

## Environment

Drinking water on Long Island comes from underground aquifers. The quality of this abundant supply must be protected, and we must use our supply wisely. The best way to protect our groundwater is to not pollute our aquifers.

This section of our website provides information and offers tools for you to become "groundwater guardians" and help protect our most precious natural resource.

#### About our Water Source

#### View Water Cycle

All of the water we supply to you comes from beneath the ground and is referred to as groundwater. The water is stored beneath the ground in a sandy, geological formation known as the Aquifer System. Water in the Aquifer System originates as precipitation (such as rain and snow), which slowly percolates down through the soil and into the aquifers. There are four primary formations which are layered and make up the Long Island Aquifer System. From the shallowest to the deepest, these formations are:

- Glacial Contains the newest water to the groundwater system. The Authority has 268 wells drawing from this portion of the system. Virtually all private wells draw from the Glacial Aquifer.
- Magothy is the largest of the three formations and holds the most water, much of which is hundreds of years old. There are 329 Authority wells drawing from this portion of the aquifer.
- Raritan a clay layer that separates the Magothy and Lloyd aquifers. Some portions of the Raritan contain permeable, sandy formations that hold enough water to pump from. The Authority has 3 wells in the Raritan.
- Lloyd is the largely untapped layer which contains the oldest water, some of which has been held in the Aquifer System for more than 5,000 years. The Authority has 3 Lloyd wells.

The total depth of the Long Island Aquifer System is shallowest on the north shore (approximately 600 feet) and deepest along the south shore (approximately 2000 feet).

Water Sense

Healthy Lawns, Healthy Water

#### Long Island Commission for Aquifer Protection (LICAP)

The Long Island Commission for Aquifer Protection (LICAP) is a bi-county entity formed to address both quality and quantity issues facing Long Island's aquifer system, and to advocate for a coordinated, regional approach to groundwater resources management. Click here to be taken to <u>LICAP's web site</u>.

#### Do You Know the Value of Water?

Check out the links below to find out more.

Value of Water Brochure: What's it worth to you and your community?

<u>The Price of Water</u>

Interactive Water Model

To check out this Interactive Water Model to learn more about the water cycle Click Here!



### How Big is Your Footprint?

#### Have You Ever Wondered Just How Much Water You Actually Use?

A new tool called the **Water Footprint Calculator**, developed by GRACE Communications Foundation, lets you estimate your water use and helps you identify ways to reduce your overall "water footprint".

#### CLICK HERE to try it out!

Reducing your overall water footprint is important because our freshwater resources in this country and around the world are being threatened. Only 3% of all the water in the world is freshwater, and of that 3%, only 1% is accessible and useable by humans.

Given current water consumption rates, the United Nations has predicted that 2.7 billion people across 48 nations will face severe water shortages by the year 2025. In the United States alone, a recent government survey showed that at least 36 states are anticipating local, regional, or statewide water shortages by 2013. Forecasts such as this have prompted many scientists to predict that the next major crises we will face as a society will not be over energy or economics, but instead over water. Water use reduction is a cornerstone to a sustainable future for us all.

#### Virtual Water

The Water Footprint Calculator relies on the concept of virtual water – the water it takes to create the products and energy we use – to help estimate your water footprint. The average American directly uses about 176 gallons per day, as measured by the USGS, but much of our water consumption comes from indirect, or "virtual" use, i.e., the water embedded in food, energy and consumer goods. Comprehending the magnitude of our virtual water use helps raise public awareness about the importance of broader water conservation efforts beyond just turning off the tap.

#### Where Do We Use Most of Our Water?

- 1. What you eat and drink accounts for most of your water footprint because almost one third of all water withdrawn in the United States is used for agriculture.
- 2. A typical household uses thousands of gallons of water each year for things like toilets, showers and lawn watering.
- 3. The average family of four indirectly uses hundreds of gallons of water per day if their electricity is produced by power plants that rely on outdated cooling water systems. Such plants account for nearly half of all water withdrawn in the United States.
- 4. It takes a lot of water to make the consumer goods and services that you use and buy everyday.

