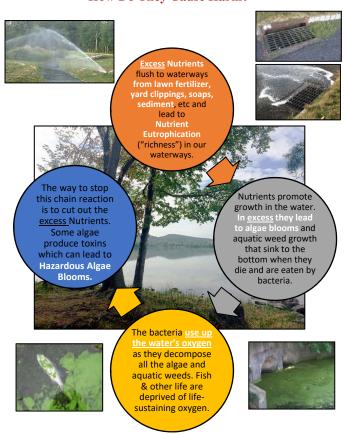
Nutrient Pollution

is present in many Rockland County waterbodies.

This is due to excess Nitrogen and Phosphorus nutrients carried by our outdoor activities and stormwater that quickly carry the excess nutrients to storm drains, then to the nearest waterways leaving little opportunity for soil and plants to filter them out.

This leads to **Nutrient Eutrophication** ("richness"), a top Water Quality Issue in NYS, that impairs our waters.

Aren't Nutrients Good for Waterbodies? YES! How Do They Cause Harm?



Are Nutrient-Impaired Waters Harmful for Human Recreation? If Hazardous Algae Blooms form, recreation would be impacted.

Nutrient Pollution Solutions

<u>Fertilizer</u>: Over-fertilized lawns is a significant source of excess nutrients in local waterbodies. If using fertilizer see **Rockland County's Fertilizer Law**, and **Look for the Zero** in the middle number indicating phosphorus-free (see links on back).

<u>Trash</u>: The grate in the street leads directly to local waters where we fish and recreate. Dispose of trash and <u>Pet</u> Waste Properly!



Improperly managed <u>Septic Systems</u> send pathogens and nutrients to local waterways and ground water.



<u>Soaps</u>: Many Soaps (particularly car wash soap) contain phosphorus. Use phosphorus-free items since <u>wastewater</u> <u>plants can't remove it all</u> and direct car wash-water to the lawn which will filter it out, but never to the storm drain.

<u>Leave the Leaves and Grass-Clippings</u> as free, organic fertilizer which will directly return nutrients to your lawn. Many fall flooding issues are a result of blocked storm drains.

<u>Water-Smart Landscaping</u>: Grass alone can require 2-3x the water of a <u>drought-tolerant mixed landscape</u> which typically use no fertilizers (less watering and maintenance!).



Shredding your leaves with a mulching mower will reduce their volume and speed up decomposition time.



Sanitary Sewer Overflows (SSOs):

Washing grease/cooking oils down drains or flushing wipes (including 'flushable') or disposables clogs sewer lines causing overflows during heavy rainfall to local waterways (and homes) that carry nutrients, bacteria and other pathogens. Pour cooled grease/cooking oil into a container then seal & discard with garbage. Wipe pan clean with a dry paper towel prior to washing.





Water-wise Landscaping will soak up Nutrient & Stormwater Pollution!

A <u>drought-tolerant mixed landscape</u> will use less water and be less maintenance once established. Creating a <u>Rain Garden</u> in a wet, shallow depression with water-tolerant native plants in the very wet zone (middle), and moderately wet zone (edges) will capture and recharge water. Rain Gardens are designed to hold standing water for less than 24 hours (no mosquitos).

CCE's Fact-Sheets for Water-Wise Landscaping, Rain Gardening, Xeriscaping, Fertilizing, etc:

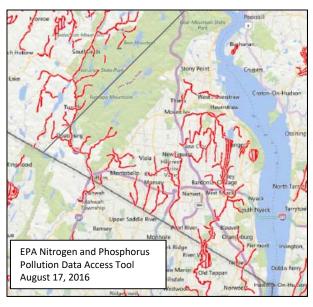
http://rocklandcce.org/fact-sheets

EPA Water-Smart Landscapes:

https://www3.epa.gov/watersense/outdoor/landscaping tips.html



Photo sources courtesy of USEPA, NYSDEC, Keep Rockland Beautiful, Wikipedia



Rockland County's Nutrient-Impaired Waters:

EPA's Waters Listed for Nitrogen and Phosphorus Impairments

<u>Sediment & Illicit Discharges</u>: Excess sediment around/in catch basins, particularly from construction sites should be reported to your municipality with photograph if possible, as should any suspicious material in <u>storm</u> drains (soap, sewage, oil & grease).

Additional Educational Resources:

CCE's Water Quality & Stormwater Education:

http://rocklandcce.org/stormwater-consortium-water-quality-education/water-quality-stormwater-education-homepage

Composting Instructions & Lawn Guidance:

http://rocklandcce.org/gardening/compost-resources

<u>Learn to Compost/Mulch Fall Leaves:</u>

http://www.dec.ny.gov/public/46613.html

Leave it on the Lawn (Grass Clippings):

http://www.dec.ny.gov/chemical/8816.html

Rockland County Fertilizer Law Fact-Sheet:

http://rocklandcce.org/fact-sheets

Look for the Zero:

http://www.dec.ny.gov/docs/water_pdf/fertbrochure15.pdf

Fertilizer & Pesticide Certificate Programs:

http://rocklandcce.org/environment/fertilizer-law-certificate-program

Get Involved with Water Quality!

Get YOUTH, COLLEGE STUDENTS or the WHOLE FAMILY involved with ENVIRONMENTAL STEWARDSHIP

SUEZ Conserve Water (REBATES, tips, etc):

www.SUEZConserve.com

Rockland County:

https://rocklandgov.com/departments/environmental-resources/volunteer-opportunities/

Rockland County Conservation Service Corps:

http://rocklandgov.com/departments/youth-bureau/rockland-conservation-and-service-corps/

Clean-ups and educational workshops:

Keep Rockland Beautiful:

http://keeprocklandbeautiful.org/

Sparkill Creek Watershed Alliance and Strawtown Studio:

http://www.sparkillcreek.org/

https://strawtownstudio.org/

See your community websites for further events, cleanups, etc.





Rain Barrels and Composters are available at Cornell Cooperative Extension in Rockland, or at the Rockland County Solid Waste Management Authority

Sewage Pollution Right to Know:

http://www.dec.ny.gov/chemical/90315.html

RC Solid Waste Mgmt Authority:

http://www.rocklandrecycles.com/

Septic Maintenance:

http://rocklandgov.com/departments/health/environmental-health/water-pollution-control/

USEPA Soak up the Rain:

https://www.epa.gov/soakuptherain

Hazardous Algae Blooms:

http://www.dec.ny.gov/chemical/77118.html

Your Home and Water Quality Impacts In Rockland County



Rockland Lake
Nutrient-Impaired Waterbody





Cornell University

Cooperative Extension Rockland County 10 Patriot Hills Drive Stony Point, NY 10980 Phone: (845) 429-7085

Website: www.rocklandcce.org

 $\underline{rocklandcce.org/stormwater\text{-}consortium}$

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities

This information has been brought to you on behalf of SUEZ North America Foundation, Inc.