	Sennett (T)	Cayuga	0	GPD	0 GPD
110	Wells College	Ledyard (T)	Cayuga	0.09	MGD	0.15 MGD
111	Auburn, City	Owasco (T)	Cayuga	4.829	MGD	6.21 MGD
112	Patterson Farms, Inc	Springport (T)	Cayuga	7506	GPD	10000 GPD
113	Cato, Vg	Cato (T)	Cayuga	25000	GPD	25000 GPD
114	Green Hill Dairy	Scipio (T)	Cayuga	45800	GPD	51000 GPD
115	Vansridge Dairy	Scipio (T)	Cayuga	62298	GPD	68923 GPD
116	Locke, Tn	Locke (T)	Cayuga	23537	GPD	83000 GPD
117	Richard Snyder	Montezuma (T)	Cayuga	21700	GPD	104550 GPD
118	Lincoln Dairy	Fleming (T)	Cayuga	105205	GPD	113329 GPD
119	Dutch Hollow Country Club	Owasco (T)	Cayuga	4000	GPD	120000 GPD
120	Aurora Ridge Dairy LLC	Ledyard (T)	Cayuga	100274	GPD	123333 GPD
121	Roach Farm	Venice (T)	Cayuga	116305	GPD	125860 GPD
122	Cayuga, Vg	Aurelius (T)	Cayuga	59000	GPD	150000 GPD
123	Dudley Water Supply	Cato (T)	Cayuga	50000	GPD	150000 GPD
124	Oakwood Dairy	Aurelius (T)	Cayuga	135616	GPD	150000 GPD
125	Genoa-King Ferry Water District	Genoa (T)	Cayuga	69758	GPD	160900 GPD
126	Spruce Haven Farms	Fleming (T)	Cayuga	115590	GPD	174480 GPD
127	Sunnyside Farms Inc	Venice (T)	Cayuga	173352	GPD	189263 GPD
128	Ridgecrest Dairy	Venice (T)	Cayuga	194630	GPD	209660 GPD
129	Owasco Country Club	Owasco (T)	Cayuga	32533	GPD	268190 GPD
130	Willet Dairy	Genoa (T)	Cayuga	203712	GPD	299667 GPD
131	Union Springs, Vg	Springport (T)	Cayuga	279845	GPD	400000 GPD
132	Moravia, Vg	Moravia (T)	Cayuga	465942	GPD	507200 GPD
133	Highland Park Golf Course	Sennett (T)	Cayuga	156840	GPD	519824 GPD
134	Owasco, Tn	Owasco (T)	Cayuga	419474	GPD	639249 GPD
135	Gernatt - Hanover	Hanover (T)	Chautauqua	0	GPM	0 GPM
136	Clymer Water District	Clymer (T)	Chautauqua	0.077	MGD	0.078 MGD
137	Former TRW Site	Jamestown (C)	Chautauqua	0.03	MGD	0.09 MGD
138	Jamestown BPU - Power	Jamestown (C)	Chautauqua	0.03	MGD	0.09 MGD
139	Brocton, Vg	Portland (T)	Chautauqua	0.3	MGD	0.539 MGD
140	Chautauqua Hatchery	Chautauqua (T)	Chautauqua	0.21	MGD	1.71 MGD
141	Fredonia Water Plant	Pomfret (T)	Chautauqua	1.58	MGD	2.22 MGD
142	Dunkirk, City of	Dunkirk (C)	Chautauqua	3.449	MGD	4.597 MGD
143	Jamestown City	Poland (T)	Chautauqua	4.692	MGD	7.989 MGD
144	Spellman Farm	Ripley (T)	Chautauqua			5000 GPD
145	Allegany State Park - Long Point	Ellery (T)	Chautauqua	4000	GPD	8000 GPD
146	Monofrax - Jamestown	Ellicott (T)	Chautauqua	12316	GPD	21716 GPD
147	Sugar Hill Golf Course	Portland (T)	Chautauqua	21800	GPD	24480 GPD
148	Cherry Creek, Vg	Cherry Creek (T)	Chautauqua	82384	GPD	114000 GPD
149	Peek'n Peak	French Creek (T)	Chautauqua	103217	GPD	154826 GPD
150	Cassadaga, Vg	Stockton (T)	Chautauqua	101907	GPD	177000 GPD
151	Tri-County Country Club	Hanover (T)	Chautauqua	40385	GPD	190412 GPD
152	Moon Brook Country Club	Ellicott (T)	Chautauqua	44156	GPD	226000 GPD
153	Frewsburg Water	Carroll (T)	Chautauqua	216935	GPD	250000 GPD
154	Ripley Water District	Ripley (T)	Chautauqua	108289	GPD	272442 GPD
155	Shorewood Association	Dunkirk (T)	Chautauqua	164471	GPD	313666 GPD
156	Mayville, Vg	Chautauqua (T)	Chautauqua	207000	GPD	353000 GPD
157	Chautauqua Golf Club	Chautauqua (T)	Chautauqua	82117	GPD	360700 GPD
158	Chautauqua Utility District	Chautauqua (T)	Chautauqua	157787	GPD	622937 GPD
159	Westfield, Vg	Westfield (T)	Chautauqua	563599	GPD	1281600 GPD
160	Dunkirk Generating Station	Dunkirk (C)	Chautauqua	304	MGD	

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#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W	Units_Ave_Max_Day	Units_Max
161	John Munch	Sheridan (T)	Chautauqua			
162	Narde Paving - Hurley Pit	Southport (T)	Chemung	0 GPD		0 GPD
163	Talisman Energy	Baldwin (T)	Chemung	0 GPD		0 GPD
164	Motor Components	Horseheads (T)	Chemung	0.18 MGD		0.576 MGD
165	Big Flats, Tn	Big Flats (T)	Chemung	0.524 MGD		1.045 MGD
166	Hardinge Inc	Horseheads (T)	Chemung	0.38 MGD		1.08 MGD
167	Former Westinghouse Facility	Horseheads (T)	Chemung	1.37 MGD		1.58 MGD
168	Horseheads, Vg	Horseheads (T)	Chemung	2 MGD		2.7 MGD
169	Elmira Water Board	Elmira (C)	Chemung	5.53 MGD		8.45 MGD
170	Elmira College - Murray Center	Veteran (T)	Chemung	172 GPM		342 GPM
171	Corning Inc - Big Flats	Big Flats (T)	Chemung	29500 GPD		29500 GPD
172	Catlin, Tn (Beaver Valley Water District)	Catlin (T)	Chemung	23293 GPD		87900 GPD
173	Mark Twain State Park	Veteran (T)	Chemung	16905 GPD		316741 GPD
174	Eaton Corporation	Horseheads (T)	Chemung	125000 GPD		900000 GPD
175	Narde Paving - Paladino Pit	Horseheads (T)	Chemung	1944000 GPD		2916000 GPD
176	Syracuse - Norwich Pit	North Norwich (T)	Chenango	0 GPD		0 GPD
177	Bainbridge, Vg	Bainbridge (T)	Chenango	0.213 MGD		0.296 MGD
178	Sherburne, Vg	Sherburne (T)	Chenango	0.199 MGD		0.442 MGD
179	Agro-Farma - New Berlin	Columbus (T)	Chenango	0.579 MGD		0.971 MGD
180	Tri City - Brisben Mine Site	Oxford (T)	Chenango	1.06 MGD		1.3 MGD
181	Norwich, City	Norwich (T)	Chenango	0.98 MGD		1.5 MGD
182	South Otselic Hatchery	Otselic (T)	Chenango	1.3 MGD		1.9 MGD
183	Mount Upton Water District	Guilford (T)	Chenango	22000 GPD		22000 GPD
184	Agro-Farma Campus	Norwich (T)	Chenango	10298 GPD		25560 GPD
185	Guilford Water District	Guilford (T)	Chenango	20000 GPD		70000 GPD
186	Saunders - Norwich	Norwich (T)	Chenango	20042 GPD		108000 GPD
187	Saunders - Bainbridge	Bainbridge (T)	Chenango	92571 GPD		144000 GPD
188	Saunders - Greene Ready Mix	Greene (T)	Chenango	20042 GPD		144000 GPD
189	New Berlin, Vg	New Berlin (T)	Chenango	107422 GPD		157000 GPD
190	Norwich Meadows Farm	Norwich (T)	Chenango	31120 GPD		175000 GPD
191	Genegantslet Golf Club	Greene (T)	Chenango	6868 GPD		178349 GPD
192	Greene, Vg	Greene (T)	Chenango	195082 GPD		195082 GPD
193	Afton, Vg	Afton (T)	Chenango	203288 GPD		520000 GPD
194	Kerry Bio-Science	Norwich (T)	Chenango	354616 GPD		530754 GPD
195	Oxford, Vg	Oxford (T)	Chenango	281733 GPD		563000 GPD
196	Graymont Materials - Clinton Quarry	Clinton (T)	Clinton	0 GPD		0 GPD
197	Clinton Correctional Facility	Saranac (T)	Clinton	0.816 MGD		1.49 MGD
198	Georgia-Pacific Consumer Operations LLC	Plattsburgh (C)	Clinton	1.07 MGD		2.02 MGD
199	Plattsburgh, Tn	Plattsburgh (T)	Clinton	1.355 MGD		2.1 MGD
200	Plattsburgh, City	Plattsburgh (T)	Clinton	2.2 MGD		2.86 MGD
201	Harris/Brault (Superfund)	Chazy (T)	Clinton	129 GPM		168 GPM
202	Peru Water District	Peru (T)	Clinton	166071 GPD		600 GPM
203	Gonyo Brothers LLC	Mooers (T)	Clinton	7882 GPD		9092 GPD
204	Rovers' Farm Inc	Chazy (T)	Clinton	30858 GPD		35607 GPD
205	Giroux Poultry Farm	Chazy (T)	Clinton	81163 GPD		81163 GPD
206	Cha-liz Farm	Chazy (T)	Clinton	105674 GPD		113000 GPD
207	Altona Correctional Facility	Altona (T)	Clinton	79361 GPD		118600 GPD
208	Adirondack Farm LLC	Ausable (T)	Clinton	104938 GPD		121545 GPD
209	Plattsburgh, Tn - Cadyville Water District	Plattsburgh (T)	Clinton	83180 GPD		184600 GPD
210	Champlain, Vg	Champlain (T)	Clinton	120000 GPD		300000 GPD
211	Graymont Materials - Mooers Quarry	Mooers (T)	Clinton	264000 GPD		792000 GPD
212	Rouses Point, Vg	Champlain (T)	Clinton	656516 GPD		1116000 GPD
213	Graymont Materials - Plattsburgh Quarry	Plattsburgh (T)	Clinton	1750000 GPD		2750000 GPD
214	Morrisonville Water District	Schuyler Falls (T)	Clinton			
215	Copake Country Club	Copake (T)	Columbia	0.024 MGD		0.22 MGD
216	Stockport, Tn	Stockport (T)	Columbia	0.152 MGD		0.288 MGD
217	Olde Kinderhook Golf Club	Kinderhook (T)	Columbia	0.04 MGD		0.386 MGD
218	Schweitzer-Mauduit International Inc.	Ancram (T)	Columbia	0.884 MGD		0.951
219	Greenport Water District #1- Mt Ida	Claverack (T)	Columbia	21800 GPD		47000 GPD
220	Golden Harvest Farms, Inc.	Kinderhook (T)	Columbia	9493 GPD		52500 GPD
221	Taconic Farms	Germantown (T)	Columbia	31000 GPD		60000 GPD
222	Colarusso Quarry Co.	Greenport (T)	Columbia	84834 GPD		88000 GPD
223	Berkshire Farm Center	Canaan (T)	Columbia	42349 GPD		100128 GPD
224	Corning - Erwin Facility	Copake (T)	Columbia	76986 GPD		128814 GPD
225	Klein's Kill Fruit Farms	Livingston (T)	Columbia	147400 GPD		147400 GPD
226	Hearty Roots Community Farm Ltd	Clermont (T)	Columbia	12370 GPD		175000 GPD
227	Kinderhook, Vg	Kinderhook (T)	Columbia	118750 GPD		247000 GPD
228	Columbia Golf & Country Club	Claverack (T)	Columbia	45536 GPD		262000 GPD
229	Philmont, Vg	Claverack (T)	Columbia	166000 GPD		320000 GPD
230	Samascott Orchards	Kinderhook (T)	Columbia	29589 GPD		360000 GPD
231	George Saulpaugh & Son	Clermont (T)	Columbia	300000 GPD		388000 GPD
232	Mark Eger & Bros.	Livingston (T)	Columbia	336000 GPD		504000 GPD
233	Fix Bros	Livingston (T)	Columbia	41621 GPD		508800 GPD
234	Chatham, Vg	Ghent (T)	Columbia	260846 GPD		523781 GPD
235	Colarusso Sand & Gravel	Greenport (T)	Columbia	864761 GPD		1090285 GPD
236	Greenport Water District #1	Greenport (T)	Columbia	528000 GPD		1112000 GPD
237	FH Stickles Mine	Livingston (T)	Columbia	18116000 GPD		28899000 GPD
238	Grandview Water Works	Kinderhook (T)	Columbia			
239	Hill Water Works	Kinderhook (T)	Columbia	92100 GPD		
240	Yonder Fruit Farms	Kinderhook (T)	Columbia			

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241	Marathon, Vg	Marathon (T)	Cortland	0.08 MGD	0.278 MGD	
242	Greek Peak Mountain Resort	Virgil (T)	Cortland	307397 GPD	1.4 MGD	
243	Elm Tree Golf Course	Virgil (T)	Cortland		9000 GPD	
244	Scott Water District #1	Scott (T)	Cortland	12600 GPD	15600 GPD	
245	Suit-Kote Terminal	Cortlandville (T)	Cortland	13713 GPD	29666 GPD	
246	Preble Hill Farm, LLC	Preble (T)	Cortland	31810 GPD	36409 GPD	
247	Cortland Asphalt Products	Cortlandville (T)	Cortland	15820 GPD	45765 GPD	
248	Virgil Water District #1	Virgil (T)	Cortland	24905 GPD	71270 GPD	
249	Cornell Hartford T & R Center	Harford (T)	Cortland	52894 GPD	79989 GPD	
250	Cincinnatus, Tn	Cincinnatus (T)	Cortland	40035 GPD	113000 GPD	
251	Saunders - Cortland Ready Mix	Cortlandville (T)	Cortland	20042 GPD	144000 GPD	
252	McGraw, Vg	Cortlandville (T)	Cortland	110970 GPD	160900 GPD	
253	Cooperstown Dreams Park	Homer (T)	Cortland	58613 GPD	164000 GPD	
254	Willowbrook Golf Club	Cortlandville (T)	Cortland	13678.93 GPD	316800 GPD	
255	Albany International	Homer (T)	Cortland	147052 GPD	318380 GPD	
256	Cortland Country Club	Cortlandville (T)	Cortland	80000 GPD	400000 GPD	
257	Kinsella - EZAcres	Homer (T)	Cortland	336000 GPD	500000 GPD	
258	Intertek	Cortlandville (T)	Cortland	532308 GPD	658080 GPD	
259	Newton Water Works	Homer (T)	Cortland	402000 GPD	660000 GPD	
260	Polkville Crushed Stone	Cortlandville (T)	Cortland	332013 GPD	720040 GPD	
261	Cortlandville, Tn	Cortlandville (T)	Cortland	627000 GPD	805000 GPD	
262	Labrador Development Corp	Truxton (T)	Cortland	1682118 GPD	2144250 GPD	
263	Cortland Water Department	Cortland (C)	Cortland	2547487 GPD	3297686 GPD	
264	New Hope View Farm	Homer (T)	Cortland	35967 GPD		
265	Walton, Vg	Walton (T)	Delaware	0.365 MGD	0.416 MGD	
266	Delhi, Vg	Delhi (T)	Delaware	0.33 MGD	0.644 MGD	
267	Hancock Quarry	Hancock (T)	Delaware	0.72 MGD	0.72 MGD	
268	Morningstar Foods	Delhi (T)	Delaware	0.6066 MGD	0.72 MGD	
269	Sidney Water Supply	Sidney (T)	Delaware	671800 GPD	1.1708 MGD	
270	Kraft Foods - Walton	Walton (T)	Delaware	0.618 MGD	1.301 MGD	
271	Ski Plattekill, Inc.	Roxbury (T)	Delaware	3.2 MGD	3.2 MGD	
272	SUNY Delhi, Lower Campus Farm	Delhi (T)	Delaware	7611 GPD	110 GPM	
273	Andes Water District #1	Andes (T)	Delaware	22272 GPD	51390 GPD	
274	Ouleout Golf Course	Franklin (T)	Delaware	27913 GPD	53760 GPD	
275	Hanah Mountain Resort Country Club	Middletown (T)	Delaware		100000 GPD	
276	Franklin, Vg	Franklin (T)	Delaware	29100 GPD	110000 GPD	
277	Delhi College Golf Course	Delhi (T)	Delaware	14177 GPD	187695 GPD	
278	Margaretville, Vg	Middletown (T)	Delaware	95000 GPD	210000 GPD	
279	Fleischmanns, Vg	Middletown (T)	Delaware	165000 GPD	305800 GPD	
280	Roxbury, Tn	Roxbury (T)	Delaware	193000 GPD	336000 GPD	
281	Friesland Campina Domo	Delhi (T)	Delaware	430183 GPD	852537 GPD	
282	Wadson Mini Mall	Hancock (T)	Delaware	973 GPD		
283	Terhune Orchards	Pleasant Valley (T)	Dutchess	0 GPM	0 GPM	
284	Hopewell Hamlet Water District	East Fishkill (T)	Dutchess	46235 GPD	0.0864 MGD	
285	Merritt Park Water	Fishkill (T)	Dutchess	0.024 MGD	0.094 MGD	
286	Tivoli, Vg	Red Hook (T)	Dutchess	0.074 MGD	0.102 MGD	
287	Brinkerhoff Water District	Fishkill (T)	Dutchess	0.281 MGD	0.483 MGD	
288	Four Corners	East Fishkill (T)	Dutchess	81278 GPD	0.746544 MGD	
289	Wappinger, Tn - Hilltop Wells	Wappinger (T)	Dutchess	0.3178 MGD	0.815 MGD	
290	Wappinger, Tn - Atlas Wells	Wappinger (T)	Dutchess	0.6205 MGD	1.297 MGD	
291	Dutchess Quarry & Supply Co - Pleasant Val	Pleasant Valley (T)	Dutchess	0.4243 MGD	1.38 MGD	
292	Peckham - Wingdale Materials, LLC	Dover (T)	Dutchess	2.4 MGD	2.4 MGD	
293	Peckham Materials - Wingdale	Dover (T)	Dutchess	2.4 MGD	2.4 MGD	
294	Fishkill, Vg	Fishkill (T)	Dutchess	1.92 MGD	2.8 MGD	
295	Red Wing - Roe Jan Mine	Milan (T)	Dutchess	278598 GPD	2.9 MGD	
296	Beacon, City	Fishkill (T)	Dutchess	2.35 MGD	3.2 MGD	
297	IBM Hudson Valley Research Park	East Fishkill (T)	Dutchess	2.06 MGD	3.39 MGD	
298	Tilcon - Clinton Point Quarry	Poughkeepsie (T)	Dutchess	9.5865 MGD	11.3757 MGD	
299	Poughkeepsie, City	Poughkeepsie (T)	Dutchess	9.997 MGD	15.76 MGD	
300	IBM Poughkeepsie	Poughkeepsie (T)	Dutchess	23.6 MGD	46 MGD	
301	Pawling, Vg	Pawling (T)	Dutchess	228000 GPD	196 GPM	
302	Rose Hill Farm	Red Hook (T)	Dutchess		2500 GPD	
303	Taconic Estates	East Fishkill (T)	Dutchess	5971 GPD	13000 GPD	
304	Green Meadow Park Water	La Grange (T)	Dutchess	13500 GPD	23564 GPD	
305	Cedar Valley	Pawling (T)	Dutchess	16000 GPD	28000 GPD	
306	Pleasant Valley Farm - Salt Point	Pleasant Valley (T)	Dutchess	21600 GPD	43200 GPD	
307	Arlington High School	La Grange (T)	Dutchess	10225 GPD	45900 GPD	
308	Secor Strawberries	East Fishkill (T)	Dutchess	1580 GPD	71424 GPD	
309	Millbrook Golf & Tennis Club	Washington (T)	Dutchess	5945 GPD	80000 GPD	
310	Windemere Highlands	Red Hook (T)	Dutchess	26734 GPD	85000 GPD	
311	Fishkill Farms	East Fishkill (T)	Dutchess	7397 GPD	90000 GPD	
312	Valley Dale (Hillis Park)	Pleasant Valley (T)	Dutchess	40003 GPD	98000 GPD	
313	Little Switzerland	East Fishkill (T)	Dutchess	69811 GPD	108500 GPD	
314	James Baird State Park	La Grange (T)	Dutchess	55000 GPD	110000 GPD	
315	Cranesville - Blue Stores Mine	Rhinebeck (T)	Dutchess	120000 GPD	120000 GPD	
316	Pine Plains Water Improvement Area	Pine Plains (T)	Dutchess	70300 GPD	136800 GPD	
317	Dover Plains Water	Dover (T)	Dutchess	139000 GPD	146000 GPD	
318	Dalton Farms - DCWWA	Beekman (T)	Dutchess	104651 GPD	147600 GPD	
319	Bard College	Red Hook (T)	Dutchess	74780 GPD	157000 GPD	
320	Wassaic TDDSO	Amenia (T)	Dutchess	66667 GPD	170000 GPD	

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#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave	Day	W	Units	Ave	Max	Day	Units	Max
321	Amenia Water District #1	Amenia (T)	Dutchess	95091	GPD		186300	GPD				
322	LaGrange Town Center	La Grange (T)	Dutchess	82200	GPD		219000	GPD				
323	Red Hook Water District #1	Red Hook (T)	Dutchess	82000	GPD		227000	GPD				
324	Links at Unionvale	Union Vale (T)	Dutchess	50476	GPD		230000	GPD				
325	Dutchess Golf & Country Club	Poughkeepsie (T)	Dutchess	230000	GPD		250000	GPD				
326	Carvel Country Club	Pine Plains (T)	Dutchess	14385	GPD		270000	GPD				
327	Red Hook, Vg	Red Hook (T)	Dutchess	238333	GPD		287000	GPD				
328	Mead Orchards	Red Hook (T)	Dutchess	20000	GPD		290000	GPD				
329	Route 82 Sand & Gravel	Washington (T)	Dutchess	252000	GPD		306000	GPD				
330	Millerton, Vg	Northeast (T)	Dutchess	189800	GPD		338000	GPD				
331	Millbrook, Vg	Washington (T)	Dutchess	213000	GPD		400000	GPD				
332	Beekman Country Club - Water Company	East Fishkill (T)	Dutchess	94774	GPD		403300	GPD				
333	Casperkill Golf Club	Poughkeepsie (T)	Dutchess	250000	GPD		465000	GPD				
334	West Beekman	Beekman (T)	Dutchess	84328	GPD		624000	GPD				
335	Harlem Valley Materials	Amenia (T)	Dutchess	504000	GPD		720000	GPD				
336	Beekman Country Club	East Fishkill (T)	Dutchess	76004	GPD		909045	GPD				
337	Manchester Water District	La Grange (T)	Dutchess	338000	GPD		920000	GPD				
338	Green Haven Correctional Facility	Beekman (T)	Dutchess	662891	GPD		936135	GPD				
339	Migliorelli Farm	Red Hook (T)	Dutchess	500000	GPD		1000000	GPD				
340	Rhinebeck, Vg	Rhinebeck (T)	Dutchess	457000	GPD		1179000	GPD				
341	Hyde Park - DCWWA	Hyde Park (T)	Dutchess	1031408	GPD		1375000	GPD				
342	Callanan - Amenia Facility	Amenia (T)	Dutchess	385009	GPD		2013018	GPD				
343	West Hook Sand & Gravel	East Fishkill (T)	Dutchess	1968685	GPD		5712000	GPD				
344	Greig Farm	Red Hook (T)	Dutchess									
345	Hardeman Orchards	Red Hook (T)	Dutchess									
346	Montclair Condominiums	Wappinger (T)	Dutchess	36649	GPD							
347	Red Hook Golf Club	Red Hook (T)	Dutchess	37357	GPD							
348	State Farm	Collins (T)	Erie	0	GPD		0	GPD				
349	Collins, Tn	Collins (T)	Erie	0.11	MGD		0.318	MGD				
350	Links at Ivy Ridge	Newstead (T)	Erie	0.05	MGD		0.35	MGD				
351	Collins Correctional Facility	Collins (T)	Erie	0.568	MGD		0.71	MGD				
352	IsleChem, LLC	Grand Island (T)	Erie	0.377	MGD		1.16	MGD				
353	Perry's Ice Cream Co. Inc.	Newstead (T)	Erie	1.153	MGD		1.59	MGD				
354	Grand Island, Tn	Grand Island (T)	Erie	1.646	MGD		2.561	MGD				
355	Kissing Bridge Corp	Concord (T)	Erie	2.6	MGD		3.7	MGD				
356	Tonawanda Coke Corp	Tonawanda (T)	Erie	2.18	MGD		4.18	MGD				
357	DuPont Co - Yerkes Plant	Tonawanda (T)	Erie	3.25	MGD		4.93	MGD				
358	Goodyear Dunlop Tires, NA Ltd.	Tonawanda (T)	Erie	4.2	MGD		5.3	MGD				
359	Buffalo River Improvement Corporation	Buffalo (C)	Erie	5.23	MGD		9	MGD				
360	County Line Stone Co, Inc	Newstead (T)	Erie	11	MGD		14	MGD				
361	FMC Corporation	Tonawanda (T)	Erie	9.822	MGD		14.699	MGD				
362	Tonawanda, Tn	Tonawanda (T)	Erie	13	MGD		16.4	MGD				
363	ArcelorMittal Lackawanna	Hamburg (T)	Erie	25	MGD		25	MGD				
364	ECWA - Van De Water	Tonawanda (T)	Erie	18.48	MGD		41.43	MGD				
365	ECWA - Sturgeon Point	Evans (T)	Erie	49	MGD		74	MGD				
366	Buffalo Water Authority	Buffalo (C)	Erie	68.1	MGD		86.21	MGD				
367	Huntley Generating Station	Tonawanda (T)	Erie	200	MGD		406	MGD				
368	Springville, Vg	Concord (T)	Erie	437	GPM		822	GPM				
369	Gernatt - Springville	Concord (T)	Erie	1500	GPD		1650	GPD				
370	Gernatt - Collins	Collins (T)	Erie	1900	GPD		2300	GPD				
371	Como Plant #21	Cheektowaga (T)	Erie	1455	GPM		2825	GPM				
372	Gernatt - Chaffee	Sardinia (T)	Erie	2850	GPD		3150	GPD				
373	Frey Concrete, Inc	Lancaster (T)	Erie	9546	GPD		17730	GPD				
374	Wehrle Plant #23	Lancaster (T)	Erie	13884	GPM		24900	GPM				
375	Phillips Family Farm	Brant (T)	Erie	30000	GPD		32000	GPD				
376	East Aurora Country Club	Elma (T)	Erie	38641	GPD		38641	GPD				
377	Kreher's Farm Fresh Eggs, LLC	Clarence (T)	Erie	30000	GPD		50000	GPD				
378	Country Club of Buffalo	Amherst (T)	Erie				99000	GPD				
379	Amos Zittel & Sons	Eden (T)	Erie	34000	GPD		100000	GPD				
380	Gowanda Country Club	Collins (T)	Erie	24411	GPD		120000	GPD				
381	Springville Country Club	Concord (T)	Erie	23337	GPD		135000	GPD				
382	Westwood Country Club	Amherst (T)	Erie	28997	GPD		168000	GPD				
383	Park Country Club	Amherst (T)	Erie	66000	GPD		225000	GPD				
384	Lancaster Country Club	Lancaster (T)	Erie	42150	GPD		227307	GPD				
385	Wanakah Country Club	Hamburg (T)	Erie	65810	GPD		250000	GPD				
386	Glen Oak Golf Course	Amherst (T)	Erie	288000	GPD		288000	GPD				
387	Alden, Vg	Alden (T)	Erie	215341	GPD		321300	GPD				
388	Orchard Park Country Club	Orchard Park (T)	Erie	48387	GPD		325167	GPD				
389	Fox Valley Club	Lancaster (T)	Erie	27894	GPD		339375	GPD				
390	Brierwood Country Club	Hamburg (T)	Erie	55746	GPD		350000	GPD				
391	Turnbull Nursery	Brant (T)	Erie	25000	GPD		350000	GPD				
392	CET - Tonawanda Engine Site	Tonawanda (T)	Erie	257621	GPD		373787	GPD				
393	North Collins, Vg	Brant (T)	Erie	160000	GPD		380000	GPD				
394	Crag Burn Golf Club	Elma (T)	Erie	25457	GPD		386919	GPD				
395	Brookfield Country Club	Clarence (T)	Erie	35279	GPD		450000	GPD				
396	Bowman Farms	North Collins (T)	Erie	228000	GPD		501600	GPD				
397	D & J Brawdy Farms, Inc	Eden (T)	Erie	188852	GPD		504000	GPD				
398	Henry W. Agle & Sons Inc.	Eden (T)	Erie	60000	GPD		565000	GPD				
399	Ford Gum	Newstead (T)	Erie	970500	GPD		970500	GPD				
400	M K Phelps Farm	Sardinia (T)	Erie	5000	GPD		1550000	GPD				

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401	Chiavetta's	Evans (T)	Erie			
402	Westport Consolidated Water District	Westport (T)	Essex	0.074 MGD		0.1983 MGD
403	Port Henry , Vg	Moriah (T)	Essex	0.15 MGD		0.295 MGD
404	Whiteface Club	North Elba (T)	Essex	45506 GPD		0.38 MGD
405	Saranac Lake, Vg	North Elba (T)	Essex	1.03 MGD		1.319 MGD
406	Lake Placid, Vg	North Elba (T)	Essex	1.081082 MGD		2.076 MGD
407	International Paper - Ticonderoga Mill	Ticonderoga (T)	Essex	16.8 MGD		21.5 MGD
408	Wilmington Water District #2	Wilmington (T)	Essex	250 GPM		250 GPM
409	New Russia Water District	Elizabethtown (T)	Essex	900 GPD		1400 GPD
410	Lewis Water District #1	Lewis (T)	Essex	28000 GPD		37000 GPD
411	Ray Brook Water District	North Elba (T)	Essex	41000 GPD		81000 GPD
412	Harmony Golf Club	Chesterfield (T)	Essex	33400 GPD		88000 GPD
413	Ausable Club	Keene (T)	Essex	33000 GPD		109000 GPD
414	Elizabethtown Water District	Elizabethtown (T)	Essex	140000 GPD		150000 GPD
415	Minerva, Tn	Minerva (T)	Essex	80000 GPD		210000 GPD
416	Jay, Water Plant	Jay (T)	Essex	202304 GPD		263000 GPD
417	Au Sable Forks Water District	Jay (T)	Essex	193238 GPD		300000 GPD
418	Adirondack Correctional Facility	North Elba (T)	Essex	326590 GPD		386910 GPD
419	Ticonderoga, Tn - Gooseneck Pond	Ticonderoga (T)	Essex	334389 GPD		471000 GPD
420	Keeseville, Vg	Chesterfield (T)	Essex	195101 GPD		485020 GPD
421	Ticonderoga Golf Corp	Ticonderoga (T)	Essex			725000 GPD
422	Schroon Lake Water District	Schroon (T)	Essex	260000 GPD		728000 GPD
423	Ticonderoga, Tn - Lake George	Ticonderoga (T)	Essex	450526 GPD		800000 GPD
424	Graymont Materials - Lewis Quarry	Lewis (T)	Essex	700000 GPD		828000 GPD
425	Moriah Water District	Moriah (T)	Essex	422923 GPD		962000 GPD
426	NYCO Minerals	Lewis (T)	Essex	750000 GPD		2060000 GPD
427	Forever Wild Water Co.	Jay (T)	Essex	52141 GPD		
428	Winebrook Hills Water District	Newcomb (T)	Essex			
429	Chateaugay, Vg	Chateaugay (T)	Franklin	0.735 MGD		1.008 MGD
430	Tupper Lake, Vg	Tupper Lake (T)	Franklin	0.811 MGD		1.59 MGD
431	Chateaugay Hatchery	Chateaugay (T)	Franklin	1.6 MGD		1.6 MGD
432	Malone, Vg	Malone (T)	Franklin	2.2 MGD		3 MGD
433	Adirondack Hatchery	Santa Clara (T)	Franklin	2.61 MGD		3.17 MGD
434	Carsada Dairy	Malone (T)	Franklin	40595 GPD		49837 GPD
435	Chateaugay Correctional Facility	Chateaugay (T)	Franklin	25599 GPD		65500 GPD
436	Burke, Vg	Burke (T)	Franklin	15800 GPD		70000 GPD
437	Trainer Farm	Chateaugay (T)	Franklin	42912 GPD		78253 GPD
438	Bilow Farm	Bellmont (T)	Franklin	90878 GPD		98890 GPD
439	Papas Dairy	Malone (T)	Franklin	92456 GPD		103964 GPD
440	Paul Smith's College	Brighton (T)	Franklin	67943 GPD		172800 GPD
441	Boralex NY (ReEnergy New York)	Chateaugay (T)	Franklin	157000 GPD		338000 GPD
442	Graymont Materials - Saranac Lake Quarry	Harrietstown (T)	Franklin	530000 GPD		870000 GPD
443	Childstock Farms	Malone (T)	Franklin	125500 GPD		1167000 GPD
444	Titus Mountain Family Ski Center	Malone (T)	Franklin	960000 GPD		2880000 GPD
445	Graymont Materials - Malone Quarry	Malone (T)	Franklin	720000 GPD		2970000 GPD
446	Agri-Mark, Inc - Chateaugay Plant	Chateaugay (T)	Franklin	628939 GPD		
447	Aqua Arbor	Chateaugay (T)	Franklin			
448	Aqua Arbor	Chateaugay (T)	Franklin			
449	St. Regis Falls Water District	Waverly (T)	Franklin			
450	Canajoharie Water Works	Johnstown (T)	Fulton	0.95 MGD		1.43 MGD
451	Royal Mountain Ski Area	Caroga (T)	Fulton	67000 GPD		1.7 MGD
452	Gloversville Board of Water Commissioners	Johnstown (T)	Fulton	1.94 MGD		2.68 MGD
453	Johnstown, City	Johnstown (T)	Fulton	1.81 MGD		2.8 MGD
454	Pinelands Nursery	Bleecker (T)	Fulton	500 GPD		3000 GPD
455	Saint Johnsville, Vg	Oppenheim (T)	Fulton	53539 GPD		70872 GPD
456	Sacadaga Park Water District	Northampton (T)	Fulton	49000 GPD		107000 GPD
457	Delaney Crushed Stone	Northampton (T)	Fulton	9000 GPD		120000 GPD
458	Broadalbin, Vg	Broadalbin (T)	Fulton	108000 GPD		130000 GPD
459	Mayfield, Vg	Mayfield (T)	Fulton	85500 GPD		174900 GPD
460	Northville, Vg	Northampton (T)	Fulton	95411 GPD		273600 GPD
461	Cranesville - Maple Ave	Johnstown (T)	Fulton	456000 GPD		456000 GPD
462	Hanson Aggregates - Leroy	Le Roy (T)	Genesee	0 GPD		0 GPD
463	Patsy Vigneri & Sons	Elba (T)	Genesee	0 GPD		0 GPD
464	Elba, Vg	Elba (T)	Genesee	0.084 MGD		0.278 MGD
465	Hanson Aggregates - Batavia Sand & Gravel	Batavia (T)	Genesee	0.475 MGD		1.47 MGD
466	CY Farms LLC	Elba (T)	Genesee	70100 GPD		1.75 MGD
467	OATKA Milk Products Coop Inc	Batavia (T)	Genesee	1.198 MGD		2.004 MGD
468	Batavia, City	Batavia (C)	Genesee	2.78 MGD		4.49 MGD
469	Hanson Aggregates - Stafford Quarry	Stafford (T)	Genesee	3.1 MGD		6.8 MGD
470	US Gypsum Co	Oakfield (T)	Genesee	9.42 MGD		24.172 MGD
471	Star Growers Farm LLC	Elba (T)	Genesee	117500 GPD		252 GPM
472	Reyncrest Farms	Daricn (T)	Genesee	42500 GPD		45000 GPD
473	Oak Orchard Dairy	Elba (T)	Genesee	47337 GPD		50000 GPD
474	Lamb Farms # 2	Elba (T)	Genesee	48758 GPD		55680 GPD
475	Chestnut Hill Country Club, Inc.	Darien (T)	Genesee	49428 GPD		60000 GPD
476	Zuber Farms	Byron (T)	Genesee	52000 GPD		65000 GPD
477	Hildene Farms, Inc	Pavilion (T)	Genesee	60000 GPD		70000 GPD
478	Torrey Farms Dairy Inc.	Elba (T)	Genesee	96427 GPD		106681 GPD
479	Lamb Farms # 1	Oakfield (T)	Genesee	97796 GPD		111680 GPD
480	Corfu, Vg	Pembroke (T)	Genesee	101605 GPD		145870 GPD