Calculate your water footprint and learn more about saving water at <a href="http://www.h2oconserve.org/home.php?pd=index">http://www.h2oconserve.org/home.php?pd=index</a>

WATER QUALITY

Water Quality Reports

Water Education

Your Drinking water

**Backflow Prevention** 

<u>FAQs</u>

Why Does?

<u>Environment</u>

Water Conservation

<u>WaterSense</u>

Setting Your Irrigation Controller

Source Water Protection

**GroundWater Guardians** 

Helpful Household Tips

Protect Your Pipes

Lawn & Garden Tips

<u>Leak Facts</u>

4060 Sunrise Highway | Suite 1000 | Oakdale, NY 11769 Customer Service: <u>(631) 698-9500</u>



<u>Contact SCWA</u> <u>Privacy Policy</u> <u>Site Map</u> <u>Terms of Use</u>

© 2019 Suffolk County Water Authority. All rights reserved



# Long Island Commission for Aquifer Protection

## **Upcoming: LICAP Public Hearings**

#### December 17th, 4:00 PM

Maxine S. Postal Auditorium 300 Center Drive Riverhead, NY 11901

#### December 18th, 4:00 PM

Theodore Roosevelt Executive and Legislative Building 1550 Franklin Avenue Mineola, NY 11501

#### December 19th, 4:00 PM

Rose Caracappa Auditorium 725 Veterans Memorial Highway Smithtown, NY 11787

Hearings are to solicit comments on the Commission's 2019 State of the Aquifer Report and Groundwater Resources Management Plan. Download the Groundwater Resources Management Plan (Parts 1&2) HERE Download the Groundwater Resources Management Plan (Part 3) HERE Download the 2017 Groundwater Resources Management Plan HERE

## **Upcoming: LICAP General Meeting**

December 11th 10:00 AM - 12:00 PM Suffolk County Water Authority Education Center 260 Motor Parkway Hauppauge, NY 11788

click here to view the agenda



# Visit OurWaterOurLives.com and take the pledge today!

Click HERE for a list of certified irrigation professionals

Click HERE to see the Smart Controller specs

1) Limit Lawn Watering

- Try an Odd/Even Schedule: Odd numbered addresses water on odd days, while even numbered addresses water on even days.

- Use a Smart Sprinkler System: These devices have built-in water saving features including weather sensors that adjust optimal sprinkler run times to reduce wasted/excess water. Enter the LICAP Smart Sprinkler System Lottery using the form below for your chance at a free smart system with rebate for installation from LICAP (Great Neck, Greenport, Long Beach and Sayville customers ONLY. While supplies last).

- Use a Rain Sensor: These devices can be added to most existing irrigation systems to reduce wasted/excess water.

- Reduce Run Times/Run Days: Manually adjust irrigation timers to water 2/3 days per week with shortened run times per zone. This reduces over-watering which helps support deep root growth for a healthier lawn.

-Change irrigation timers to run between 9 p.m. and midnight to reduce water use during peak hours.



#### 2) Detect and Fix Leaks

- A one drop per second leak wastes 1,661 gallons a year.
- To check for leaks:
  - Make sure all faucets/spigots inside and outside your home are closed tightly.
  - Look at your water meter and note the number.
  - Leave faucets/spigots closed for 20 minutes.

- Look at your water meter again. If the number changes, you likely have a leak.
- Inspect the piping in your home for cracks and leaks. Check outdoor piping and hoses as well.

To check for toilet leaks:

- Remove the toilet tank lid.
- Drop one tablet or ten drops of food dye into the tank.
- Put lid back on. Do not flush.
- Wait 10-15 minutes and then check the bowl. Id the food dye appears in the water, your toilet is leaking.



#### 3) Limit Indoor Water Usage

- Limit shower times to less than 5 minutes and save as much as 1,000 gallons a month.
- Make sure the faucet is turned off when brushing teeth, shaving, and soaping hands and save up to 200 gallons a month for a family of four.
- Run washing machines and dishwashers only when full.

- Aerate your Faucet: Installing a WaterSense labeled aerator on your faucets is one of the most cost effective means to use water more wisely in your home. You can increase the faucet's efficiency by 30 percent without decreasing performance.



