

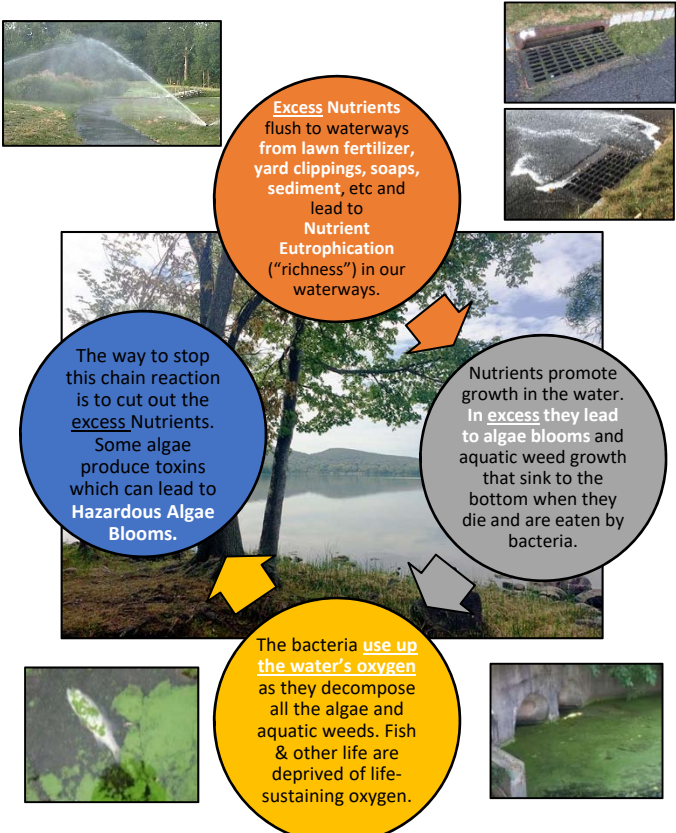
# Nutrient Pollution

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

**Fertilizer:** Flow from over-fertilized/overwatered lawns is a significant source of excess nutrients in local waterbodies. If buying fertilizer see **Rockland County's Fertilizer Law**, and **Look for the Zero** in the middle number indicating phosphorus-free.



**Trash:** The grate in the street leads directly to local waters. **Much of Rockland's drinking water is from underground wells.** Dispose of Properly! Trash, **Pet Waste** and improperly managed **Septic Systems** will send parasites, bacteria, and nutrients to local water bodies and/or underground water.

**Soap/Cleaners:** Many Soaps/Cleaners (particularly car wash soap) contain a form of phosphorus called **phosphates**. Use phosphorus-free items since **wastewater plants can't remove it all**, and **direct car wash-water to the lawn which will filter it out**, but never to the storm drain which will promote algae growth in the local waterbody.

**Leave the Leaves and Grass-Clippings** as free, organic fertilizer which will directly return nutrients to your lawn. Many fall flooding issues are a result of blocked drains. **Do not rake, blow or hose them to catch basins which will cause flooding and flush nutrients to local waterways, promoting algae growth.**

**Water-Smart Landscaping:** Grass alone can require 2-3x the water of a **drought-tolerant mixed landscape** 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.**



### Did you know?

Stormwater also flushes oil, road salt, & pollutants over and off the land to local waters instead of soaking it in.

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

*A drought-tolerant mixed landscape will use less water and be less maintenance once established. Creating a **Rain Garden** 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).*

### Cornell's Water-Wise Landscaping, Rain Gardening:

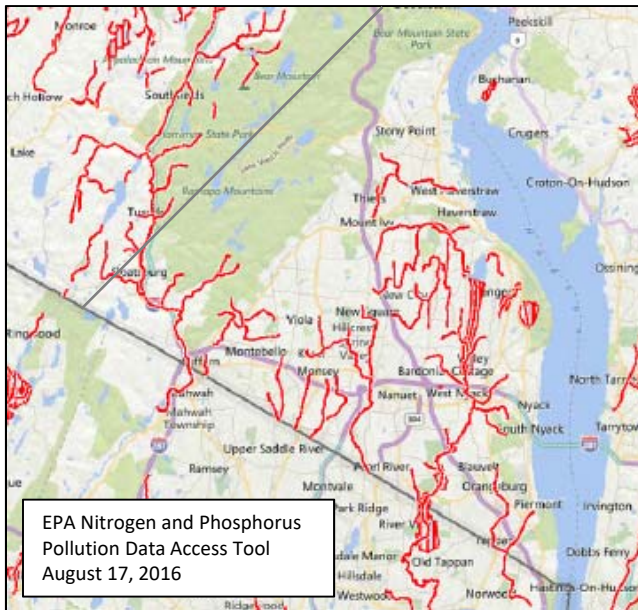
<http://rocklandcce.org/fact-sheets>

### EPA Water-Smart Landscapes:

[https://www3.epa.gov/watersense/outdoor/landscaping\\_tips.html](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 For purposes of identifying nutrient-related impairments, EPA used the following national impairment categories: algal growth, ammonia, noxious aquatic plants, nutrients, organic enrichment/oxygen depletion.

**Sediment & Illicit Discharges:** 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 storm drains (soap, sewage, oil & grease).

### **Educational Resources:**

#### **Composting Instructions & Lawn Guidance:**

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

#### **Learn to Compost/Mulch Fall Leaves:**

<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](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**

Cornell Cooperative Extension, Rockland County:

EVENTS: <http://rocklandcce.org/events>

Rockland County:

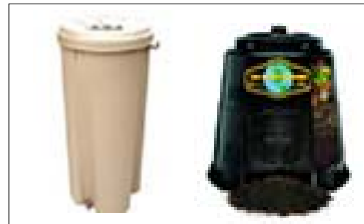
<https://rocklandgov.com/departments/environmental-resources/volunteer-opportunities/>

Keep Rockland Beautiful: Clean-ups, etc.

<http://www.rocklanddc.org/keep-rockland-beautiful>

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

**Rain Barrels and Composters are available at  
Cornell University Cooperative Extension or  
Rockland County Solid Waste Management Authority**



### **Educational Resources, cont:**

**Cornell's Fact Sheets** (Xeriscaping, Fertilizing, etc):

<http://rocklandcce.org/fact-sheets>

**Stormwater, Green Infrastructure, Illicit Discharge:**

<http://rocklandcce.org/stormwater-consortium>

**USEPA Nutrient Pollution:**

<https://www.epa.gov/nutrientpollution>

**USEPA Soak up the Rain:**

<https://www.epa.gov/soakuptherain>

**Hazardous Algae Blooms:**

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

**Sewage Pollution Right to Know:**

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

**RC Solid Waste Mgmt Authority:**

<http://www.rocklandrecycles.com/>

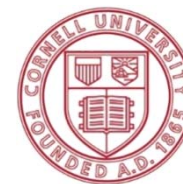
**Septic Maintenance:**

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

## **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](http://www.rocklandcce.org)

[rocklandcce.org/stormwater-consortium](http://rocklandcce.org/stormwater-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*