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481	Terry Hills Golf Course	Batavia (T)	Genesee	24473 GPD		240000 GPD
482	Stafford Country Club	Stafford (T)	Genesee	18000 GPD		250000 GPD
483	Bonduelle USA - Bergen Facility	Bergen (T)	Genesee	94342 GPD		479900 GPD
484	Frey Sand and Gravel	Alexander (T)	Genesee	1050000 GPD		1050000 GPD
485	Bonduelle USA - Oakfield Facility	Oakfield (T)	Genesee	189029 GPD		1055582 GPD
486	L-Brooke Farms, LLC	Byron (T)	Genesee			1260000 GPD
487	Dolomite Products - Circular Hill	Le Roy (T)	Genesee	720000 GPD		2160000 GPD
488	Del Mar Farms Inc	Batavia (T)	Genesee	1225000 GPD		4550000 GPD
489	Big O Farms Inc	Elba (T)	Genesee	3168000 GPD		4752000 GPD
490	Dolomite Products - Leroy Quarry	Le Roy (T)	Genesee	0.875 MGD		
491	My-T-Acres, Inc	Batavia (T)	Genesee	2.89 MGD		
492	Tilcon - High Hill Road Pit	Coxsackie (T)	Greene	0 GPD		0 GPD
493	Greenville, Tn	Greenville (T)	Greene	0.054 MGD		0.079 MGD
494	Cairo Water District	Cairo (T)	Greene	0.096 MGD		0.189 MGD
495	Story Farms	Catskill (T)	Greene	8250 GPD		0.3 MGD
496	Hunter, Vg	Hunter (T)	Greene	0.181 MGD		0.464 MGD
497	New Athens Generating	Athens (T)	Greene	0.153 MGD		0.77 MGD
498	Peckham Materials - Catskill	Catskill (T)	Greene	0.84 MGD		0.84 MGD
499	Ravena, Vg	New Baltimore (T)	Greene	0.5 MGD		0.934 MGD
500	Coxsackie, Vg	Coxsackie (T)	Greene	1.051 MGD		1.34 MGD
501	Windham Mountain Ski Resort	Windham (T)	Greene	486000 GPD		2.88 MGD
502	Hunter Mountain	Hunter (T)	Greene	0.868 MGD		12.96
503	Tannersville, Vg	Hunter (T)	Greene	176 GPM		297 GPM
504	Holcim (US) Inc.	Catskill (T)	Greene	21224 GPD		750 GPM
505	Kiskatum Mobil Home Park	Catskill (T)	Greene	5000 GPD		6000 GPD
506	Sunny Hill Resort & Golf	Greenville (T)	Greene	28000 GPD		33000 GPD
507	Falke Quarry	Lexington (T)	Greene	64000 GPD		64000 GPD
508	Windham Mountain, Vg	Windham (T)	Greene	49883 GPD		64712 GPD
509	Windham Country Club	Windham (T)	Greene	58117 GPD		85474 GPD
510	Blackhead Mountain Lodge & Country Club	Cairo (T)	Greene	50000 GPD		120000 GPD
511	River Garden	Cairo (T)	Greene	65000 GPD		130000 GPD
512	Windham Water District #1, Hensonville	Windham (T)	Greene	81438 GPD		144400 GPD
513	Coxsackie Correctional Facility	Coxsackie (T)	Greene	21246 GPD		406530 GPD
514	Catskill, Vg	Coxsackie (T)	Greene	831490 GPD		1192645 GPD
515	Sunrise Farms	Catskill (T)	Greene	608640 GPD		1248000 GPD
516	Onteora Club	Hunter (T)	Greene			
517	Prattsville Water District	Prattsville (T)	Greene	25417 GPD		
518	Blue Mountain Lake Water District #1	Indian Lake (T)	Hamilton	0.04 MGD		0.132 MGD
519	Indian Lake Water District #2	Indian Lake (T)	Hamilton	0.113 MGD		0.295 MGD
520	Wells Water District	Wells (T)	Hamilton	0.18 MGD		0.435 MGD
521	Speculator, Vg	Lake Pleasant (T)	Hamilton	84786 GPD		245970 GPD
522	Inlet Golf Club	Inlet (T)	Hamilton	16055 GPD		300000 GPD
523	Long Lake Water District #2	Long Lake (T)	Hamilton	328597 GPD		623000 GPD
524	Rocky Point Homeowners Assn	Inlet (T)	Hamilton			
525	Hanson Aggregates - Gravesville	Russia (T)	Herkimer	0 GPD		0 GPD
526	Thendara Golf Course	Webb (T)	Herkimer	0.36 MGD		0.36 MGD
527	Barrett - Litchfield Quarry	Litchfield (T)	Herkimer	0.35 MGD		0.74 MGD
528	Hanson Aggregates - Jordanville	Warren (T)	Herkimer	0.335 MGD		0.933 MGD
529	Remington Arms Co	German Flatts (T)	Herkimer	0.82 MGD		0.95 MGD
530	Frankfort, Vg	Frankfort (T)	Herkimer	700000 GPD		1 MGD
531	Burrows Paper Corporation	Little Falls (C)	Herkimer	0.795 MGD		1.6 MGD
532	Ilion, Vg	German Flatts (T)	Herkimer	1.29 MGD		1.66 MGD
533	Burrows Paper Corporation - East Mill St	Little Falls (C)	Herkimer	1.45 MGD		2.36 MGD
534	Mohawk Valley Water Authority	Russia (T)	Herkimer	20.6 MGD		24.25 MGD
535	Hanson Aggregates - Poland Sand & Gravel	Russia (T)	Herkimer	27 GPD		40 GPD
536	Van Hornesville Hatchery	Stark (T)	Herkimer	364 GPM		364 GPM
537	Newport, Vg	Newport (T)	Herkimer	78000 GPD		100000 GPD
538	Middleville, Vg	Fairfield (T)	Herkimer	95233 GPD		100065 GPD
539	Poland, Vg	Russia (T)	Herkimer	55588 GPD		169200 GPD
540	West Winfield, Vg	Winfield (T)	Herkimer	96240 GPD		181000 GPD
541	Bonded Concrete - Gravesville Plant	Russia (T)	Herkimer	207000 GPD		360000 GPD
542	Old Forge Water District	Webb (T)	Herkimer	188000 GPD		477000 GPD
543	Mohawk, Vg	German Flatts (T)	Herkimer	541528 GPD		832000 GPD
544	Dolgeville, Vg	Salisbury (T)	Herkimer	655380 GPD		879120 GPD
545	Little Falls, City	Salisbury (T)	Herkimer	2600000 GPD		3100000 GPD
546	Black River Generation, LLC (ReEnergy)	Le Ray (T)	Jefferson	0 GPD		0 GPD
547	Wellesley Island Water Corp	Alexandria (T)	Jefferson	0.045 MGD		0.162 MGD
548	Clayton, Vg	Clayton (T)	Jefferson	0.154 MGD		0.299 MGD
549	Philadelphia, Vg	Le Ray (T)	Jefferson	0.226 MGD		0.394 MGD
550	Fort Drum Public Works	Le Ray (T)	Jefferson	0.576 MGD		0.763 MGD
551	Climax Paperboard, Inc.	Champion (T)	Jefferson	0.275 MGD		0.785 MGD
552	Adams, Vg	Adams (T)	Jefferson	0.695 MGD		0.909 MGD
553	Hanson Aggregates - Great Bend Quarry	Champion (T)	Jefferson	0.361 MGD		1 MGD
554	Hanson Aggregates - Watertown Quarry	Pamelia (T)	Jefferson	0.989 MGD		1.8 MGD
555	Barrett - Watertown Quarry	Pamelia (T)	Jefferson	1.2 MGD		2.64 MGD
556	Watertown, City	Watertown (C)	Jefferson	5.03 MGD		6.91 MGD
557	Carthage Energy LLC	Wilna (T)	Jefferson	0.198 MGD		11.017 MGD
558	Clark Farm	Clayton (T)	Jefferson	8877 GPD		10000 GPD
559	Frontenac Crystal Springs	Clayton (T)	Jefferson	10744 GPD		15356 GPD
560	Wilna Water District #2	Wilna (T)	Jefferson	12001 GPD		27569 GPD

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#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W	Units_Ave_Max	Day_Units_Max
561	Morning Star Farm	Adams (T)	Jefferson	31427	GPD	35971 GPD
562	CTS Dairy	Ellisburg (T)	Jefferson	68987	GPD	78690 GPD
563	Hi Hope Farm	Ellisburg (T)	Jefferson	69102	GPD	79092 GPD
564	Murcrest Farm LLC	Champion (T)	Jefferson	60400	GPD	82500 GPD
565	Sheland Farms	Ellisburg (T)	Jefferson	57000	GPD	85000 GPD
566	Hillcrest Farm LLC	Ellisburg (T)	Jefferson	77400	GPD	88000 GPD
567	Deer Run Dairy	Henderson (T)	Jefferson	43573	GPD	90400 GPD
568	North Harbor Dairy	Hounsfield (T)	Jefferson	27060	GPD	91935 GPD
569	Antwerp, Vg	Antwerp (T)	Jefferson	60889	GPD	93000 GPD
570	Milk Street Dairy	Rutland (T)	Jefferson	72201	GPD	95114 GPD
571	Henderson, Tn	Henderson (T)	Jefferson	35008	GPD	106600 GPD
572	Grand Venture Dairy LLC	Lorraine (T)	Jefferson	73150	GPD	110300 GPD
573	Dexter, Vg	Brownville (T)	Jefferson	67500	GPD	117000 GPD
574	Butterville Farms	Henderson (T)	Jefferson	108345	GPD	119866 GPD
575	Porterdale Farms	Rodman (T)	Jefferson	114978	GPD	131600 GPD
576	HP Hood dba Crowley	Orleans (T)	Jefferson	157546	GPD	162883 GPD
577	Golf Club on Wellesley Island	Alexandria (T)	Jefferson	33355	GPD	175000 GPD
578	Ellisburg, Tn, Water District #1	Ellisburg (T)	Jefferson	82885	GPD	177000 GPD
579	Evans Mills, Vg	Le Ray (T)	Jefferson	78000	GPD	186000 GPD
580	Mannsville, Vg	Ellisburg (T)	Jefferson	32190	GPD	198800 GPD
581	North Branch Farms	Ellisburg (T)	Jefferson	200000	GPD	200000 GPD
582	Black River, Vg	Le Ray (T)	Jefferson	179488	GPD	290000 GPD
583	Brownville, Vg	Brownville (T)	Jefferson	143000	GPD	331000 GPD
584	Leray Water District #2	Le Ray (T)	Jefferson	247860	GPD	344860 GPD
585	Bedford Creek Golf Course	Hounsfield (T)	Jefferson	16000	GPD	360000 GPD
586	FiberMark - Brownville	Hounsfield (T)	Jefferson	203361	GPD	387723 GPD
587	Cranesville - Watertown	Watertown (T)	Jefferson	432000	GPD	432000 GPD
588	Knowlton Technologies, LLC	Watertown (C)	Jefferson	399000	GPD	545100 GPD
589	Sackets Harbor, Vg	Hounsfield (T)	Jefferson	299767	GPD	594026 GPD
590	Dry Hill Ski Area	Watertown (T)	Jefferson	474000	GPD	720000 GPD
591	Cape Vincent, Vg	Cape Vincent (T)	Jefferson	478598	GPD	786560 GPD
592	New York Air Brake Co	Watertown (C)	Jefferson	12296	GPD	
593	Greenpoint Remediation	Kings (T)	Kings	619	GPM	704 GPM
594	Dyker Beach Golf Course	Kings (T)	Kings	43953	GPD	475000 GPD
595	Brooklyn Navy Yard	Kings (T)	Kings	52729233	GPD	73490591 GPD
596	Virkler - Watson Operations	Watson (T)	Lewis	0.122	MGD	0.122 MGD
597	Virkler - West Lowville	Lowville (T)	Lewis	0.285	MGD	0.285 MGD
598	Croghan, Vg	Croghan (T)	Lewis	0.168	MGD	0.516 MGD
599	Carthage/West Carthage, Vgs	Croghan (T)	Lewis	0.66	MGD	0.75 MGD
600	Interface Solutions, Inc - Lewis Plant	Croghan (T)	Lewis	0.71	MGD	1.34 MGD
601	Burrows Paper Corporation - Lyonsdale	Lyonsdale (T)	Lewis	1.65	MGD	2.13 MGD
602	Boonville Quarry	Leyden (T)	Lewis	1.32	MGD	3.44 MGD
603	RT Vanderbilt Co, Inc - Gouverneur Mineral	Diana (T)	Lewis	2.6	MGD	3.84 MGD
604	WPS Beaver Falls Generation	Croghan (T)	Lewis	1.36	MGD	44.6 MGD
605	Virkler - Martinsburg Quarry	Martinsburg (T)	Lewis	9300	GPD	9300 GPD
606	Pominville Farm	Croghan (T)	Lewis	14000	GPD	18000 GPD
607	Moserdale Farm	Denmark (T)	Lewis	31125	GPD	31125 GPD
608	Glenfield Water District	Martinsburg (T)	Lewis	31045	GPD	82200 GPD
609	Port Leyden, Vg	Lyonsdale (T)	Lewis	47985	GPD	84516 GPD
610	Lyons Falls, Vg	Lyonsdale (T)	Lewis	103083	GPD	103083 GPD
611	Demko Farms Inc	Lowville (T)	Lewis	97000	GPD	108000 GPD
612	Copenhagen, Vg	Denmark (T)	Lewis	61638	GPD	108500 GPD
613	Turin, Vg	Turin (T)	Lewis	60100	GPD	111000 GPD
614	Martinsburg Water District	Martinsburg (T)	Lewis	72141	GPD	141500 GPD
615	Harrisville, Vg	Diana (T)	Lewis	88000	GPD	259000 GPD
616	Hidden Falls Spring Water	Greig (T)	Lewis	288000	GPD	288000 GPD
617	Marks Farm	Martinsburg (T)	Lewis	294705	GPD	294705 GPD
618	Lyonsdale Biomass, LLC	Lyonsdale (T)	Lewis	260829	GPD	563000 GPD
619	Lowville, Vg	New Bremen (T)	Lewis	924417	GPD	1073000 GPD
620	Riverview Dale Farm	New Bremen (T)	Lewis			
621	Fairview Golf Course	Avon (T)	Livingston	75000	GPD	0.144 MGD
622	Nunda, Vg	Nunda (T)	Livingston	0.154	MGD	0.284 MGD
623	Groveland Correctional Facility	Groveland (T)	Livingston	0.342	MGD	0.48 MGD
624	Dansville, Vg	North Dansville (T)	Livingston	0.673	MGD	1.15 MGD
625	Avon, Vg	Livonia (T)	Livingston	0.839	MGD	1.39 MGD
626	Geneseo, Vg	Geneseo (T)	Livingston	1.3	MGD	2.1 MGD
627	Seneca Foods Corp	Leicester (T)	Livingston	0.397	MGD	2.16 MGD
628	Hanson Aggregates - Honeoye Falls Quarry	Lima (T)	Livingston	6	MGD	8.9 MGD
629	Cedar Springs Fish Hatchery	Caledonia (T)	Livingston	600	GPM	600 GPM
630	Caledonia Fish Hatchery	Caledonia (T)	Livingston	5250	GPM	6232 GPM
631	Edgewood Farms	Groveland (T)	Livingston	24818	GPD	26875 GPD
632	Walker Farm - Wayland	Springwater (T)	Livingston	25927	GPD	30000 GPD
633	Coyne Farms	Avon (T)	Livingston	35786	GPD	35786 GPD
634	Mount Morris Dairy Farms	Mount Morris (T)	Livingston	32000	GPD	36000 GPD
635	Woodyllyn Hills Golf Course	Nunda (T)	Livingston	1808	GPD	40000 GPD
636	Lang's Nursery	West Sparta (T)	Livingston	48000	GPD	72000 GPD
637	Springwater, Tn	Springwater (T)	Livingston	47150	GPD	85000 GPD
638	Noblehurst Farms, Inc.	York (T)	Livingston	83000	GPD	102000 GPD
639	Lima Golf & Country Club	Lima (T)	Livingston	84000	GPD	168000 GPD
640	JCI Jones Chemicals - Caledonia	Caledonia (T)	Livingston	326000	GPD	498000 GPD

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641	Valley Sand & Gravel	Caledonia (T)	Livingston	1221000 GPD	1887000 GPD
642	Dolomite Products - Avon Sand & Gravel	Avon (T)	Livingston	0.129 MGD	
643	Owera Water District	Cazenovia (T)	Madison	0.0076 MGD	0.02 MGD
644	Hamilton, Vg	Hamilton (T)	Madison	0.392282 MGD	0.835 MGD
645	Cazenovia, Vg	Cazenovia (T)	Madison	261000 GPD	1 MGD
646	Morrisville State College - Aquaculture Cent	Eaton (T)	Madison	91.04 GPM	132.2 GPM
647	New Woodstock Water District	Cazenovia (T)	Madison	23300 GPD	90000 GPD
648	Oriskany Falls, Vg	Madison (T)	Madison	56110 GPD	96412 GPD
649	White Eagle Farms	Eaton (T)	Madison	96698 GPD	106981 GPD
650	Morrisville, Vg	Eaton (T)	Madison	65000 GPD	117000 GPD
651	Rogues Roost Golf & Country Club	Sullivan (T)	Madison	8333 GPD	120000 GPD
652	Madison, Vg	Madison (T)	Madison	65000 GPD	150000 GPD
653	Kanon Valley Country Club	Lenox (T)	Madison	13157 GPD	166500 GPD
654	DeRuyter, Vg	De Ruyter (T)	Madison	44000 GPD	167000 GPD
655	Earlville, Vg	Hamilton (T)	Madison	60600 GPD	181000 GPD
656	Mosher Farms	Eaton (T)	Madison	30450 GPD	300900 GPD
657	Morrisville State College	Eaton (T)	Madison	199830 GPD	387000 GPD
658	Callanan - Clockville Site	Lincoln (T)	Madison	3061856 GPD	3603050 GPD
659	Oneida Community Golf Club	Oneida (C)	Madison	10900 GPD	
660	Monroe County Water Authority - Brockport	Hamlin (T)	Monroe	0 MGD	0 MGD
661	Pittsford, Tn - Recreational	Pittsford	Monroe	0 GPD	0 GPD
662	Russel Generating Station	Greece (T)	Monroe	0 MGD	0 MGD
663	Oak Hill Country Club	Pittsford (T)	Monroe	0.11 MGD	0.49 MGD
664	Salmon Creek Country Club	Ogden (T)	Monroe	12904 GPD	1.08 MGD
665	Webster, Vg	Webster (T)	Monroe	468337 GPD	1.192 MGD
666	JB Martin Farms, Inc	Clarkson (T)	Monroe	2 MGD	2.05 MGD
667	Monroe County Water Authority - Shoremon	Greece (T)	Monroe	55.4 MGD	109 MGD
668	Chili Country Club	Chili (T)	Monroe	63333 GPD	64800 GPD
669	Mendon Country Club	Mendon (T)	Monroe	19589 GPD	80000 GPD
670	Colby Homestead Farms	Ogden (T)	Monroe	14200 GPD	150000 GPD
671	Powers Farm	Pittsford (T)	Monroe	2200 GPD	150000 GPD
672	Xerox Joseph C. Wilson Center for Technology	Webster (T)	Monroe	147785 GPD	215088 GPD
673	Durand-Eastman Golf Club	Rochester (C)	Monroe	118033 GPD	225000 GPD
674	Deerfield Country Club	Clarkson (T)	Monroe	40800 GPD	243000 GPD
675	Locust Hill Country Club	Henrietta (T)	Monroe	100000 GPD	250000 GPD
676	Brook-Lea Country Club	Gates (T)	Monroe	37676 GPD	288000 GPD
677	Perinton Golf & Country Club	Perinton (T)	Monroe	230000 GPD	297000 GPD
678	Churchville Park Golf Course	Riga (T)	Monroe	157377 GPD	300000 GPD
679	Country Club of Rochester	Pittsford (T)	Monroe	51000 GPD	300000 GPD
680	Penfield Country Club	Penfield (T)	Monroe	16114 GPD	315214 GPD
681	Timber Ridge Golf Club	Clarkson (T)	Monroe	156776 GPD	360000 GPD
682	Twin Hills Golf Course	Parma (T)	Monroe	20055 GPD	410000 GPD
683	Mill Creek Golf Club	Riga (T)	Monroe	426000 GPD	432000 GPD
684	Wildwood Country Club	Rush (T)	Monroe	109000 GPD	450000 GPD
685	Genesee Valley Park Golf Course	Rochester (C)	Monroe	251803 GPD	480000 GPD
686	Leverenz Farms	Hamlin (T)	Monroe		500000 GPD
687	Conrow Farms	Clarkson (T)	Monroe	600000 GPD	600000 GPD
688	Midvale Country Club	Perinton (T)	Monroe	283000 GPD	942000 GPD
689	Monroe Golf Club	Pittsford (T)	Monroe	86470 GPD	950000 GPD
690	Ridgemont Country Club	Greece (T)	Monroe	150000 GPD	1000000 GPD
691	Eastman Kodak Water Treatment Plant	Greece (T)	Monroe	13189442 GPD	16493439 GPD
692	Chase Farm	Perinton (T)	Monroe	2652 GPD	
693	Dolomite Products - Brockport Quarry	Penfield (T)	Monroe	1.45 MGD	
694	Dolomite Products - Gates Quarry	Gates (T)	Monroe	1.74 MGD	
695	Dolomite Products - Ogden Quarry	Ogden (T)	Monroe	1.2 MGD	
696	Dolomite Products - Penfield Quarry	Penfield (T)	Monroe	0.726 MGD	
697	Dolomite Products - Shadow Lake Golf Club	Penfield (T)	Monroe	0.047 MGD	
698	Dolomite Products - Shadow Pine Golf Club	Penfield (T)	Monroe	0.042 MGD	
699	Irondequoit Country Club	Pittsford (T)	Monroe		
700	Pinewood Country Club	Ogden (T)	Monroe		
701	Logan Farms	Palatine (T)	Montgomery	0	0
702	Hanson Aggregates - St. Johnsville Quarry	St Johnsville (T)	Montgomery	30910 GPD	0.118 MGD
703	Fort Plain, Vg	Palatine (T)	Montgomery	0.35 MGD	0.5 MGD
704	Free Bird Farm	Palatine (T)	Montgomery	1000 GPD	2000 GPD
705	Bruce Matis	Palatine (T)	Montgomery	17500 GPD	17500 GPD
706	R&R Farms / Dykeman & Sons, Inc	Glen (T)	Montgomery	42734 GPD	48911 GPD
707	Cashins Farm	Root (T)	Montgomery	20000 GPD	120000 GPD
708	Palatine Bridge, Vg	Palatine (T)	Montgomery	101000 GPD	137000 GPD
709	Fultonville, Vg	Glen (T)	Montgomery	100000 GPD	180000 GPD
710	Fonda Water Plant	Mohawk (T)	Montgomery	535000 GPD	699000 GPD
711	Callanan - Pattersonville Site	Amsterdam (C)	Montgomery	105796 GPD	2360754 GPD
712	Rolling Hills at Antlers	Amsterdam (T)	Montgomery		
713	Albertson Water District	North Hempstead (T)	Nassau	2 MGD	4.6 MGD
714	Old Westbury, Vg	North Hempstead (T)	Nassau	1.989 MGD	6.969 MGD
715	Locust Valley Water District	Oyster Bay (T)	Nassau	1.725 MGD	7.053 MGD
716	Glen Cove, City	Glen Cove (C)	Nassau		7.8 MGD
717	Unisys (Former) - OffSite Remedial Facility	North Hempstead (T)	Nassau	437 GPM	517 GPM
718	Unisys (Former) - OU1 - Groundwater Treatm	North Hempstead (T)	Nassau	574 GPM	719 GPM
719	Gunthers Greenhouse	Hempstead (T)	Nassau	7000 GPD	10000 GPD
720	North Hills Country Club	North Hempstead (T)	Nassau	70800 GPD	250000 GPD

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721	Creek Country Club	Oyster Bay (T)	Nassau	35027 GPD	580000 GPD
722	Jones Beach State Park	Hempstead (T)	Nassau	151000 GPD	631000 GPD
723	Long Beach, City	Long Beach (C)	Nassau	3200000 GPD	5178000 GPD
724	Pine Hollow Country Club	Oyster Bay (T)	Nassau	104559 GPD	
725	59th Street Steam Station	New York (T)	New York	1.6 MGD	4.3 MGD
726	World Financial Center	New York (T)	New York	15.24 MGD	28.55 MGD
727	One New York Plaza	New York (T)	New York	10.9 MGD	32.1 MGD
728	East River Generating Station	New York (T)	New York	264.1 MGD	371.8 MGD
729	102nd Street Landfill	Niagara Falls (C)	Niagara	0.001 MGD	0.0034 MGD
730	Modern Landfill Inc	Lewiston (T)	Niagara	0.01 MGD	0.03 MGD
731	Love Canal	Niagara Falls (C)	Niagara	0.015 MGD	0.0982 MGD
732	Former Carborundum Complex	Wheatfield (T)	Niagara	0.124 MGD	0.138 MGD
733	Durez North Tonawanda	North Tonawanda (C)	Niagara	0.112 MGD	0.269 MGD
734	Hyde Park Landfill	Niagara Falls (C)	Niagara	0.107 MGD	0.462 MGD
735	Olin Chemicals	Niagara Falls (C)	Niagara	0.92 MGD	0.95 MGD
736	McCullum Farms	Royalton (T)	Niagara	2.5 MGD	3.5 MGD
737	North Tonawanda, City	North Tonawanda (C)	Niagara	3.93 MGD	5.4 MGD
738	Lockport, City	North Tonawanda (C)	Niagara	5.27 MGD	7.24 MGD
739	Occidental Chemical Corp - Niagara Plant	Niagara Falls (C)	Niagara	12 MGD	22 MGD
740	Niagara Falls Water Board	Niagara Falls (C)	Niagara	18.4 MGD	24.3 MGD
741	Niagara County Water District	Niagara Falls (C)	Niagara	17 MGD	34 MGD
742	Praxair, Inc	Niagara Falls (C)	Niagara	39.9 MGD	48.8 MGD
743	DuPont Niagara	Niagara Falls (C)	Niagara	31 MGD	50 MGD
744	AES Somerset (Somerset Operating Compan	Somerset (T)	Niagara	239 MGD	274 MGD
745	Seabert Farm	Cambria (T)	Niagara	4392 GPD	9150 GPD
746	Niagara Power Project	Lewiston (T)	Niagara	47463 MGD	62164 MGD
747	Freatman Farm	Cambria (T)	Niagara	75000 GPD	75000 GPD
748	Tan Tara Golf Club	Pendleton (T)	Niagara	83333 GPD	99288 GPD
749	Niagara Frontier Country Club	Porter (T)	Niagara	81500 GPD	120000 GPD
750	Deerwood Golf Course	North Tonawanda (C)	Niagara	122396 GPD	383274 GPD
751	Lockport Town & Country Club	Lockport (C)	Niagara	26275 GPD	385000 GPD
752	Willowbrook Golf Course	Lockport (T)	Niagara	400000 GPD	720000
753	Lafarge Niagara Quarry	Niagara (T)	Niagara	1190000 GPD	2880000 GPD
754	Lafarge Lockport Quarry	Lockport (C)	Niagara	1930000 GPD	4320000 GPD
755	Hanson Aggregates - Boonville	Western (T)	Oneida	0 GPD	0 GPD
756	Hanson Aggregates - Forestport Quarry	Forestport (T)	Oneida	0 GPD	0 GPD
757	Waterville, Vg	Sangerfield (T)	Oneida	0.248 MGD	0.339 MGD
758	Camden, Vg	Camden (T)	Oneida	0.36 MGD	0.618 MGD
759	Oneida, City	Annsville (T)	Oneida	3.05 MGD	4.36 MGD
760	Revere Copper Products	Rome (C)	Oneida	5.8 MGD	5.8 MGD
761	Rome Fish Hatchery	Rome (C)	Oneida	7.1 MGD	8.4 MGD
762	Rome, City	Annsville (T)	Oneida	9.5 MGD	14.8 MGD
763	Hanson Aggregates - Oriskany Falls	Augusta (T)	Oneida	184 GPM	209 GPM
764	Prospect, Vg	Trenton (T)	Oneida	23430 GPD	27700 GPD
765	Barneveld, Vg	Trenton (T)	Oneida	35087 GPD	57000 GPD
766	Deansboro Water District	Marshall (T)	Oneida	27940 GPD	61700 GPD
767	Forestport,Tn	Forestport (T)	Oneida	0.023 MGD	65900 GPD
768	Remsen, Vg	Remsen (T)	Oneida	49387 GPD	150153 GPD
769	Harden Furniture	Annsville (T)	Oneida	153000 GPD	153000 GPD
770	McConnellsville Golf Club	Vienna (T)	Oneida	153000 GPD	153000 GPD
771	Cleveland, Vg	Vienna (T)	Oneida	126000 GPD	253000 GPD
772	Clinton, Vg	Kirkland (T)	Oneida	423249 GPD	494420 GPD
773	International Wire - Camden Wire	Camden (T)	Oneida	544000 GPD	685000 GPD
774	International Wire - Sherrill Operations	Sherrill (C)	Oneida	460000 GPD	721000 GPD
775	Boonville, Vg	Boonville (T)	Oneida	248000 GPD	785700 GPD
776	Homogeneous Metals	Paris (T)	Oneida	559983 GPD	1332000 GPD
777	Clayville, Vg	Paris (T)	Oneida	68398 GPD	
778	Norman Brennan	Paris (T)	Oneida		
779	Sauquoit Water District	Paris (T)	Oneida	293000 GPD	
780	Barrow's View Club	Spafford (T)	Onondaga	0 GPD	0 GPD
781	Syracuse - Apulia	Fabius (T)	Onondaga	0 GPD	0 GPD
782	Syracuse - Black Creek Road	Clay (T)	Onondaga	0 GPD	0 GPD
783	Syracuse - Brickyard Pit	Van Buren (T)	Onondaga	0 GPD	0 GPD
784	Tully, Vg	Tully (T)	Onondaga	0.129 MGD	0.181 MGD
785	Hanson Aggregates - Skaneateles Quarry	Skaneateles (T)	Onondaga	0.18 MGD	0.456 MGD
786	Hanson Aggregates - Jamesville Quarry	Dewitt (T)	Onondaga	0.88 MGD	1.64 MGD
787	Baldwinsville, Vg	Lysander (T)	Onondaga	0.951 MGD	1.743 MGD
788	Onondaga County Water Authority - Otisco	Marcellus (T)	Onondaga	17.584 MGD	20.893 MGD
789	Syracuse, City	Skaneateles (T)	Onondaga	35.51 MGD	37.85 MGD
790	Tre-G Farms, LLC	Pompey (T)	Onondaga	10000 GPD	12000 GPD
791	Hafner, LLC	Lysander (T)	Onondaga	770.96 GPD	44100 GPD
792	Pine Grove Health and Country Club	Camillus (T)	Onondaga	45600 GPD	68400 GPD
793	Marshall Skiff Orchards	Onondaga (T)	Onondaga	63000 GPD	70000 GPD
794	Four Seasons Ski Center	Manlius (T)	Onondaga	90000 GPD	110000 GPD
795	Beak & Skiff Apple Farms	Onondaga (T)	Onondaga	126000 GPD	126000 GPD
796	Twin Birch Dairy LLC	Skaneateles (T)	Onondaga	123341 GPD	132645 GPD
797	Saunders - Nedrow Plant	Onondaga (T)	Onondaga	20042 GPD	144000 GPD
798	West Hill Golf Course	Camillus (T)	Onondaga	144000 GPD	144000 GPD
799	Arrowhead Golf Club	Cicero (T)	Onondaga	92076 GPD	243000 GPD
800	Omega Wire - Jordan	Elbridge (T)	Onondaga	179000 GPD	291000 GPD

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#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W	Units_Ave_Max_Day	Units_Max
801	Skaneateles Country Club	Skaneateles (T)	Onondaga	90715	GPD	299391 GPD
802	Kinsella - Fayetteville Quarry	Manlius (T)	Onondaga	142000	GPD	400000 GPD
803	Emmi & Sons Inc	Lysander (T)	Onondaga	139751.33	GPD	418415 GPD
804	Saunders - South Onondaga	Onondaga (T)	Onondaga	205185	GPD	432000 GPD
805	Cranesville - Tully Pit	Tully (T)	Onondaga	456000	GPD	456000 GPD
806	Lockheed Martin Corp.	Salina (T)	Onondaga	304827	GPD	469028 GPD
807	Kinsella - Barber Walters Pit	Pompey (T)	Onondaga	336000	GPD	500000 GPD
808	Saunders - Marcellus Plant	Camillus (T)	Onondaga	520000	GPD	576000 GPD
809	Clinton's Ditch Cooperative Co., Inc.	Cicero (T)	Onondaga	447900	GPD	727000 GPD
810	Onondaga Golf and Country Club	Dewitt (T)	Onondaga	6986	GPD	971000 GPD
811	Toggenburgh Mountain	Fabius (T)	Onondaga	447386	GPD	5443200 GPD
812	Cavalry Veterans of Syracuse Golf Club	Manlius (T)	Onondaga	42390	GPD	
813	Hourigan Dairy Farm	Elbridge (T)	Onondaga	35000	GPD	
814	Reeves Farms	Lysander (T)	Onondaga	0.075	MGD	
815	Hanson Aggregates - Phelps	Phelps (T)	Ontario	0	GPD	0 GPD
816	Rushville, Vg	Gorham (T)	Ontario	0.11	MGD	0.234 MGD
817	Hanson Aggregates - Phelps Sand & Gravel	Phelps (T)	Ontario	0.232	MGD	0.528 MGD
818	Hanson Aggregates - Victor	Victor (T)	Ontario	0.232	MGD	0.528 MGD
819	Gorham, Tn	Gorham (T)	Ontario	0.414	MGD	0.842 MGD
820	Geneva, City	Geneva (T)	Ontario	1.87	MGD	3.171 MGD
821	Newark, Vg	Canandaigua (T)	Ontario	3.06	MGD	4.272 MGD
822	Hanson Aggregates - Oaks Corners Quarry	Phelps (T)	Ontario	2.87	MGD	4.4 MGD
823	Bristol Mountain	South Bristol (T)	Ontario	0.45	MGD	10.08 MGD
824	Rochester, City	Canadice (T)	Ontario	36.6	MGD	40.26 MGD
825	Champion Hills Country Club	Victor (T)	Ontario	80	GPM	100 GPM
826	Great Lake Kraut	Manchester (T)	Ontario	19750	GPD	48420 GPD
827	Parkview Fairways Golf Course	East Bloomfield (T)	Ontario	17925	GPD	85500 GPD
828	Canandaigua Country Club	Canandaigua (T)	Ontario	70000	GPD	90000 GPD
829	Willocrest Farms	Manchester (T)	Ontario	81917	GPD	91437 GPD
830	El-Vi Farms	Phelps (T)	Ontario	105674	GPD	113000 GPD
831	Willow Bend Farm	Manchester (T)	Ontario	34699	GPD	153130 GPD
832	Hemdale Farms	Seneca (T)	Ontario	4841	GPD	200000 GPD
833	Centerpointe Golf Course	Canandaigua (T)	Ontario	20143	GPD	210000 GPD
834	Hansen Farms	Seneca (T)	Ontario	8285	GPD	216000 GPD
835	Victor Hills Golf Club	Victor (T)	Ontario	256320	GPD	256320 GPD
836	Pedersen Farms	Seneca (T)	Ontario	75000	GPD	270000 GPD
837	Naples, Vg	Naples (T)	Ontario	250000	GPD	275000 GPD
838	Clifton Springs Country Club	Hopewell	Ontario	95000	GPD	325000 GPD
839	Cobblestone Creek Country Club	Victor (T)	Ontario	67900	GPD	375000 GPD
840	Ravenwood Golf Club	Victor (T)	Ontario	141441	GPD	400000 GPD
841	Elam Sand & Gravel - West Bloomfield	West Bloomfield (T)	Ontario	292213	GPD	546840 GPD
842	Palmyra, Vg	Canandaigua (T)	Ontario	370300	GPD	605900 GPD
843	Elam Sand & Gravel - Oaks Corners	Phelps (T)	Ontario	324072	GPD	620496 GPD
844	Syracuse - Lake Road Pit	Phelps (T)	Ontario	1920000	GPD	1920000 GPD
845	Bloomfield, Vg	East Bloomfield (T)	Ontario	155510	GPD	
846	Dolomite Products - Manchester Quarry	Manchester (T)	Ontario	1.99	MGD	
847	Dolomite Products - Mendon Sand & Gravel	West Bloomfield (T)	Ontario	0.139	MGD	
848	Hunt Hollow Ski Club	Naples (T)	Ontario	0.517	MGD	
849	Reservoir Creek Golf Course	Naples (T)	Ontario			
850	Spring Hope Dairy	Hopewell (T)	Ontario	59579	GPD	GPD
851	Cavallaro Farms	Goshen (T)	Orange	0	GPD	0 GPD
852	Wickham Village Water District	Warwick (T)	Orange	0.00778	MGD	0.01605 MGD
853	Blooming Grove Water District #2, Oxford	Blooming Grove (T)	Orange	0.01	MGD	0.02 MGD
854	Blooming Grove Water District #3, Tomahav	Blooming Grove (T)	Orange	0.011	MGD	0.034 MGD
855	Amdur Park, Woodbury Water District #6	Woodbury (T)	Orange	0.014	MGD	0.036 MGD
856	Blooming Grove Water District #5, Mountair	Blooming Grove (T)	Orange	0.021	MGD	0.04 MGD
857	Blooming Grove Water District #4, Tappan	Blooming Grove (T)	Orange	0.031	MGD	0.057 MGD
858	Highland Lake Estates	Woodbury (T)	Orange	0.0385	MGD	0.088 MGD
859	Lake Tiorati Water Supply	Tuxedo (T)	Orange	0.017	MGD	0.115 MGD
860	Dagele Bros Produce	Warwick (T)	Orange	0.05	MGD	0.12 MGD
861	Davandjer Farms	Warwick (T)	Orange	0.05	MGD	0.12 MGD
862	Bear Mountain Water Supply	Highlands (T)	Orange	0.156	MGD	0.242 MGD
863	Blooming Grove Water District #1	Blooming Grove (T)	Orange	0.25	MGD	0.299 MGD
864	Crist Bros Orchards	Montgomery (T)	Orange	0.049	MGD	0.31 MGD
865	Pine Bush Water District	Crawford (T)	Orange	0.155	MGD	0.332 MGD
866	Montgomery, Vg	Montgomery (T)	Orange	0.263	MGD	0.377 MGD
867	Maybrook, Vg	Hamptonburgh (T)	Orange	0.195	MGD	0.5 MGD
868	Greenwood Lake, Vg	Warwick (T)	Orange	0.32	MGD	0.519 MGD
869	Highland Falls, Vg	Highlands (T)	Orange	0.435	MGD	0.6 MGD
870	Harriman, Vg	Monroe (T)	Orange	0.451	MGD	0.734 MGD
871	Florida, Vg	Chester (T)	Orange	0.468	MGD	0.743 MGD
872	Chester, Vg	Chester (T)	Orange	445000	GPD	0.772 MGD
873	Tuxedo Park, Vg	Tuxedo (T)	Orange	0.3442	MGD	0.812 MGD
874	Hoefner Farms - Montgomery	Montgomery (T)	Orange	600000	GPD	1.02 MGD
875	Dutchess Quarry & Supply Co - Goshen	Goshen (T)	Orange	102439	GPD	1.08 MGD
876	Goshen, Vg	Goshen (T)	Orange	0.828	MGD	1.173 MGD
877	Port Jervis, City	Port Jervis (C)	Orange	0.7	MGD	1.2 MGD
878	Walden, Vg	Montgomery (T)	Orange	0.71	MGD	1.3 MGD
879	Woodbury, Vg	Woodbury (T)	Orange	0.94	MGD	1.48 MGD
880	Kiryas Joel, Vg	Monroe (T)	Orange	1.57	MGD	2.16 MGD