#### 4) Limit Outdoor Water Usage

- Instead of washing your car in the driveway, bring it to a commercial car wash that recycles water instead.
- Consider a "low maintenance lawn" that uses native ground cover that requires little water instead of grass.
- Use mulch when planting to prevent water loss through evaporation.
- Sweep outdoor surfaces with a broom instead of using a hose.



#### 5) Use EPA WaterSense Products

- Look for the EPA WaterSense logo when purchasing washing machines, dishwashers, showerheads, sinks, toilets, faucet aerators, and other water products. The average home, retrofitted with water-efficient fixtures, can save 30,000 gallons per year.



CALENDAR

◀ January 2020 ▶

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
5 12 19 26	6 13 20 27	7 14 21 28	8 15 22 29	9 16 23 30	10 17 24 31	11 18 25 1

📥 Print

#### Mission

The Long Island Commission for Aquifer Protection (LICAP) is a bi-county entity formed to address both quality and quantity issues facing Long Island's aquifer system, and to advocate for a coordinated, regional approach to groundwater resources management. Website powered by Network Solutions®

## How to Save an Estuary: Wastewater Reuse at the Riverhead Sewer District's Water Resource Recovery Facility

#### By Christopher A. Weiss and Timothy N. Nordberg

Why would H2M architects + engineers (H2M) and the Town of Riverhead improve upon a perfectly functioning wastewater treatment plant and pave the way for new concepts like "wastewater reuse"? When the wastewater facility is situated on a sole source potable water aquifer and a nationally significant ecological estuary. It also helps when you are lucky enough to have an environmentally forward-thinking municipality that embraces innovation for the overall benefit of the region. Reusing wastewater on Long Island is an idea that has been overlooked for too long. Creating the first municipal reuse facility in New York was the perfect solution to address this unique combination of circumstances.

#### **Project Challenges and Solutions**

The existing 1.3 million-gallon-per-day (MGD) Town of Riverhead Advanced Wastewater Treatment Facility (AWTF) in Suffolk County was last upgraded in 2000. The AWTF regularly met its total nitrogen discharge limit of 15 mg/1 to the Peconic River. In 2001, recommendations from the Peconic Estuary study (Peconic Estuary Program 2001) included reducing nitrogen loading by all sources to strengthen and maintain the estuary for the future. This recommendation coincided with the sewer district's consideration that a portion of their effluent could be reused as irrigation water on the neighboring Indian Island Golf Course to reduce the nitrogen loading to the Peconic River.

What seemed like straightforward application idea was found to be all but simple. New York did not have state standards in place for wastewater reuse for irrigation discharge. So, H2M and Riverhead had to conduct a research study to determine what the standards would be, prove the standards could be met, and get the standards approved by the regulating agency – all before the project could move the full-scale design phase. The research study collated all the reuse water standards from states across the country already applying reuse water and selected the strictest of each parameter to be monitored in the discharge. Then, a pilot plant was designed and constructed on the AWTF property. A portion of the existing plant's tertiary effluent was passed through the pilot plant for additional treatment to meet these stringent reuse water standards. To test the water from reuse pilot plant, a replica golf course hole was constructed on the AWTF property using the same soils, grasses, and landscaping as the Indian Island Golf Course. Testing was conducted on the water from the sprinklers as well as on the replica golf course landscaping, soil strata and air.

Successful completion of readily available treatment equipment on typical tertiary AWTF effluent to meet the newly formed reuse water standards has set the path for other

projects in New York to follow. However, just as the reuse standards derived by this project were being approved by the regulating agency, the New York State Department of Environmental Conservation (NYSDEC), in line with US Environmental Protection Agency's (USEPA) estuary recommendations, modified the facility's State Pollutant Discharge Elimination System (SPDES) permit to a lower effluent nitrogen concentration, from 15 mg/1 to 3.2 mg/1.