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881	West Point - Stoney Lonesome	Highlands (T)	Orange	1.22 MGD		2.56 MGD
882	Newburgh Consolidated Water District	Newburgh (T)	Orange	0.63 MGD		2.74 MGD
883	West Point - Lusk	Highlands (T)	Orange	2.03 MGD		2.82 MGD
884	Wallkill Water District #1	Wallkill (T)	Orange	2.43 MGD		3.8 MGD
885	Cromwell Hill Commons	Monroe (T)	Orange	9 GPM		13 GPM
886	Myruski Farms Inc	Goshen (T)	Orange	70 GPM		70 GPM
887	Tetz & Sons - Phillipsburg	Wallkill (T)	Orange	150 GPD		150 GPD
888	Morgiewicz Produce	Warwick (T)	Orange	3500 GPD		300 GPM
889	Danskammer Generating	Newburgh (T)	Orange	278.8 MGD		455.04 MGD
890	Madura Farm	Warwick (T)	Orange	300 GPD		500 GPD
891	Jones Farm	Cornwall (T)	Orange	250 GPM		740 GPM
892	Roseton Generating Station	Newburgh (T)	Orange	340.54 MGD		794.4 MGD
893	Eastern Alloys	Montgomery (T)	Orange	226 GPD		1763 GPD
894	Rogowski Farm	Warwick (T)	Orange	250 GPD		2500 GPD
895	J Glebocki Farms	Goshen (T)	Orange	2500 GPD		3000 GPD
896	West Point - Transportation Pool	Highlands (T)	Orange	1125 GPD		5200 GPD
897	Corbin Hills Water Supply	Highlands (T)	Orange	9412 GPD		12500 GPD
898	Whitlock Farms Water Co.	Wallkill (T)	Orange	11200 GPD		16800 GPD
899	Ridgebury Lake Water District	Wawayanda (T)	Orange	17172 GPD		41100 GPD
900	New Vernon Water Co	Mount Hope (T)	Orange	15736 GPD		44600 GPD
901	Westbrook Water Corp	Deerpark (T)	Orange	22265 GPD		56400 GPD
902	Robinn Meadows Water Company	Wawayanda (T)	Orange	22626 GPD		59600 GPD
903	Huguenot Estates East	Deerpark (T)	Orange	46462 GPD		63200 GPD
904	Coleman Ditch	Warwick (T)	Orange	394 GPD		72000 GPD
905	Lake Vue Park Water District	Montgomery (T)	Orange	11000 GPD		73000 GPD
906	Fleurchem Inc	Middletown (C)	Orange	39195 GPD		78390 GPD
907	Country Crossing	Woodbury (T)	Orange	16663 GPD		83000 GPD
908	Sugar Loaf Hills	Chester (T)	Orange	50433 GPD		102000 GPD
909	Kings Estates (Warwick Water Corp)	Warwick (T)	Orange	70024 GPD		107000 GPD
910	Greenwood Lake, West Side #1	Warwick (T)	Orange	103500 GPD		125600 GPD
911	Lake Hill Farms Water District	Chester (T)	Orange	79834 GPD		133000 GPD
912	Surrey Meadows Water District	Chester (T)	Orange	52925 GPD		144000 GPD
913	Tuxedo Club	Tuxedo (T)	Orange			150000 GPD
914	Orange County Golf Club	Wallkill (T)	Orange	100000 GPD		180000 GPD
915	JCI Jones Chemicals - Warwick	Warwick (T)	Orange	143000 GPD		187000 GPD
916	Powelton Club	Newburgh (T)	Orange	62085 GPD		193065 GPD
917	Wallkill Golf Club	Wallkill (T)	Orange	24199 GPD		216095 GPD
918	Mansion Ridge Golf Club	Monroe	Orange	185000 GPD		270000 GPD
919	Montgomery Water District #1	Montgomery (T)	Orange	32000 GPD		302000 GPD
920	West Point - Camp Buckner	Highlands (T)	Orange	97175 GPD		328000 GPD
921	Highland Sand & Gravel	Woodbury (T)	Orange	280000 GPD		350000 GPD
922	Mid-Orange Correctional Facility	Warwick (T)	Orange	162604 GPD		403200 GPD
923	Otisville, Vg	Mount Hope (T)	Orange	213981 GPD		407400 GPD
924	Mount Peter Ski Area	Warwick (T)	Orange	144000 GPD		576000 GPD
925	Wiecek Well (Zangrillo)	Goshen (T)	Orange	576000 GPD		576000 GPD
926	DeBuck's Sod Farm	Warwick (T)	Orange	390000 GPD		1000000 GPD
927	Pine Island Turf Nursery, Inc.	Warwick (T)	Orange	20000 GPD		1000000 GPD
928	Monroe, Vg	Monroe (T)	Orange	874436 GPD		1325599 GPD
929	Warwick, Vg	Warwick (T)	Orange	710356 GPD		1361000 GPD
930	Middletown, City	Wallkill (T)	Orange	2620521 GPD		3178000 GPD
931	Newburgh, City	New Windsor (T)	Orange	4926000 GPD		6514000 GPD
932	Horizon Heights (Monroe Water District #1)	Monroe (T)	Orange			
933	Jados Farms	Warwick (T)	Orange			
934	Joseph Sidoti	Warwick (T)	Orange			
935	Monroe Hills Water District	Monroe (T)	Orange			
936	Pasquale Sidoti	Warwick (T)	Orange			
937	Shuback Farms	Warwick (T)	Orange			
938	Unionville, Vg	Minisink (T)	Orange			
939	Lyndonville, Vg	Yates (T)	Orleans	37959 GPD		
940	James Piedimonte & Sons	Murray (T)	Orleans	0.193 MGD		0.408 MGD
941	Hanson Aggregates - Clarendon Quarry	Clarendon (T)	Orleans	39600 GPD		1.6 MGD
942	Albion, Vg	Carlton (T)	Orleans	1.19 MGD		2.1 MGD
943	Barre Stone Products	Barre (T)	Orleans	1.48 MGD		2.27 MGD
944	Ledge Rock Farms LLC	Shelby (T)	Orleans	3.9 MGD		6.6 MGD
945	Sun Rich Farms	Barre (T)	Orleans	556 GPD		7000 GPM
946	Root Bros. Farms	Barre (T)	Orleans	27019 GPD		30926 GPD
947	K & W Enterprises	Barre (T)	Orleans	36819 GPD		325800 GPD
948	Shelridge Country Club	Gaines (T)	Orleans	363000 GPD		363000 GPD
949	Torrey Farms Inc.	Ridgeway (T)	Orleans	104350 GPD		432000 GPD
950	Panek Farms, LLC	Barre (T)	Orleans	1243000 GPD		1728000 GPD
951	Hanson Aggregates - Lacona North	Albion (T)	Orleans	51325 GPD		2715000 GPD
952	Hanson Aggregates - Lacona South	Sandy Creek (T)	Oswego	0 GPD		0 GPD
953	Syracuse - Fulton Office	Sandy Creek (T)	Oswego	0 GPD		0 GPD
954	Syracuse - Hastings Main	Volney (T)	Oswego	0 GPD		0 GPD
955	Sandy Creek & Lacona Joint Water Works	Hastings (T)	Oswego	0 GPD		0 GPD
956	Huhtamaki Inc	Sandy Creek (T)	Oswego	0.17 MGD		0.28 MGD
957	Novelis Corporation	Fulton (C)	Oswego	220440 GPD		0.857 MGD
958	Interface Solutions, Inc - Fulton	Scriba (T)	Oswego	0.534 MGD		2 MGD
959	Oneida Fish Hatchery	Volney (T)	Oswego	0.975 MGD		2.17 MGD
960	Fulton City Water Works	Constantia (T)	Oswego	1 MGD		2.3 MGD
		Volney (T)	Oswego	1.29 MGD		2.97 MGD

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961	Salmon River Hatchery	Albion (T)	Oswego	7.7 MGD	7.7 MGD	
962	Oswego County Energy Recovery Facility	Volney (T)	Oswego	8.25 MGD	14 MGD	
963	Oswego, City	Oswego (C)	Oswego	7.85 MGD	14.091 MGD	
964	Metropolitan Water Board	Oswego (T)	Oswego	19.564 MGD	40.17 MGD	
965	Oswego Harbor Power	Oswego (C)	Oswego	167.7 MGD	364.21 MGD	
966	Nine Mile Point Nuclear Station	Scriba (T)	Oswego	401.1 MGD	457.1 MGD	
967	James A. Fitzpatrick Nuclear Power Plant	Scriba (T)	Oswego	543 MGD	596 MGD	
968	Sorbello & Sons	Granby (T)	Oswego	5000 GPD	5000 GPD	
969	Grindstone Farm	Richland (T)	Oswego	5000 GPD	60000 GPD	
970	Oswego Country Club	Oswego (C)	Oswego	10500 GPD	215000 GPD	
971	Richland Water District #1 & #2	Richland (T)	Oswego	169264 GPD	289227 GPD	
972	Battle Island Golf	Granby (T)	Oswego	101342 GPD	338350 GPD	
973	Phoenix, Vg	Schroepel (T)	Oswego	251504 GPD	548310 GPD	
974	Mexico, Vg	Mexico (T)	Oswego	372833 GPD	590200 GPD	
975	Omega Wire - Williamstown	Williamstown (T)	Oswego	404000 GPD	612000 GPD	
976	Syracuse - Granby Pit	Granby (T)	Oswego	720000 GPD	720000 GPD	
977	Bieler Enterprises	Williamstown (T)	Oswego	698512.5 GPD	1259000 GPD	
978	North Country Concrete	Constantia (T)	Oswego	1320000 GPD	1320000 GPD	
979	Northern Aggregates - Fulton	Volney (T)	Oswego	1620000 GPD	1620000 GPD	
980	Hopkinson Farms	Williamstown (T)	Oswego	360000 GPD		
981	Pulaski, Vg	Richland (T)	Oswego			
982	Richfield Springs, Vg	Springfield (T)	Otsego	0.13 MGD	0.221 MGD	
983	Oneonta, City	Oneonta (T)	Otsego	1.69 MGD	2.09 MGD	
984	Meadows	Middlefield (T)	Otsego	16300 GPD	18600 GPD	
985	Otsego Manor	Otsego (T)	Otsego	17312 GPD	25364 GPD	
986	Laurens, Vg	Laurens (T)	Otsego	18078 GPD	30000 GPD	
987	Cobleskill Stone Products - Broe Pit	Milford (T)	Otsego	36000 GPD	36000 GPD	
988	Darin Hickling	Edmeston (T)	Otsego	30300 GPD	40320 GPD	
989	Maryland Water District	Maryland (T)	Otsego	39392 GPD	54000 GPD	
990	Woodland Water District	Oneonta (T)	Otsego	19060 GPD	57100 GPD	
991	Gilbertsville, Vg	Butternuts (T)	Otsego		97000 GPD	
992	Cherry Valley, Vg	Cherry Valley (T)	Otsego	45359 GPD	102000 GPD	
993	Otego, Vg	Otego (T)	Otsego	78400 GPD	126000 GPD	
994	Morris, Vg	Morris (T)	Otsego	59333 GPD	147000 GPD	
995	Milford, Vg	Milford (T)	Otsego	94000 GPD	152000 GPD	
996	Worcester Water District #2	Worcester (T)	Otsego	70110 GPD	204900 GPD	
997	Leatherstocking Golf Course	Otsego (T)	Otsego	314741 GPD	384500 GPD	
998	Unadilla, Vg	Unadilla (T)	Otsego	161000 GPD	385000 GPD	
999	Cooperstown, Vg	Otsego (T)	Otsego	553900 GPD	991000 GPD	
1000	Peckham - Putnam Materials Corp.	Patterson (T)	Putnam	0.135 MGD	0.169 MGD	
1001	Watchtower Bible and Tract Society	Patterson (T)	Putnam	0.097 MGD	0.213 MGD	
1002	Carmel Water District #2	Carmel (T)	Putnam	0.85 MGD	1.5 MGD	
1003	Carmel Water District #9	Carmel (T)	Putnam	31.6 GPM	38.7 GPM	
1004	Carmel Water District #8	Carmel (T)	Putnam	207 GPM	257 GPM	
1005	Fox Hill Estates	Southeast (T)	Putnam	2748 GPD	9640 GPD	
1006	Mountain Brook Water District	Southeast (T)	Putnam	2502 GPD	10700 GPD	
1007	Starr Ridge Manor Water District	Southeast (T)	Putnam	8015 GPD	33710 GPD	
1008	Springhouse Estates	Southeast (T)	Putnam	13390 GPD	33770 GPD	
1009	Hillcrest Water District (Southeast, Tn)	Southeast (T)	Putnam	21895 GPD	48770 GPD	
1010	Blackberry Hill Water District	Southeast (T)	Putnam	41101 GPD	64430 GPD	
1011	Brewster Heights	Southeast (T)	Putnam	41101 GPD	64430 GPD	
1012	Carmel Water District #3	Carmel (T)	Putnam	98420 GPD	129345 GPD	
1013	Brewster, Vg	Southeast (T)	Putnam	202000 GPD	213510 GPD	
1014	Garrison Golf Club	Philipstown (T)	Putnam	123120 GPD	246240 GPD	
1015	Back O'Beyond	Southeast (T)	Putnam	41318 GPD	275000 GPD	
1016	Mahopac Golf Club	Carmel (T)	Putnam	22091 GPD	366742 GPD	
1017	Centennial Golf Club	Carmel (T)	Putnam	36784 GPD	385000 GPD	
1018	Brewster Heights - Middle Branch	Southeast (T)	Putnam	92600 GPD		
1019	Astoria Generating Station	Queens (T)	Queens	455.6 MGD	723.7 MGD	
1020	Ravenswood Generating Station	Queens (T)	Queens	512.9 MGD	1390 MGD	
1021	New York City DEP Wells	Queens (T)	Queens			
1022	Castleton, Vg	Schodack (T)	Rensselaer	0.153 MGD	0.238 MGD	
1023	Castleton Power	Schodack (T)	Rensselaer	81630 GPD	0.286 MGD	
1024	Peckham - William E. Dailey Inc.	Hoosick (T)	Rensselaer	0.6 MGD	0.6 MGD	
1025	Interface Solutions, Inc - Hoosick Falls	Hoosick (T)	Rensselaer	0.3166 MGD	0.672 MGD	
1026	AMRI Rensselaer	Rensselaer (C)	Rensselaer	0.835 MGD	1.613 MGD	
1027	Warren W Fane - Wynantskill Pit	North Greenbush (T)	Rensselaer	1.5 MGD	3.5 MGD	
1028	Troy, City - John P. Buckley WTP	Pittstown (T)	Rensselaer	18.49 MGD	27.84 MGD	
1029	Oak-Mitsui	Hoosick (T)	Rensselaer	553 GPD	669 GPD	
1030	Warren W Fane	Schaghticoke (T)	Rensselaer	1710 GPM	1810 GPM	
1031	Evergreen Farm	Petersburg (T)	Rensselaer	13526 GPD	15256 GPD	
1032	Swartz Dairy and Produce LLC	Schodack (T)	Rensselaer	45000 GPD	45000 GPD	
1033	Schodack Water District #1	Schodack (T)	Rensselaer	38685 GPD	98416 GPD	
1034	Nassau, Vg	Nassau (T)	Rensselaer	149650 GPD	249000 GPD	
1035	Hampton Manor / Hillview Water District #4	East Greenbush (T)	Rensselaer	130000 GPD	250000 GPD	
1036	Troy Country Club	Brunswick (T)	Rensselaer	51795 GPD	325000 GPD	
1037	Bonded Concrete - Cammarota Pit	Schaghticoke (T)	Rensselaer	207000 GPD	360000 GPD	
1038	Bonded Concrete - Nassau Quarry	Nassau (T)	Rensselaer	207000 GPD	360000 GPD	
1039	Bonded Concrete - Weir Sand & Gravel Min	Schaghticoke (T)	Rensselaer	207000 GPD	360000 GPD	
1040	Polaro	Poestenkill (T)	Rensselaer	207000 GPD	360000 GPD	

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1041	Hoosick Falls, Vg	Hoosick (T)	Rensselaer	441419 GPD	670616 GPD
1042	Bonded Concrete - West Sand Lake Pit	Sand Lake (T)	Rensselaer	450000 GPD	780000 GPD
1043	Schodack Water District #9	Schodack (T)	Rensselaer	144283 GPD	1214000 GPD
1044	Callanan - Cropseyville Site	Brunswick (T)	Rensselaer	899724 GPD	2209018 GPD
1045	Arthur Kill Generating Station	Richmond (T)	Richmond	480 MGD	712.8 MGD
1046	South Shore Golf Course	Richmond (T)	Richmond	42245 GPD	155116 GPD
1047	Tilcon - Suffern Quarry	Ramapo (T)	Rockland	0 GPD	0 GPD
1048	Tilcon - Tomkins Cove Quarry	Stony Point (T)	Rockland	0.1606 MGD	0.2915 MGD
1049	Tilcon - Haverstraw Quarry	Clarkstown (T)	Rockland	0.2342 MGD	0.4217 MGD
1050	Suffern, Vg	Ramapo (T)	Rockland	1.347 MGD	2.324 MGD
1051	Nyack, Vg	Clarkstown (T)	Rockland	1.9 MGD	2.5 MGD
1052	Tilcon - West Nyack Quarry	Clarkstown (T)	Rockland	0.993 MGD	2.712 MGD
1053	United Water New York	Ramapo (T)	Rockland	29.12 MGD	43.697 MGD
1054	Genon Bowline	Haverstraw (T)	Rockland	74.94 MGD	989.29 MGD
1055	Van Houten Farms	Orangetown (T)	Rockland	1200 GPD	3000 GPD
1056	PJ Rotella Memorial GC	Haverstraw (T)	Rockland	18120 GPD	155000 GPD
1057	New York Country Club	Ramapo (T)	Rockland		200000 GPD
1058	Manhattan Woods Golf Club	Orangetown (T)	Rockland	35773 GPD	460000 GPD
1059	Spook Rock Golf Course	Ramapo (T)	Rockland	252324 GPD	501276 GPD
1060	Wyeth Pharmaceuticals	Orangetown (T)	Rockland	1148708 GPD	3474669 GPD
1061	Rockland Country Club	Orangetown (T)	Rockland	2056745 GPD	7192075 GPD
1062	Hadley, Tn Water District #1	Hadley (T)	Saratoga	0.0353 MGD	0.125 MGD
1063	Hadley, Tn Water District #2	Hadley (T)	Saratoga	0.0471 MGD	0.15 MGD
1064	Peckham Materials - Greenfield	Greenfield (T)	Saratoga	0.42 MGD	0.42 MGD
1065	Pallette Stone - Saratoga Quarry	Saratoga Springs (C)	Saratoga	0.53976 MGD	0.7667 MGD
1066	Knolls Atomic Power Lab - Kesselring Site	Milton (T)	Saratoga	0.34 MGD	1.1 MGD
1067	South Glens Falls, Vg	Moreau (T)	Saratoga	0.59 MGD	1.25 MGD
1068	Pallette Stone - South Corinth	Corinth (T)	Saratoga	1.2 MGD	1.5 MGD
1069	Ballston Spa, Vg	Saratoga Springs (C)	Saratoga	0.87 MGD	1.804 MGD
1070	Clifton Park Water Authority	Clifton Park (T)	Saratoga	3.19 MGD	5.66 MGD
1071	Amsterdam, City	Providence (T)	Saratoga	5.6 MGD	7.1 MGD
1072	Saratoga Springs, City	Saratoga Springs (C)	Saratoga	4.128 MGD	8.373 MGD
1073	Mohawk Fine Papers - Waterford	Waterford (T)	Saratoga	9 MGD	9 MGD
1074	MPM Silicones, LLC	Waterford (T)	Saratoga	11.6 MGD	18 MGD
1075	Pomapa Bros. Inc. - Milton	Saratoga Springs (C)	Saratoga	4218 GPD	4219 GPD
1076	Barber Brothers	Northumberland (T)	Saratoga	29673 GPD	34070 GPD
1077	Kings Ransom Farm	Northumberland (T)	Saratoga	35110 GPD	39480 GPD
1078	Eagle Crest Golf Club	Clifton Park (T)	Saratoga	36000 GPD	89000 GPD
1079	Saratoga Golf and Polo Club	Saratoga Springs (C)	Saratoga	31000 GPD	110000 GPD
1080	Northwood Water Company	Malta (T)	Saratoga	94400 GPD	151000 GPD
1081	McGregor Country Club	Wilton (T)	Saratoga	62411 GPD	183000 GPD
1082	Mount McGregor Correctional Facility	Corinth (T)	Saratoga	72391 GPD	220846 GPD
1083	Airway Meadows Golf Course	Northumberland (T)	Saratoga	20834 GPD	300000 GPD
1084	Rowlands Hollow Water Works	Milton (T)	Saratoga	136000 GPD	304000 GPD
1085	Fairways of Halfmoon	Halfmoon (T)	Saratoga	155700 GPD	305000 GPD
1086	Van Patten Golf Club	Clifton Park (T)	Saratoga	13800	350000 GPD
1087	Heritage Springs Water Works	Milton (T)	Saratoga	184000 GPD	353000 GPD
1088	Ballston Spa Country Club	Milton (T)	Saratoga	100000 GPD	360000 GPD
1089	Bonded Concrete - Schultz Construction Min	Ballston (T)	Saratoga	207000 GPD	360000 GPD
1090	Mohawk River Golf Course	Clifton Park (T)	Saratoga		360000 GPD
1091	Saratoga National Golf Club	Saratoga Springs (C)	Saratoga	50000 GPD	400000 GPD
1092	Stillwater, Vg	Stillwater (T)	Saratoga	309718 GPD	404000 GPD
1093	Cranesville - Hudson Valley Sand & Stone	Wilton (T)	Saratoga	420000 GPD	420000 GPD
1094	Fort Edward, Vg	Moreau (T)	Saratoga	379545 GPD	607000 GPD
1095	Edison Club Golf Course	Clifton Park (T)	Saratoga	29939 GPD	760000 GPD
1096	Wilton Water and Sewer Authority	Wilton (T)	Saratoga	652000 GPD	1124000 GPD
1097	Mechanicville, City	Stillwater (T)	Saratoga	0.97 MGD	1176000 GPD
1098	Saratoga Sod Farm, Inc.	Stillwater (T)	Saratoga	122236 GPD	3168000 GPD
1099	Saratoga County Water Authority	Halfmoon (T)	Saratoga	2861130 GPD	7111450 GPD
1100	Galway Golf Club	Galway (T)	Saratoga	2314 GPD	GPD
1101	Saratoga Water Services, Inc	Malta (T)	Saratoga		
1102	GE - Global Research Center	Niskayuna (T)	Schenectady	0 GPM	0 GPM
1103	Niskayuna Consolidated Water District	Niskayuna (T)	Schenectady	1.4 MGD	1.7 MGD
1104	Knolls Atomic Power Lab - Knolls Site	Niskayuna (T)	Schenectady	3.5 MGD	3.9 MGD
1105	Schenectady, City	Rotterdam (T)	Schenectady	12.9 MGD	21 MGD
1106	GE - Schenectady	Rotterdam (T)	Schenectady	11 MGD	50 MGD
1107	Princetown, Tn	Princetown (T)	Schenectady	62711 GPD	180000 GPD
1108	Rotterdam, Tn - Main St	Rotterdam (T)	Schenectady	223560 GPD	377500 GPD
1109	Cranesville - Scotia Sand & Stone	Glenville (T)	Schenectady	456000 GPD	456000 GPD
1110	Adirondack Beverages	Glenville (T)	Schenectady	286254 GPD	539444 GPD
1111	Scotia Pumping Station	Glenville (T)	Schenectady	1236536 GPD	1627000 GPD
1112	SI Group	Rotterdam (T)	Schenectady	1728000 GPD	1728000 GPD
1113	Glenville, Tn	Glenville (T)	Schenectady	1717189 GPD	3074000 GPD
1114	Rotterdam, Tn - Rice Road	Rotterdam (T)	Schenectady	3.85 MGD	8885000 GPD
1115	Schoharie Quarry	Schoharie (T)	Schoharie	0.84 MGD	0.84 MGD
1116	Howes Cave Quarry	Cobleskill (T)	Schoharie	1.32 MGD	1.32 MGD
1117	Middleburg, Vg	Middleburg (T)	Schoharie	22167 GPD	300 GPM
1118	Central Bridge W.D.	Schoharie (T)	Schoharie	56000 GPD	109000 GPD
1119	Barber Family Farm	Fulton (T)	Schoharie	2071 GPD	126000 GPD
1120	Richmondville, Vg	Richmondville (T)	Schoharie	74380 GPD	127303 GPD

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1121	Schoharie Valley Farms	Schoharie (T)	Schoharie	986 GPD	180000 GPD
1122	Stamford, Vg	Jefferson (T)	Schoharie	132572 GPD	294113 GPD
1123	Schoharie, Vg	Schoharie (T)	Schoharie	134000 GPD	382000 GPD
1124	Sharon Springs, Vg	Sharon (T)	Schoharie	171000 GPD	432000 GPD
1125	Shaul Farms	Fulton (T)	Schoharie	474444 GPD	720000 GPD
1126	Cobleskill, Vg	Cobleskill (T)	Schoharie		
1127	Hanson Aggregates - Cayuta	Cayuta (T)	Schuyler	0 GPD	0 GPD
1128	Cargill Salt	Dix (T)	Schuyler	8.6 MGD	10.4 MGD
1129	US Salt LLC	Reading (T)	Schuyler	8.99 MGD	10.88 MGD
1130	Glenview Dairy	Montour (T)	Schuyler	20000 GPD	30000 GPD
1131	Seneca Valley Farm	Hector (T)	Schuyler	89822 GPD	96000 GPD
1132	Bergen Farms	Hector (T)	Schuyler	80000 GPD	130000 GPD
1133	Odessa, Vg	Catharine (T)	Schuyler	53090 GPD	209000 GPD
1134	Hector Water District	Hector (T)	Schuyler	112000 GPD	273000 GPD
1135	Montour Falls, Vg	Montour (T)	Schuyler	193000 GPD	662000 GPD
1136	Watkins Glen, Vg	Dix (T)	Schuyler	311372 GPD	767300 GPD
1137	Seneca Falls, Vg	Fayette (T)	Seneca	1.1 MGD	1.5 MGD
1138	Waterloo, Vg	Fayette (T)	Seneca	1.325 MGD	2.826
1139	Evans Chemetics LP	Waterloo (T)	Seneca	4.5 MGD	6.3 MGD
1140	Clinton Erie Associates, Inc.	Tyre (T)	Seneca	15 MGD	15 MGD
1141	Ovid, Vg	Ovid (T)	Seneca	69716 GPD	101000 GPD
1142	Interlaken, Vg	Covert (T)	Seneca	55244 GPD	117000 GPD
1143	Willard Drug Treatment Campus	Romulus (T)	Seneca	195100 GPD	347000 GPD
1144	Seneca Falls Country Club	Seneca Falls (T)	Seneca	30186 GPD	350000 GPD
1145	Graymont Materials - Parishville Plant	Potsdam (T)	St. Lawrence	0 GPD	0 GPD
1146	Newton Falls Fine Paper Company, LLC	Clifton (T)	St. Lawrence	0	0
1147	RT Vanderbilt Co, Inc - Gouverneur Mineral	Fowler (T)	St. Lawrence	0.033 MGD	0.046 MGD
1148	Parishville Water District #1	Parishville (T)	St. Lawrence	0.045 MGD	0.08 MGD
1149	Waddington, Vg	Waddington (T)	St. Lawrence	0.06 MGD	0.126 MGD
1150	Madrid Water District #1	Madrid (T)	St. Lawrence	0.054 MGD	0.133 MGD
1151	APC Paper Company of New York	Norfolk (T)	St. Lawrence	0.194 MGD	0.38 MGD
1152	Balmat Mines	Fowler (T)	St. Lawrence	0.37 MGD	0.53 MGD
1153	Hanson Aggregates - Ogdensburg Quarry	Oswegatchie (T)	St. Lawrence	0.335 MGD	0.556 MGD
1154	Former GM Powertrain Facility	Massena (T)	St. Lawrence	0.057 MGD	0.64 MGD
1155	Alcoa East Plant Intake (Reynolds Metals)	Massena (T)	St. Lawrence	0.48 MGD	0.7 MGD
1156	Canton, Vg	Pierrepont (T)	St. Lawrence	0.55 MGD	0.74 MGD
1157	Gouverneur, Vg	Gouverneur (T)	St. Lawrence	0.6451 MGD	1.0824 MGD
1158	Massena, Vg	Massena (T)	St. Lawrence	1.2 MGD	1.7 MGD
1159	Potsdam Specialty Paper Inc.	Potsdam (T)	St. Lawrence	1.11 MGD	1.93 MGD
1160	Cellu Tissue - Natural Dam	Gouverneur (T)	St. Lawrence	1.556 MGD	2.537 MGD
1161	Massena Intake	Massena (T)	St. Lawrence	2.2 MGD	2.7 MGD
1162	Ogdensburg, City	Ogdensburg (C)	St. Lawrence	2.04 MGD	5 MGD
1163	Barrett - Norwood Quarry	Norfolk (T)	St. Lawrence	2.23 MGD	6.82 MGD
1164	Potsdam Town & Country Club	Potsdam (T)	St. Lawrence	300 GPM	900 GPM
1165	Losurdo Foods	Oswegatchie (T)	St. Lawrence	22000 GPD	28000 GPD
1166	Corning Inc - Canton Plant	Dekalb (T)	St. Lawrence	19152 GPD	42027 GPD
1167	Greenwood Dairy Farm	Potsdam (T)	St. Lawrence	19679 GPD	57000 GPD
1168	Stauffer Farms LLC	Lawrence (T)	St. Lawrence	50000 GPD	60000 GPD
1169	St. Lawrence University Golf Course	Canton (T)	St. Lawrence	51346 GPD	75000 GPD
1170	Colton Water District	Colton (T)	St. Lawrence	48000 GPD	98000 GPD
1171	Hermon, Vg	Russell (T)	St. Lawrence	100000 GPD	100000 GPD
1172	St. Lawrence/FDR Power Project	Massena (T)	St. Lawrence	79278 MGD	108686 MGD
1173	River Breeze Farm	Waddington (T)	St. Lawrence	62567 GPD	108866 GPD
1174	Mapleview Dairy	Madrid (T)	St. Lawrence	105794 GPD	114166 GPD
1175	St. Lawrence University	Canton (T)	St. Lawrence	62462 GPD	116949 GPD
1176	Star Lake Water District	Fine (T)	St. Lawrence	82520 GPD	148900 GPD
1177	Piercefield Water District	Piercefield (T)	St. Lawrence	14367 GPD	169920 GPD
1178	Heuvelton, Vg	Oswegatchie (T)	St. Lawrence	118000 GPD	215000 GPD
1179	North Country Dairy, LLC	Lawrence (T)	St. Lawrence	389550 GPD	787600 GPD
1180	Potsdam, Vg	Potsdam (T)	St. Lawrence	1048400 GPD	1673000 GPD
1181	AG Energy (Ogdensburg Energy)	Ogdensburg (C)	St. Lawrence		
1182	Hanson Aggregates - Kanona Sand & Gravel	Bath (T)	Steuben	0 GPD	0 GPD
1183	Syracuse - Gang Mills	Erwin (T)	Steuben	0 GPD	0 GPD
1184	Savona, Vg	Bath (T)	Steuben	0.0345 MGD	0.225 MGD
1185	Corning, Tn - Gibson Water District	Corning (T)	Steuben	0.032 MGD	0.262 MGD
1186	Painted Post, Vg	Erwin (T)	Steuben	0.18 MGD	0.619 MGD
1187	Canisteo, Vg	Canisteo (T)	Steuben	0.37 MGD	0.983 MGD
1188	Kraft Foods Global - Campbell	Campbell (T)	Steuben	0.742 MGD	1.1 MGD
1189	Erwin, Tn	Campbell (T)	Steuben	0.865 MGD	1.411 MGD
1190	Bath, Vg	Bath (T)	Steuben	0.946 MGD	2.05 MGD
1191	Corning Inc	Corning (C)	Steuben	1.35 MGD	2.36 MGD
1192	Bath Fish Hatchery	Urbana (T)	Steuben	2.13 MGD	2.56 MGD
1193	Hanson Aggregates - Bath Sand & Gravel	Bath (T)	Steuben	1750 GPD	9306 GPD
1194	Dolomite Products - Blades Bath	Bath (T)	Steuben	8000 GPD	25480 GPD
1195	Damin Farm, LLC	Prattsburg (T)	Steuben	40242 GPD	46060 GPD
1196	Mehlenbacher Farms Inc	Wayland (T)	Steuben	19452 GPD	63333 GPD
1197	Campbell, Tn	Campbell (T)	Steuben	17758.68 GPD	66134 GPD
1198	North Cohocton Water District	Cohocton (T)	Steuben	29000 GPD	76000 GPD
1199	Cohocton, Vg	Cohocton (T)	Steuben	70877 GPD	80000 GPD
1200	Arkport, Vg	Hornellsville (T)	Steuben	95340 GPD	100000 GPD

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1201	Avoca, Vg	Avoca (T)	Steuben	61669	GPD	115000 GPD
1202	Bath Veterans Administration	Bath (T)	Steuben	153903	GPD	203000 GPD
1203	Inergy Midstream	Bath (T)	Steuben	107800	GPD	203900 GPD
1204	Prattsburgh Water District	Prattsburgh (T)	Steuben	52438	GPD	250000 GPD
1205	HP Hood	Hornellsville (T)	Steuben	171520	GPD	343000 GPD
1206	Wayland, Vg	Wayland (T)	Steuben	350000	GPD	350000 GPD
1207	Hammondsport Water	Urbana (T)	Steuben	109372	GPD	444800 GPD
1208	Corning Country Club	Corning (T)	Steuben	31402	GPD	492000 GPD
1209	Corning Inc - Sullivan Park	Erwin (T)	Steuben	242523	GPD	689000 GPD
1210	Hoeffner Farms - Hornell	Fremont (T)	Steuben	594000	GPD	1188000
1211	Corning, City	Corning (C)	Steuben	1312660	GPD	1437000 GPD
1212	Elam Materials	Cohocton (T)	Steuben	930596	GPD	1440134 GPD
1213	World Kitchen - Pressware Plant	Corning (C)	Steuben	1654248	GPD	2912136 GPD
1214	Dolomite Products - Blades Howard	Howard (T)	Steuben	873000	GPD	3600000 GPD
1215	Hornell, City	Fremont (T)	Steuben	2358143	GPD	3806280 GPD
1216	Mahany, R&G	Dansville (T)	Steuben	1162170	GPD	6062400 GPD
1217	Joseph Meyer & Sons	Fremont (T)	Steuben			
1218	Corwith Farms	Southampton (T)	Suffolk	0	GPD	0 GPD
1219	Jane Kulesa	Riverhead (T)	Suffolk	0	GPD	0 GPD
1220	Walker McCall, LLC	Southold (T)	Suffolk	0	GPM	0 GPM
1221	Plum Island Animal Disease Center	Southold (T)	Suffolk	58156	GPD	0.183 MGD
1222	Edmund Densieski	Southampton (T)	Suffolk	0.3	MGD	1.5 MGD
1223	Ed Zilnicki Farm	Riverhead (T)	Suffolk	1.4	MGD	1.9 MGD
1224	Coram Materials Corp	Brookhaven (T)	Suffolk	2.16	MGD	2.16 MGD
1225	Walter Zilnicki	Riverhead (T)	Suffolk	1.25	MGD	2.3 MGD
1226	Martin Sidor Farms Inc	Southold (T)	Suffolk	6.72	MGD	6.72 MGD
1227	DeLea Sod Farms - MP	Huntington (T)	Suffolk	4680000	GPD	7 MGD
1228	Dankowski Farms	East Hampton (T)	Suffolk	1260	GPM	1260 GPM
1229	Colonial Springs Farms	Babylon (T)	Suffolk	4000	GPD	5000 GPD
1230	Pellegrini Vineyards	Southold (T)	Suffolk	212	GPD	6575 GPD
1231	Sommer Nurseries	Southampton (T)	Suffolk	12000	GPD	15000 GPD
1232	Reilly Vineyards, LLC	Southold (T)	Suffolk	45000	GPD	45000 GPD
1233	Van De Wetering Greenhouses Inc	Riverhead (T)	Suffolk	39840	GPD	65203 GPD
1234	Emma's Garden Growers	Southold (T)	Suffolk	15708	GPD	80000 GPD
1235	Frederick Malik Farm	Brookhaven (T)	Suffolk	40500	GPD	81000 GPD
1236	Martha Clara Vineyards Inc	Riverhead (T)	Suffolk	517	GPD	108000 GPD
1237	Deer Run Farms	Brookhaven (T)	Suffolk	30000	GPD	110000 GPD
1238	May's Farm	Riverhead (T)	Suffolk	9000	GPD	110000 GPD
1239	Three Ponds Farm	Southampton (T)	Suffolk	37859	GPD	112500 GPD
1240	Schlecht Nursery	Brookhaven (T)	Suffolk	59587	GPD	118800 GPD
1241	John Tuthill	Southold (T)	Suffolk			126000 GPD
1242	Golden Earthworm Organic Farm	Riverhead (T)	Suffolk	108000	GPD	144000 GPD
1243	John Condzella	Riverhead (T)	Suffolk	1627	GPD	150000 GPD
1244	Wowak Farms	Riverhead (T)	Suffolk	50000	GPD	150000 GPD
1245	Calverton Links	Riverhead (T)	Suffolk	90500	GPD	156666 GPD
1246	Borella's Farm	Smithtown (T)	Suffolk	90000	GPD	180000 GPD
1247	Ed Ruland & Son	Southold (T)	Suffolk	152308	GPD	180000 GPD
1248	Schmitt Farms - Roanoke Ave	Riverhead (T)	Suffolk	92476	GPD	190000 GPD
1249	Hamlet Willow Creek Country Club	Brookhaven (T)	Suffolk	105000	GPD	200000 GPD
1250	F & W Schmitts Farm	Huntington (T)	Suffolk	19726	GPD	240000 GPD
1251	F & W Schmitts Farm - Yaphank	Brookhaven (T)	Suffolk	19726	GPD	240000 GPD
1252	Kozak Farms	Riverhead (T)	Suffolk	168580	GPD	240000 GPD
1253	Satur Farms	Southold (T)	Suffolk	90000	GPD	240000 GPD
1254	Elak Farm	Southold (T)	Suffolk	180000	GPD	250000 GPD
1255	Country Gardens Nursery	Southampton (T)	Suffolk	28246	GPD	254400 GPD
1256	Meyers Farm	Riverhead (T)	Suffolk	25890	GPD	270000 GPD
1257	Ty Lloyd Farm	Riverhead (T)	Suffolk	140000	GPD	280000 GPD
1258	Perennial Charm Nursery	Southampton (T)	Suffolk	141666	GPD	288000 GPD
1259	Michael McKay Farms	Riverhead (T)	Suffolk	200000	GPD	300000 GPD
1260	Sep Farms - Southold	Southold (T)	Suffolk	142909	GPD	310000 GPD
1261	Ivy Acres Inc	Riverhead (T)	Suffolk	143940	GPD	315900 GPD
1262	W Polak Farms	Riverhead (T)	Suffolk	220000	GPD	327000 GPD
1263	Sep Farms - East Marion	Southold (T)	Suffolk	28953	GPD	336000 GPD
1264	St. George's Golf and Country Club	Brookhaven (T)	Suffolk	104138	GPD	355750 GPD
1265	Gajeski Produce	Riverhead (T)	Suffolk	35000	GPD	360000 GPD
1266	Wm Wickham Farm	Southold (T)	Suffolk	79500	GPD	360000 GPD
1267	Southword Ho Country Club	Islip (T)	Suffolk	75477	GPD	388000 GPD
1268	Bruno Farms	Brookhaven (T)	Suffolk	300000	GPD	400000 GPD
1269	Timber Point Golf Course	Islip (T)	Suffolk	100000	GPD	400000 GPD
1270	Peat & Son Nursery	Southampton (T)	Suffolk	92780	GPD	420000 GPD
1271	Schmitts Farm - Manor Lane	Riverhead (T)	Suffolk	1150	GPD	420000 GPD
1272	MKZ Farms	Riverhead (T)	Suffolk	26281	GPD	432000 GPD
1273	Briermere Farms	Riverhead (T)	Suffolk	373714	GPD	450000 GPD
1274	Davis Peach Farm North Orchard LLC	Riverhead (T)	Suffolk	300000	GPD	450000 GPD
1275	Shade Tree Nursery	Riverhead (T)	Suffolk	45084	GPD	450000 GPD
1276	Fred Terry Farms	Southold (T)	Suffolk	8575	GPD	480000 GPD
1277	Stonebridge Golf & Country Club	Smithtown (T)	Suffolk	360000	GPD	480000 GPD
1278	Wickham's Fruit Farm LLC	Southold (T)	Suffolk	30800	GPD	500000 GPD
1279	Kurt Weiss Greenhouses	Brookhaven (T)	Suffolk	171000	GPD	516666 GPD
1280	Half Hollow Nursery	Riverhead (T)	Suffolk	317000	GPD	675000 GPD

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#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W_Units	Ave_Max_Day_Units	Max_Units_Max
1281	Fedun Farms	Riverhead (T)	Suffolk	20000 GPD		684000 GPD
1282	Romanski Farms	Riverhead (T)	Suffolk	65205 GPD		700000 GPD
1283	Sujecks Farms	Riverhead (T)	Suffolk	400000 GPD		892000 GPD
1284	Anderson Farms	Riverhead (T)	Suffolk	325000 GPD		900000 GPD
1285	Wind Acres Farm	Riverhead (T)	Suffolk	176000 GPD		900000 GPD
1286	DeLea Sod Farm - Scorells	Huntington (T)	Suffolk	720000 GPD		960000 GPD
1287	Woodbourne Nursery	Huntington (T)	Suffolk	840000 GPD		1008000 GPD
1288	Greenlawn Sod Farms	Riverhead (T)	Suffolk	4500 GPD		1150000 GPD
1289	Richard M. Flynn	Brookhaven (T)	Suffolk	889750 GPD		1257100 GPD
1290	Karpinski Farms	Riverhead (T)	Suffolk	648000 GPD		1296000 GPD
1291	John Hartmann & Sons	Riverhead (T)	Suffolk	251112 GPD		1368000 GPD
1292	Frank McBride & Sons	Southold (T)	Suffolk	960000 GPD		1440000 GPD
1293	Hodun Farm	Riverhead (T)	Suffolk	1104000 GPD		1440000 GPD
1294	Lewin Farm	Riverhead (T)	Suffolk	750000 GPD		1440000 GPD
1295	Harbes Farm	Southold (T)	Suffolk	407934 GPD		1632000 GPD
1296	Zilnicki Farms	Riverhead (T)	Suffolk	1800000 GPD		1800000 GPD
1297	North Fork Nursery	Riverhead (T)	Suffolk	631233 GPD		1980000 GPD
1298	John Kujawski & Sons	Riverhead (T)	Suffolk	328000 GPD		2400000 GPD
1299	East Coast Nurseries	Riverhead (T)	Suffolk	290012 GPD		4270000 GPD
1300	DeLea Sod Farms - Aquabogue	Huntington (T)	Suffolk	3708000 GPD		4940000 GPD
1301	DeLea Sod Farms - Cal	Huntington (T)	Suffolk	3888000 GPD		5100000 GPD
1302	Roanoke Sand & Gravel	Brookhaven (T)	Suffolk	4307245 GPD		24843450 GPD
1303	Fosters Farm	Southampton (T)	Suffolk			
1304	Indian Island Golf Course	Riverhead (T)	Suffolk			
1305	Jacob Rottkamp & Son	Riverhead (T)	Suffolk	1.6 MGD		
1306	Laural Links Country Club	Southold (T)	Suffolk			
1307	Mill Road Farms	Riverhead (T)	Suffolk	250000 GPD		
1308	Pattys Berries & Bunches	Southold (T)	Suffolk			
1309	Round Swamp Farm	East Hampton (T)	Suffolk	40000 GPD		
1310	West Sayville	Islip (T)	Suffolk			
1311	Roscoe-Rockland Water District	Rockland (T)	Sullivan	0.092 MGD		0.207 MGD
1312	Woodbourne Correctional Facility	Fallsburg (T)	Sullivan	0.185 MGD		0.268 MGD
1313	Woodridge, Vg	Fallsburg (T)	Sullivan	0.323 MGD		0.407 MGD
1314	Livingston Manor Water	Rockland (T)	Sullivan	0.389 MGD		0.679 MGD
1315	Fallsburg-WHO-LS-SF	Fallsburg (T)	Sullivan	1.404 MGD		3.335 MGD
1316	New York City DEP	Neversink (T)	Sullivan	1078 MGD		1418 MGD
1317	Catskill State Fish Hatchery	Rockland (T)	Sullivan	2640 GPM		3000 GPM
1318	SH Water Company (Sackett Lake Estates)	Thompson (T)	Sullivan	3425 GPD		4903 GPD
1319	Camp Ohr Shalom	Fallsburg (T)	Sullivan	12000 GPD		12000 GPD
1320	Spring Glen Water Co	Mamakating (T)	Sullivan	9000 GPD		13500 GPD
1321	Cold Spring Water District	Thompson (T)	Sullivan	13582 GPD		40800 GPD
1322	Kinnebrook Mobile Home Park	Thompson (T)	Sullivan	54183 GPD		82600 GPD
1323	Tetz & Sons - Mongaup	Thompson (T)	Sullivan	97700 GPD		136000 GPD
1324	Kiamesha Artesian Spring Water	Thompson (T)	Sullivan	112500 GPD		136645 GPD
1325	Crystal Water Supply Co	Thompson (T)	Sullivan	86310 GPD		199300 GPD
1326	Mountaindale Water District	Fallsburg (T)	Sullivan	51740 GPD		213000 GPD
1327	White Sulphur Springs Water District	Liberty (T)	Sullivan	43000 GPD		218000 GPD
1328	Narrowsburg Water District	Tusten (T)	Sullivan	74681 GPD		229200 GPD
1329	Davos / Riverside Water System	Fallsburg (T)	Sullivan	65329 GPD		244000 GPD
1330	Lochmor Golf Course	Fallsburg (T)	Sullivan	21278 GPD		250000 GPD
1331	Callicoon Water Company	Delaware (T)	Sullivan	137764 GPD		298000 GPD
1332	Grossinger Country Club	Liberty (T)	Sullivan	17615 GPD		300000 GPD
1333	Tarry Brae Golf Course (South Fallsburgh)	Fallsburg (T)	Sullivan	27610 GPD		300000 GPD
1334	Wurtsboro, Vg	Mamakating (T)	Sullivan	204198 GPD		480800 GPD
1335	Stevensville Water District	Liberty (T)	Sullivan	285000 GPD		788000 GPD
1336	Liberty, Vg	Liberty (T)	Sullivan	667000 GPD		789000 GPD
1337	Emerald Green Louise Marie Water Co	Thompson (T)	Sullivan	434613 GPD		951399 GPD
1338	Callanan - Cochetcon Site	Cochectcon (T)	Sullivan	102438 GPD		1602000 GPD
1339	Callanan - Bridgeville Site	Thompson (T)	Sullivan	589953 GPD		3170376 GPD
1340	JD Water Company Inc	Bethel (T)	Sullivan			
1341	Jeffersonville, Vg	Callicoon (T)	Sullivan			
1342	Nichols, Tn	Nichols (T)	Tioga	4987 GPD		0.05 MGD
1343	Owego, Tn Water District #1	Owego (T)	Tioga	0.048 MGD		0.165 MGD
1344	Owego, Tn Water District #5 (RT 38)	Owego (T)	Tioga	0.049 MGD		0.187 MGD
1345	Marshland Links	Owego (T)	Tioga	0.18 MGD		0.21 MGD
1346	Owego, Tn Water District #2	Owego (T)	Tioga	0.196 MGD		0.363 MGD
1347	Owego, Tn Water District #4	Owego (T)	Tioga	0.154 MGD		0.368 MGD
1348	Owego, Tn Water District #3	Owego (T)	Tioga	0.104 MGD		0.424 MGD
1349	Former IBM - Owego	Owego (T)	Tioga	0.421 MGD		0.653 MGD
1350	Waverly, Vg	Barton (T)	Tioga			1.1 MGD
1351	United Water Nichols/Owego	Nichols (T)	Tioga	1.371 MGD		2.123 MGD
1352	AA Dairy	Candor (T)	Tioga	38500 GPD		41800 GPD
1353	Candor, Vg	Candor (T)	Tioga	107022 GPD		161000 GPD
1354	Newark Valley, Vg	Newark Valley (T)	Tioga	110924 GPD		324633 GPD
1355	Owego, Tn	Owego (T)	Tioga			
1356	Cornell University - Chilled Water Plant 1	Ithaca (C)	Tompkins	0		0
1357	Cargill Salt - Cayuga Mine	Lansing (T)	Tompkins	0.203 MGD		0.397 MGD
1358	Cornell Research Ponds	Dryden (T)	Tompkins	1 MGD		1 MGD
1359	Cornell University - Water Filtration Plant	Ithaca (T)	Tompkins	1.514 MGD		2.692 MGD
1360	Southern Cayuga Lake Intermunicipal Water	Lansing (T)	Tompkins	2.814 MGD		4.89 MGD

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1361	Ithaca, City	Ithaca (T)	Tompkins	3.96 MGD		5.64 MGD
1362	Cornell University - Heat Exchange Facility	Ithaca (T)	Tompkins	19 MGD		45 MGD
1363	AES Cayuga (Cayuga Operating Company)	Lansing (T)	Tompkins	214.12 MGD		243.36 MGD
1364	Carey Farm	Groton (T)	Tompkins	7500 GPD		10000 GPD
1365	Cedar View Golf Course	Lansing (T)	Tompkins	368 GPD		24000 GPD
1366	Hardie Farms	Lansing (T)	Tompkins	50066 GPD		61000 GPD
1367	Saunders - Ithaca Concrete	Dryden (T)	Tompkins	20042 GPD		144000 GPD
1368	Cornell University - Ag. Research Facilities	Ithaca (C)	Tompkins	30821 GPD		146319 GPD
1369	Newfield, Tn	Newfield (T)	Tompkins	137099 GPD		285020 GPD
1370	Dryden, Vg	Dryden (T)	Tompkins	213000 GPD		410000 GPD
1371	Groton, Vg	Groton (T)	Tompkins	293000 GPD		585000 GPD
1372	Gill Corn Farms	Hurley (T)	Ulster	0		0
1373	Robert Davenport & Sons	Marbletown (T)	Ulster	0 GPD		0 GPD
1374	Tilcon - Cedar Cliff Quarry	Marlborough (T)	Ulster	0 GPD		0 GPD
1375	WH Walker & Son	Lloyd (T)	Ulster	0 GPD		0 GPD
1376	TechCity (IBM Kingston)	Ulster (T)	Ulster	0.071 MGD		0.112 MGD
1377	Wallkill (Watchtower Farms I)	Shawangunk (T)	Ulster	0.123 MGD		0.187 MGD
1378	Rosendale, Tn	Rosendale (T)	Ulster	0.125 MGD		0.195 MGD
1379	Watchtower Farms	Shawangunk (T)	Ulster	0.0095 MGD		0.239 MGD
1380	Wallkill Correctional Facility	Shawangunk (T)	Ulster	0.02 MGD		0.46 MGD
1381	Ellenville, Vg	Wawarsing (T)	Ulster	0.82 MGD		0.91 MGD
1382	Highland Water District	Lloyd (T)	Ulster	0.547 MGD		2.66 MGD
1383	Northeast Solite Corp	Saugerties (T)	Ulster	1.5 MGD		3.7 MGD
1384	Kingston City Water District	Woodstock (T)	Ulster	4.5 MGD		4.9 MGD
1385	Eastern Correctional Facility	Wawarsing (T)	Ulster	380 GPM		571 GPM
1386	Minard & Sons	Plattekill (T)	Ulster			2200 GPD
1387	Pioneer Fruit Farms	Marlborough (T)	Ulster	5000 GPD		8000 GPD
1388	Pioneer Water Bottling Co	Marlborough (T)	Ulster	12000 GPD		15000 GPD
1389	Shawangunk Bulk Spring Water	Shawangunk (T)	Ulster	3337 GPD		18000
1390	Mohonk Golf Course	New Paltz (T)	Ulster	21600 GPD		21600 GPD
1391	Lais Farm	Marlborough (T)	Ulster	21600 GPD		43200 GPD
1392	Highland Residential Center	Lloyd (T)	Ulster	34100 GPD		45500 GPD
1393	Frank Tantillo & Son	Gardiner (T)	Ulster	30000 GPD		50000 GPD
1394	Dressel Farms, LLC	New Paltz (T)	Ulster	1933 GPD		50400 GPD
1395	Halcyon Park Water District	Ulster (T)	Ulster	26000 GPD		62000 GPD
1396	Hudson Valley Resort	Rochester (T)	Ulster	60000 GPD		120000 GPD
1397	Pine Hill Water Co	Shandaken (T)	Ulster	122400 GPD		122400 GPD
1398	Davenport Farms	Marbletown (T)	Ulster	24000 GPD		132000 GPD
1399	Kerhonkson Water District	Wawarsing (T)	Ulster	59808 GPD		156000 GPD
1400	Wiltwyck Golf Club	Ulster (T)	Ulster	22417 GPD		184000 GPD
1401	Rolling Meadows Water Corp (Hurley Water	Hurley (T)	Ulster	167214 GPD		200000 GPD
1402	Saunderskill Farm	Rochester (T)	Ulster	100000 GPD		200000 GPD
1403	Napanoch Water District	Wawarsing (T)	Ulster	99899 GPD		223000 GPD
1404	Truncali Farms	Marlborough (T)	Ulster	240000 GPD		240000 GPD
1405	Troncillito Brother's Inc.	Marlborough (T)	Ulster	34076 GPD		250000 GPD
1406	Pavero Cold Storage	Lloyd (T)	Ulster	120000 GPD		350000 GPD
1407	Mombaccus Excavating - Amanda Dr	Rochester (T)	Ulster	207000 GPD		360000 GPD
1408	Mombaccus Excavating Inc	Rochester (T)	Ulster	207000 GPD		360000 GPD
1409	Shawangunk, Tn (Wallkill Water District)	Shawangunk (T)	Ulster	147050 GPD		399400 GPD
1410	Minard Farms	Lloyd (T)	Ulster	35000 GPD		432000 GPD
1411	Port Ewen Water District	Esopus (T)	Ulster	310000 GPD		450000 GPD
1412	Taliaferro Farms	New Paltz (T)	Ulster	348750 GPD		465000 GPD
1413	Cranesville - Eastern Quarry	Kingston (T)	Ulster	504000 GPD		504000 GPD
1414	Woodstock, Tn	Woodstock (T)	Ulster	137000 GPD		517000 GPD
1415	Wilflow Orchards LLC	Lloyd (T)	Ulster	22027 GPD		600000 GPD
1416	Hepworth Farm	Marlborough (T)	Ulster	295833 GPD		806452 GPD
1417	Ulster Water District, Tn	Ulster (T)	Ulster	770000 GPD		1363000 GPD
1418	New Paltz, Vg	New Paltz (T)	Ulster	773451 GPD		1471000 GPD
1419	Fino Farms	Marlborough (T)	Ulster	132876 GPD		1586000 GPD
1420	Saugerties, Vg	Saugerties (T)	Ulster	961870 GPD		1659000 GPD
1421	Greiner Bros Farms Inc	Marlborough (T)	Ulster	192812 GPD		2343892 GPD
1422	Callanan - East Kingston Site	Ulster (T)	Ulster	1144159 GPD		3401391 GPD
1423	Callanan - Port Ewen Quarry	Esopus (T)	Ulster	249773 GPD		3515400 GPD
1424	A Zimmerman & Son	Lloyd (T)	Ulster			
1425	Hudson Valley Water Co	Hurley (T)	Ulster	56168 GPD		
1426	J Anzalone Orchards	Lloyd (T)	Ulster			
1427	Jaway Farms	Rochester (T)	Ulster			
1428	M G Hurd and Sons	Lloyd (T)	Ulster	59660 GPD		
1429	Stone Dock Golf Course	Marbletown (T)	Ulster			
1430	International Paper - Corinth	Lake Luzerne (T)	Warren	0 MGD		0 MGD
1431	Peckham Materials - Chestertown	Chester (T)	Warren	0.528 MGD		0.528 MGD
1432	Indeck - Corinth Energy Center	Lake Luzerne (T)	Warren	0.658 MGD		1.091 MGD
1433	Lake George, Vg	Lake George (T)	Warren	0.72 MGD		1.4 MGD
1434	Jointa Galusha, LLC - Glens Falls Quarry	Glens Falls (C)	Warren	0.834 MGD		1.44 MGD
1435	Glens Falls, City	Queensbury (T)	Warren	2.7 MGD		3.4 MGD
1436	Queensbury Water District	Queensbury (T)	Warren	5.209 MGD		12.13 MGD
1437	Gore Mountain - PWS	Johnsburg (T)	Warren	2.35 MGD		19.79 GPM
1438	Gore Mountain - Snow	Johnsburg (T)	Warren	4.54 MGD		5000 GPM
1439	Shore Colony Water District	Queensbury (T)	Warren	4364 GPD		18400 GPD
1440	Finch Paper LLC	Glens Falls (C)	Warren	19604 GPM		27810 GPM

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1441	Arcady Bay Association	Hague (T)	Warren	9300	GPD	33600
1442	Double H Ranch	Lake Luzerne (T)	Warren	31500	GPD	40000
1443	Diamond Point Water District	Lake George (T)	Warren	37440	GPD	66050
1444	Silver Bay Association	Hague (T)	Warren	30000	GPD	119000
1445	Word of Life Ranch / Bible Institute	Chester (T)	Warren	27828	GPD	119600
1446	Pottersville Water District	Chester (T)	Warren	30000	GPD	132000
1447	Chestertown Water District	Chester (T)	Warren	80000	GPD	305000
1448	Glens Falls Country Club	Queensbury (T)	Warren	45353	GPD	310000
1449	North Creek Water District	Johnsburg (T)	Warren	153032	GPD	397500
1450	Bolton Landing, City	Bolton (T)	Warren	198127	GPD	550834
1451	Lake Luzerne Water District	Lake Luzerne (T)	Warren	341000	GPD	595000
1452	Warrensburg Water District	Warrensburg (T)	Warren	414532	GPD	978000
1453	Hollingsworth & Vose Co - Greenwich Faci	Easton (T)	Washington	0.261	MGD	0.66
1454	Great Meadow Correctional Facility	Whitehall (T)	Washington	0.431	MGD	0.69
1455	Jointa Galusha, LLC - Hartford Quarry	Hartford (T)	Washington	45000	GPD	0.864
1456	Granville, Vg	Granville (T)	Washington	0.56	MGD	0.889
1457	Peckham Materials - Hudson Falls	Kingsbury (T)	Washington	1.02	MGD	1.02
1458	Willard Mountain	Easton (T)	Washington	0.576	MGD	1.152
1459	Hollingsworth & Vose Co - Easton Facility	Easton (T)	Washington	2.91	MGD	3.59
1460	Irving Tissue, Inc	Fort Edward (T)	Washington	3.012	MGD	5.28
1461	Wheelabrator Hudson Falls LLC	Kingsbury (T)	Washington	23.496	MGD	25.79
1462	Cornerest Farm	Hebron (T)	Washington	643	GPD	731
1463	Brookside Farm	Argyle (T)	Washington	800	GPD	1000
1464	Fullerton Farm	Argyle (T)	Washington	3880	GPD	4100
1465	Happenchance Farm	White Creek (T)	Washington	500	GPD	6000
1466	Moses Farm	White Creek (T)	Washington	17840	GPD	21000
1467	Tiashoke Farm, LLC	Cambridge (T)	Washington	28894	GPD	62645
1468	Ideal Dairy Farms Inc	Kingsbury (T)	Washington	52250	GPD	66500
1469	Pleasant Valley Farm - Argyle	Argyle (T)	Washington	4785	GPD	87200
1470	Windy Hills Golf Course	Easton (T)	Washington			94000
1471	Walker Farms - Fort Ann	Fort Ann (T)	Washington	97500	GPD	113000
1472	Allenwaite Farms, Inc	Easton (T)	Washington	102687	GPD	117480
1473	Woody Hill Farms	Salem (T)	Washington	115916	GPD	123053
1474	Salem, Vg	Salem (T)	Washington	39651	GPD	137040
1475	B J Farms	Easton (T)	Washington	123556	GPD	139355
1476	GE - Hudson Falls	Kingsbury (T)	Washington	121830	GPD	182465
1477	Jointa Galusha, LLC - Pattens Mills	Fort Ann (T)	Washington	15964	GPD	227770
1478	Greenwich, Vg	Easton (T)	Washington	150000	GPD	303000
1479	Fort Ann, Vg	Fort Ann (T)	Washington	93604	GPD	487000
1480	Hand Melon Farm LLC	Easton (T)	Washington	300000	GPD	500000
1481	Whitehall, Vg	Dresden (T)	Washington	625000	GPD	795000
1482	Gardenworks Farm	Salem (T)	Washington			
1483	Polevalley Players Club	Hartford (T)	Washington			
1484	Sheldon Farms	Salem (T)	Washington			
1485	Slack Hollow Farm	Argyle (T)	Washington	3000	GPD	
1486	Mizkan Americas, Inc	Sodus (T)	Wayne	0.124	MGD	0.179
1487	Rose-North Rose Water District	Rose (T)	Wayne	0.292	MGD	0.705
1488	Lyons, Vg	Lyons (T)	Wayne			0.802
1489	Mason Farms	Williamson (T)	Wayne	15000	GPD	1
1490	Hanson Aggregates - Butler Quarry	Butler (T)	Wayne	0.4	MGD	1.28
1491	Ontario Benefit Area #1	Ontario (T)	Wayne	1.955	MGD	3.396
1492	Williamson, Tn	Williamson (T)	Wayne	1.55	MGD	3.41
1493	RE Ginna Nuclear Power Plant	Ontario (T)	Wayne	427	MGD	511
1494	Bri-ton Farms	Huron (T)	Wayne	1120	GPD	5000
1495	Wayne County Eggs	Wolcott (T)	Wayne	50233	GPD	57484
1496	Fleischmann's Vinegar Co	Rose (T)	Wayne	35613	GPD	60000
1497	KS Dathyn Farms	Sodus (T)	Wayne	15000	GPD	100000
1498	Orbaker's Fruit Farm	Williamson (T)	Wayne	5995	GPD	111907
1499	Abe Dathyn Farms	Sodus (T)	Wayne	4390	GPD	120000
1500	Savannah Water District #1	Savannah (T)	Wayne	49953	GPD	141000
1501	Brookwoods Country Club	Ontario (T)	Wayne	27000	GPD	150000
1502	Merrell Farms, LLC	Butler (T)	Wayne	152875	GPD	166359
1503	Blue Heron Hills Country Club	Walworth (T)	Wayne	57884	GPD	200000
1504	Cahoon Farms Inc	Huron (T)	Wayne	142723	GPD	210083
1505	Belle Terre Farm	Sodus (T)	Wayne	15780	GPD	216000
1506	Clyde, Vg	Galen (T)	Wayne	205000	GPD	324000
1507	Wayne Hills Country Club	Galen (T)	Wayne	131922	GPD	350000
1508	Johnson Potato Farm	Williamson (T)	Wayne			432000
1509	Wolcott, Vg	Wolcott (T)	Wayne	214000	GPD	707000
1510	Brantling Ski Slopes	Arcadia (T)	Wayne	75269	GPD	727272
1511	Sodus Bay Heights Golf Club	Sodus (T)	Wayne	42155	GPD	859000
1512	Dolomite Products - Cleason Palmer	Palmyra (T)	Wayne	768000	GPD	2304000
1513	Dolomite Products - Greystone Golf Club	Walworth (T)	Wayne	0.087	MGD	
1514	Dolomite Products - Walworth Quarry	Walworth (T)	Wayne	0.493	MGD	
1515	White Plains, City	White Plains (C)	Westchester	0	GPD	0
1516	Camp Smith, NY Army National Guard	Cortlandt (T)	Westchester	0.0201391	MGD	0.0929
1517	IBM Somers	Somers (T)	Westchester	0.027	MGD	0.151
1518	Metropolis Country Club	Greenburgh (T)	Westchester	39029	GPD	0.224
1519	St. Andrew's Golf Club	Greenburgh (T)	Westchester	39785	GPD	0.28
1520	Bedford Hills Correctional Facility	Bedford (T)	Westchester	0.3	MGD	0.334

Water Withdrawal Registrations 2012, <http://nywateraction.org/withdrawals/2012waterregis.xls>

#	FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	Ave_Day_W	Units	Ave_Max_Day_W	Units_Max
1521	North Castle Water District #2	North Castle (T)	Westchester	0.137	MGD	0.35	MGD
1522	Scarsdale Golf Club	Greenburgh (T)	Westchester	0.045	MGD	0.4	MGD
1523	Bedford Golf and Tennis Club	Bedford (T)	Westchester	33410	GPD	0.5	MGD
1524	Heritage Waterworks	Somers (T)	Westchester	0.348	MGD	0.56	MGD
1525	North Castle Water District #4	North Castle (T)	Westchester	0.334	MGD	0.673	MGD
1526	Bedford Consolidated Improvement District	Bedford (T)	Westchester	0.65	MGD	1.33	MGD
1527	Winged Foot Golf Club	Mamaroneck (T)	Westchester	116219	GPD	4.12	MGD
1528	Ossining, Vg	Ossining (T)	Westchester	3.2	MGD	4.2	MGD
1529	Peekskill, City	Peekskill (C)	Westchester	4.197	MGD	5.61	MGD
1530	American Sugar Refining Inc.	Yonkers (C)	Westchester	7.5	MGD	12.3	MGD
1531	Wheelabrator Westchester	Peekskill (C)	Westchester	46	MGD	49	MGD
1532	Indian Point 2&3 LLCs	Cortlandt (T)	Westchester	2024	MGD	2489	MGD
1533	Cale Farms Water Works	Somers	Westchester	9300	GPD	21700	GPD
1534	Century Country Club	Harrison (T)	Westchester	48806	GPD	70280	GPD
1535	Amawalk - Shenorock Water District	Somers (T)	Westchester		GPD	74100	GPD
1536	Michelle Estates	Lewisboro (T)	Westchester	40791	GPD	106700	GPD
1537	Salem Golf Club	North Salem (T)	Westchester	11989	GPD	120000	GPD
1538	Leewood Golf Club	Eastchester (T)	Westchester	40046	GPD	128000	GPD
1539	Pound Ridge Golf Club	Pound Ridge (T)	Westchester	115500	GPD	135000	GPD
1540	Westchester Hills Golf Club	White Plains (C)	Westchester	47321	GPD	160000	GPD
1541	Greenbriar/Somerdel Water Works	Somers (T)	Westchester	47500	GPD	160300	GPD
1542	Lake Isle Country Club (Town of Eastchester)	Eastchester (T)	Westchester	50015	GPD	200000	GPD
1543	Sleepy Hollow Country Club	Ossining (T)	Westchester	85749	GPD	200000	GPD
1544	Brynwood Golf & Country Club	North Castle (T)	Westchester	50500	GPD	206000	GPD
1545	Apawamis Club	Rye (C)	Westchester	21000	GPD	250000	GPD
1546	Willow Ridge Country Club	Harrison (T)	Westchester	58125	GPD	250000	GPD
1547	Mount Kisco Country Club	Mount Kisco (T)	Westchester	137574	GPD	258320	GPD
1548	Hollow Brook Golf Club	Cortlandt (T)	Westchester	35930	GPD	260000	GPD
1549	Elmwood Country Club	Greenburgh (T)	Westchester	147787	GPD	270000	GPD
1550	Hudson National Golf Club	Cortlandt (T)	Westchester	100000	GPD	280000	GPD
1551	Fenway Golf Club	Scarsdale (T)	Westchester	39203	GPD	290000	GPD
1552	Sunningdale Country Club	Greenburgh (T)	Westchester	30000	GPD	300000	GPD
1553	Blind Brook Club	Rye (T)	Westchester	26027	GPD	320000	GPD
1554	Doral Arrowwood	Rye (T)	Westchester	34560	GPD	321718	GPD
1555	Rockrimmon Country Club	Pound Ridge (T)	Westchester	81550	GPD	340000	GPD
1556	Pelham Country Club	Pelham (T)	Westchester	14383	GPD	350000	GPD
1557	Quaker Ridge Golf Club	Scarsdale (T)	Westchester	44107	GPD	350000	GPD
1558	Siwanoy Country Club	Eastchester (T)	Westchester	44429	GPD	355000	GPD
1559	Purchase Golf Club	Purchase	Westchester	100000	GPD	400000	GPD
1560	Waccabuc Country Club	Lewisboro (T)	Westchester	99421	GPD	422341	GPD
1561	Trump National Golf Club Westchester	Ossining (T)	Westchester	131940	GPD	433525	GPD
1562	Anglebrook Golf Club	Somers (T)	Westchester	145958	GPD	450000	GPD
1563	Brae Burn Country Club	Harrison (T)	Westchester	55479	GPD	450000	GPD
1564	Glen Arbor Golf Club	Bedford (T)	Westchester	243646	GPD	466290	GPD
1565	Westchester Country Club	Harrison (T)	Westchester	390000	GPD	500000	GPD
1566	Mount Kisco, Vg	Bedford (T)	Westchester	1360370	GPD	1563000	GPD
1567	Old Oaks Country Club	Harrison (T)	Westchester	19566	GPD		
1568	Somers Point Country Club	Somers (T)	Westchester	97777	GPD		
1569	Arcade, Vg	Arcade (T)	Wyoming	0.54	MGD	0.6	MGD
1570	Mount Morris, Vg	Perry (T)	Wyoming	0.53	MGD	1	MGD
1571	Dale Brine Field	Middlebury (T)	Wyoming	0.776	MGD	1.674	MGD
1572	Morton Salt, Inc	Gainesville (T)	Wyoming	9.84	MGD	10.28	MGD
1573	Texas Brine Co	Middlebury (T)	Wyoming	105	GPM	120	GPM
1574	True Farms	Perry (T)	Wyoming	34800	GPD	40300	GPD
1575	Swiss Valley Farms	Warsaw (T)	Wyoming			50000	GPD
1576	North Java Water District	Java (T)	Wyoming	34633	GPD	70522	GPD
1577	Southview Farm LP	Castile (T)	Wyoming	78000	GPD	90000	GPD
1578	Van Slyke's Dairy Farm	Pike (T)	Wyoming	60000	GPD	100000	GPD
1579	Pike, Tn	Pike (T)	Wyoming	38340	GPD	112757	GPD
1580	Table Rock Farm	Castile (T)	Wyoming	46180	GPD	114240	GPD
1581	Synergy, LLC	Covington (T)	Wyoming	108000	GPD	151500	GPD
1582	Indeck - Silver Springs Energy Center	Gainesville (T)	Wyoming	3792	GPD	185000	GPD
1583	Silver Springs, Vg	Gainesville (T)	Wyoming	94000	GPD	219000	GPD
1584	Silver Lake Country Club	Castile (T)	Wyoming	22685	GPD	432000	GPD
1585	Akron, Vg	Bennington (T)	Wyoming	411465	GPD	646000	GPD
1586	Warsaw, Vg	Gainesville (T)	Wyoming	350000	GPD	850000	GPD
1587	Attica Water Plant	Attica (T)	Wyoming	933000	GPD	1168000	GPD
1588	McCormick Farms, Inc	Wethersfield (T)	Wyoming	2387389	GPD	2387389	GPD
1589	Ayers & Gillette LLC	Pike (T)	Wyoming	0.135	MGD		
1590	Broughton Farm	Gainesville (T)	Wyoming	93340	GPD		
1591	Gardeau Creast Farms	Castile (T)	Wyoming	47139	GPD		GPD
1592	Perry, Vg	Castile (T)	Wyoming				
1593	RL Jeffres & Sons Inc	Covington (T)	Wyoming				
1594	Ferro Electronic Materials	Torrey (T)	Yates	71963	GPD	121528	GPD
1595	Dundee, Vg	Starkey (T)	Yates	191000	GPD	407000	GPD
1596	Torrey Farms of Potter Inc.	Potter (T)	Yates	1152000	GPD	1152000	GPD
1597	Penn Yan, Vg	Jerusalem (T)	Yates	857941	GPD	1813000	GPD
1598	AES Greenridge LLC	Torrey (T)	Yates	64634881	GPD	64634881	GPD
1599	Lakeside Country Club	Milo (T)	Yates	227309	GPD		

EXHIBIT G

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

#	Date Notice	Date Comr	Issue Dat	P/NP	Name of Facility	Application ID	City/Town	County	DEC ENB Notice URL	Vol MGD	Water Source
1	08/07/13	09/11/13	11/15/13	NP	Ravenswood	2-6304-00024/00054	Long Island City	Queens	2 http://www.dec.ny.gov/enb/20130807_reg2.html#263040002400054 , http://www.dec.ny.gov/enb/20130828_not2.html	1528.000	East River
2	08/14/13	08/29/13		NP	Sunningdale Country Club Incorporated	3-5526-00466/00001	Greenburgh	Westchester	3 http://www.dec.ny.gov/enb/20130814_reg3.html#355260046600001	0.572	groundwater
3	09/04/13	09/19/13		Public	Suffolk County Water Authority	1-4738-04287/00001	Southold	Suffolk	1 http://www.dec.ny.gov/enb/20130904_reg1.html#147380428700001	1.008	well field
4	09/04/13	09/26/15		Public	City of Fulton	7-3554-00213/00001	Schroepfel	Oswego	7 http://www.dec.ny.gov/enb/20130911_reg7.html#735540021300001		NS well field
5	10/02/13	10/17/13		Public	Suffolk County Water Authority	1-4738-04259/00001	Southold	Suffolk	1 http://www.dec.ny.gov/enb/20131002_reg1.html#147380425900001	1.008	well field
6	10/02/13	10/17/13		Public	Town of New Berlin	7-0838-00057/00004	New Berlin	Chenango	7 http://www.dec.ny.gov/enb/20131002_reg7.html#708380005700004	0.010	well field
7	10/16/13	10/31/13		Public	Town of Richland	7-3550-00257/00001	Richland	Oswego	7 http://www.dec.ny.gov/enb/20131016_reg7.html#735500025700001		NS groundwater
8	10/23/13	11/07/13		Public	Village of Mohawk	6-2128-00150/00001	Mohawk	Herkimer	6 http://www.dec.ny.gov/enb/20131023_reg6.html#621280015000001	0.003	groundwater
9	12/11/13	12/26/13		Public	City of Glen Cove	1-2805-00203/00001	Glen Cove	Nassau	1 http://www.dec.ny.gov/enb/20131211_reg1.html#128050020300001	2.000	groundwater
10	12/18/13	01/30/14		Public	Mohawk Valley Water Authority	6-9906-00017/00001	Utica	Herkimer and Onei	6 http://www.dec.ny.gov/enb/20131218_reg6.html#699060001700001 , http://www.dec.ny.gov/enb/20140115_reg6.html#699060001700001	32.000	Hinckley Reservoir
11	01/08/14	01/23/14		Public	Greenlawn Water District	1-4726-02347/00001	Huntington	Suffolk	1 http://www.dec.ny.gov/enb/20140108_reg1.html#147260234700001	2.000	groundwater
12	01/29/14	02/13/14		Public	Suffolk County Water Authority	1-4724-01966/00001	Sag Harbor	Suffolk	1 http://www.dec.ny.gov/enb/20140129_reg1.html#147240196600001	1.440	groundwater
13	02/26/14	03/13/14	09/24/14	NP	Astoria Generating Company LP	2-6301-00185/00026	Astoria	Queens	2 http://www.dec.ny.gov/enb/20140226_not2.html	1246.000	East River
14	02/26/14	03/13/14		NP	OGS--Empire State Plaza	4-0101-00010/00003	Albany	Albany	4 http://www.dec.ny.gov/enb/20140226_reg4.html#401010001000003	92.000	Hudson River
15	03/12/14	03/28/14		NP	RED-Rochester LLC--Eastman Business P	8-2699-000126/00005	Rochester	Monroe	8 http://www.dec.ny.gov/enb/20140312_reg8.html#826990012600005	54.000	Lake Ontario
16	03/19/14	04/03/14		NP	F H Stickers	4-1046-00009/00005	Livingston	Columbia	4 http://www.dec.ny.gov/enb/20140319_reg4.html#410460000900005	3.900	NS
17	04/09/14	04/24/14		NP	Lafarge Building Materials Inc	4-0124-00001/00132	Ravena	Albany	4 http://www.dec.ny.gov/enb/20140409_reg4.html#401240000100132	8.600	Hudson River
18	04/16/14	05/01/14		NP	DEC--Salmon River Fish Hatchery	7-3520-00007/00006	Altmar	Oswego	7 http://www.dec.ny.gov/enb/20140416_reg7.html#735200000700006	8.780	Salmon River
19	05/14/14	05/29/14		NP	Alcoa Massena Operations (WEST Plant)	6-4058-00003/00381	Massena	St Lawrence	6 http://www.dec.ny.gov/enb/20140514_reg6.html	47.700	St. Lawrence River
20	05/14/14	05/29/14		NP	Reenergy Black River	6-2240-00009/00010	Fort Drum	Jefferson	6 http://www.dec.ny.gov/enb/20140514_reg6.html	6.248	Black River
21	05/14/14	05/29/14		NP	U. of Rochester	8-2699-00059/00030	Rochester	Monroe	8 http://www.dec.ny.gov/enb/20140514_reg8.html	45.000	Genesee River
22	05/21/14	06/05/14		NP	Tecumseh Redevelopment	9-1409-00003/00082	Lackawanna	Erie	9 http://www.dec.ny.gov/enb/20140521_reg9.html	50.000	Lake Erie
23	06/11/14	08/11/14	11/21/14	NP	Con Ed--East River Generating Station	2-6206-00012/00004	New York	New York	2 http://www.dec.ny.gov/enb/20140611_reg2.html#262060001200004	374.000	East River
24	06/25/14	07/10/14		NP	General Motors Tonawanda Engine Plant	9-1464-00048/00118	Buffalo	Erie	9 http://www.dec.ny.gov/enb/20140625_reg9.html#914640004800118	25.000	Niagara River
25	07/02/14	07/17/14		NP	Dupont Niagara Falls Plant	9-2911-00030/00327	Niagara Falls	Niagara	9 http://www.dec.ny.gov/enb/20140702_reg9.html#929110003000327	68.000	Niagara River
26	07/02/14	07/17/14		NP	Praxair	9-2911-00096/00007	Niagara Falls	Niagara	9 http://www.dec.ny.gov/enb/20140702_reg9.html#929110009600007	53.000	Niagara River
27	07/09/14	07/24/14		NP	Lakeside Beaver Falls Generating Station	6-2320-00018/00014	Beaver Falls	Exsex	6 http://www.dec.ny.gov/enb/20140709_reg6.html#623200001800014	49.000	Beaver River, trib. Black River
28	07/16/14	07/31/14		NP	West Hook Sand & Gravel	3-1330-00052/02003	Fishkill	Dutchess	3 http://www.dec.ny.gov/enb/97980.html	17.140	on-site ponds (groundwater and s
29	07/16/14	07/31/14		NP	Hanson Honeoye Falls Quarry & Asphalt F	8-9908-00113/00034	Lima	Multiple	8 http://www.dec.ny.gov/enb/20140716_reg8.html#899080011300034	10.270	Not stated
30	08/13/14	09/25/14		NP	International Paper Ticonderoga Mill	5-1548-00008/00085	Ticonderoga	Essex	5 http://www.dec.ny.gov/enb/20140813_reg5.html#515480000800085	30.000	Lake Champlain
31	08/20/14	10/06/14	02/24/15	NP	Danskammer	3-3346-00011/00017	Newburgh	Orange	3 http://www.dec.ny.gov/enb/20140820_reg3.html#333460001100017	455.000	Hudson River
32	09/03/14	09/18/14		NP	Occidental Chemical Corp Niagara Plant	9-2911-00112/00236	Niagara Falls	Niagara	9 http://www.dec.ny.gov/enb/20140903_reg9.html#929110011200236	57.600	Niagara River
33	09/04/14	09/25/14		NP	U S Salt Watkins Glen Refinery	8-4432-00001/00035	Watkins Glen	Schuyler	8 http://www.dec.ny.gov/enb/20140820_reg8.html#844320000100035	13.250	Seneca Lake
34	09/10/14	09/25/14		NP	Novelis Corporation	7-3556-00001/00111	Oswego	Oswego	7 http://www.dec.ny.gov/enb/20140910_reg7.html#735560000100111	28.800	Lake Ontario
35	09/10/14	09/25/14		NP	U S Gypsum Co--Oakfield Plant	8-1838-00007/00039	Oakfield	Genessee	8 http://www.dec.ny.gov/enb/20140910_reg8.html#818380000700039	42.785	groundwater, mostly
36	09/17/14	10/02/14		Public	City of Saratoga Springs	5-4115-00042/00003	Saratoga Springs	Saratoga	5 http://www.dec.ny.gov/enb/20140917_reg5.html#541150004200003		NS groundwater
37	09/17/14	10/02/14	02/19/15	NP	GINNA Nuclear Power Plant	8-5434-00010/00021	Ontario	Wayne	8 http://www.dec.ny.gov/enb/20140917_reg8.html#854340001000021	520.000	Lake Ontario
38	09/24/14	10/09/14		NP	NYS Rome Fish Hatchery	6-3013-00027/00005	Rome	Oneida	6 http://www.dec.ny.gov/enb/20140924_reg6.html#630130002700005	9.360	Delta reservoir and groundwater
39	10/01/14	10/16/14		NP	County Line Stone Akron Quarry	9-1456-00004/00020	Akron	Erie	9 http://www.dec.ny.gov/enb/20141001_reg9.html#914560000400020	19.152	NS
40	10/22/14	11/13/14	02/27/15	NP	Brooklyn Navy Yard Cogeneration Plant	2-6101-00185/00019	Brooklyn	Kings	2 http://www.dec.ny.gov/enb/20141022_reg2.html#261010018500019	72.000	East River
41	10/29/14	11/13/14		NP	NYU Medical Center	2-6206-00103/00009	Manhattan	New York	2 http://www.dec.ny.gov/enb/20141029_reg2.html#262060010300009	1.440	groundwater
42	10/29/14	11/13/14		NP	Wheelabrator Westchester LP	3-5512-00031/00017	Peekskill	Westchester	3 http://www.dec.ny.gov/enb/20141029_reg3.html#355120003100017	55.000	Hudson River
43	10/29/14	11/13/14		NP	Carthage Energy Cogen Facility	6-2260-00024/00011	Carthage	Jefferson	6 http://www.dec.ny.gov/enb/20141029_reg6.html#622600002400011	22.000	Black River
44	10/29/14	11/13/14		Public	Village of Iliion Water Supply System	6-2128-00148/00001	Iliion	Herkimer	6 http://www.dec.ny.gov/enb/20141029_reg6.html#621280014800001		NS groundwater
45	10/29/14	11/13/14		Public	Village of Castile water system	9-5634-00016/00001	Genesee Falls	Wyoming	9 http://www.dec.ny.gov/enb/20141029_reg9.html#956340001600001		NS groundwater
46	11/05/14	11/20/14		Public	NYC DDC Bertram Avenue Outfall	2-6404-01238/00001	Staten Island	Richmond	2 http://www.dec.ny.gov/enb/20141105_reg2.html#264040123800001	9.790	groundwater
47	11/05/14	11/20/14		NP	American Sugar Refining	3-5518-00214/00029	Yonkers	Westchester	3 http://www.dec.ny.gov/enb/20141105_reg3.html#355180021400029	17.280	Hudson River
48	11/05/14	11/20/14		Public	Town of Stillwater	5-4152-00187/00001	Stillwater	Saratoga	5 http://www.dec.ny.gov/enb/20141105_reg5.html#541520018700001		NS NS
49	11/05/14	11/20/14	01/26/15	NP	Cayuga LLC Generating Station	7-5032-00019/00024	Lansing	Tompkins	7 http://www.dec.ny.gov/enb/20141105_reg7.html#750320001900024	245.000	Cayuga Lake
50	11/12/14	11/28/14		Public	NYS Collins/Gowanda Correctional Facilit	9-1436-00010/00010	Collins	Erie	9 http://www.dec.ny.gov/enb/20141112_reg9.html#914360001000010	0.864	three well fields
51	12/10/14	12/26/14		NP	Battery Park Comm Ctr	2-6205-00038/00003	Manhattan	New York	2 http://www.dec.ny.gov/enb/20141210_reg2.html#262050003800003	57.600	NS
52	12/17/14	01/02/15		Public	Suffolk County Water Authority	1-4736-07861/00003	Southampton	Suffolk	1 http://www.dec.ny.gov/enb/20141217_reg1.html#147360786100003	1.998	groundwater
53	12/17/14	01/02/15		NP	Cricket Valley Energy Center	3-1326-00275/00008	Dover	Dutchess	3 http://www.dec.ny.gov/enb/20141217_reg3.html#313260027500008	0.009	on-site, bedrock water supply wel
54	12/24/14	01/30/15		NP	Constitution Pipeline	0-9999-00181/00009	Multiple	Multiple	M http://www.dec.ny.gov/enb/20141224_reg0.html#099990018100009	5.787	Schoharie Creek
55	01/07/15	01/22/15		Public	Village of Canajoharie Water District	0-9999-00153/00001	Ephratah	Multiple	5 http://www.dec.ny.gov/enb/20150128_reg0.html#099990015300001	0.216	municipal springs
56	01/14/15	01/29/15		NP	Finch Paper LLC	5-5205-00005/00065	Glens Falls	Warren	5 http://www.dec.ny.gov/enb/20150114_reg5.html#552050000500065	52.920	Hudson River and onsite wells