To meet the lower effluent nitrogen limit the entire treatment facility would be upgraded. The wastewater reuse project initially planned as an extension to the existing wastewater treatment facility was now re-designed to be an integral part of a full facility upgrade. The new Riverhead Water Resources Recovery Facility (WRRF) project blossomed to cost \$24 million which included a 1.5 MGD membrane bioreactor and reclamation system with a fully integrated wastewater reuse process train and golf course irrigation supply system. Ultrafiltration membrane technology used in the main process treatment train was selected based on its ability to produce crystal clear effluent on a consistent basis prior to final disinfection. This eliminated discharge clarity impacts on the Peconic River, resulting in plant effluent that is always reuse-ready. That was the heart and soul of this project.



#### Water Resource Recovery Facility Design

The new facility was designed with the environment in mind. Existing structures, including concrete tanks and operations buildings, were repurposed. Energy efficiency measures were selected, such as variable frequency driven motors, in-tank probes for real-time process monitoring and motion sensors for lighting. These efficiency measures reduced the overall carbon footprint for the construction and future operation. Permit limitations in place during dewatering operations ensured that no pollution would occur in the tributary creek adjacent to the site, which ultimately flows into the Peconic River. Trenchless directional drilling techniques were used to install the 1,000 feet of force main piping under the golf course, from the facility to the irrigation control building. This approach eliminated the costly rehabilitation of fairways, tees and greens.

To provide consistent results from a complex plant capable of meeting the limits of today's technology, H2M used techniques to provide the "simpl-exity" needed to simplify the complex nature of the operations. Using wireless connectivity between the facility and the golf course, as well as fiber optic cables between process control panels on the site, a site-wide SCADA loop was created for total controls, with remote access built in for viewing the process from anywhere. More reliable sensors also allow for real-time process control abilities, further promoting energy efficiency and control over the treatment operations.

#### New York State's First Municipal Reuse Facility

The Town of Riverhead WRRF is the first municipal reuse facility in New York State and was completed in time for the 2016 golf irrigation season. The project was completed within budget, which included New York State and Suffolk County grants of \$2 million and \$8 million, respectively. The new facility was upgraded with biological reactors matched with ultrafiltration for solids/liquid separation and ultraviolet disinfection to meet the limits of today's technology. These processes were chosen to both consistently meet the Total Maximum Daily Load for Total Nitrogen levels for discharge to the Peconic River, and to stay within the footprint of the pre-existing plant. The limitations of the new SPDES permit will reduce the overall annual nitrogen discharge by over 50 percent from the previous limitations.

The Town of Riverhead WRRF will reuse up to 100,000 gallons of in-plant washwater and makeup water each day for internal treatment facility equipment. Potable water traditionally has been purchased from the local supplier for this purpose. The benefits of the internally recycled water include reduced groundwater demand for the local potable water treatment plant and additional control over water pressure with the addition of a single booster pump.

The Town of Riverhead WRRF also provides up to 450,000 gallons per day of reuse water for normal sprinkler irrigation to the adjacent Indian Island Golf Course, free of charge. This irrigation water no longer needs to be drawn from golf course groundwater wells and is sufficient to provide all the water they need on a typical summer watering cycle. Reuse water containing minimal nitrogen will replace the iron-rich well water that interfered with the mechanical operations of the irrigation valves and sprinkler heads. It will also provide additional nutrients to the fairways, tees and greens that reduces the need for traditional fertilizer application. By reducing the draw on the groundwater aquifer, the groundwater level that exists will continue to protect against the intrusion of the surrounding salt water bodies. A truly outstanding result of the project was the community acceptance by the residents, the golf course patrons and the grounds crew, pushing past the fear of wastewater reuse and joining the chorus of ... "It's about time."

The upgraded facility, with its Water Resource Recovery components online, will enhance these benefits to the overall well-being of this coastal community by both diverting an additional one-third of the permitted total nitrogen discharge during irrigation seasons away from the plant's Peconic River outfall and by saving up to 100 million gallons a year of groundwater pumped from the aquifer. These are realized annual benefits to the Peconic Estuary and Groundwater Aquifer Benefits

- 50% reduction of Total Nitrogen discharged to the waters of the Peconic Estuary
- 90% reduction in suspended solids discharged to the waters of the Peconic Estuary
- 100 million gallons of groundwater saved

In New York State, WWTP flows are in excess of 3,561 million gallons per day. Reusing only 20% of that water resource saves over 260 billion gallons per year from potable water supply. That is over 700 million gallons per day of untapped water resource recovery potential.