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

#	Date Notice	Date Comr	Issue Dat P/NP	Name of Facility	Application ID	City/Town	County	DEC ENB Notice URL	Vol MGD	Water Source	
57	01/14/15	01/29/15	NP	Momentive Performance Materials	5-4154-00002/01789	Waterford	Saratoga	5 http://www.dec.ny.gov/enb/20150114_reg5.html#541540000201789	15.000	Hudson River	
58	01/14/15	01/29/15	NP	Wheelabrator Hudson Falls	5-5344-00001/00021	Kingsbury	Washington	5 http://www.dec.ny.gov/enb/20150114_reg5.html#553440000100021	33.800	Hudson River	
59	01/21/15	02/05/15	NP	Syracuse Sand & Gravel Constantia Center	7-3526-00008/00004	Constantia	Oswego	7 http://www.dec.ny.gov/enb/20150121_reg7.html#735260000800004	0.610	NS	
60	01/21/15	02/05/15	02/10/15	NP	Huntley Steam Generating Station	9-1464-00130/00035	Tonawanda	9 http://www.dec.ny.gov/enb/20150121_reg9.html#914640013000035	501.150	NS	
61	01/28/15	02/13/15	Public	Old Westbury Village Water District	1-2822-01708/00001	North Hempstead	Nassau	1 http://www.dec.ny.gov/enb/20150128_reg1.html#128220170800001	1.987	groundwater	
62	01/28/15	02/13/15	NP	NYC DEP - Butler Manor Watershed	2-6405-00461/00003	Staten Island	Richmond	2 http://www.dec.ny.gov/enb/20150128_reg2.html#264050046100003	2.636	groundwater	
63	01/28/15	02/13/15	Public	Village of Harriman Water District	3-3340-00045/00003	Monroe	Orange	3 http://www.dec.ny.gov/enb/20150128_reg3.html#333400004500003	0.102	groundwater	
64	01/28/15	02/13/15	Public	Village of Canajoharie Water District	0-9999-00153/00001	Ephratah	Multiple	5 http://www.dec.ny.gov/enb/20150128_reg0.html#099990015300001	0.216	municipal springs	
65	01/28/15	02/13/15	NP	Somerset Steam Generation Station	9-2938-00003/00007	Somerset	Niagara	9 http://www.dec.ny.gov/enb/20150128_reg9.html#929380000300007	281.000	NS	
66	02/04/15	02/19/15	NP	Dunn Paper - Natural Dam	6-4040-00006/00026	Gouverneur	St Lawrence	6 http://www.dec.ny.gov/enb/20150204_reg6.html#640400000600026	3.312	Oswegatchie River	
67	02/04/15	02/19/15	NP	Frey Concrete	8-1822-00008/00003	Alexander	Genesee	8 http://www.dec.ny.gov/enb/20150204_reg8.html#818220000800003	2.520	NS	
68	02/04/15	02/19/15	NP	O-At-Ka Milk Products Coop	8-1802-00024/02001	Batavia	Genesee	8 http://www.dec.ny.gov/enb/20150204_reg8.html#818020002402001	4.320	NS	
69	02/11/15	02/26/15	NP	Wyeth Pharmaceuticals	3-3924-00025/00084	Orangetown	Rockland	3 http://www.dec.ny.gov/enb/20150211_reg3.html#339240002500084	3.100	on-site wells	
70	02/11/15	02/26/15	NP	Schweitzer-Mauduit	4-1020-00007/00014	Ancram	Columbia	4 http://www.dec.ny.gov/enb/20150211_reg4.html#410200000700014	2.448	Roeliff Jansen Kill	
71	02/11/15	02/26/15	NP	Irving Tissue Ft Edward Operations	5-5330-00015/00031	Fort Edward	Washington	5 http://www.dec.ny.gov/enb/20150211_reg5.html#553300001500031	6.000	NS	
72	02/11/15	02/26/15	NP	Syracuse Sand & Gravel Granby Mine	7-3528-00031/00005	Granby	Oswego	7 http://www.dec.ny.gov/enb/20150211_reg7.html#735280003100005	2.160	on-site ponds	
73	02/11/15	02/26/15	NP	Bonduelle USA Oakfield Facility	8-1838-00001/00006	Oakfield	Genesee	8 http://www.dec.ny.gov/enb/20150211_reg8.html#818380000100006	2.016	two ponds located on their proper	
74	02/11/15	02/26/15	NP	Oak Hill Country Club	8-2646-00035/00024	Pittsford	Monroe	8 http://www.dec.ny.gov/enb/20150211_reg8.html#826460003500024	4.090	Allen's Creek, Erie Canal	
75	02/11/15	02/26/15	NP	Frey Concrete	9-1452-00008/00003	Lancaster	Erie	9 http://www.dec.ny.gov/enb/20150211_reg9.html#914520000800003	0.018	on-site well	
76	02/11/15	02/26/15	NP	Peroxychem LLC	9-1464-00040/00111	Tonawanda	Erie	9 http://www.dec.ny.gov/enb/20150211_reg9.html#914640004000111	16.000	Niagara River	
77	02/11/15	02/26/15	NP	Tonawanda Coke Corp	9-1464-00113/00036	Tonawanda	Erie	9 http://www.dec.ny.gov/enb/20150211_reg9.html#914640011300036	17.280	Niagara River	
78	02/18/15	03/05/15	Public	Suffolk County Water Authority	1-4722-06434/00001	Brookhaven	Suffolk	1 http://www.dec.ny.gov/enb/20150218_reg1.html#147220643400001	1.998	groundwater	
79	02/18/15	03/05/15	Public	Suffolk County Water Authority	1-4728-05022/00003	Islip	Suffolk	1 http://www.dec.ny.gov/enb/20150218_reg1.html#147280502200003	1.998	groundwater	
80	02/18/15	03/05/15	NP	NYCEDC New Stapleton Waterfront Deve	2-6402-00004/00095	Staten Island	Richmond	2 http://www.dec.ny.gov/enb/20150218_reg2.html#264020000400095	1.440	groundwater	
81	02/18/15	03/05/15	NP	Titus Mountain Family Ski Center	5-1648-00050/00021	Malone	Franklin	5 http://www.dec.ny.gov/enb/20150218_reg5.html#516480005000021	2.880	Salmon River	
82	02/18/15	03/05/15	NP	Oak Hill Country Club	8-2646-00035/00024	Pittsford	Monroe	8 http://www.dec.ny.gov/enb/20150218_reg8.html#826460003500024	4.090	Allen's Creek, Erie Canal	
83	02/18/15	03/05/15	NP	Orchard Park Country Club	9-1460-00103/00011	Orchard Park	Erie	9 http://www.dec.ny.gov/enb/20150218_reg9.html#914600010300011	0.418	NS	
84	02/25/15	03/12/15	NP	Brae Burn Country Club	3-5528-00123/00001	Purchase	Westchester	3 http://www.dec.ny.gov/enb/20150225_reg3.html#355280012300001	2.016	on-site pond	
85	02/25/15	03/12/15	NP	Amri Rensselaer	4-3814-00016/00253	Rensselaer	Rensselaer	4 http://www.dec.ny.gov/enb/20150225_reg4.html#438140001600253	6.048	Hudson River	
86	02/25/15	03/12/15	NP	Gore Mtn Ski Center	5-5230-00017/00010	Johnsburg	Warren	5 http://www.dec.ny.gov/enb/20150225_reg5.html#552300001700010	7.020	North Creek Reservoir, Hudson F	
87	02/25/15	03/12/15	NP	Mohawk Fine Papers Inc Waterford Facilit	5-4154-00003/00026	Waterford	Saratoga	5 http://www.dec.ny.gov/enb/20150225_reg5.html#541540000300026	9.000	Mohawk River	
88	02/25/15	03/12/15	NP	Remington Arms Co	6-2128-00019/00377	Ilion	Herkimer	6 http://www.dec.ny.gov/enb/20150225_reg6.html#621280001900377	3.888	on-site wells	
89	02/25/15	03/12/15	NP	Reynolds Metals St Lawrence Reduction P	6-4058-00024/00085	Massena	St Lawrence	6 http://www.dec.ny.gov/enb/20150225_reg6.html#640580002400085	6.800	St. Lawrence River	
90	02/25/15	03/12/15	NP	Syracuse Sand & Gravel Lake Road Pit	8-3240-00033/00004	Phelps	Ontario	8 http://www.dec.ny.gov/enb/20150225_reg8.html#832400003300004	6.640	on-site pond	
91	02/25/15	03/12/15	NP	Holiday Valley Resort - Tannenbaum Rese	9-0460-00035/00003	Mansfield	Cattaraugus	9 http://www.dec.ny.gov/enb/20150225_reg9.html#904600003500003	8.568	Great Valley Creek, on-site wells	
92	02/25/15	03/12/15	NP	Kissing Bridge Ski Area	9-1438-00192/00003	Concord	Erie	9 http://www.dec.ny.gov/enb/20150225_reg9.html#914380019200003	5.256	West Branch of the Cazenovia Cr	
93	02/25/15	03/12/15	NP	Redland Quarries Lockport Quarry	9-2999-00002/00016	Lockport	Niagara	9 http://www.dec.ny.gov/enb/20150225_reg9.html#929990000200016	6.840	on-site sources	
94	02/25/15	03/12/15	NP	Redland Quarries Niagara Falls Quarry	9-2930-00015/02002	Niagara Falls	Niagara	9 http://www.dec.ny.gov/enb/20150225_reg9.html#929300001502002	2.880	on-site sources	
95	03/04/15	03/19/15	NP	Fenway Golf Club	3-5550-00073/00002	Scarsdale	Westchester	3 http://www.dec.ny.gov/enb/20150304_reg3.html#355500007300002	2.448	pond and wells	
96	03/04/15	03/19/15	NP	Saint Andrew's Golf Club	3-5526-00473/00001	Hastings on Hudson	Westchester	3 http://www.dec.ny.gov/enb/20150304_reg3.html#355260047300001	2.592	pond and wells	
97	03/04/15	03/19/15	NP	Scarsdale Golf Club	3-5526-00474/00001	Hartsdale	Westchester	3 http://www.dec.ny.gov/enb/20150304_reg3.html#355260047400001	2.592	Hartsdale Lake	
98	03/04/15	03/19/15	NP	Westchester Country Club	3-5514-00015/00003	Rye	Westchester	3 http://www.dec.ny.gov/enb/20150304_reg3.html#355140001500003	2.160	pond and wells	
99	03/11/15	03/26/15	NP	Con Ed-59th St Station	2-6202-00032/00025	New York	New York	2 http://www.dec.ny.gov/enb/20150311_reg2.html#262020003200025	4.320	Hudson River	
100	03/11/15	03/26/15	NP	NYS Rockland Lake State Park	3-3920-00099/00007	Clarkstown	Rockland	3 http://www.dec.ny.gov/enb/20150311_reg3.html#339200009900007	1.115	Rockland Lake	
101	03/11/15	03/26/15	05/01/15	NP	Roseton Generating Station	3-3346-00075/00019	Newburgh	Orange	3 http://www.dec.ny.gov/enb/20150311_reg3.html#333460007500019	923.000	Hudson River
102	03/11/15	03/26/15	NP	Lydall Thermal/Acoustical	4-0128-00009/02001	Green Island	Albany	4 http://www.dec.ny.gov/enb/20150311_reg4.html#401280000902001	3.700	Hudson River	
103	03/11/15	03/26/15	NP	Windham Mountain Ski Area	4-1946-00007/00015	Windham	Greene	4 http://www.dec.ny.gov/enb/20150311_reg4.html#419460000700015	6.912	Batavia Kill	
104	03/11/15	03/26/15	NP	Whiteface Mountain Ski Center	5-1554-00013/02003	Wilmington	Essex	5 http://www.dec.ny.gov/enb/20150311_reg5.html#515540001302003	8.640	Asusable River West Branch	
105	03/11/15	03/26/15	NP	Burrows Paper Corp Mill St Facility	6-2109-00003/00008	Little Falls	Herkimer	6 http://www.dec.ny.gov/enb/20150311_reg6.html#621090000300008	2.880	Mohawk River	
106	03/11/15	03/26/15	NP	Potsdam Specialty Paper Inc	6-4074-00033/02002	Potsdam	St Lawrence	6 http://www.dec.ny.gov/enb/20150311_reg6.html#640740003302002	2.900	Raquette River	
107	03/11/15	03/26/15	NP	Revere Copper Products	6-3013-00091/00040	Rome	Oneida	6 http://www.dec.ny.gov/enb/20150311_reg6.html#630130009100040	5.760	Mohawk River	
108	03/11/15	03/26/15	NP	Valley Sand & Gravel Avon Plant	8-2422-00032/00003	Caledonia	Livingston	8 http://www.dec.ny.gov/enb/20150311_reg8.html#824220003200003	4.896	North Pond	
109	03/11/15	03/26/15	NP	Friendship Dairies LLC	9-0250-00005/00013	Friendship	Allegany	9 http://www.dec.ny.gov/enb/20150311_reg9.html#902500000500013	2.116	groundwater wells	
110	03/18/15	04/02/15	NP	IBM East Fishkill Facility	3-1328-00025/01068	East Fishkill	Dutchess	3 http://www.dec.ny.gov/enb/20150318_reg3.html#313280002501068	5.570	groundwater	
111	03/18/15	04/02/15	NP	Winged Foot Golf Club	3-5532-00126/00006	Mamaroneck	Westchester	3 http://www.dec.ny.gov/enb/20150318_reg3.html#355320012600006	5.330	man made pond	
112	03/18/15	04/02/15	NP	Adirondack Fish Culture Station	5-1652-00134/00003	Santa Clara	Franklin	5 http://www.dec.ny.gov/enb/20150318_reg5.html#516520013400003	3.600	Little Clean Pond	
113	03/18/15	04/02/15	Public	City of Saratoga Bog Meadow Well Field	5-4115-00042/00003	Saratoga Springs	Saratoga	5 http://www.dec.ny.gov/enb/20150318_reg5.html#541150004200003		NS groundwater	
114	03/18/15	04/02/15	NP	DEC Chateaugay Fish Hatchery	5-1634-00006/00003	Chateaugay	Franklin	5 http://www.dec.ny.gov/enb/20150318_reg5.html#516340000600003	1.584	GW near Marble River	

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

#	Date Notice	Date Comr	Issue Dat P/NP	Name of Facility	Application ID	City/Town	County	DEC ENB Notice URL	Vol MGD	Water Source
115	03/18/15	04/02/15	NP	Gouverneur Minerals Div # 4 Mine	6-2324-00005/02001	Lake Bonaparte	Lewis	6 http://www.dec.ny.gov/enb/20150318_reg6.html#623240000502001	4.320	underground pond
116	03/18/15	04/02/15	NP	Hanson Aggregates Watertown Mine	6-2248-00002/02003	Watertown	Jefferson	6 http://www.dec.ny.gov/enb/20150318_reg6.html#622480000202003	9.900	on site sources
117	03/18/15	04/02/15	NP	Hanson Aggregates Jamesville Quarry	7-3126-00034/00038	Dewitt	Onondaga	7 http://www.dec.ny.gov/enb/20150318_reg7.html#731260003400038	3.890	Butternut Creek
118	03/18/15	04/02/15	NP	DEC Caledonia Fish Hatchery	8-2422-00019/00022	Caledonia	Livingston	8 http://www.dec.ny.gov/enb/20150318_reg8.html#824220001900022	43.000	Spring Creek
119	03/18/15	04/02/15	NP	Dolomite Circular Hill Quarry	8-1836-00016/00013	Le Roy	Genesee	8 http://www.dec.ny.gov/enb/20150318_reg8.html#818360001600013	3.456	mine floor
120	03/18/15	04/02/15	NP	DEC Randolph Fish Hatchery	9-0426-00005/00008	Randolph	Cattaraugus	9 http://www.dec.ny.gov/enb/20150318_reg9.html#904260000500008	3.010	spring-charged retention basin
121	03/18/15	04/02/15	NP	Jamesstown Macadam Corbett Hill Mine	9-0499-00085/00003	Randolph	Cattaraugus	9 http://www.dec.ny.gov/enb/20150318_reg9.html#904990008500003	4.970	GW and SW ponds
122	03/25/15	04/09/15	NP	New York Plaza Building	2-6206-00053/00005	New York	New York	2 http://www.dec.ny.gov/enb/20150325_reg2.html#262060005300005	33.500	East River
123	03/25/15	04/09/15	NP	Tilcon - West Nyack Stone Processing	3-3920-00054/02001	Clarkstown	Rockland	3 http://www.dec.ny.gov/enb/20150325_reg3.html#339200005402001	2.800	excavation pit
124	03/25/15	04/09/15	NP	Burrows Paper Corp Lyonsdale	6-2338-00002/00012	Little Falls	Lewis	6 http://www.dec.ny.gov/enb/20150325_reg6.html#623380000200012	3.197	Moose River
125	03/25/15	04/09/15	NP	DEC Oneida Fish Hatchery	7-3526-00036/00010	Constantia	Oswego	7 http://www.dec.ny.gov/enb/20150325_reg7.html#735260003600010	2.600	NS
126	03/25/15	04/09/15	NP	Hanson Aggregates Batavia Mine	8-1824-00004/00017	Batavia	Genesee	8 http://www.dec.ny.gov/enb/20150325_reg8.html#818240000400017	5.760	man made pond
127	04/01/15	05/01/15	NP	Tuxedo Reserve	3-3350-00044/00003	Tuxedo	Orange	3 http://www.dec.ny.gov/enb/20150401_reg3.html#333500004400003	0.370	groundwater wells
128	04/01/15	04/16/15	NP	Barrett Paving Boonville Quarry	6-9906-00045/00021	Leyden	Multiple	6 http://www.dec.ny.gov/enb/20150401_reg6.html#699060004500021	3.700	North River Quarry
129	04/01/15	04/16/15	NP	Syracuse S&G Constantia Center Mine	7-3526-00008/00004	Constantia	Oswego	7 http://www.dec.ny.gov/enb/20150401_reg7.html#735260000800004	0.610	NS
130	04/01/15	04/16/15	NP	Hanson Aggregates Stafford Quarry	8-1844-00013/00024	Stafford	Genesee	8 http://www.dec.ny.gov/enb/20150401_reg8.html#818440001300024	9.740	sumps and wells
131	04/08/15	04/23/15	Public	Suffolk County Water Authority	1-4736-08200/00001	Southampton	Suffolk	1 http://www.dec.ny.gov/enb/20150408_reg1.html#147360820000001	1.4397	groundwater
132	04/08/15	04/23/15	Public	Town of New Scotland Water	4-0134-00201/00001	New Scotland	Albany	4 http://www.dec.ny.gov/enb/20150408_reg4.html#Town_of_New_Scotland	0.051	groundwater
133	04/08/15	04/23/15	NP	Valente Gravel Wynantskill Pit	4-3899-00017/00003	North Greenbush	Albany	4 http://www.dec.ny.gov/enb/20150408_reg4.html#438990001700003	7.668	on-site ponds
134	04/08/15	04/23/15	NP	Knolls Atomic Power Laboratory	5-4142-00005/00090	Milton	Saratoga	5 http://www.dec.ny.gov/enb/20150408_reg5.html#541420000500090	4.030	on-site well field
135	04/08/15	04/23/15	NP	NYS Clinton Correctional Facility	5-0934-00125/00003	Dannemora	Clinton	5 http://www.dec.ny.gov/enb/20150408_reg5.html#509340012500003	2.503	on-site wells
136	04/08/15	04/23/15	NP	Saratoga National Golf Club	5-4115-00097/00019	Saratoga Springs	Saratoga	5 http://www.dec.ny.gov/enb/20150408_reg5.html#541150009700019	2.160	Lake Lonely
137	04/08/15	04/23/15	NP	Huhtamaki Inc	7-3504-00016/00032	Fulton	Oswego	7 http://www.dec.ny.gov/enb/20150408_reg7.html#735040001600032	2.880	Oswego River
138	04/08/15	04/23/15	NP	Gernatt - Collins Plant	9-1436-00111/00002	Collins	Erie	9 http://www.dec.ny.gov/enb/20150408_reg9.html#914360011000002	4.032	on-site pond
139	04/08/15	04/23/15	NP	Gernatt Asphalt Products	9-0472-00053/02001	Gowanda	Cattaraugus	9 http://www.dec.ny.gov/enb/20150408_reg9.html#904720005302001	5.040	on-site pond
140	04/22/15	05/07/15	Public	Suffolk County Water Authority	1-4724-01840/00003	East Hampton	Suffolk	1 http://www.dec.ny.gov/enb/20150422_reg1.html#147240184000003	0.720	groundwater
141	04/29/15	05/14/15	NP	US Army Garrison	3-3336-00022/00075	West Point	Orange	3 http://www.dec.ny.gov/enb/20150429_reg3.html#333360002200075	2.980	Long Pond, Lusk Reservoir, Stilv
142	04/29/15	05/14/15	NP	Graymont Materials Clinton Quarry	5-0932-00023/00004	Clinton	Clinton	5 http://www.dec.ny.gov/enb/20150429_reg5.html#509320002300004	4.320	quarry sump
143	04/29/15	05/14/15	NP	Jointa Galusha Glens Falls Lime Quarry	5-5205-00017/00014	Glens Falls	Warren	5 http://www.dec.ny.gov/enb/20150429_reg5.html#552050001700014	2.592	quarry sump
144	04/29/15	05/14/15	NP	NYCO Seventy Road Mine	5-1532-00007/00008	Lewis	Essex	5 http://www.dec.ny.gov/enb/20150429_reg5.html#515320000700008	2.160	quarry sump
145	04/29/15	05/14/15	NP	Palette Stone Corinth Facility	5-4126-00010/02001	Corinth	Saratoga	5 http://www.dec.ny.gov/enb/20150429_reg5.html#541260001002001	3.600	on-site pond
146	04/29/15	05/14/15	NP	Carthage Specialty Paperboard	6-2230-00004/02003	West Carthage	Jefferson	6 http://www.dec.ny.gov/enb/20150429_reg6.html#622300000402003	2.592	Black River
147	04/29/15	05/14/15	NP	Oswego Harbor Power	7-3512-00030/00045	Oswego	Oswego	7 http://www.dec.ny.gov/enb/20150429_reg7.html#735120003000045	1400.000	Lake Ontario
148	05/13/15	05/28/15	NP	Town of Ramapo Spook Rock Golf Course	3-3926-00659/00008	Ramapo (Suffern)	Rockland	3 http://www.dec.ny.gov/enb/20150513_reg3.html#339260065900008	2.260	on-site pond and two wells
149	05/13/15	05/28/15	NP	Warren Fane Hemstreet Park Pit	4-3842-00020/00011	Schaghticoke	Rensselaer	4 http://www.dec.ny.gov/enb/20150513_reg4.html#438420002000011	5.328	on-site ponds
150	05/13/15	05/28/15	NP	Barrett Paving Norwood Quarry	6-4062-00002/00026	Norwood	St. Lawrence	6 http://www.dec.ny.gov/enb/20150513_reg6.html#640620000200026	8.496	Raquette River & on-site quarry p
151	05/13/15	05/28/15	NP	Seneca Foods- Leicester Plant	8-2430-00004/00006	Leicester	Livingston	8 http://www.dec.ny.gov/enb/20150513_reg8.html#824300000400006	2.880	Genesee River
152	05/20/15	06/04/15	Public	City of Glens Falls Butler Pond Watershed	5-5234-00635/00001	Queensbury	Warren	5 http://www.dec.ny.gov/enb/20150520_reg5.html#552340063500001	0.072	new well
153	05/20/15	06/04/15	NP	DEC Bath Fish Hatchery	8-4672-00169/00003	Urbana	Steuben	8 http://www.dec.ny.gov/enb/20150520_reg8.html#846720016900003	2.150	three spring fed water sources
154	05/20/15	06/04/15	NP	Erie Co Elma Meadows Golf Course	9-1442-00012/00014	Elma	Erie	9 http://www.dec.ny.gov/enb/20150520_reg9.html#914420001200014	0.366	Buffalo Creek
155	05/20/15	06/04/15	NP	Red Wing Properties ROE-JAN Plant	0-9999-00114/00005	Milan and Clermont	Several	M http://www.dec.ny.gov/enb/20150520_reg0.html#099990011400005	2.880	on-site pond
156	06/03/15	06/18/15	NP	Century Country Club	3-5528-00130/00001	Harrison (Purchase)	Westchester	3 http://www.dec.ny.gov/enb/20150603_reg3.html#355280013000001	2.434	on-site well fed pond
157	06/10/15	06/25/15	NP	Chelsea Skybox	2-6205-00267/00003	Manhattan	New York	2 http://www.dec.ny.gov/enb/20150610_reg2.html#262050026700003	0.777	Groundwater
158	06/10/15	06/25/15	NP	Hoves Cave Quarry	4-4326-00002/00006	Cobleskill	Schoharie	4 http://www.dec.ny.gov/enb/20150610_reg4.html#443260000200006	6.365	on-site ponds
159	06/10/15	06/25/15	NP	Barrett Pamela Quarry	6-2248-00014/00019	Watertown	Jefferson	6 http://www.dec.ny.gov/enb/20150610_reg6.html#622480001400019	7.200	NS
160	06/10/15	06/25/15	NP	Hanson Aggregates Oriskany Falls	6-3099-00049/00075	Oriskany Falls	Oneida	6 http://www.dec.ny.gov/enb/20150610_reg6.html#630990004900075	4.400	on-site pond and wells and Oriska
161	06/10/15	06/25/15	NP	Hanson Aggregates Poland Sand and Grav	6-2144-00002/00008	Poland	Herkimer	6 http://www.dec.ny.gov/enb/20150610_reg6.html#621440000200008	4.100	on-site pond and Oxbow West Ca
162	06/10/15	06/25/15	NP	St Lawrence Zinc Company	6-4038-00024/02001	Gouverneur	St Lawrence	6 http://www.dec.ny.gov/enb/20150610_reg6.html#640380002402001	9.180	Sylvia Lake, on-site pond and we
163	06/10/15	06/25/15	NP	Cavalry Club Golf Course	7-3138-00079/00009	Manlius	Onondaga	7 http://www.dec.ny.gov/enb/20150610_reg7.html#731380007900009	1.944	on-site pond
164	06/10/15	06/25/15	NP	Cornell University Lower Intake Pump Ho	7-5030-00008/00007	Ithaca	Tompkins	7 http://www.dec.ny.gov/enb/20150610_reg7.html#750300000800007	5.456	Fall Creek
165	06/10/15	06/25/15	NP	Keeler Wilson Quarry	8-3422-00007/00017	Albion	Orleans	8 http://www.dec.ny.gov/enb/20150610_reg8.html#834220000700017	9.000	open pit pond
166	06/10/15	06/25/15	NP	Goodyear Dunlop Tires	9-1464-00030/00202	Tonawanda	Erie	9 http://www.dec.ny.gov/enb/20150610_reg9.html#914640003000202	8.640	Niagara River and on-site well
167	06/17/15	07/02/15	NP	Wingdale Mine Facility	3-1326-00049/00025	Dover (Wingdale)	Dutchess	3 http://www.dec.ny.gov/enb/20150617_reg3.html#313260004900025	5.760	on-site pond
168	06/17/15	07/02/15	NP	Callanan Industries Oxbow Quarry	7-2538-00002/02003	Lincoln (Clockville)	Madison	7 http://www.dec.ny.gov/enb/20150617_reg7.html#725380000202003	3.564	on-site pond
169	06/17/15	07/02/15	NP	Dolomite Products Ogden Quarry	8-2638-00008/02005	Ogden	Monroe	8 http://www.dec.ny.gov/enb/20150617_reg8.html#826380000802005	5.069	NS
170	06/17/15	07/02/15	NP	Dolomite Products Palmer Road Pit	8-5499-00027/00004	Palmyra	Wayne	8 http://www.dec.ny.gov/enb/20150617_reg8.html#854990002700004	8.208	NS
171	06/17/15	07/02/15	NP	Dolomite Products Walworth Pit	8-5444-00001/02001	Walworth	Wayne	8 http://www.dec.ny.gov/enb/20150617_reg8.html#854440000102001	6.206	on-site ponds
172	06/17/15	07/02/15	NP	Hanson Aggregates Geneva Plant	8-3240-00006/00023	Phelps	Ontario	8 http://www.dec.ny.gov/enb/20150617_reg8.html#832400000600023	2.592	on-site quarries and wells

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

#	Date Notice	Date Comr	Issue Dat P/NP	Name of Facility	Application ID	City/Town	County	DEC ENB Notice URL	Vol MGD	Water Source
173	06/17/15	07/02/15	NP	E I Dupont Yerkes Plant	9-1464-00031/00297	Tonawanda	Erie	9 http://www.dec.ny.gov/enb/20150617_reg9.html#914640003100297	14.400	Niagara River
174	06/24/15	07/09/15	NP	Tricity Highway Products Brisben Pit	7-0830-00001/02002	Greene	Chenango	7 http://www.dec.ny.gov/enb/20150624_reg7.html#708300000102002	2.880	on-site pond
175	06/24/15	07/09/15	NP	Dolomite Products Le Roy Stone Quarry	8-1836-00001/02004	Le Roy	Genesee	8 http://www.dec.ny.gov/enb/20150624_reg8.html#818360000102004	7.056	on-site quarry sumps
176	06/24/15	07/09/15	NP	Dolomite Products Manchester Quarry	8-3236-00005/02001	Manchester	Ontario	8 http://www.dec.ny.gov/enb/20150624_reg8.html#832360000502001	8.734	on-site ponds
177	06/24/15	07/09/15	NP	Dolomite Products Penfield Plant	8-2642-00009/02001	Penfield	Monroe	8 http://www.dec.ny.gov/enb/20150624_reg8.html#826420000902001	8.381	on-site sources
178	06/24/15	07/09/15	NP	Islechem	9-1446-00019/00030	Grand Island	Erie	9 http://www.dec.ny.gov/enb/20150624_reg9.html#914460001900030	3.186	Niagara River
179	07/01/15	07/16/15	NP	Callanan Industries Port Ewen Facility	3-5122-00046/00011	Esopus	Ulster	3 http://www.dec.ny.gov/enb/20150701_reg3.html#351220004600011	7.092	Roudout Creek and on-site wells
180	07/01/15	07/16/15	NP	Dolomite Products Amenia Plant	3-1320-00002/00019	Amenia	Dutchess	3 http://www.dec.ny.gov/enb/20150701_reg3.html#31320000200019	5.443	Webatuck Creek & settling pond
181	07/01/15	07/16/15	NP	Callanan Industries Pattersonville Quarry/4	4-2726-00003/00019	Florida	Montgomery	4 http://www.dec.ny.gov/enb/20150701_reg4.html#427260000300019	3.910	sump and on-site wells
182	07/01/15	07/16/15	NP	Callanan Industries South Bethlehem Quar	4-0199-00001/00039	Bethlehem	Albany	4 http://www.dec.ny.gov/enb/20150701_reg4.html#401990000100039	1.5048	on-site ponds and wells
183	07/01/15	07/16/15	NP	Nine Mile Point Nuclear Station	7-3556-00013/00033	Scriba	Oswego	7 http://www.dec.ny.gov/enb/20150701_reg7.html#735560001300033	489.600	Lake Ontario
184	07/01/15	07/16/15	NP	Callanan Industries Brockport Plant	8-2652-00012/02004	Sweden	Monroe	8 http://www.dec.ny.gov/enb/20150701_reg8.html#826520001202004	11.700	quarry sump
185	07/01/15	07/16/15	NP	Dolomite Products Gates Quarry	8-2626-00016/02001	Gates	Monroe	8 http://www.dec.ny.gov/enb/20150701_reg8.html#826260001602001	9.936	on-site sources
186	07/01/15	07/16/15	NP	Hanson Aggregates Clarendon Quarry	8-3248-00002/02002	Victor	Ontario	8 http://www.dec.ny.gov/enb/20150701_reg8.html#832480000202002	2.606	on-site pond and well
187	07/01/15	07/16/15	NP	Hanson Aggregates Victor Pit	8-3426-00004/02002	Clarendon	Orleans	8 http://www.dec.ny.gov/enb/20150701_reg8.html#834260000402002	4.226	quarry sumps
188	07/01/15	07/16/15	NP	Swain Recreation Center Sewage	9-0256-00001/00003	Grove	Allegany	9 http://www.dec.ny.gov/enb/20150701_reg9.html#902560000100003	3.168	Canaseraga Creek
TOTAL									9696.927	

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

Name of Facility	Basin	SEQRA	Coastal Zone	Purpose
Ravenswood	Hudson	Type II	Yes	for operation of the Ravenswood Generation Station
Sunningdale Country Club Incorporated	Hudson	Type II	No	the addition of two new wells to their current irrigation water system in order to lower reliance on municipal
Suffolk County Water Authority	Long Island	Unlisted, Neg dec on file	No	to construct two water supply wells to service the Southold Low water supply system to replace an existing
City of Fulton	Great Lakes	Unlisted, Neg dec on file	No	to add an additional well in the Great Bear well field
Suffolk County Water Authority	Long Island	Type II	No	to construct two replacement water supply wells at Kenny's Rd Plant in Town of Southold
Town of New Berlin	Susquehanna	Type I, neg dec on file	No	for the proposed South New Berlin Water System Improvements
Town of Richland	Great Lakes	Type I, neg dec on file	No	rehabilitate two (2) existing wells for public water supply and install approximately 60,000 linear feet (11.4
Village of Mohawk	Hudson	Unlisted, Neg dec on file	No	new permissive service area will serve four residential properties along Putts Hill Road
City of Glen Cove	Long Island	Unlisted, Neg dec on file	No	install a new water supply well
Mohawk Valley Water Authority	Hudson	Type I, neg dec on file	No	to increase MVWA's authorized service area to include the Towns of Frankfort and Schuyler in Herkimer C
Greenlawn Water District	Long Island	Unlisted, Neg dec on file	No	Construct a new public supply well having a pump capacity of 1,380 gallons permit minute (1440 x 1380 = -
Suffolk County Water Authority	Long Island	Unlisted, Neg dec on file	Yes	proposes to construct Division Street replacement production well No. 2A (WWA-11688) approximately 17
Astoria Generating Company LP	NY Harbor	Type II	No	for operation of the Astoria Generating Station Facility
OGS--Empire State Plaza	Hudson	Type II	No	for operation of the air conditioning system at the Empire State Plaza
RED-Rochester LLC--Eastman Business P	Great Lakes	Type II	Yes	for operation of the RED-Rochester LLC Industrial Water Treatment Plant, which serves the Eastman Busin
F H Stickles	Hudson	Type II	No	for operation of the Livingston Mine
Lafarge Building Materials Inc	Hudson	Type II	Yes	for operation of the facility. Notice does not mention that facility is a cement-making facility.
DEC--Salmon River Fish Hatchery	Great Lakes	Type II	No	for fish production at the Salmon River Fish Hatchery
Alcoa Massena Operations (WEST Plant)	Great Lakes	Type II	Yes	for the operation of the facility
Reenergy Black River	Great Lakes	Type II	No	for the operation of the ReEnergy Black River Generation facility
U. of Rochester	Great Lakes	Type II	No	for operation of the University of Rochester Central Utilities Plant
Tecumseh Redevelopment	Great Lakes	Type II	Yes	for operations at the applicant's facility and for other water users
Con Ed--East River Generating Station	NY Harbor	Type II	No	for operation of the East River Generating Station
General Motors Tonawanda Engine Plant	Great Lakes	Type II	Yes	for operation of the General Motors CET Tonawanda Engine Facility
Dupont Niagara Falls Plant	Great Lakes	Type II	Yes	for operation of the DuPont Niagara Falls Plant
Praxair	Great Lakes	Type II	Yes	for operation of the Praxair, Inc. Niagara Falls Facility
Lakeside Beaver Falls Generating Station	Great Lakes	Type II		for once through cooling and other process related to electrical generation
West Hook Sand & Gravel	Hudson	Type II		for facility operations at the West Hook Sand & Gravel Mine
Hanson Honeoye Falls Quarry & Asphalt F	Great Lakes	Type II		withdrawal for operations of the Hanson Aggregates New York LLC. Honeoye Falls Quarry and Asphalt Pl
International Paper Ticonderoga Mill	Great Lakes	Type II		for operation of the International Paper Ticonderoga Mill facility
Danskammer	Hudson	Type II	No	for operation of the Danskammer Generating Station
Occidental Chemical Corp Niagara Plant	Great Lakes	Type II	Yes	Not stated
U S Salt Watkins Glen Refinery	Great Lakes	Type II		for operation of the US Salt Watkins Glen Refinery including use for cooling water, process water, boiler bl
Novelis Corporation	Great Lakes	Type II	No	for operation of the Novelis Corporation Facility. No mention it is an aluminum manufacturing facility
U S Gypsum Co--Oakfield Plant	Great Lakes	Type II		for withdrawal of up to a maximum of 25.92 million gallons per day (MGD) of water from groundwater fro
City of Saratoga Springs	Hudson	Type II		development of a new groundwater supply at the existing Bog Meadow pump station
GINNA Nuclear Power Plant	Great Lakes	Type II	Yes	for operation of a nuclear power facility
NYS Rome Fish Hatchery	Hudson	Type II	No	3.6 MGP from a groundwater source and up to 5.76 MGP from Delta Reservoir for the operation of the NYS
County Line Stone Akron Quarry	Great Lakes	Type II	No	for operation of the County Line Stone Co. Inc. Akron Quarry
Brooklyn Navy Yard Cogeneration Plant	NY Harbor	Type II	No	for operation of the Brooklyn Navy Yard Cogeneration Plant Facility for once-through cooling
NYU Medical Center	Hudson	Neg Dec	No	to operate a temporary dewatering system to facilitate the construction of a new hospital building
Wheelabrator Westchester LP	Hudson	Type II	Yes	for operation of the Wheelabrator Westchester Facility
Carthage Energy Cogen Facility	Great Lakes	Type II	No	for cooling water and other uses related to electrical generation
Village of Ilion Water Supply System	Hudson	Type II	No	Install two new municipal wells
Village of Castile water system	Great Lakes	Neg Dec	No	the installation of 1 new well
NYC DDC Bertram Avenue Outfall	Hudson	FEIS	Yes	to operate a temporary dewatering system to facilitate construction of new sewers
American Sugar Refining	Hudson	Type II	Yes	for operation of the American Sugar Refining, Inc. Facility
Town of Stillwater	Hudson	Neg Dec	No	installation of 7.8 miles of water transmission lines connecting to Saratoga Co Water Authority
Cayuga LLC Generating Station	Great Lakes	Type II	No	for operation of the Cayuga LLC Generating Station
NYS Collins/Gowanda Correctional Facili	Great Lakes	Neg Dec	No	to allow water levels in the wells to recover to safe levels of operation
Battery Park Comm Ctr	Hudson	Type II	No	for operation of the World Financial Center
Suffolk County Water Authority	Long Island	Neg Dec	No	to construct a new public supply well in the Spinney Road well field in East Quogue, Town of Southampton
Cricket Valley Energy Center	Hudson	DEIS	No	for a planned 1,000 megawatt (MW) power plant in Dover, New York
Constitution Pipeline	Hudson	Type II	No	for a one-time, temporary withdrawal of a total volume of approximately 5,787,900 gallons of water from th
Village of Canajoharie Water District	Hudson	Neg Dec	No	to sell 216,000 additional gpd of water to the C.G. Roxane LLC water bottling facility in the Town of Johns
Finch Paper LLC		Type II	No	for operation of the Finch Paper LLC Facility

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

Name of Facility	Basin	SEQRA	Coastal Zone	Purpose
Momentive Performance Materials	Hudson	Type II	No	for operation of the Momentive Performance Materials facility
Wheelabrator Hudson Falls	Hudson	Type II	No	for operation of the Wheelabrator Hudson Falls facility
Syracuse Sand & Gravel Constantia Center	Great Lakes	Type II	No	for aggregate washing operations at the Constantia Center mine
Huntley Steam Generating Station	Great Lakes	Type II	No	water for operation of the Huntley Steam Generation Station
Old Westbury Village Water District	Long Island	Neg Dec	No	proposes to construct additional water supply well # 7 to improve supply capacity to meet current and future
NYC DEP - Butler Manor Watershed	Hudson	FEIS	Yes	to operate a temporary dewatering system to facilitate the construction of sanitary and stormwater sewers in
Village of Harriman Water District	Hudson	Type II	No	to construct a new water supply well (LIZDA Well #2) as a replacement for an existing well (LIZDA Well #
Village of Canajoharie Water District	Hudson	Neg Dec	No	to sell 216,000 additional gpd of water to the C.G. Roxane LLC water bottling facility in the Town of Johns
Somerset Steam Generation Station	Great Lakes	Type II	No	for operation of the Somerset Steam Generation Station
Dunn Paper - Natural Dam	Great Lakes	Type II	No	for operation of the Clearwater Paper Facility on the Oswegatchie River
Frey Concrete	Great Lakes	Type II	No	for operation of the Frey Sand and Gravel Corporation Sand and Gravel Washing Operation Facility
O-At-Ka Milk Products Coop	Great Lakes	Type II	No	for operation of the O-At-Ka Milk Products Cooperative facility
Wyeth Pharmaceuticals	Hudson	Type II	No	for operation of the Wyeth Pearl River NY Facility
Schweitzer-Mauduit	Hudson	Type II	No	for operation of the Schweitzer-Mauduit Facility manufacturing fine specialty papers
Irving Tissue Ft Edward Operations	Great Lakes	Type II	No	for operation of the Irving Tissue Paper Mill Facility
Syracuse Sand & Gravel Granby Mine	Great Lakes	Type II	No	for operation of the Syracuse Sand & Gravel Granby Mine
Bonduelle USA Oakfield Facility	Great Lakes	Type II	No	water for operation of the Bonduelle USA food processing plant
Oak Hill Country Club	Great Lakes	Type II	No	for operation of the Oak Hill Country Club two golf courses
Frey Concrete	Great Lakes	Type II	No	for operation of the Frey Concrete Facility
Peroxychem LLC	Great Lakes	Type II	No	for the operation of the PeroxyChem LLC facility
Tonawanda Coke Corp	Great Lakes	Type II	No	for industrial uses at the Tonawanda Coke Corporation
Suffolk County Water Authority	Long Island	Neg Dec	No	new water supply production well to a depth of 675 feet below grade with a pump capacity of 1,388 gallons
Suffolk County Water Authority	Long Island	Neg Dec	No	new water supply production well to a depth of 835 feet below grade with a pump capacity of 1,388 gallons
NYCEDC New Stapleton Waterfront Deve	Hudson	FEIS	Yes	temporary dewatering system to facilitate the construction of sanitary and stormwater sewers east of Prospe
Titus Mountain Family Ski Center	Great Lakes	Type II	No	for snowmaking
Oak Hill Country Club	Great Lakes	Type II	No	for operation of the Oak Hill Country Club two golf courses
Orchard Park Country Club	Great Lakes	Type II	No	for operation of the Orchard Park Country Club Golf Course
Brae Burn Country Club	Hudson	Type II	No	for operation of the Brae Burn Country Club for irrigation of its golf courses
Amri Rensselaer	Hudson	Type II	No	for operation of the Albany Molecular Research Inc Facility for cooling water
Gore Mtn Ski Center	Hudson	Type II	No	for operation of the Gore Mountain Ski Area snow making facility
Mohawk Fine Papers Inc Waterford Facilit	Hudson	Type II	No	for operation of the Mohawk Fine Papers Facility
Remington Arms Co	Hudson	Type II	No	for operation of the Remington Arms firearm manufacturing facility
Reynolds Metals St Lawrence Reduction P	Great Lakes	Type II	No	for operation of the Reynolds Metals Company facility
Syracuse Sand & Gravel Lake Road Pit	Great Lakes	Type II	No	for operation of the Syracuse Sand and Gravel LLC Lake Road Pit sand and gravel wash and screening facil
Holiday Valley Resort - Tannenbaum Rese	Allegheny	Type II	No	for operation of the Holiday Valley Resort Facility for snow making
Kissing Bridge Ski Area	Great Lakes	Type II	No	for the Kissing Bridge Ski Area snow making operations
Redland Quarries Lockport Quarry	Great Lakes	Type II	No	for operation of the Redland/LaFarge Lockport Facility
Redland Quarries Niagara Falls Quarry	Great Lakes	Type II	No	for operation of the Redland Niagara Quarry facility
Fenway Golf Club	Hudson	Type II	No	for operation of the Fenway Golf Club Facility
Saint Andrew's Golf Club	Hudson	Type II	No	for operation of the Saint Andrew's Golf Club Facility
Scarsdale Golf Club	Hudson	Type II	No	for irrigation of the Scarsdale Golf Course
Westchester Country Club	Hudson	Type II	No	for irrigation of the Westchester County Club
Con Ed-59th St Station	Hudson	Type II	No	for operation of the power Facility
NYS Rockland Lake State Park	Hudson	Type II	No	for operation of the Golf Course Facility
Roseton Generating Station	Hudson	Type II	Yes	for once-through cooling
Lydall Thermal/Acoustical	Hudson	Type II	No	for operation of the Lydall Thermal/Acoustical specialty paper manufacturing facility
Windham Mountain Ski Area	Hudson	Type II	No	for snow making operation of the Windham Ski Facility
Whiteface Mountain Ski Center	Great Lakes	Type II	No	for snow making at the White Mountain Ski Center Facility
Burrows Paper Corp Mill St Facility	Hudson	Type II	No	for operation of the paper mill Facility
Potsdam Specialty Paper Inc	Great Lakes	Type II	No	for operation of the specialty paper mill Facility
Revere Copper Products	Hudson	Type II	No	for process and cooling purposes of the Revere Copper Products Facility
Valley Sand & Gravel Avon Plant	Great Lakes	Type II	No	for operation of the Valley Sand & Gravel Avon Plant sand and gravel production facility
Friendship Dairies LLC	Great Lakes	Type II	No	for operation of the dairy processing Facility
IBM East Fishkill Facility	Hudson	Type II	No	for operation of the IBM Hudson Valley Research Park Facility
Winged Foot Golf Club	Hudson	Type II	No	for irrigation of the Winged Foot Golf Club
Adirondack Fish Culture Station	Great Lakes	Type II	No	for operation of the Adirondack Fish Hatchery Facility
City of Saratoga Bog Meadow Well Field	Great Lakes	Type II	No	a new groundwater supply
DEC Chateaugay Fish Hatchery	Great Lakes	Type II	No	for operation of the Chateaugay Fish Hatchery

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Name of Facility	Basin	SEQRA	Coastal Zone	Purpose
Gouverneur Minerals Div # 4 Mine	Great Lakes	Type II	No	for dewatering of the Vanderbilt Minerals Mine Facility
Hanson Aggregates Watertown Mine	Great Lakes	Type II	No	for mine dewatering, aggregate processing, and dust suppression
Hanson Aggregates Jamesville Quarry	Great Lakes	Type II	No	for operation of the Jamesville Quarry Facility
DEC Caledonia Fish Hatchery	Great Lakes	Type II	No	for operation of the Caledonia Fish Hatchery Facility
Dolomite Circular Hill Quarry	Great Lakes	Type II	No	for operation of the Leroy Circular Hill Quarry Facility
DEC Randolph Fish Hatchery	Allegheny	Type II	No	for operation of the Randolph Fish Hatchery Facility
Jamestown Macadam Corbett Hill Mine	Allegheny	Type II	No	for operation of the Corbett Hill Gravel Products facility
New York Plaza Building	Hudson	Type II	No	for cooling purposes
Tilcon - West Nyack Stone Processing	Hudson	Type II	No	for operation of the West Nyack Quarry Site Facility
Burrows Paper Corp Lyonsdale	Great Lakes	Type II	No	for operation of the Burrows Paper Corporation Facility
DEC Oneida Fish Hatchery	Great Lakes	Type II	No	for operation of the Oneida Fish Hatchery
Hanson Aggregates Batavia Mine	Great Lakes	Type II	No	for operation of the sand and gravel aggregates Facility
Tuxedo Reserve	Hudson	Yes	No	for proposed development, including new WWTP to serve town as well as development
Barrett Paving Boonville Quarry	Great Lakes	Type II	No	for operation of the Barrett Paving Boonville Quarry Facility
Syracuse S&G Constantia Center Mine	Great Lakes	Type II	No	for aggregate washing operations at the Constantia Center mine
Hanson Aggregates Stafford Quarry	Great Lakes	Type II	No	for operation of the Stafford Quarry Facility
Suffolk County Water Authority	Long Island	Unlisted, Neg dec on file	Yes	new public supply well
Town of New Scotland Water	Hudson	DEIS	No	creation of a new water district with two new ground water production wells
Valente Gravel Wynantskill Pit	Hudson	Type II	No	for operation of the mining facility
Knolls Atomic Power Laboratory	Great Lakes	Type II	No	for operation (cooling) of the Knolls Atomic Power Laboratory - Kesselring Site Facility
NYS Clinton Correctional Facility	Great Lakes	Type II	No	operation of the maximum security prison facility
Saratoga National Golf Club	Hudson	Type II	No	for irrigation
Huhtamaki Inc	Great Lakes	Type II	No	for operation of food container manufacturing facility
Gernatt - Collins Plant	Great Lakes	Type II	No	for operation of sand and gravel processing facility
Gernatt Asphalt Products	Great Lakes	Type II	No	for operation of gravel pit mine facility
Suffolk County Water Authority	Long Island	Unlisted, Neg dec on file	No	to construct and operate a new well
US Army Garrison	Hudson	Type II	No	for operation of the water supply facility
Graymont Materials Clinton Quarry	Great Lakes	Type II	No	for operation of the quarry facility
Jointa Galusha Glens Falls Lime Quarry	Great Lakes	Type II	No	for operation of the bedrock material facility
NYCO Seventy Road Mine	Great Lakes	Type II	No	for operation of the aggregate production facility
Pallette Stone Corinth Facility	Great Lakes	Type II	No	for aggregate washing and dust control
Carthage Specialty Paperboard	Great Lakes	Type II	No	for operation of the specialty paperboard manufacturing facility
Oswego Harbor Power	Great Lakes	Type II	No	for operation (cooling water) of the Oswego Harbor Power LLC Facility
Town of Ramapo Spook Rock Golf Course	Hudson	Type II	No	for irrigation of the golf course facility
Warren Fane Hemstreet Park Pit	Hudson	Type II	No	for operation of sand and gravel mining facility
Barrett Paving Norwood Quarry	Great Lakes	Type II	No	mining, crushing, and washing of limestone
Seneca Foods- Leicester Plant	Great Lakes	Type II	No	for fruit and vegetable processing facility
City of Glens Falls Butler Pond Watershed	Hudson	Unlisted, Neg dec on file	No	for extracting water and transferring it to JUST Beverages, LLC bottling facility
DEC Bath Fish Hatchery	Susquehanna	Type II	No	for operation of the Bath Fish Hatchery Facility
Erie Co Elma Meadows Golf Course	Great Lakes	Unlisted, Neg dec on file	No	for operation of the Elma Meadows Golf Course
Red Wing Properties ROE-JAN Plant	Hudson	Type II	No	for aggregate washing and dust control
Century Country Club	Hudson	Type II	No	for irrigation of the golf course facility
Chelsea Skybox	Hudson	FEIS	No	temporary dewatering system to facilitate construction of a new residential/commercial building
Howes Cave Quarry	Hudson	Type II	No	for washing aggregate and dust control
Barrett Pamela Quarry	Great Lakes	Type II	No	limestone mining and crushing/aggregate and asphalt production
Hanson Aggregates Oriskany Falls	ny Creek	Type II	No	limestone mining and aggregate processing
Hanson Aggregates Poland Sand and Gravel	nada Creek	Type II	No	for operation of the Poland S&G Facility
St Lawrence Zinc Company	Great Lakes	Type II	No	for operation of the mining and milling operations facility
Cavalry Club Golf Course	Great Lakes	Type II	No	for irrigation
Cornell University Lower Intake Pump House	Great Lakes	Type II	No	for drinking water
Keeler Wilson Quarry	Great Lakes	Type II	No	for operation of the Wilson Quarry Facility
Goodyear Dunlop Tires	Great Lakes	Type II	No	for non-contact cooling and process water
Wingdale Mine Facility	Hudson	Type II	No	granite mining and aggregate processing
Callanan Industries Oxbow Quarry	Hudson	Type II	No	limestone mining and aggregate production
Dolomite Products Ogdan Quarry	Great Lakes	Type II	No	for mine dewatering and aggregate processing operations
Dolomite Products Palmer Road Pit	Great Lakes	Type II	No	for aggregate production
Dolomite Products Walworth Pit	Great Lakes	Type II	No	for mine dewatering, aggregate processing and dust control
Hanson Aggregates Geneva Plant	Great Lakes	Type II	No	limestone mining and aggregate processing facility

Water Withdrawal Permit Applications Noticed in the ENB through 7/01/15

Name of Facility	Basin	SEQRA	Coastal Zone	Purpose
E I Dupont Yerkes Plant	Great Lakes	Type II	No	for operation of the E I DuPont Yerkes Plant Facility
Tricity Highway Products Brisben Pit	Susquehanna	Type II	No	for mining operation and aggregate processing facility
Dolomite Products Le Roy Stone Quarry	Great Lakes	Type II	No	mine and aggregate processing facility
Dolomite Products Manchester Quarry	Great Lakes	Type II	No	for mine dewatering
Dolomite Products Penfield Plant	Great Lakes	Type II	No	for mine dewatering, aggregate washing and dust suppression
Islechem	Great Lakes	Type II	No	for operation of chemical manufacturing facility
Callanan Industries Port Ewen Facility	Hudson	Type II	No	for operation of the limestone mining and aggregate processing facility
Dolomite Products Amenia Plant	Hudson	Type II	No	for operation of aggregate processing and hot mix asphalt/read-mix concrete production facility
Callanan Industries Pattersonville Quarry//	Hudson	Type II	No	for dolostone mining and aggregate processing operation and asphalt production facility
Callanan Industries South Bethlehem Quar	Hudson	Type II	No	for stone washing operations and for dust suppression
Nine Mile Point Nuclear Station	Great Lakes	Type II	Yes	for operation of the Nine Mile Point Nuclear Station
Callanan Industries Brockport Plant	Great Lakes	Type II	No	limestone mining and aggregate processing facility
Dolomite Products Gates Quarry	Great Lakes	Type II	No	for mine dewatering and dust control of dolostone mining facility
Hanson Aggregates Clarendon Quarry	Great Lakes	Type II	No	for sand and gravel mining operation
Hanson Aggregates Victor Pit	Great Lakes	Type II	No	limestone mining and aggregate processing facility
Swain Recreation Center Sewage	Great Lakes	Type II	No	for snowmaking operations at ski area facility

EXHIBIT H



JOINT APPLICATION FORM



For Permits/Determinations to undertake activities affecting streams, waterways, waterbodies, wetlands, coastal areas and sources of water withdrawal.

New York State

You must separately apply for and obtain separate Permits/Determinations from each involved agency prior to proceeding with work. Please read all instructions.

US Army Corps of Engineers (USACE)

<p>APPLICATIONS TO 1. NYS Department of Environmental Conservation</p> <p>Check all permits that apply:</p> <p><input type="checkbox"/> Stream Disturbance <input type="checkbox"/> Excavation and Fill In Navigable Waters <input type="checkbox"/> Docks, Moorings or Platforms <input type="checkbox"/> Dams and Impoundment Structures <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> Freshwater Wetlands <input type="checkbox"/> Tidal Wetlands</p> <p><input type="checkbox"/> Coastal Erosion Management <input type="checkbox"/> Wild, Scenic and Recreational Rivers <input checked="" type="checkbox"/> Water Withdrawal <input type="checkbox"/> Long Island Well <input type="checkbox"/> Aquatic Vegetation Control <input type="checkbox"/> Aquatic Insect Control <input type="checkbox"/> Fish Control <input type="checkbox"/> Incidental Take of Endangered/Threatened Species</p> <p><input checked="" type="checkbox"/> I am sending this application to this agency.</p>	<p>2. US Army Corps of Engineers</p> <p>Check all permits that apply:</p> <p><input type="checkbox"/> Section 404 Clean Water Act <input type="checkbox"/> Section 10 Rivers and Harbors Act <input type="checkbox"/> Nationwide Permit(s) - Identify Number(s): _____ _____</p> <p>Preconstruction Notification - <input type="checkbox"/> Y / <input type="checkbox"/> N</p> <p><input type="checkbox"/> I am sending this application to this agency.</p>	<p>3. NYS Office of General Services</p> <p>Check all permits that apply:</p> <p><input type="checkbox"/> State Owned Lands Under Water <input type="checkbox"/> Utility Easement (pipelines, conduits, cables, etc.) <input type="checkbox"/> Docks, Moorings or Platforms</p> <p><input type="checkbox"/> I am sending this application to this agency.</p>	<p>4. NYS Department of State</p> <p>Check if this applies:</p> <p><input type="checkbox"/> Coastal Consistency Concurrence</p> <p><input type="checkbox"/> I am sending this application to this agency.</p>
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5. Name of Applicant (use full name) TC Ravenswood LLC		Applicant must be: <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Lessee (check all that apply)
Mailing Address 38-54 Vernon Blvd		
Post Office City Long Island City		Taxpayer ID (If applicant is NOT an individual): 11-3484082
State NY	Zip Code 11101	
Telephone (daytime) 718.706.2702	Email Kenneth_Yager@transcanada.com	

6. Name of Facility or Property Owner (if different than Applicant)	
Mailing Address	
Post Office City	
State	Zip Code
Telephone (daytime)	Email

7. Contact/Agent Name Kenneth Yager	
Company Name TC Ravenswood LLC	
Mailing Address 38-54 Vernon Blvd	
Post Office City Long Island City	
State NY	Zip Code 11101
Telephone (daytime) 718.706.2863	
Email Kenneth_Yager@transcanada.com	

8. Project / Facility Name Ravenswood Generating Station		Property Tax Map Section / Block / Lot Number Block 357 Lot 1	
Project Location - Provide directions and distances to roads, bridges and bodies of waters: Ravenswood cooling water intakes located on the shoreline of the East River. North of the Queensboro Bridge and South of the Roosevelt Island Bridge.			
Street Address, if applicable 38-54 Vernon Blvd.		Post Office City Long Island City	State Zip Code NY 11101
Town / Village / City Long Island City		County Queens	
Name of USGS Quadrangle Map Central Park		Stream/Water Body Name East River	
Location Coordinates: Enter NYTMs in kilometers, OR Latitude/Longitude			
NYTM-E 	NYTM-N 	Latitude 40 45' 41"	Longitude 73 56' 39"

For Agency Use Only	DEC Application Number:	USACE Number:
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JOINT APPLICATION FORM - PAGE 2 OF 2
Submit this completed page as part of your Application.

9. **Project Description and Purpose:** Provide a complete narrative description of the proposed work and its purpose. Attach additional page(s) if necessary. Include: description of current site conditions and how the site will be modified by the proposed project; structures and fill materials to be installed; type and quantity of materials to be used (i.e., square ft of coverage and cubic yds of fill material and/or structures below ordinary/mean high water) area of excavation or dredging, volumes of material to be removed and location of dredged material disposal or use; work methods and type of equipment to be used; pollution control methods and mitigation activities proposed to compensate for resource impacts; and where applicable, the phasing of activities. ATTACH PLANS ON SEPARATE PAGES.

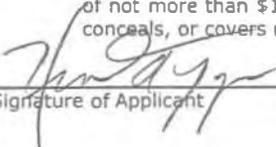
The Ravenswood Power Station has three electric generating units that utilize once through cooling water intake structure. Circulating Water Pumps (CWP) take suction from the East River and circulate water through the condenser to condense exhausted steam from the low pressure turbine. Water withdrawn is then return to the East River via SPDES permit NY 0005193. No modifications or maintenance to the water withdrawal system is proposed.

Proposed Use: <input type="checkbox"/> Private <input type="checkbox"/> Public <input checked="" type="checkbox"/> Commercial	Proposed Start Date: _____	Estimated Completion Date: _____
Has Work Begun on Project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, explain. The Ravenswood Generating station has been in operation since 1963		
Will Project Occupy Federal, State or Municipal Land? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please specify.		

10. List Previous Permit / Application Numbers (if any) and Dates:

11. Will this project require additional Federal, State, or Local Permits including zoning changes? Yes No If yes, please list:
NYCRR Part 601 Water Withdrawal Permit

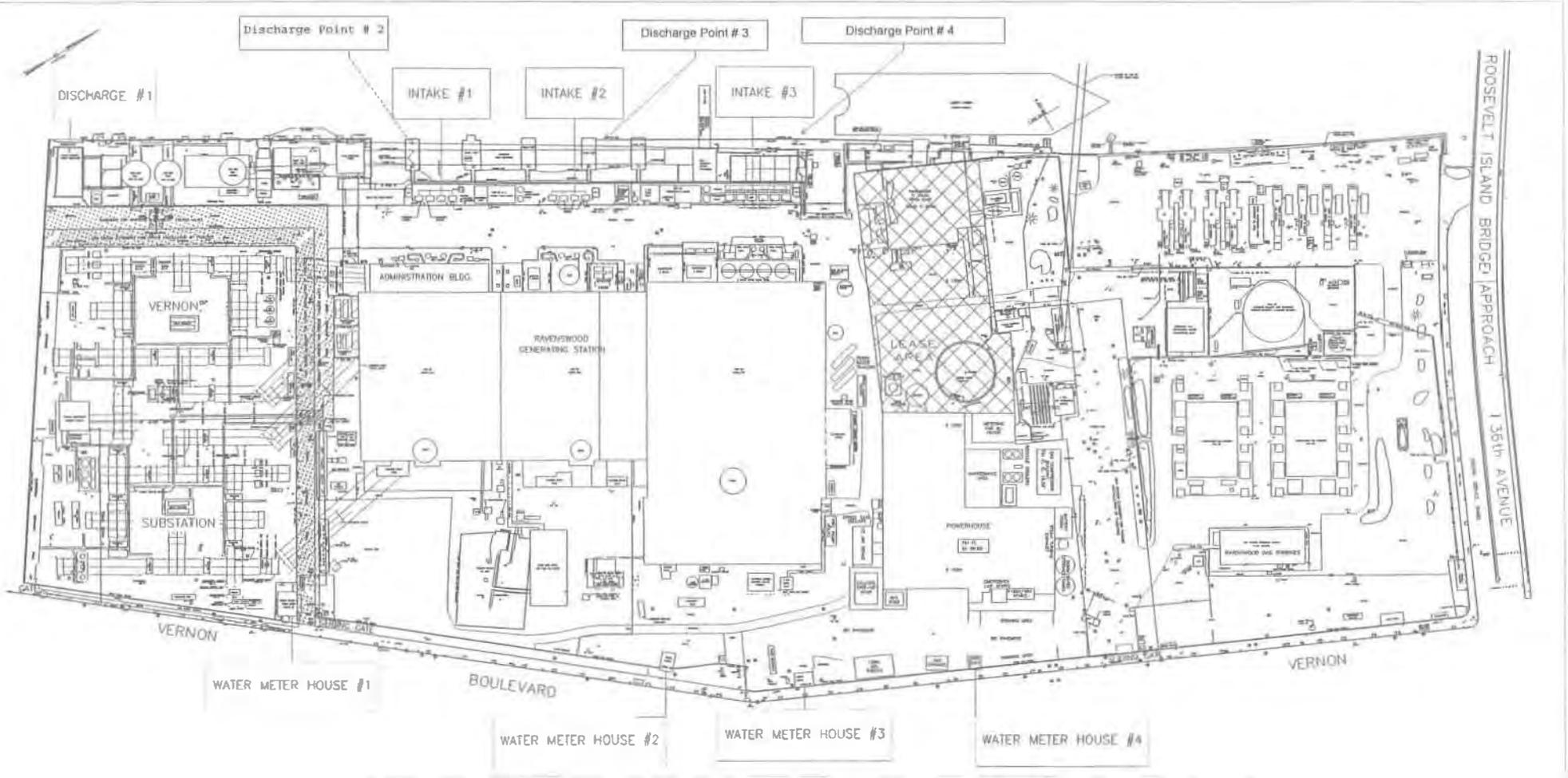
12. **Signatures.** If applicant is not the owner, both must sign the application.
I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant	Printed Name	Title	Date
	Kenneth A Yager	Compliance Mgr.	5/31/2013
Signature of Owner	Printed Name	Title	Date
Signature of Agent	Printed Name	Title	Date

<u>For Agency Use Only</u>	DETERMINATION OF NO PERMIT REQUIRED
_____ (Agency Name)	Agency Project Number _____ has determined that No Permit is required from this Agency for the project described in this application.
Agency Representative: Name (printed) _____	Title _____
Signature _____	Date _____

Figure 1

Ravenswood Generating Station General Map 601.10(b)



<p>Imported Water Meter House # 1-NYC DEP Water Supply Water Meter House # 2-NYC DEP Water Supply Water Meter House # 3-NYC DEP Water Supply Water Meter House #4-NYC DEP Water Supply</p>	<p>Discharge/Return Points Discharge Point #1-SPDES Outfall 001 Discharge Point #2-SPDES Outfall 008 Discharge Point #3-SPDES Outfall 009 Discharge Point #4-SPDES Outfall 010</p>	<p>Withdrawal from East River Intake # 1- Unit 10 Water Intake Intake # 2- Unit 20 Water intake Intake # 3-Unit 30 Water Intake</p>
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Figure 2

Source: USGS Central Park, NY-NJ 2013

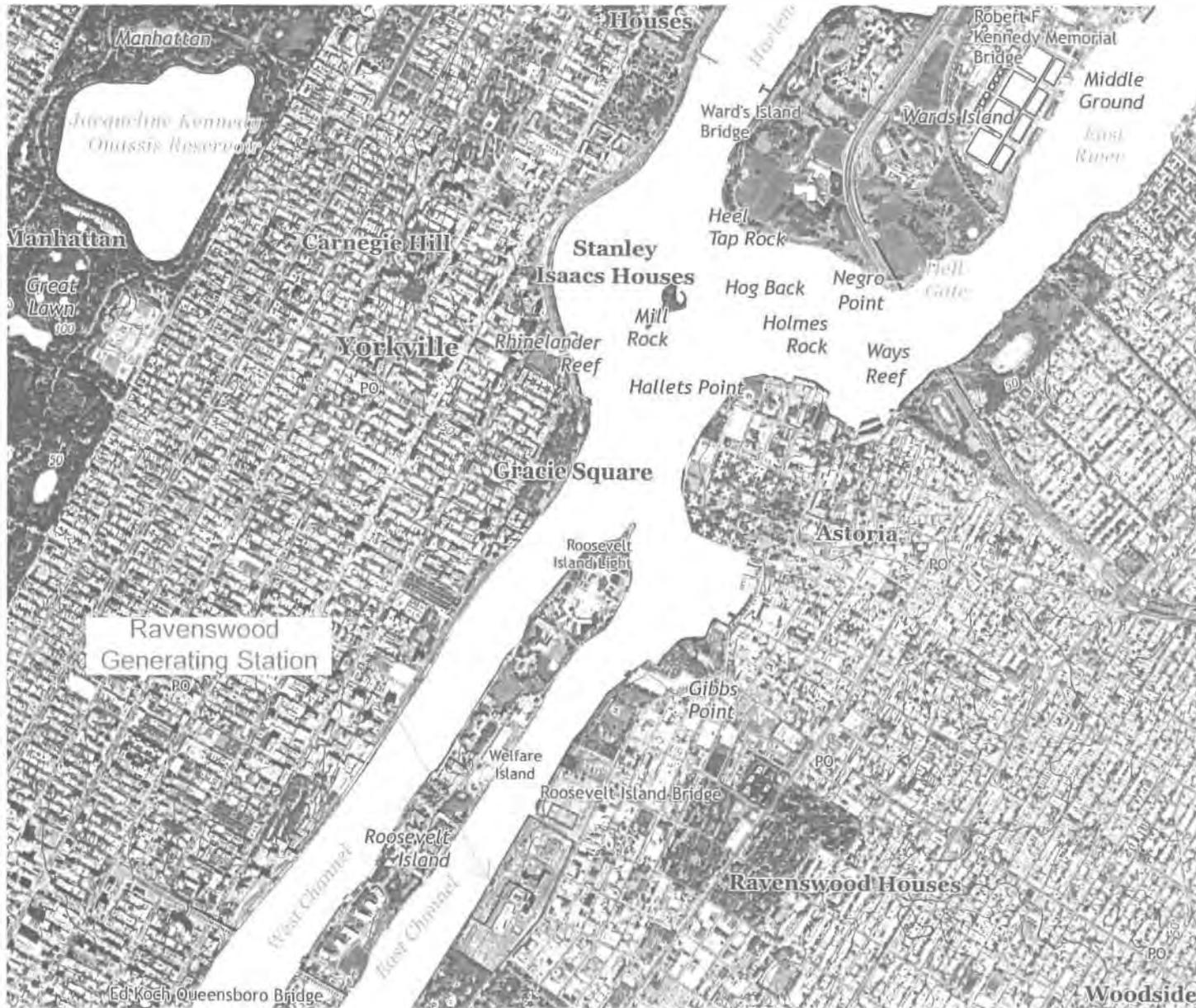


Figure 3

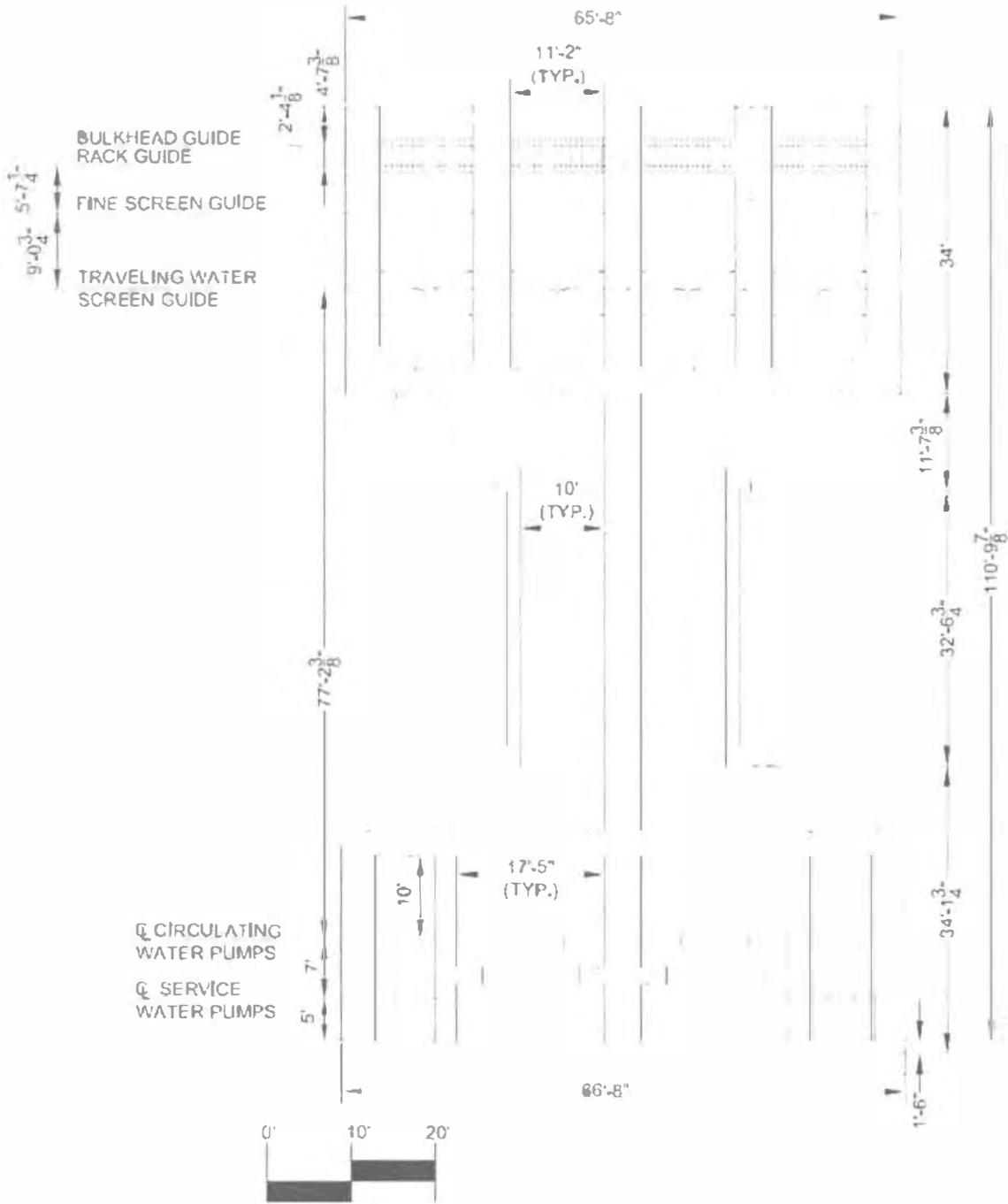


Figure 3 – Ravenswood Generating Station Unit 10 CWIS – Plan
(Unit 20 is Identical)