#### On the Horizon for Wastewater Reuse

Biosolids reuse is the next sustainability target that H2M will be assisting the Town of Riverhead with at their wastewater treatment facility. The treatment facility produces over 1 million pounds of waste solids that removed from the sanitary waste stream. These waste solids (biosolids) are processed further to remove 80% of the excess water and then trucked out of state for landfill disposal at annual cost in excess of \$500,000. Beneficial reuse processing upgrades at the plant would increase the water removal to 95% and allow the biosolids to be reused as fertilizer by local farmers, or fertilizer suppliers. This reduces volume of material being trucked off site. The final biosolids material can be used as a fertilizer replacement, and not have to pay for landfill disposal. This sustainability project has the potential to **reduce** the overall annual waste disposal cost by more than 75%.

Christopher A. Weiss, P.E. is the Deputy Division Director of Wastewater Engineering at H2M architects + engineers and may be reached at cweiss @h2m.com. Timothy N. Nordberg, P.E. is Project Engineer with H2M architects + engineers, and may be reached at thordberg @h2m.com.

#### **OPINIONCOMMENTARY** By John Turner and Enrico Nardone

# Water reuse is an idea whose time has come



Golfers play golf on the Indian Island Golf Course in Riverhead on Wednesday, Nov. 8, 2017. Credit: James Carbone

Updated January 27, 2019 2:03 PM PRINT SHARE

Long Island faces a water crisis, both to the fresh drinking water aquifers that sustain our daily lives and the salty coastal waters that enrich it. The crisis is reflected by what has been a steady, decades-long deterioration in water quality, from excess nitrogen fueled by human sewage, to toxic plumes and spills, all the while "mining" our supply by taking out more water than is being replenished.

Simply put, while several dozen laws and regulations provide the legal basis for a number of valuable water-protection programs, the evidence indicates that collectively we are failing to adequately protect Long Island's waters and waterways.

Water reuse should be a key strategy to reverse this failure. Water reuse turns wastewater from a liability into an asset, improving quality while reducing pumping demands on the drinking water aquifers by using this water for another beneficial purpose instead of dumping it into the nearest stream or bay.

Reuse can simultaneously achieve water quality and quantity benefits, as evidenced by one of two reuse projects on Long Island. This project involves Suffolk County's Indian Island golf course in Riverhead and the adjacent Town of Riverhead sewage treatment plant. The initiative, which began last spring, sends highly treated effluent to the golf course to irrigate the grass. The benefits? Two thousand, four hundred fewer pounds of nitrogen discharged into Peconic Bay and 63 million fewer gallons of water pumped from the stressed underlying aquifers.

#### ADVERTISING

This project is a mere drop in the bucket regarding water reuse here. For example, in Suffolk County, there are several dozen sewage treatment plants and golf courses within one-half mile of each other, as well as many other possible targets for wastewater. The comprehensive implementation of reuse projects could significantly reduce nitrogen in coastal waters and our drinking water aquifer and mean billions of gallons of fresh water never pumped from the stressed aquifers. That would protect the flow in streams and rivers.

To best guide this implementation, we're calling on environmental leaders in the public and private sectors to fund a Long Island-wide feasibility study or road map that prioritizes reuse projects based on financial, logistical and environmental criteria. This blueprint would allow us, in a thoughtful way, to advance the most effective reuse projects providing the greatest water-management benefits.

About 2.3 billion gallons of water are reused daily in the United States, most notably in California, Florida and the arid Southwest. Let's take a major step forward in managing and protecting our vulnerable coastal waters and drinking-water supply by adding Long Island to that list.

John Turner is the conservation policy advocate for the Seatuck Environmental Association in Islip, where Enrico Nardone is the executive director.

## **Riverhead sewage treatment plant earns national excellence and innovation award**

By **Denise Civiletti** 

Nov 22, 2017, 8:12 am



Riverhead Sewer District superintendent

Michael Reichel, left, llistens as Supervisor Sean Walter, center, accepts a Water Environment Federation project excellence award, which was presented to the town by H2M president and CEO Rich Humann, right, and wastewater division deputy director Chris Weiss, joined by council members Jodi Giglio, John Dunleavy, Tim Hubbard and James Wooten. Photo: Denise Civiletti

Riverhead's upgraded sewage treatment plant has received a national award for innovation and excellence.

The Water Environment Federation, a nonprofit technical and educational organization representing water quality professionals around the world, has honored the Riverhead facility with one of three project excellence awards this year.

Officials from H2M Architects and Engineers, the firm that designed and implemented a \$24 million facility upgrade at the Riverhead plant, presented the town board with the award at the start of last night's meeting.

"It's a state-of-the-art project that is really going to set the standard not only on Long Island but even nationally," said H2M president and CEO Rich Humann.

With the upgrade, the plant, originally built in the 1930s, became Long Island's first water resource recovery facility, capable of diverting up to 500,000 gallons per day of treated effluent from the Peconic River to irrigation uses on the adjacent county-owned golf course as well as on the sewer district property itself.



Courtesy photo illustration: H2M

Architects and Engineers

The award is a great honor, the deputy director of H2M's wastewater division, Chris Weiss, said last night. "Each year only three projects are selected to receive this award," Weiss said. "In 2017 Riverhead was one of them." The other two were vastly larger facilities in Chicago and Alexandria, Virginia.

"Riverhead really led the way here in New York State," Weiss said. "It is the first place to bring water resource applications to a wastewater treatment plant in the state. It was not mandated by regulation and it was not done because there was a water resource emergency, but because it was the right thing to do — and that resonated with the Water Environment Federation," Weiss said.

The plant accepts waste by pipeline from properties within the Riverhead Sewer District and by truckload from properties in the towns of Riverhead and Southampton that are served by private septic systems. As a result of the upgrade, it can treat up to 1.5 million gallons of wastewater per day to the technological limit of under 4 milligrams of nitrogen per liter. Using membrane technology and high-dose ultraviolet disinfection, the plant treats for a host of other pathogens as well, including viruses. Using some of the effluent for irrigation reduces nitrogen-loading in the Peconic Estuary by 1.4 tons per year. Nitrogen pollution contributes to harmful algal blooms and increases aquatic plant growth in water bodies, which in turn consume too much oxygen. That can deplete oxygen to levels that cannot support marine life, resulting in massive fish kills like the ones seen in the Peconic in 2015.

The upgrade and reuse project was completed in 2016 with financial assistance from federal, state and county governments.

Riverhead's facility has received accolades from the U.S. Environmental Protection Agency, which in 2015 honored Riverhead Sewer District superintendent Michael Reichel with an environmental champion award. Reichel advocated for the reuse project for three decades.

In accepting the award from H2M's president last night, Riverhead Town Supervisor Sean Walter thanked Reichel, whom he called "the impetus" for the project.

"We operate the most advanced wsatwater treatment plant in New York State," Walter said. "This shows our commitment to the environment."



Aerial view of the upgraded Riverhead sewage treatment plant and the adjacent Indian Island Golf Course.

## Waste not, want not

By: David Winzelberg March 28, 2017

A \$23 million project that allows wastewater to be re-used to irrigate a Riverhead golf course may be a model for conserving precious water resources across Long Island. Designed by Melville-based engineering firm H2M and implemented last September by the Town of Riverhead Sewer District, the Advanced Wastewater Treatment Facility treats up to 1.5 million gallons of wastewater daily and can provide up to 450,000 gallons per day for re-use in irrigation of the adjacent Suffolk County-owned Indian Island Golf Course.

Though there are similar wastewater re-use systems in other states, particularly in the Southwest, the Riverhead facility is the first of its kind in New York, according to Frank M. Russo, senior vice president and director of wastewater engineering at H2M. There are a few benefits from the re-use system, not the least of which is water conservation. Other upsides include lowering the nitrogen levels of the resulting effluent that flows in the Peconic River; keeping golf course groundwater levels high, which staves off saltwater intrusion; and limiting the use of well water that's rich in iron. Iron from the well water clogs plumbing and sprinkler heads, so reducing the iron saves on labor and maintenance costs.