Figure 4

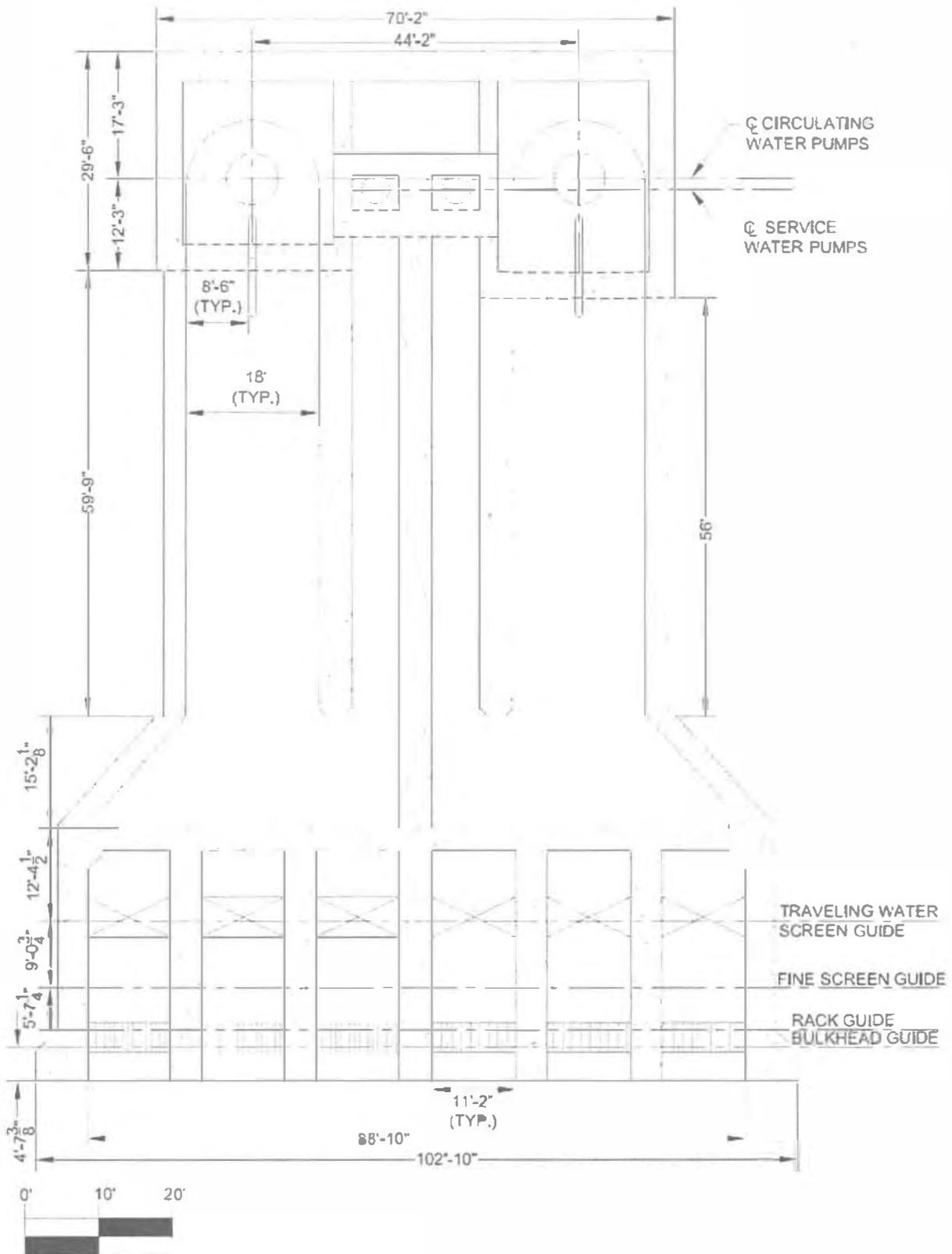
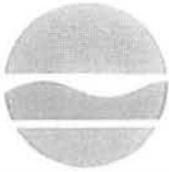


Figure 4 – Ravenswood Generating Station Unit 30 CWIS – Plan



New York State Department of Environmental Conservation
Water Withdrawal Application Supplement WW-1

May 2013

Pursuant to 6 NYCRR Part 601: <http://www.dec.ny.gov/regs/4445.html>

READ THE INSTRUCTIONS ON PAGE 2 BEFORE COMPLETING THIS FORM

FOR DEPARTMENT USE ONLY	
Application No.	
WWA Number	

1. APPLICANT NAME TC Ravenswood LLC 2. FACILITY NAME Ravenswood Generating Station

3. PROJECT TYPE Water Withdrawal New Public Water Supply Service Area or Extension
 Land Acquisition for Public Water Supply Change in Use of Existing Water Withdrawal

4. WATER USE TYPE Public Water Supply Bottled/Bulk Water Commercial Cooling Industrial
 Institutional Mine Dewatering Oil/Gas Production Power Production Recreational
 Other: _____

5. WITHDRAWAL TYPE Existing New If this is an existing public water supply, provide the most recent WSA or WWA Number: _____
 If other than public water supply, list other existing or pending related DEC permits (e.g., SPOES, Mining, Dam):
SPDES NY 0005193

6. WATER WITHDRAWAL SOURCE Surface Water Water Body Name(s) East River
 Groundwater Nearest Surface Water Body _____ Distance From Well _____ (in feet)

7. WATER SUPPLY TO OTHER STATES Does this project involve the transport of any fresh water of NYS through pipes, conduits, ditches or canals to any other state?
 No Yes, describe: _____

8. TRANSPORTATION OF WATER BY VESSEL Does this project involve the transport by vessel of more than 10,000 gallons per day of surface water? (Excludes ballast water necessary for normal vessel activity. A vessel is defined as any floating craft propelled by mechanical power.) Yes No

9. WATER WITHDRAWAL AMOUNTS This project involves the withdrawal of up to: 1,534,752,00 gallons per day Source Name East River
 Does the project include a MAJOR DRAINAGE BASIN TRANSFER of water? See map at <http://www.dec.ny.gov/lands/56800.html> No Yes
 if yes, Existing New From Basin _____ To Basin _____

10. REQUIRED EXHIBITS (6 NYCRR Part 601.10) Provide the names of the required exhibits applicable to this withdrawal:

601.10(a) PROJECT AUTHORIZATION FOR PUBLIC WATER SUPPLY SYSTEMS (e.g. Resolutions, Ordinances)	<u>Not Applicable</u>	601.10(h) ACQUISITION MAPS (Map of any lands to be acquired as part of project)	<u>Not Applicable</u>
601.10(b) GENERAL MAP (e.g. Project Location, For Public Water Supplies - water service area boundary)	<u>See Figure # 1</u>	601.10(i) WATER ANALYSES (Public Water Supplies should submit chemical & bacterial analysis directly to NYSDOH)	<u>Not Applicable</u>
601.10(c) WATERSHED MAPS (Topographic map with location of withdrawal and any return flow or interbasin diversions).	<u>See Figure #'s 1 & 2</u>	601.10(j) TREATMENT METHODS (Public Water Supplies - proposed methods to meet NYSDOH standards)	<u>Not Applicable</u>
601.10(d) CONTRACT PLANS (Public Water Supplies should submit directly to NYSDOH for review and approval)	<u>Not Applicable</u>	601.10(k) PROJECT JUSTIFICATION (Provide summary statement of answers to the eight justification questions)	<u>See Section (K)</u>
601.10(e) ENGINEER'S REPORT (Signed by NYSPE, includes project description, water source yields and demands, etc.)	<u>See Appendix A</u>	601.10(l) CANAL WITHDRAWAL APPROVALS (If applicable, provide adequate proof of approval from Canal Authority)	<u>Not Applicable</u>
601.10(f) WATER CONSERVATION PROGRAM (Completed Water Conservation Program Form)	<u>See Appendix B</u>	601.10(m) TRANSMITTAL LETTER (Include all contact information for applicant, attorney, engineer, etc.)	<u>See Section M</u>
601.10(g) ANNUAL REPORTING FORM FOR EXISTING WITHDRAWALS (Most recent submitted annual report)	<u>See Appendix C</u>	601.10(n) GREAT LAKES ST. LAWRENCE RIVER WATER RESOURCES COMPACT PROCESS REQUIREMENTS (Only applicable to Public Water Supply diversions from Great Lakes Basin - no other diversion types are allowed).	<u>Not applicable</u>

Clear Form

Applicant Signature [Handwritten Signature]

Name Kenneth Yaeger
 Title Compliance Manager

Date 5/31/2013

NYCRR Part 601
Water Withdrawal Permit Application
601.10 Requirements

- (a) Project Authorization
The existing water withdrawal system was commissioned in 1963 and is currently used to supply once through cooling water for an electric generating facility. The current facility holds a valid SPDES permit for discharge of cooling and process water from permitted outfalls. The water withdrawal system is not a public supply system and is not applicable to the requirements set forth in subpart (a).
- (b) General Map
See Drawing # 1-Ravenswood Generating Station General Map.
- (c) Watershed Maps
See Drawing # 2- Watershed maps
- (d) Contract Plans
No contract plans exist for the water withdrawal system. The existing water withdrawal system was commissioned in 1963 and is currently used to supply once through cooling water for an electric generating facility.
- (e) Engineer's Report
See Appendix A- Engineer's Report
- (f) Water Conservation Program
See Appendix B-Water Conservation Form
- (g) Annual Water Withdrawal Report
See Appendix C- 2012 Water Withdrawal Report
- (h) Acquisition Maps
The water withdrawal system is an existing system that was commissioned in 1963 and is currently used to supply once through cooling water for an electric generating facility. Land acquisition maps are not required for the existing water withdrawal system.
- (i) Water Analyses
The water withdrawal system is not a public supply system and chemical and bacteriological analyses are not performed. Therefore, Ravenswood is not applicable to the requirements set forth in subpart (i).
- (j) Treatment Methods

The water withdrawal system is not a public supply system required to meet Department of Health standards and is therefore not applicable to the requirements set forth in subpart (j).

(k) Project Justification

The Ravenswood Generating Station is located in Long Island City, New York and is situated along the east bank of the upper East River, directly across from Roosevelt Island. The facility is comprised of three conventional steam electric generating units (Units 10, 20 & 30), a combined cycle unit (unit 40), and simple cycle gas turbine units. Cooling water for Units 10, 20 & 30 is currently withdrawn from the East River through intake structures and is routed through steam surface condensers. Low pressure steam is exhausted from the low pressure turbines and is directed to the condenser where it passes over the tubes and is condensed to back to water. The cooling water is then returned to a common discharge canal, which is returned to the East River. The siting of the electric generating facility along the East River is ideal due to the plentiful surface water supply for once through cooling. The East River's mean tidal flow is about 240,000 cubic feet per second (1.79 million gallons per second) allowing for Ravenswood to adequately and reasonably withdraw and return the necessary water for cooling.

The installation of variable frequency drives (VFD) on the circulating water pumps (CWP) has allowed for vast conservation improvements and an overall reduction in water withdrawn from the East River. The installation of VFDs has reduced electricity consumed by the CWP while in VFD operation due to the slower motor speeds. More importantly, the installation of VFDs has led to a considerable overall reduction in the volume of surface water withdrawn from the East River. The upgrades performed on the CWPS have directly made the water withdrawal system an environmentally sound and economically feasible project. In addition to the conservation of water withdrawn from the East River, the VFDs installed on the CWPs have also helped reduce the overall adverse environmentally impact associated with the impingement and entrainment of marine organisms. The volume of water withdrawn is directly proportional to the number of organisms impinged and entrained. A flow reduction achieved by the use of variable speed pumps has a proportional reduction to impinged and entrained organisms. The installation and implementation of VFDs is projected to reduce impingement mortality and entrainment of organisms by 90% and 65% from baseline, respectively. The current water withdrawal system utilized at Ravenswood complies with the various federal, state, and local laws.

(l) Canal Withdrawal Approval

The water withdrawal system is not located on a canal and is therefore not applicable to the requirements set forth in subpart (l).

(m) Transmittal Letter

(1)

Applicant:
TC Ravenswood LLC
Kenneth Yager
38-54 Vernon Blvd.
Long Island City, NY 11101

Engineer:
Erwin Schaub, P.E.
38-54 Vernon Blvd.
Long Island City, NY 11101

(2) If required, a public venue will be determined at the appropriate time.

(3) Publications in local newspapers for facility permits are published in the 'Daily News'.

(n) Great Lakes-St. Lawrence River Basin

The water withdrawal system is not located within the Great Lakes or St. Lawrence River basin and is therefore not applicable to the requirements set forth in subpart (n).

Appendix A

NYCRR Part 601
Water Withdrawal Permit Application
Engineer's Report

Professional Engineer's Certification

Name: Erwin Schaub
Firm: TC Ravenswood LLC
Address: 38-54 Vernon Blvd
Long Island City, New York 11101

Signature: _____



NYCRR Part 601

Water Withdrawal Permit Application

Engineer's Report

1. General description of the project and the engineering features of the existing water withdrawal system.

The Ravenswood Generating Station is located in Long Island City, New York and is situated along the east bank of the upper East River, directly across from Roosevelt Island. The facility is comprised of three conventional steam electric generating units (Units 10, 20 & 30), a combined cycle unit (unit 40), and simple cycle gas turbine units. Cooling water for units 10, 20, and 30 is withdrawn from the East River through intake structures and is routed through steam surface condensers. Low pressure steam is exhausted from the low pressure turbines and is directed to the condenser where it passes over the tubes and is condensed back to water. The cooling water is then returned to a common discharge canal, which is returned to the East River. Unit 40 and the simple cycle gas turbines do not utilize a once through cooling water system.

Condenser cooling water and service water for units 10, 20 and 30 is drawn into a protected embayment and intake structure. Units 10 and 20 each have four water intake bays; two bays provide water to each circulator. Unit 30 has six intake bays; three bays provide water to each circulator. Wooden debris skimmers (ice breakers) are located at the entrance to each intake bay to prevent floating material from entering the bays. The continuous traveling water screens (3/8 inch square mesh) are equipped with high pressure (screen wash) spray systems to wash off impinged fish, crabs, and debris from the riverside of the screen. The wash water and impinged material is then diverted back to the East River through low stress fish return piping.

Each of the three units is equipped with two motor driven circulating water pumps. At Units 10 and 20; each pump has a rated capacity of 107,000 gallons per minute (GPM). Unit 30 pumps are rated at 268,500 GPM. Each motor has been retrofitted with variable frequency drives (VFD). A VFD is a device that rectifies 60 cycle AC current to direct current. Then using insulated gate bipolar transistors (IGBT's), converts the DC supply to a square wave alternating supply at adjustable frequency. This causes the motor to operate at variable speeds. The VFD allows the facility to decrease the circulating water pump motor speed and consequently proportionately decrease the circulating water flow. Operation at less than full flow capacity directly relates to conservation.

A service water system (Low Pressure Salt Water Pumps) also provides water from the East River for cooling small equipment throughout the facility and

turbine-generator cooling. Units 10 and 20 each have a Low Pressure Salt Water Pump with a shared spare and unit 30 has three Low Pressure Salt Water Pumps.

2. A listing of all existing sources of water supply, including wells, surface withdrawals, and any purchases sales or transfer of water.

Existing Source	Water Supply
11 Circulating Water Pump	Surface-East River
12 Circulating Water Pump	Surface-East River
21 Circulating Water Pump	Surface-East River
22 Circulating Water Pump	Surface-East River
31 Circulating Water Pump	Surface-East River
32 Circulating Water Pump	Surface-East River
11 Low Pressure Salt Water Pump	Surface-East River
21 Low Pressure Salt Water Pump	Surface-East River
1-2 Low Pressure Salt Water Pump	Surface-East River
31 Low Pressure Salt Water Pump	Surface-East River
32 Low Pressure Salt Water Pump	Surface-East River
33 Low Pressure Salt Water Pump	Surface-East River
Unit 10, 20, & 30 Screen Wash Pumps (5)	Surface-East River
Water Meter House 1, 2, 3 & 4	Purchase - NYCDEP

3. Evaluation of a practicable alternative to the proposed source shall include an analysis of increased water conservation measures as a means to reduce or eliminate the need for the proposed source.

Cooling water is a critical component to the production of electricity at the station. Total elimination of cooling water is not a practical alternative. However, conservation methods are a viable option that has been implemented at the facility in order to reduce cooling water withdrawn from the East River. Circulating Water Pumps (CWP) have been retrofitted with VFDs to allow for reduced surface water withdrawal at reduced generation loading and reduced cooling water temperatures. An analysis of the first ten months of cooling water withdrawal from the East River was performed on the CWPs with VFD operation. The average hourly CWP GPM was calculated by utilizing continuously recorded motor speeds. The hourly CWP GPM was then compared to average CWP GPM if VFDs had not been installed (full flow operation). The difference between the two averages was then used to determine the water conservation directly related to the retrofit of the CWP on a daily basis for all units. Monthly averages are shown below. The overall reduction in surface water withdrawn from the East River is significantly reduced with the use of VFD operation of the CWPs. The conservation methods utilized at Ravenswood have directly led to substantial conservation of surface water and have been adequately implemented.

	Unit 10			Unit 20			Unit 30			AVG. Water Withdrawal Conservation All Units (GPD)
	Unit 10 CWP AVG. GPM with VFD Operation	Unit 10 CWP AVG. GPM NO VFD	AVG. Withdrawal Conservation (GPD)	Unit 20 CWP AVG. GPM with VFD Operation	Unit 20 CWP AVG. GPM NO VFD	AVG. Withdrawal Conservation (GPD)	Unit 30 CWP AVG. GPM with VFD Operation	Unit 30 CWP AVG. GPM NO VFD	AVG. Withdrawal Conservation (GPD)	
July 2012	151,030	179,484	40,973,475	157,429	189,839	46,670,534	338,158	450,387	161,609,894	249,253,904
August 2012	155,883	202,536	38,956,157	167,411	189,839	32,295,838	165,404	225,194	86,096,285	157,348,281
Sept 2012	121,097	163,290	27,961,262	158,758	175,253	23,753,039	22,658	24,587	2,777,300	54,391,601
October 2012	168,933	193,290	35,074,172	52,196	65,581	19,274,255	364,899	537,000	247,826,058	302,174,485
November 2012	103,902	189,072	8,469,892	131,006	160,890	43,032,785	325,356	389,758	92,738,741	144,241,328
December 2012	214,000	214,000	0	43,808	55,226	16,441,232	0	0	0	16,441,232
January 2013	107,490	214,000	34,087,195	86,162	177,103	114,502,914	0	0	0	143,501,109
February 2013	24,563	34,516	10,485,108	2,779	5,713	3,693,642	77,542	138,581	87,895,382	102,074,132
March 2013	0	0	0	123,081	186,387	91,160,256	0	0	0	91,160,256
April 2013	9,107	20,710	17,264,262	95,504	192,400	139,530,196	0	0	0	160,237,546

4. For public water supply systems, the present and projected population of the water service area and the present and projected consumption rate.

Not applicable to Ravenswood Generating Station.

5. For public water supply systems, the radius of land owned or controlled for wellhead protection surrounding any proposed groundwater withdrawal, or the water quality classification and a copy of any Department of Health Watershed Rules and Regulations for any proposed surface withdrawal.

Not applicable to Ravenswood Generating Station.

6. The general-character and extent and essential design features of proposed controlling, diverting or regulatory works.

Implementation of site specific procedures on the operation of the CWPs has been employed at the site. Personnel are trained in the operation of the equipment and are instructed on CWP speeds for maximum conservation of water withdrawal.

7. The proposed instantaneous and maximum daily rates of withdrawal; the existing and projected daily average, daily maximum, and 30 day maximum water demands of the withdrawal system;

2012 Maximum daily withdrawal rate	1,534.75 MGD
2012 Existing Daily Average	486.49 MGD
Projected Daily Average	486.49 MGD
Daily Maximum	1,489.70 MGD
2012 30 Day Maximum Demand	27,933.85 MG30DAY

8. When applicable, any fire suppression flows which can be supplied, including the duration for which such flows can be maintained.

Water for fire suppression is fed from the city water supply (NYC DEP). The city water system supplies the suction to fire pumps which discharge to various fire protection systems located at the facility.

<u>Fire Protection System</u>	<u>Flow</u>
Dock Foam Fire Suppression System	3,000 GPM
GT Foam Fire Suppression System	1,000 GPM
Unit 40 Fire Suppression system	3,000 GPM
10, 20 & 30 Standpipe Booster Pump	750 GPM
06 Tank Foam Fire Suppression System	500 GPM
Rainey Foam Fire Suppression System	1,000 GPM
10/20 Transformer Fire Suppression System	750 GPM

9. For public water supply systems, the location, extent and character of proposed treatment.

Not applicable to Ravenswood Generating Station.

10. For groundwater sources, well drinking logs, monitoring well locations and pump test data and analyses of results.

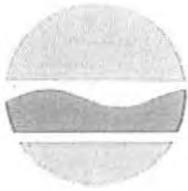
Not applicable to Ravenswood Generating Station.

11. For surface water sources, information on rainfall, stream flows and classifications, contributing watershed size, location of nearby USGS stream gauges, other upstream water withdrawals, safe yield analysis or passby flow calculations and proposed withdrawal methods including intake structure design and screening.

The Hudson-Raritan Estuary System is a coastal plain estuary dominated by the drowned river valley of the Hudson River estuary. The estuary system extends 170 miles from the dam at Troy, NY to Sandy Hook, NJ. The freshwater tributary to the estuary system drains a total of about 16,300 square miles. Seasonal and inter-annual variation of stream flow of the Hudson River recorded at Green Island, New York, near Troy (USGS gage 0 1358000) is characterized by high flow during March through May, with monthly mean peak flow of 32,719 cubic

feet per second (CFS). The mean oscillating tidal flow in the East River reaches about 240,000 CFS. The estuary system is comprised of all tidally inundated areas within these drainage basins including tidal straights; Harlem and East Rivers. The East River extends 16 miles from the battery to Throgs Neck and Willets Point at the Long Island Sound. The tidal straight is divided into distinct hydrological sections. The East River is narrow and bulk-headed along most of the length, and is divided into east and west channels where it passes Roosevelt Island. The station is located on the east channel from which the station withdraws its cooling water. Maximum river velocities are high, reaching 5.0 ft/sec. The station utilizes a once through cooling water system. The intake structures are recessed 60 feet inside the bulkhead line. Units 10 and 20 each have four water intake bays that measure 11.2 feet wide and by 17 feet deep at mean low water (MLW). Unit 30 has six intake bays that each measure 11.2 feet wide by 24 feet deep (MLW). The existing technology includes 14 vertical continuous traveling screens outfitted with 3/8 inch square mesh and high pressure wash to remove impinged material.

Appendix B



DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATER CONSERVATION PROGRAM FORM
NON-POTABLE WATER SUPPLIES

TO BE COMPLETED AND SUBMITTED AS PART OF A
 NYSDEC WATER WITHDRAWAL PERMIT APPLICATION
 *SEE PAGE 6 FOR FURTHER INTRODUCTION AND INSTRUCTION REGARDING THIS FORM

If your water facility already has its own written water conservation program, you may submit it as a supplement to this WCPF. If your system is new, indicate the water conservation measures that will be taken when the system is completed (e.g. All sources of supply will be 100% metered).

I. GENERAL SYSTEM INFORMATION

Facility Name: Ravenswood Generating Station	DEC No.		
Street Address: 38-54 Vernon Blvd	WWA No.		
Post Office Box:	County: Queens	State: New York	ZIP: 11101
Contact Name: Kenneth Yager			
Street Address: 38-54 Vernon Blvd			
Post Office Box:	County: Queens	State: New York	ZIP: 11101
Applicant's Telephone: 7,187,062,702	Contact's Telephone: 7,187,062,702		

II. SOURCES OF WATER SUPPLY

[State capacity and withdrawal in gallons per minute (gpm), gallons per day (gpd), or million gallons per day (mgd).]

Source Type: S = Surface supply, G = Ground supply, P = Purchased supply

Source Status: R = Regular use, S = Standby use, E = Emergency use, I = Inactive, D = Decommissioned

Source Name	Source Type	Source Status	Tested Capacity	Actual Current Withdrawal	Start-up Year
East River	S	R	1,534.75 MGD	486.49 MGD	1963
NYCDEP	P	R		0.455 MGD	

III. WATER SOURCES AND METERING

For unmetered systems, please provide your best estimates for water production and/or consumption.

Are all sources of supply (including major interconnections) equipped with master meters?	No
How often are they read?	Service water meters are read monthly.
How often are they calibrated?	Meters are not calibrated at this time
Are there secondary meters located within the facility or system?	Yes If yes, how many? 15
Describe secondary metering system if applicable: All incoming city water is metered by a NYC DEP service water meter. Inside the plant various secondary water meters are installed to determine water usage throughout the site. Surface water is withdrawn from the East River and flow rate is determined by pump speed.	

Water Production for Calendar Year		
Total metered water production:	177,570,461,410	gallons per year
Average day production (total/days of use):	486,494,415	gallons per day
Maximum day production (largest single day):	1,489,700,000	gallons per day

What are your future goals and schedule for water metering?
City water connections from the NYC DEP water system are currently metered to determine the total water purchased. Multiple water meters are installed throughout the facility and are read monthly to determine water usage at different parts of the steam-electric generation process. Currently, primary and secondary water meters are being reviewed to determine the best practice for calibration of these meters.

Best Management Practices:

** 100% metering of all sources of water supply.*

** Source and secondary meters must be tested and calibrated annually.*

IV. WATER AUDITING

The process of conducting an audit of a water system will enable the collection of data on how much and where water enters, leaves and is used within a facility or system. Another goal of a water audit is to estimate unaccounted-for water use, which includes: Losses through leaks, improperly-functioning or inoperative system controls and unmetered sources of water. The water audit provides a system with a baseline against which water-conservation measures can be evaluated.

Do you conduct a water audit at least once each year? No If yes, please submit a copy of your latest audit in addition to completing the following section.

** Water Audit for Calendar Year

Total metered water production (from previous section)		Total	177,570,461,410	
Sources of Water Use	Metered or Estimated?			% of Total
Process Water	Metered	subtract	166,347,970	0.09
Cooling Water	Estimated	subtract	176,711,185,540	99.52
Wash Water		subtract		
Sanitary		subtract		
Incorporation into Product		subtract		
Irrigation		subtract		
Other HP wash water for screens	Estimated	subtract	692,928,000	0.39
Other		subtract		
TOTAL UNACCOUNTED-FOR WATER		Sub-total	0	0
Unaccounted-for water breakdown	Meter under-registration	subtract	0	0
	Unrepaired leakage	subtract	0	
	Other:	subtract		
** Water measurement and accounting techniques are available in NYSDEC's Water Conservation Manual, http://www.dec.ny.gov/lands/32346.html			0	

What are your future goals for water system auditing?
 Continuation of monthly water meter readings by Performance Engineering Group. Water meter readings and site water usage is analyzed and compared to historical data.

Best Management Practices:

** At least once each year, a system water audit must be conducted using metered water production and consumption data to determine unaccounted-for water.*

** Keep accurate estimates of unmetered water use.*

** Quantify all authorized water uses by consumption categories.*

V. LEAK DETECTION AND REPAIR

Do you regularly survey your facility for leakage? No Are leaks repaired in a timely manner? Yes If applicable, do you regularly survey underground piping for water leakage? No						
Total length of underground piping	Percent of piping surveyed each year	Length of pipe surveyed each year	Listening equipment used	Year of last survey	Number of leaks found	Number of leaks repaired

What are your future goals for water system leak detection and repair?
 The site is continuously manned with personnel and water usage data is analyzed monthly. If a leak is detected in underground piping the leak is addressed as soon as possible.

Best Management Practices:

- * Check any under ground water distribution systems for leaks each year.
- * Fix every detectable leak as soon as possible.
- * Have an on-going system rehabilitation program.

VI. WATER REUSE, RECYCLING AND DROUGHT PLANNING

Does your facility reuse or recycle primary use water? No If yes, describe process:

Does your facility use reclaimed rainwater, storm water runoff or wastewater? No If yes, describe process:

Describe any equipment or processes that promote the efficient use of water by your facility:
Variable Frequency Drives (VFD) are installed on the Circulating Water Pumps (CWP). The CWPs withdraw surface water from the East River for cooling. VFDs allow for the pumps to operate at less than full speed operation at reduced loads and cooler water temperatures. The reduced speed directly correlates to reduced water withdrawal.

Does your system include storage tanks or ponds to meet short term water demands?
Yes, demineralized water storage tanks are used.

Describe any actions that can be taken to reduce water use during times of drought:
VFD operation of the CWP in order to reduce surface water withdrawal.

What are your future goals for recycling or reducing water usage?
Continuing use of CWPs in VFD to reduce surface water withdrawal at reduced loads.

Best Management Practices:

- * Reuse or recycle water whenever possible.
- * Employ efficient irrigation techniques
- * Develop a plan to reduce water use during times of drought.

VI. SIGNATURE PAGE AND DISCUSSION

Facility Name: Ravenswood Generating Station	WWA No.
--	---------

Signature: 	Signatory:
Title: Compliance Manager	Date: 5/31/2013

DISCUSSION:

Effective February 15, 2011, New York State Environmental Conservation Law (§ECL 15-1501) has required that all applications for a NYSDEC Water Withdrawal Permit include a water conservation program. This Water Conservation Program Form (WCPF) is a required submittal of all such applications.

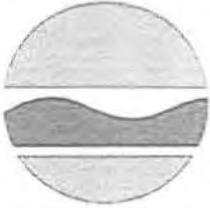
The WCPF has been set up to cover the following basic elements of a water conservation program: Source Water Inventory, Water Usage and Metering, Water Auditing, Leak Detection/Repair, and Water Use Reduction. The Best Management Practices listed at the bottom of each page represent DEC water conservation policy objectives and should be incorporated into your program development. Additional water conservation measures that are specific to your category of water usage should also be incorporated into your individual program.

Water withdrawal permit applicants can consult the NYSDEC publication entitled "A Survey of Methods for Implementing and Documenting Water Conservation in New York".

The American Water Works Association (AWWA) is also an excellent source of information regarding water conservation practices and procedures. Information ranging from technical manuals to online resources and tools can be found at <http://www.awwa.org>.

Clear Entire Form

Appendix C



New York State Department of Environmental Conservation

Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form

Due by March 31 each year

Prior to filling out this form please read the instructions on last page (This form not for Agricultural Facilities)

Section 1

Facility Name: Ravenswood Generating Station Facility Street Address: 38-54 Vernon Boulevard City: Long Island City Zip: 11101 Town: County: Queens Contact Name: Gregory Pryor Email: gregory_pryor@transcanada.com Telephone: (718) 706-2863

Reporting Year: 2012

Table with 4 columns: Source Name, Source Type, Well Depth (Ft), Max Rate, Units. Includes entries for East River and NYC DEP.

Water Withdrawal Category (check one)

- Agricultural, Bottled / Bulk Water, Commercial, Environmental, Industrial, Institutional, Mine Dewatering, Oil/ Gas Production, Power Production: Fossil Fuel (checked), Nuclear, Other Pwr, Public Water Supply, Recreation: Golf Course, Snow Making, Other Rec, Other

If an interbasin diversion occurs, check this box and enter information in Section 3

Average Day Withdrawal: 486 MGD Maximum Day Withdrawal: 1,489.7 MGD Permitted Withdrawal: MGD

Submitted by: Gregory Pryor Title: Environmental Specialist Date: 1/11/2013

Buttons: Reset Form, Print Form, Submit by Email

If you do not receive a confirmation email, please contact AWQRSDEC@gw.dec.state.ny.us or 518 402-8086.

Section 2

Calculation Method:

M = Metered readings. W = Flow through a weir or flume. P = Flow through a pipe or pump run time. E = Estimated.

UNITS: <i>Must be in gallons per month</i>	January	February	March	April	May	June
Withdrawn	4,180,896,000	2,783,808,000	11,009,952,000	8,614,800,000	10,453,248,000	14,111,136,720
Transferred / Imported	9,552,777	8,833,832	10,944,208	14,300,667	11,448,093	15,332,994
Consumed	8,160,434	7,446,808	8,048,021	12,381,599	9,174,934	13,485,679
Returned	4,165,584,343	2,778,859,024	10,952,368,187	8,580,431,068	10,412,897,159	14,065,752,035
Diversions In / Out if any	0	0	0	0	0	0
	July	August	September	October	November	December
Withdrawn	29,130,912,720	21,968,064,000	13,070,304,000	26,265,312,000	24,259,392,000	11,556,288,000
Transferred / Imported	19,580,467	15,648,019	10,588,747	18,948,492	19,466,268	11,703,408
Consumed	16,929,661	13,191,527	8,628,313	15,356,435	16,572,638	10,114,834
Returned	29,034,466,581	21,891,608,492	13,027,912,434	26,176,744,057	24,183,433,630	11,516,980,574
Diversions In / Out if any	0	0	0	0	0	0
Describe location of returned water	Water is returned to the East River via SPDES outfalls 001, 008, 009, and 010. These points are annotated as discharges 1-4 respectively on the attached map.					

Section 3

General Map Required

Please submit a map showing location of all withdrawals and any points of return flow. Label all points. A map is not necessary if one was submitted in a previous year and no changes have occurred. Precise locations will remain confidential.

A paper copy of a USGS map or other high quality map or an electronically generated map can be faxed, mailed, or emailed. For electronic maps a suggested website is described below:

(1) Go to the [USGS National Map site](http://usgs01.srv.mst.edu/store3/digital_download/mapping_ap.jsp) [http://usgs01.srv.mst.edu/store3/digital_download/mapping_ap.jsp].

Type the address of the agricultural facility into the search box.

(2) Zoom in and use any of the map-type choices to best confirm your location.

(3) Designate water withdrawal locations by clicking on the map to add a marker(s).

(4) For surface water withdrawals, use the "Topo" tab.

(5) Add a marker to designate the location of any related dams, weirs, or diversion structures.

(6) Print. Manually label the name of each marked source.

Submit your map to DEC in one of the following ways:

- Print and mail or fax to 518 402-8290.
- Print, scan and email to awqrsdec@gw.dec.state.ny.us.
- Copy electronically and email to awqrsdec@gw.dec.state.ny.us.

NOTE: Precise locations will be kept confidential.

Interbasin Diversions

Fill out this section only if water is being transferred between major drainage basins. To determine basin ID, click the link below, highlighted in blue. Enter basin ID where requested. Use drop down menu. Describe location of originating and receiving sites (e.g. Town water intake at north end of Pleasant Lake to southwestern corner of Stony Reservoir near Route 12).

Originating Major Drainage Basin

<http://www.dec.ny.gov/lands/56800.html>

Receiving Major Drainage Basin

<http://www.dec.ny.gov/lands/56800.html>

Enter Basin ID here:

Enter Basin ID here:

Originating Site Description:

Receiving Site Description:

Section 4

Water Conservation and Efficiencies

All permitted water withdrawal systems must have a Water Conservation Program.

Section A: For Permitted Public Water Supply Facilities Only - All others use Section B

Are all sources of supply including major interconnections equipped with master meters? Yes No

What percentage of your system is metered? %. Residential charge per 1000 gallons of water: \$

How often were customer meters read this past year (e.g. quarterly, yearly)?

Number of water service connections: Total population served:

How many customer meters were recalibrated and/or replaced in the past year?

Miles of pipe in water distribution system: Length of pipe replaced in the past year:

Miles of pipe on which leak detection was performed using sonic listening equipment: Type of equipment used:

How many system-wide water audits were performed in the past year?

What percentage of the water withdrawn was not billed to customers? %. Lost to distribution system leakage? %

Was information about household water saving devices and ways to reduce water use distributed to residential customers? Yes No

Was water conservation information about promoting recycling and reuse distributed to industrial and commercial customers? Yes No

Do you have lawn sprinkling time restrictions (e.g. odd/even days) during periods of peak demand? Yes No

Do you have a plan that takes progressive steps to further reduce outdoor water use during drought conditions with an ordinance or procedure to assure compliance? Yes No

Please review your permit(s) for any specific water conservation conditions and report below on progress made in past year.

Section B: Water Withdrawal Reporting and Registered Facilities (see permitting schedule in NYCRR Part 601.7)

Are all sources of supply including major interconnections equipped with master meters? Yes No

How often were master meters read in the past year?

How often were master meters calibrated in the past year?

Are there secondary meters located within the facility or system? Yes No

Identify other water conservation and efficiency measures currently used in your system (e.g. Best Management Practices such as recycling process and cooling waters, use of drip irrigation and moisture probes, utilizing storm water runoff and reclaimed wastewater or conducting facility water audits):

The station has conducted major capital upgrades on the circulating water system in order to retrofit circulating water pumps with variable speed drives and vacuum priming systems to allow for variable speed operation. The variable speed operation allows for reductions in water use during periods of reduced load, cool weather conditions, or when full circulating water flow is not required. The circulating water pumps take suction off the East River and provide once through cooling water for the condensers.

Section 5	Instructions / Definitions
Agricultural Purpose	The practice of farming for crops, plants, vines and trees, and the keeping, grazing or feeding of livestock, for sale of livestock or livestock products. Agricultural facilities must use the form titled. "Registration and Water Withdrawal Reporting Form for Agricultural Facilities".
Public Water Supply	Supply water to the public. Examples include: municipality, hotel, apartment, restaurant, church, campground, etc.
Source Name	Name of well or surface water body (e.g., Well No. 1, Alcove Reservoir, etc.). List all sources including unused or back-up wells.
Source Type	S = Stream or River. L = Pond or Lake. R = Reservoir. BW = Bedrock Well. UW = Unconsolidated Well (e.g., sand and gravel). SP = Spring. P = Purchased. Use drop down menu.
Well Depth	Total depth in feet below ground surface. Leave blank for surface sources.
Max Rate	Maximum potential withdrawal rate of the water source. Will be equal or greater than Permitted Rate.
Units (Max Rate)	Gallons per minute (gpm), gallons per day (gpd), or million gallons per day (mgd). Use drop down menu.
Average Day Withdrawal	Total amount withdrawn during reporting year divided by total days withdrawn (e.g., for a public water supply 365 million gallons/365 days = 1 mgd).
Maximum Day Withdrawal	Largest single day withdrawal rate of the source during the reporting year.
Permitted Rate	If unknown, contact NYSDEC at AWQRSDEC@gw.dec.state.ny.us or 518-402-8182.
Calculation Method	M = metered readings. W = flow through a weir or flume. P = flow through a pump or pump run time. E = estimated.
Withdrawn	Amount of water removed from all sources.
Transferred/Imported	Amount of water brought in from or sent to another facility, includes bulk sales. For transferred water use a negative sign.
Consumed	Amount of water not returned (e.g. water incorporated into a product or lost through evaporation). Public water suppliers must use metered sales to customers.
Returned	Amount of water discharged to a water treatment system or discharged back to the environment.
Diversions In/Out	Amount of water, if any, diverted from/to another major drainage basin. For Diversions Out, use a negative (-) sign.
Location of Returned Water	State the general area where returned water is discharged. Example: "Hudson River near Poughkeepsie", "Groundwater near Auburn".
Major Drainage Basins	Report only "Major Basin" transfers. Use the internet link available on the form (labeled "Click Here To Determine Basin ID") and enter Basin ID into the box indicated (use drop down menu). Describe the location of originating withdrawal and receiving discharge. Be as specific as possible.
Water Audit	A water audit is a thorough examination of the accuracy of water records and system control equipment to determine water system efficiency and to identify, quantify, and verify water and revenue losses. Water audits are beneficial in identifying the amount of unaccounted-for water.

EXHIBIT I

ENB Region 2 Completed Applications 08/07/2013

http://www.dec.ny.gov/enb/20130807_reg2.html#263040002400054

Queens County

Applicant:

TC Ravenswood LLC
110 Turnpike Rd Ste 203
Westborough, MA 01581

Facility:

Ravenswood Generating Station
38-54 Vernon Blvd
Queens, NY 11101

Application ID:

2-6304-00024/00054

Permit(s) Applied for:

Article 15 Title 15 Water Withdrawal Non-public

Project is Located:

Queens, Queens County

Project Description:

The department has made a tentative determination to issue an initial water withdrawal permit to the above-referenced applicant authorizing a withdrawal of water in the amount of approximately 1.5 billion gallons per day from the East River, Water Index Number ER (0.3 - 10.1), Class I, for use as cooling water for power production. WWA # 11,660

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is not subject to SEQR because it is a Type II action.