"From an environmental standpoint, there are dual benefits involved," said Peter Scully, Suffolk's deputy county executive for administration. "We reduce the amount of treated effluent being discharged into our bays and harbors, while also reducing significantly the amount of clean water removed from the aquifer to irrigate the golf course." As it is with most infrastructure projects, the major obstacle for upgrading sewage plants into re-use systems is money. The upgrade to a re-use facility costs between 15 and 20 percent more than a regular sewage treatment plant. However, when other costs and the benefits of the re-use systems are factored in, it may be worth it for local municipalities to explore. "You have to look at everything, including the costs of pulling water out of the ground," said Michael Reichel, superintendent of the Riverhead Sewer District, who spearheaded the wastewater re-use effort. In 2015, Reichel received an Environmental Champion Award from the U.S. Environmental Protection Agency for his work on the project.



Purple pipes inside Riverhead's Advanced Wastewater Treatment Facility carry reusable water for irrigation.

The Riverhead plant was upgraded with the help of an \$8 million grant from Suffolk County and \$2 million from the state Department of Environmental Conservation. And while the county searches for funding for septic system upgrades and other water quality measures, it's possible that some money from Gov. Andrew Cuomo's recently announced \$2 billion for critical water infrastructure could trickle down to fund wastewater re-use upgrades.

"If we're serious about protecting our precious water supply, then this becomes a viable option," Russo said.

And though the Riverhead system isn't designed to provide drinking water, it's been brought up to the limits of technology and uses the same filtration system that bottledwater companies use.

"We may be meeting the criteria for potable water," Reichel said. "We're planning to test it with the state Department of Health before the end of the year."

The success of the Riverhead upgrade now has county officials considering expanding wastewater re-use systems to some of its other sewage plants.

"Planning department staff has identified 23 golf courses in Suffolk County that are within a half-mile of a sewage treatment plant," Scully said. "We should focus on identifying the next viable re-use scenarios and pursue the next site with vigor." Russo agrees.

"It's the right thing to do," he said.





## Water Sense





Suffolk County Water Authority is proud to be an EPA Water Sense Partner.

Water is a finite resource. Between 70 and 75 percent of the Earth's surface is covered with water, but only 1 percent of that is available for human use. While both world population and the demand for freshwater resources are increasing, supply remains constant. Water efficiency helps preserve our water supply for future generations.

#### The WaterSense Program

WaterSense is a partnership program sponsored by the U.S. Environmental Protection Agency (EPA). Its mission is to protect the future of our nation's water supply by promoting and enhancing the market for water-efficient products and services. WaterSense provides consumers with a simple way to identify these types of products and services. EPA realized that managing water supplies was becoming an increasingly important issue to all local markets around the country. Through its national program, local water utilities, product manufacturers, and retailers work with EPA to promote water-efficient products and practices among consumers and commercial audiences.



#### Look for WaterSense Products

The WaterSense label helps customers differentiate between products in the marketplce, while encouraging innovation in manufacturing. WaterSense labels toilets, faucets, and faucet accessories that use less water but perform as well or better than standard models. Generally speaking, WaterSense labelled products will be about 20 percent more water efficient than conventional models in the same category. Performance criteria are a critical component to each WaterSense product specification developed. To earn the WaterSense label, products must undergo independent testing and certification by third-party laboratories to ensure they meet EPA performance and efficiency criteria. You can visit <u>www.epa.gov/watersense</u> to see a registry of labeled products.



Dreaming of a Better Bathroom?



Beat the Peak!

Facts & tips to reduce water use during Peak Season





Learn More!

Learn more about water efficieny and Take the I'm for Water Pledge at <u>http://www.epa.gov/watersense/wereforwater/index.html</u>

#### WATER QUALITY

Water Conservation

#### <u>WaterSense</u>

Setting Your Irrigation Controller

Source Water Protection

GroundWater Guardians

4060 Sunrise Highway | Suite 1000 | Oakdale, NY 11769 Customer Service: <u>(631) 698-9500</u>



<u>Contact SCWA</u> <u>Privacy Policy</u> <u>Site Map</u> <u>Terms of Use</u>

© 2019 Suffolk County Water Authority. All rights reserved