SEQR Lead Agency: None Designated

State Historic Preservation Act (SHPA) Determination:

The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Aug 22, 2013*.

Contact:

Andrea Sheeran
NYSDEC Headquarters
625 Broadway
Albany, NY 12233
(518)402-9167

deppermitting@dec.ny.gov

ENB - Region 2 Notices 8/28/2013

http://www.dec.ny.gov/enb/20130828_not2.html

Notice of Extension of Public Comment Period

New York State Department of Environmental Conservation (NYS DEC) has extended the Public Comment Period for the below Referenced Project until September 11, 2013. This complete notice was previously published in the [August 7, 2013 ENB](#) at:

http://www.dec.ny.gov/enb/20130807_reg2.html.

Applicant: Trans Canada Ravenswood LLC

Address: 38-54 Vernon Boulevard

Long Island City, NY 11101

Permits applied for and application numbers: Initial Water Withdrawal Permit,

DECID#

2-6304-00024/00054

Project description and location:

The applicant has applied for an initial permit for the continued withdrawal of 1.5 billion GPD of water for operation of the Ravenswood Generation Station. The Station has been in operation since 1963. No changes in current operations are proposed. NYS DEC has determined that the Facility is eligible for an Initial Permit which are limited to existing facilities for existing water withdrawals over 100,000GPD which were properly reported to the Department.

State Environmental Quality Review (SEQR) Determination:

SEQR - 1 - Project is a Type II action

NYS DEC has determined that the issuance of "initial permits" under ECL section 15-501.9 as implemented by 6 NYCRR 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR 617.5(c)(19).

SEQR Lead Agency: Not applicable

State Historic Preservation Act (SHPA) Determination:

SHPA - 1 Cultural resource lists and map have been checked. No registered, eligible or inventoried archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act.

Availability for Public Comment:

The application may be reviewed at the address to the right. Written comments on the project must be submitted to the Contact Person by no later than: September 11, 2013

Contact: Kent P. Sanders, NYS DEC - Division of Environmental Permits, 625 Broadway, Albany, NY 12306-2014, Phone: (518) 402-9178, Fax: (518) 402-9168,

E-Mail deppermitting@dec.ny.gov.

EXHIBIT J

New York State Department of Environmental Conservation

Division of Environmental Permits, 4th Floor

625 Broadway, Albany, NY 12233-1750

Phone: (518) 402-9167 • Fax: (518) 402-9168

Website: www.dec.ny.gov



Joe Martens
Commissioner

November 15, 2013

To: Interested Parties and Stakeholders:

Rc: Response to Public Comments on Application for Initial Water Withdrawal Permit
DEC #2-6304-0002400054
Ravenswood Generating Station
38-54 Vernon Blvd, Queens County

This letter responds to the public comments received by the New York State Department of Environmental Conservation (NYSDEC) on the above-referenced Initial Water Withdrawal Permit application for the Ravenswood Generating Station located at 38-54 Vernon Blvd, Queens NY. The Department offers these responses because of the public interest in the recently-revised water withdrawal regulations and in the statutorily required "Initial Permits" that are being issued under the revised regulations.

Many public comments were received on the above-referenced Initial Permit application. The comments are available from the Department on request. The public comments have been compiled and are presented below along with the Department's responses.

Comment 1

The Ravenswood Initial Permit application fails to provide information on upstream water withdrawals, safe yield analyses, and passby flow calculations

Response 1

The Department determined that the application was complete on August 1, 2013 after technical review. Some of the items called for in the regulations governing water withdrawal permit application (6 NYCRR § 601.10) are not applicable to the withdrawal. Information on rainfall, safe yield, river flow, contributing watershed size, passby analysis or other upstream water withdrawals, is not germane to the Ravenswood Project as the East River is not, in fact, a river but rather a strait between Long Island Sound and Lower New York Harbor. Information on tidal flows, and intake structure designs was provided in the application.

Comment 2

Ravenswood Fails to Provide an Adequate Watershed Map

Response 2

The maps submitted with this application are considered to be adequate for this project.

Comment 3

DEC should reclassify the as a Type I action because the withdrawal is over 2 Million Gallons per day.

Response 3

As provided by ECL §15-1501.9 the Department has no discretion but to issue “initial permits” for the amount of the water withdrawals for users that were in operation and properly reported their withdrawals to the Department as of February 15, 2012. ECL

Under these circumstances, the issuance of the water withdrawal permit here is covered by the Type II category for ministerial actions set out in section 617.5(c)(19) of the Department’s SEQR regulations. “Ministerial action” is defined [under the SEQR regulations] as “an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act...” Here, above and beyond the amount of the permitted withdrawal (which is prescribed by statute), the Legislature has restricted the Department’s discretion to the standard form permit and the imposition of sound water conservation measures.. Generally, an action may be deemed ministerial, if it could not have been approved or denied on the basis of SEQR’s broader environmental concerns. The fact that the withdrawal is for an amount that exceeds the Type I threshold does not remove it from the Type II classification..Items on the Type II list under 617.5(c) provide exemptions from SEQRA irrespective of whether the action is also present on the Type I list unless they contain a limitation that the action cannot “meet or exceed any threshold on the Type I list”.

Comment 4

The revised notice recognizes that the project is in fact located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act. Now that this is recognized, it would seem that the DEC’s consideration of Ravenswood’s application for a water withdrawal permit is premature and should not be undertaken until the NYS Department of State and New York City have ruled on the project’s consistency with the relevant State and City coastal management policies, including Policy 18;

Response 4

The Coastal Management Program only applies to Type I and Unlisted Actions under SEQR. Type II actions do not require a Coastal Consistency Certification. As a consequence, no coordination with the Department of State is required. It must be recalled the Ravenswood water

withdrawal is not new and as such is not presenting any new impacts to the environment. The Department's action in issuing an initial permit for the withdrawal is mandated by state statute for the existing and reported withdrawals that were previously unregulated.

Comment 5

DEC should not create a class of 'initial permits'.

Response 5

The comment is acknowledged. Initial permits were created by the amendments to New York's water withdrawal law. As cited above, under ECL § 15-1501.9, an initial permit "shall be issued" for existing withdrawals that were properly reported to the Department as of February 15, 2012.

Comment 6

Impacts on the Brooklyn-Queens Sole Source Aquifer Must Be Considered Possible impacts of the heavy withdrawals from the East River by the Ravenswood project right at the edge of the Brooklyn-Queens sole source aquifer must be considered in evaluating the environmental impacts of the project.

Response 6

The overwhelming majority of the water withdrawn is returned to the East River within minutes of the withdrawal and within 50 feet of the intakes. Impacts to the Brooklyn-Queens Aquifer are not anticipated.

Comment 7

Ravenswood Fails to Comply with Proper Water Conservation and Efficiency Measures The responses contained in the Water Conservation Program (WCP) form attached as Appendix B to the Ravenswood application show that Ravenswood's water conservation measures are inadequate in at least five respects.

Response 7

See the Response to Comment 8 below. A comprehensive water conservation plan suitable for this facility was developed pursuant to the facility's SPDES permit.

Comment 8

Fish Kill Issues Must Be Considered The issuance of a new type of permit to Ravenswood requires that a SEQRA review be done for this permit. Whatever understanding the parties may have reached with regard to the Ravenswood SPDES permit regarding environmental reviews, that understanding does not

encompass the issuance of a new type of permit that was not in existence at the time the understanding was reached.

Response 8

See the Response to Comment 2 above concerning SEQR. In 2007 the Department issued a Departmental Initiated Modification to require the Ravenswood Generating Station up to reduce entrainment mortality by 65% and impingement mortality by 79% from the full flow baseline of Ravenswood water withdrawal system pursuant to 6 NYCRR § 704.5 and § 316(b) of the federal Clean Water Act (CWA).

The applicant was also required to propose additional measures to further reduce impingement mortality, achieving a 90% reduction from full flow baseline. These levels of impact reduction meet the § 316(b) Phase II Best Technology Available (BTA) performance standards. This modification required numerous studies and evaluations of impacts and alternatives, was subject to SEQRA, and a Negative Declaration of Significance was issued. These permit requirements are binding on the applicant.

As noted in Appendix B of the 2012 SPDES permit for the facility, in determining BTA the Department considered the closed cycle cooling alternative:

“...after evaluating all of the available alternatives the New York State Department of Environmental Conservation determined that, in combination, the following technologies and operational measures listed here represent the best technologies available for minimizing adverse environmental impacts from the cooling water intake system. Implementation of these items was completed by early 2012...”

- a) Installation of variable speed pumps and ancillary equipment at Ravenswood Units 1, 2 and 3 that will allow for the reduction in cooling water use during periods of low electrical generation;
- b) Scheduling of a planned outage process that will require cooling water pumps to be shut down to reduce impingement and entrainment during periods of non electrical generation;
- c) Upgrades to the existing traveling intake screens at Ravenswood Units 1, 2 and 3 to allow for the continuous operation of all traveling intake screens and construction of low stress fish returns, to increase fish impingement survival;...”

Further, NYCRR Part 601.7(f) requires: Where the water withdrawal system listed in an initial permit application is associated with a project, facility, activity or use that is subject to a SPDES permit or another Department permit, the Department will review the initial permit application in coordination with the SPDES or other permit program, particularly with respect to any pending permit renewals.

Conditions requiring BTA for reducing fish impingement and entrainment and reduced water usage are incorporated in the station’s 2012 SPDES permit. The Department has considered

these SPDES permit requirements in its review of the Initial Permit Application for a Water Withdrawal Permit.

Thank you for taking the time to comment on this application. If you have any questions or need further information, please don't hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Kent P. Sanders". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kent P. Sanders
Deputy Chief Permit Administrator
Division of Environmental Permit

EXHIBIT K



PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
TC RAVENSWOOD LLC
110 TURNPIKE RD STE 203
WESTBOROUGH, MA 01581
(508) 871-1850

Facility:
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD
QUEENS, NY 11101

Facility Location: in QUEENS COUNTY **Village:** Long Island City
Facility Principal Reference Point: NYTM-E: 588.961 NYTM-N: 4512.613
Latitude: 40°45'34.8" Longitude: 73°56'45.8"

Project Location: 38-54 Vernon Boulevard

Authorized Activity: This permit authorizes the withdrawal of a supply of water up to 1,390,000,000 gallons per day (GPD) from the East River for once through cooling and other processes related to electrical generation.

Permit Authorizations

Water Withdrawal Non-public - Under Article 15, Title 15

Permit ID 2-6304-00024/00054

(WWA No. 11660)

New Permit

Effective Date: 11/15/2013

Expiration Date: 10/31/2017

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KENT P SANDERS, Deputy Chief Permit Administrator

Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature:

Date 11/15/2013

Permit Components

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS



GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

1. **Approval of Completed Works from NYS P.E.** Any new works constructed or modified pursuant to this water withdrawal permit shall be constructed under the general supervision of a person licensed to practice engineering in this state (professional engineer). Upon completion of construction and pre-operational testing, such works may not commence final operation until the professional engineer first certifies in writing to the Department that the works have been constructed in accordance with the issued permit.

2. **Permit Expiration and Renewal** Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 30 days prior to its expiration.

3. **Transfer of Ownership of Water Withdrawal Systems** Unless otherwise specified in this permit, a new water withdrawal permit application is required for the acquisition or condemnation of the approved water withdrawal system.

4. **Cooling Water Withdrawals Regulated by SPDES** Nothing in this water withdrawal permit shall supercede the need to, where necessary, obtain an appropriate SPDES permit that allows for the operation of a cooling water intake structure and the discharge of the amounts of water approved by this water withdrawal permit. If any modifications to the location, or capacity of the intake structure are required by the permittee's SPDES permit, permittee must also apply for a modification of this water withdrawal permit to reflect such changes.

5. **Incorporation of the SPDES Water Conservation and Fisheries Protection Measures** Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit # NY0005193 are hereby incorporated by reference into this permit.

6. **Annual Water Withdrawal Reports** The permittee must submit a Water Withdrawal Reporting Form to the Department's Division of Water, Albany, NY, by March 31st of each year. The form is available on the Department's website and includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation and efficiencies employed during the past calendar year.

7. **Source Meter Calibration** All source meters or measuring devices shall be calibrated for accuracy at least once each year.

8. **Meter All Sources** The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.



GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Deputy Chief Permit Administrator
NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

4. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.



5. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

EXHIBIT L

New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, NY 12233-1750
Phone: (518) 402-9167 * Fax: (518) 402-9168
Website: www.dec.ny.gov



Joe Martens
Commissioner

March 7, 2014

Mr. Daniel O'Donnell
TC Ravenswood LLC
38-54 Vernon Boulevard
Long Island City, NY 11101

RE: DEC #2-6304-0002400054
Ravenswood Generating Station
38-54 Vernon Blvd, Queens County

Dear Mr. O'Donnell;

The Department Initiated Modification of your facility's Initial Water Withdrawal Permit is enclosed. The maximum withdrawal has been corrected from 1,390 MGD to 1,527.84 MGD. All other permit terms and conditions remain in effect. This permit will run concurrently with the facilities SPDES Permit (NY-0005193) and expire on October 31, 2017. Withdrawals beyond the scope of the permit and the approved project plans may be considered a violation of the law and subject to appropriate enforcement action.

Also note that this permit does not eliminate the need to obtain any other federal, state or local permits or approvals that may be required for this project.

Should you have any questions regarding your obligations under the permit, please feel free to contact me by phone at (518) 402-9178 or by email at kpsander@uw.dec.state.ny.us.

Sincerely,

Kent P. Sanders
Deputy Chief Permit Administrator

Enclosures: Permit
cc: 51. Hoff. DOW
C. Conyers. OGC



PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
TC RAVENSWOOD LLC
110 TURNPIKE RD STE 203
WESTBOROUGH, MA 01581
(508) 871-1850

Facility:
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD
QUEENS, NY 11101

Facility Location: in QUEENS COUNTY Village: Long Island City
Facility Principal Reference Point: NYTM-E: 588.961 NYTM-N: 4512.613
Latitude: 40°45'34.8" Longitude: 73°56'45.8"

Project Location: 38-54 Vernon Boulevard

Authorized Activity: This permit authorizes the withdrawal of a supply of water up to 1,527,840,000 gallons per day (GPD) from the East River for once through cooling and other processes related to electrical generation.

Permit Authorizations

Water Withdrawal Non-public - Under Article 15, Title 15

Permit ID 2-6304-00024/00054

(WWA No. 11,660)

New Permit

Effective Date: 11/15/2013

Expiration Date: 10/31/2017

Modification # 1

Effective Date: 3/7/2014

Expiration Date: 10/31/2017

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KENT P SANDERS, Deputy Chief Permit Administrator

Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature:

Date 3/7/2014

Permit Components



GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

1. **Approval of Completed Works from NYS P.E.** Any new works constructed or modified pursuant to this water withdrawal permit shall be constructed under the general supervision of a person licensed to practice engineering in this state (professional engineer). Upon completion of construction and pre-operational testing, such works may not commence final operation until the professional engineer first certifies in writing to the Department that the works have been constructed in accordance with the issued permit.
2. **Permit Expiration and Renewal** Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 30 days prior to its expiration.
3. **Transfer of Ownership of Water Withdrawal Systems** Unless otherwise specified in this permit, a new water withdrawal permit application is required for the acquisition or condemnation of the approved water withdrawal system.
4. **Cooling Water Withdrawals Regulated by SPDES** Nothing in this water withdrawal permit shall supercede the need to, where necessary, obtain an appropriate SPDES permit that allows for the operation of a cooling water intake structure and the discharge of the amounts of water approved by this water withdrawal permit. If any modifications to the location, or capacity of the intake structure are required by the permittee's SPDES permit, permittee must also apply for a modification of this water withdrawal permit to reflect such changes.
5. **Incorporation of the SPDES Water Conservation and Fisheries Protection Measures** Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit # NY0005193 are hereby incorporated by reference into this permit.
6. **Annual Water Withdrawal Reports** The permittee must submit a Water Withdrawal Reporting Form to the Department's Division of Water, Albany, NY, by March 31st of each year. The form is available on the Department's website and includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation and efficiencies employed during the past calendar year.
7. **Source Meter Calibration** All source meters or measuring devices shall be calibrated for accuracy at least once each year.
8. **Meter All Sources** The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.



GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Deputy Chief Permit Administrator
NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

4. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to



the permitted activity.

5. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

EXHIBIT M



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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DEC Permit Application Detail

?	Application ID:	2-6304-00024/00054
?	Facility:	Ravenswood Generating Station
?	Location:	38-54 Vernon Blvd, Queens, NY 11101
?	Town or City:	Queens
?	Applicant:	Tc Ravenswood LLC
?	Permit Type:	Water Withdrawal Non-public
?	Application Type:	Department Initiated Modification
?	Date Received:	02/19/2014
?	Status:	Modify Permit as of 03/07/2014
?	Complete Status:	
?	UPA Class:	Minor
?	Short Description:	Correction of Max withdrawal rate from 1.39 BGD to 1.52784 BGD
?	ENB Publication Date:	
?	Written Comments Due:	
?	SEQR Class:	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.
?	Coastal Zone Status:	

?	SEQR Class	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.
?	Coastal Zone Status:	
?	Final Disposition:	Modify Permit as of 03/07/2014
?	Permit Effective Date	03/07/2014
?	Permit Expiration Date	10/31/2017
	Stimulus Project	No
	Other Known IDs:	11,660 - WWA No 630000CE03 - Division of Air Resources ID (NYSDEC) 00002 - Compliance Data System ID (USEPA) NYD003917960 - Facility Index Database System ID (USEPA) CE02 - National Emissions Data System ID (USEPA) 2500 - Office of Regulatory Information System ID (USDOE) NYD003917960 - Resource Conservation Recovery Act ID (USEPA) NY0200549 - State Pollutant Discharge Elimination System ID (USEPA) NYR10E102 - State Pollutant Discharge Elimination System ID (USEPA) NY0005193 - State Pollutant Discharge Elimination System ID (USEPA)
	DEC Contact	Kent P Sanders 625 Broadway, Albany, NY 12233 Tel: (518)402-9178

Please email the Regional Office for additional information or questions regarding this application.

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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DEC Permit Application Detail

?	Application ID:	2-6301-00185/00026
?	Facility:	Astoria Generating Station
?	Location:	18-01 20TH Ave, Astoria, NY 11105
?	Town or City:	Queens
?	Applicant:	Astoria Generating Company LP
?	Permit Type:	Water Withdrawal Non-public
?	Application Type:	New
?	Date Received:	06/03/2013
?	Status:	Issued as of 09/24/2014
?	Complete Status:	Complete as of 02/18/2014
?	UPA Class:	Minor
?	Short Description:	INITIAL 601 WW APP
?	ENB Publication Date:	02/26/2014
?	Written Comments Due:	03/13/2014
?	SEQR Class:	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	The application is not subject to the Department's Environmental Justice policy (CP-29). Either the permits needed for the project are not subject to the policy or it has been determined that the project would not affect a Potential Environmental Justice Area.
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

?	ENB Publication Date:	02/26/2014
?	Written Comments Due:	03/13/2014
?	SEQR Class:	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	The application is not subject to the Department's Environmental Justice policy (CP-29). Either the permits needed for the project are not subject to the policy or it has been determined that the project would not affect a Potential Environmental Justice Area
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.
?	Coastal Zone Status:	This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.
?	Final Disposition:	Issued as of 09/24/2014
?	Permit Effective Date:	09/24/2014
?	Permit Expiration Date:	09/23/2024
	Stimulus Project:	No
	Other Known IDs:	11666 - WWA No. 00001 - Compliance Data System ID (USEPA) 8906 - Office of Regulatory Information System ID (USDOE) NY0005118 - State Pollutant Discharge Elimination System ID (USEPA)
	DEC Contact:	Michael T Higgins 625 Broadway, Albany, NY 12233 Tel:(518)357-2069
Please email the Regional Office for additional information or questions regarding this application.		

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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DEC Permit Application Detail		
?	Application ID:	2-6206-00012/00029
?	Facility:	Con ED-EAST River Generating Station
?	Location:	701-827 E 14TH St, New York, NY 10009
?	Town or City:	Manhattan
?	Applicant:	Consolidated Edison Company of New York Inc
?	Permit Type:	Water Withdrawal Non-public
?	Application Type:	Renewal Treat as New
?	Date Received:	05/31/2013
?	Status:	Issued as of 11/21/2014
?	Complete Status:	Complete as of 06/03/2014
?	UPA Class:	Major
?	Short Description:	WWN APP
	Project Description:	
?	ENB Publication Date:	06/11/2014
?	Written Comments Due:	07/11/2014
?	SEQR Class:	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	The application is not subject to the Department's Environmental Justice policy (CP-29). Either the permits needed for the project are not subject to the policy or it has been determined that the project would not affect a Potential Environmental Justice Area
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The

?	SEQR Class:	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	The application is not subject to the Department's Environmental Justice policy (CP-29). Either the permits needed for the project are not subject to the policy or it has been determined that the project would not affect a Potential Environmental Justice Area.
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.
?	Coastal Zone Status:	This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.
?	Final Disposition:	Issued as of 11/21/2014
?	Permit Effective Date:	12/01/2014
?	Permit Expiration Date:	11/30/2019
	Stimulus Project:	No
	Other Known IDs:	620000CE04 - Division of Air Resources ID (NYSDEC) 00003 - Compliance Data System ID (USEPA) NYD003939592 - Facility Index Database System ID (USEPA) CE04 - National Emissions Data System ID (USEPA) 2493 - Office of Regulatory Information System ID (USDOE) NYD003939592 - Resource Conservation Recovery Act ID (USEPA) NY0005126 - State Pollutant Discharge Elimination System ID (USEPA)
	DEC Contact:	Rudyard G Edick 625 Broadway, Albany, NY 12233 Tel (518)402-9167
Please email the Regional Office for additional information or questions regarding this application		

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Or use the browser back button to get to previous page

DEC Permit Application Detail		
?	Application ID:	2-6101-00185/00019
?	Facility:	Brooklyn Navy Yard Cogeneration Plant
?	Location:	63 Flushing AVE BROOKLYN Navy Yard, Bldg 41 Unit #234, Brooklyn, NY 11205
?	Town or City:	Brooklyn
?	Applicant:	Brooklyn Navy Yard Cogeneration Partners
?	Permit Type:	Water Withdrawal Non-public
?	Application Type:	New
?	Date Received:	06/03/2013
?	Status:	Issued as of 02/27/2015
?	Complete Status:	Complete as of 10/14/2014
?	UPA Class:	Minor
?	Short Description:	INITIAL 601 WW APP
	Project Description:	
?	ENB Publication Date:	10/22/2014
?	Written Comments Due:	11/06/2014
?	SEQR Class:	Type II Action
?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	The application is not subject to the Department's Environmental Justice policy (CP-29). Either the permits needed for the project are not subject to the policy or it has been determined that the project would not affect a Potential Environmental Justice Area
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The

Most Visited Getting Started

?	SEQR Determination:	Not Applicable
?	Lead Agency:	None Designated
?	Environmental Justice:	The application is not subject to the Department's Environmental Justice policy (CP-29). Either the permits needed for the project are not subject to the policy or it has been determined that the project would not affect a Potential Environmental Justice Area.
?	SHPA Status:	The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.
?	Coastal Zone Status:	This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.
?	Final Disposition:	Issued as of 02/27/2015
?	Permit Effective Date:	02/27/2015
?	Permit Expiration Date:	03/01/2021
	Stimulus Project:	No
	Other Known IDs:	11,668 - WWA No 610000CG01 - Division of Air Resources ID (NYSDEC) 01019 - Compliance Data System ID (USEPA) NY0000219303 - Facility INdex Database System ID (USEPA) R041 - National Emissions Data System ID (USEPA) 54914 - Office of Regulatory Information System ID (USDOE) NYR00D162 - State Pollutant Discharge Elimination System ID (USEPA) NY0251577 - State Pollutant Discharge Elimination System ID (USEPA)
	DEC Contact:	Rudyard G Edick 625 Broadway, Albany, NY 12233 Tel (518)402-9167
Please email the Regional Office for additional information or questions regarding this application		

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EXHIBIT N



NEW YORK CITY DEPARTMENT OF CITY PLANNING
 MAPPED STREETS AS OF A.M.C. 6, 1982
 SHORELINE AND WATER BODIES AS OF JANUARY 1, 1985

NEW YORK CITY MAPLED STREETS: SECTION 12
 BOROUGH OF MANHATTAN, NEW YORK COUNTY

EXHIBIT O



NEW YORK CITY DEPARTMENT OF CITY PLANNING
 MAPPED STREETS AS OF JUNE 1, 1952
 SHORELINE AND WATER BODIES AS OF JANUARY 1, 1954

NEW YORK CITY MAPPED STREETS, SECTION 9
 BOROUGH OF QUEENS, QUEENS COUNTY



EXHIBIT P

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Eastman park permit could set precedent

By Jeremy Moule @jfmoule

Water is crucial to life, and to the rebirth of Eastman Business Park.

The park has a self-contained, specialized utilities system that depends on large quantities of water from Lake Ontario.

RED-Rochester, which owns the park's utility system, has applied for a state permit to withdraw up to 54 million gallons of lake water per day to keep those utilities running.

Previously, the park's utility system didn't need a water withdrawal permit. But in 2011, a law passed that broadly regulates and restricts water withdrawals throughout New York. The purpose is to fulfill New York's commitment under a multi-state Great Lakes water conservation and protection pact.

RED-Rochester's application will be a test case of sorts. The company is one of the first industrial users to apply for a water withdrawal permit, and the application will set a precedent for future reviews and approvals, says Larry Levine, senior attorney for the Natural Resources Defense Council of New York.

Last Friday, a group of 18 state and local environmental and advocacy groups submitted a letter to the State Department of Environmental Conservation regarding RED-Rochester's application. NRDC took the lead on drafting the comments, though other signers include the state Sierra Club chapter and the Rochester Raging Grannies.

The organizations do not object to RED-Rochester withdrawing water from the lake, or to the amount of water the company wants. But they do have some big picture concerns about whether the permit application and DEC review process do enough to stress efficient water use.

"They're not really scrutinizing the applications," Levine says.

The organizations say they're worried that the DEC is treating the withdrawal permits as a formality. In the letter, they say RED-Rochester has laid out "a range of laudable water conservation measures." The DEC should, they say, make those efforts mandatory in the permit.

Those measures include identifying and addressing leaks, reducing fire protection system leaks, and working to help customers use water more efficiently, says RED-Rochester spokesperson Dave Lundy.

Applicants should also have to analyze alternative measures for conservation, the letter says. In RED-Rochester's case, it says, the company could evaluate the feasibility of installing a more water-efficient cooling system in the Eastman Business Park power plant.

DEC's press office did not respond to questions in time for this issue.

Local and state leaders say Eastman Business Park is critical to the Rochester region's economic growth. And they frequently say that the park's utilities system makes it attractive to industries. Lake Ontario water is used in the park's power plant; for high-pressure steam; and in the chilled, purified, and industrial water systems.

The park's economic importance isn't lost on environmental groups, Levine says, and they

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FILE PHOTO

Eastman Business Park's power plant relies on water from Lake Ontario for some of its systems.

understand that the lake water is an important resource. But a vigorous withdrawal permit program could help make sure the resource isn't strained, he says, which in turn would benefit the park by ensuring a reliable water supply.

The organizations do not object to RED-Rochester withdrawing water from the lake, or to the amount of water the company wants. But they do have some big picture concerns about whether the permit application and DEC review process do enough to stress efficient water use.

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Environmental groups in standoff with Eastman park firm



Steve Orr, Staff writer

7:33 p.m. EDT April 11, 2014



(Photo: Steve Orr, Staff photographer)

What might seem a routine permit application at Eastman Business Park has turned into a *cause célèbre* for a coalition of environmental groups.

The permit, sought by the Illinois company that now operates utilities at the business park, would allow the continued withdrawal of millions of gallons of water each day from Lake Ontario for use at the park.

But the environmental groups say RED-Rochester LLC's application also is a test case in how the state Department of Environmental Conservation will implement a ballyhooed new state law. New York's handling of the application also speaks to compliance with a historic interstate compact to safeguard water in the Great Lakes basin, they say.

To date, the environmentalists are not impressed with the state agency's approach.

"In all the permits they've considered so far, they're basically rubber-stamping the applications," said Larry Levine, senior attorney for the Natural Resources Defense Council, one of the largest groups in the coalition. "We will have to see what DEC does. Right now the ball's in DEC's court."

The RED-Rochester permit would govern water withdrawals at a facility on Edgemere Drive in Greece that Eastman Kodak Co. owned and operated for decades. The company had state permission to pump as much as 54 million gallons a day for industrial, power-generation, fire protection and other uses at the sprawling business park in Rochester and Greece, though in recent years it produced a fraction of that amount.

RED-Rochester, which last year purchased the water plant and other utilities from Kodak, now has applied for its own permit to withdraw supply from the lake.

The permit would be issued under regulations that became effective a year ago governing major withdrawals of water in New York.

RED Rochester's is one of the first five major water-withdrawal applications, Levine said, and it is the first application filed for a facility in New York's portion of the Great Lakes basin.

That's significant, because the withdrawal law was drafted and passed in good part so that New York could comply with the Great Lakes-St. Lawrence River Basin Water Resources Compact.

The legally binding compact, ratified by the eight states that border the Great Lakes, greatly restricts diversion of water to locations outside the basin and requires the states to take steps themselves to conserve and protect water resources. A similar pact was signed by the two Canadian provinces bordering the lakes.

The Great Lakes basin includes the five lakes — Superior, Michigan, Huron, Erie and Ontario — and the land area that drains into the lakes. About half of New York's 62 counties, including all of the Rochester region, are in the basin.

To carry out the compact's requirements, New York's Water Resources Law was amended in 2011 to require DEC permits for entities that withdraw 100,000 gallons or more a day of surface or groundwater. Rules implementing the law were effective a year ago.

Levine said the law requires that applicants explore and implement reasonable water-conservation measures. They also must assess environmental damage from their withdrawals and devise ways to mitigate that damage.

The law also was sought by forces opposed to the method of gas and oil extraction known as hydraulic fracturing. Before the law was adopted, critics said there was no control over the amount of water drillers could draw from lakes or rivers.

RED-Rochester, part of [Recycled Energy Development \(http://www.recycled-energy.com/\)](http://www.recycled-energy.com/), filed its permit application in February, and today believes it covered all the bases.

"RED's entire company is built on a mission of being good stewards of the environment," said spokesman Dave Lundy. "As part of its application, RED has detailed its plans to expand conservation efforts." Fourteen such measures are listed in its application, including investigating water use by its customers within the business park and undertaking several efforts to find leaks in water pipes.

Lundy said a ready supply of water for the business park's growing roster of industrial and commercial tenants "is critical to the economic health of the community."

DEC spokeswoman Lisa King said the agency has reached no conclusions about RED-Rochester's application. DEC officials are still reviewing both the application and public statements submitted during a comment period that ended March 28.

The NRDC was one of 18 environmental groups, with a combined New York membership of about 190,000, that submitted joint comments to DEC on the RED-Rochester application.

In their comments, they wrote the applicant did not fulfill its obligation to take water conservation and mitigation of environmental damage seriously enough.

"DEC has not been requiring any demonstration from applicants they're meeting these standards," Levine said.

In RED-Rochester's case, he said, the company could have explored re-using cooling water at the business park power plant rather than discharging it after one use into the Genesee River. Levine noted the company predicted a sharp increase in the amount of water used at the park but did not analyze the environmental impact of increased water withdrawals from the lake and discharges into the river.

The environmental groups also say the DEC has used a legal interpretation with which the groups disagree to exempt applications from having to prepare a full environmental impact statement before getting a permit.

King, the DEC spokeswoman, said she couldn't speak about specific applications, as they are still under review. She also noted litigation over one permit prevented her from commenting on some points.

But King said the DEC is careful to ensure all applications have necessary water conservation information when they're submitted.

"We take our duty to protect public health and the environment seriously," she said.

It is not just RED-Rochester that's being singled out. The environmental coalition, which also includes the Sierra Club, Citizens Campaign for the Environment and Environmental Advocates of New York, has submitted similar comments on the other four major permit applications.

Handling of the first applications, they said, will set a precedent for hundreds of additional applications expected in coming years.

The Sierra Club already has filed suit (<http://www.courthousenews.com/2014/03/06/65881.htm>) over a permit application from a power plant operator in Queens that wants to withdraw 1.5 billion gallons of water a day from New York's East River. Whether there is additional litigation remains to be seen.

"We certainly hope that DEC will take these comments seriously and will follow through ... to protect the state's water resources," Levine said. "If they go ahead and issue these permits without change, we'll have to evaluate what they've done and decide from there."

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EXHIBIT Q

Maintain a "Competitive Advantage" on Water Supply, New York Must Step-Up Its Game on Water Conservation



Posted April 9, 2014

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Less than three years ago, when Governor Cuomo signed into law new state water conservation standards, he [said](#):

The preservation and protection of New York's water resources is vital to the state's residents, farmers and businesses. This law will enhance the state's ability to manage its water to promote economic growth and address droughts while protecting the environment.

As the governor's press release explained, the law will also enable DEC to comply with commitments under the Great Lakes-St. Lawrence River Basin Water Resources [Compact](#) by regulating all significant water withdrawals occurring in the New York portion of the Great Lakes Basin."

And the law will, indeed, do all of that – *if* the state faithfully implements it.

But if New York drops the ball, it runs the risk of losing its competitive advantage over other regions of the country, in regard to available water supply to support economic growth and prosperity. The state's Climate Action Council has [warned](#):

Demand for water continues to grow, including for human consumption, agricultural use, and energy production. As other parts of the country experience large changes in drought frequency and intensity, New York's water resources may become a defining economic asset resulting in the migration of people and businesses into the state. This may bring some economic benefits, but will present new challenges as pressure on water resources increases.

And excessive water withdrawals threaten the health of some of the state's most iconic outdoor treasures – from the Hudson River to Lakes Ontario and Erie – by harming recreational fisheries and aquatic ecosystems.

Unfortunately, early efforts to enforce the new law aren't looking so promising.

Fortunately, there are sensible solutions being used elsewhere, from which New York can learn. (More on that below.)

Last year, the state Department of Environmental Conservation (DEC) began to phase-in new requirements for the largest water users in the state, such as power plants and other industrial facilities that, individually, use as much or more water than most entire cities in New York. The new standards also apply to public water utilities, which were already subject to state supervision under older laws.

But there's a very disturbing trend with this roll-out.

The state *should* be ensuring that these water users are employing all "environmentally sound and economically feasible water conservation measures" and avoiding "significant adverse environmental impacts" – as required by the 2011 law. Instead, DEC has been issuing, or proposing to issue, permits that simply rubber-stamp existing practices, or even authorize major increases in existing water use – without consideration of more water-efficient alternatives and without regard to the environmental consequences.

A series of letters from NRDC, concerning proposed water withdrawal permits, reveals this troubling pattern:

The Mohawk Valley Water Authority is the among the-largest water utilities in the state, providing drinking water to Utica and surrounding towns. The utility's water source – a reservoir that also supports a downstream trout-fishing [stream](#), navigation in the state's canal system, and a small hydroelectric power facility – was [dangerously](#) low in the last local drought in 2007, leading to a [ban on fishing](#) and an early seasonal [closure](#) of the canal. There are plans to bring new microchip manufacturing [plants](#) to the area, which could create hundreds of new jobs but depend on the availability of [huge](#) amounts of water. And the Water Authority currently loses 40% of its water to leakage, before it ever reaches local residents or business. Yet, DEC [hasn't scrutinized](#) the Water Authority's application to more than double its existing withdrawals.

The Eastman Business Park, in Rochester, is viewed as an engine for economic growth in a region that has seen major downturns in manufacturing. The facility describes itself as a "[city within a city](#)," which houses a wide range of manufacturing companies including bio-fuels, bio-chemicals, fuel cells, batteries, photovoltaic, and medical materials. It currently uses up to 18.5 million gallons per day and has [plans](#) to add new water-intensive manufacturing firms. The facility uses a number of commendable water conservation measures, but, when the new companies start operation, it expects to push against the limits of its water withdrawal capacity – nearly three times current usage (and more

than all but 5 cities in the state). Still, [DEC hasn't required](#) the business park to evaluate available means to further improve water use efficiency, which would help ensure a sustainable water supply for manufacturing at the site. Nor has DEC required any consideration of how to reduce adverse environmental impacts, including the suctioning of untold numbers of fish and fish eggs and larvae from Lake Ontario into the intake system, and the release of heated water back into the Genesee River.

The [Empire State Plaza](#) complex of state buildings in Albany house 11,000 employees, a state museum, library, and archives, and a performing arts center and convention center. It also withdraws up to 92 million gallons of water daily from the Hudson River – more water than any city in the state uses, except New York City – and along with it likely extracts (and kills) millions of fish and fish eggs and larvae. The sole use for that water is a “once-through” system that serves as air conditioning for the complex. [DEC hasn't required](#) the facility to consider upgrades that could actually save both money and water, nor an alternative cooling system configuration, such as that used by the new World Trade Center, which [modified](#) the design for a cooling system very similar to the Empire State Plaza's, reducing water usage by 80%.

Two power plants in Queens, each of which withdraws over one billion gallons per day from the East River, have sought new water withdrawal permits. DEC already granted one of these permits, to the Ravenswood Generating Station, without considering a more efficient type of cooling system that would dramatically reduce the millions of fish and fish eggs and larvae the plant sucks up every year. The Sierra Club is [suing DEC](#) for, in effect, rubber-stamping Ravenswood's permit application. Meanwhile, DEC has proposed to [do the same](#) for the Astoria Generating Station, which uses a similar amount of water. There are at least [16 more](#) power plants statewide that use over 100 million gallons per day for their cooling systems. Those permits are up next, and DEC shows every sign it will handle them the same way.

Others are taking notice of this trend. Nearly 20 other organizations joined NRDC's comments to DEC on these permits. State [Assembly members](#) downstream of the Mohawk Valley Water Authority have voiced concerns. And there's been recent press coverage of the pending applications in Rochester and [Utica](#), including red flags raised by the editorial board at the [Utica Observer-Dispatch](#).

The State Legislature – which passed the 2011 law unanimously – should take notice too, and demand answers from DEC.

Part of the problem, as NRDC [emphasized](#) to DEC last fall, is that the state hasn't issued any clear guidelines on what sorts of water conservation measures are expected of commercial, industrial, and institutional water users. And it hasn't updated its conservation [guidelines](#) for municipal water utilities in 25 years. Further, the state [has not adopted](#) guidelines on minimum stream flows to protect fisheries and other aquatic resources, which would set an outer limit on acceptable water withdrawals.

The good news is that there are models from which New York can learn, to improve its own efforts. For example:

A handful of states (and the [Delaware River Basin Commission](#), which covers parts of New York) are [starting](#) to seriously address the pervasive problem of leakage from municipal water systems, by requiring annual “water loss” audits using a standard methodology developed by the American Water Works Association.

Several states condition eligibility for financial assistance to water utilities on the implementation of water conservation measures. NRDC recently [petitioned](#) New York to do the same.

Wisconsin developed a [matrix](#) of conservation measures that water users are expected to use, based on their size and industry, as part of the state's regulations implementing the Great Lakes Compact.

California recently completed a comprehensive [guide](#) to conservation practices for commercial, industrial, and institutional water users.

For some power plants – but not the ones discussed above – DEC is [moving to require](#) “closed-cycle” cooling systems that drastically cut water use.

The Nature Conservancy has [developed](#) science-based stream flow guidelines for New York, similar to those used elsewhere, which the state can adopt.

Sensible solutions are out there for the taking. All that seems to be missing, so far, is the political will. It's time for New York to step up its game.

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