

How do we contribute to algae blooms?



Excess Nutrients from lawn fertilizer, yard clippings, soaps, etc lead to Nutrient Eutrophication ("richness") in our waterways.



The way to stop this chain reaction is to cut out the excess Nutrients. Some algae produce toxins which can lead to Harmful Algae Blooms.

Nutrients promote growth in the water. In excess they lead to algae blooms and block sunlight. Algae sinks to the bottom and is eaten by bacteria when it dies

The bacteria use up the water's oxygen as they decompose the algae. Fish & other life are deprived of life-sustaining oxygen.



Fertilizer:

Flow from over-fertilized/overwatered lawns is a significant source of excess nutrients in local waterbodies. Look for the Zero in the middle number indicating phosphorus-free.



Trash & Sanitation:

The grate in the street leads directly to local waters. Pet Waste and Improperly managed Septic Systems send nutrients and pathogens to local waters.



Soap/Cleaners:

Use phosphorus-free soaps and direct car wash-water to the lawn which will filter out pollutants, but never to the storm drain.



WIPES & GREASE: Flushing Wipes (even "disposables") and pouring cooking oils down the drain will clog sewer lines and cause sewer back-ups full of nutrients and pathogens. Discard wipes and cooled oils in the garbage.



Leave the Leaves and Grass-Clippings as free, organic fertilizer. Raking them to the storm drain will cause flooding and algae blooms in local waterways.



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!).

EPA Water-Smart Landscapes:
https://www3.epa.gov/watersense/outdoor/landscaping_tips.html



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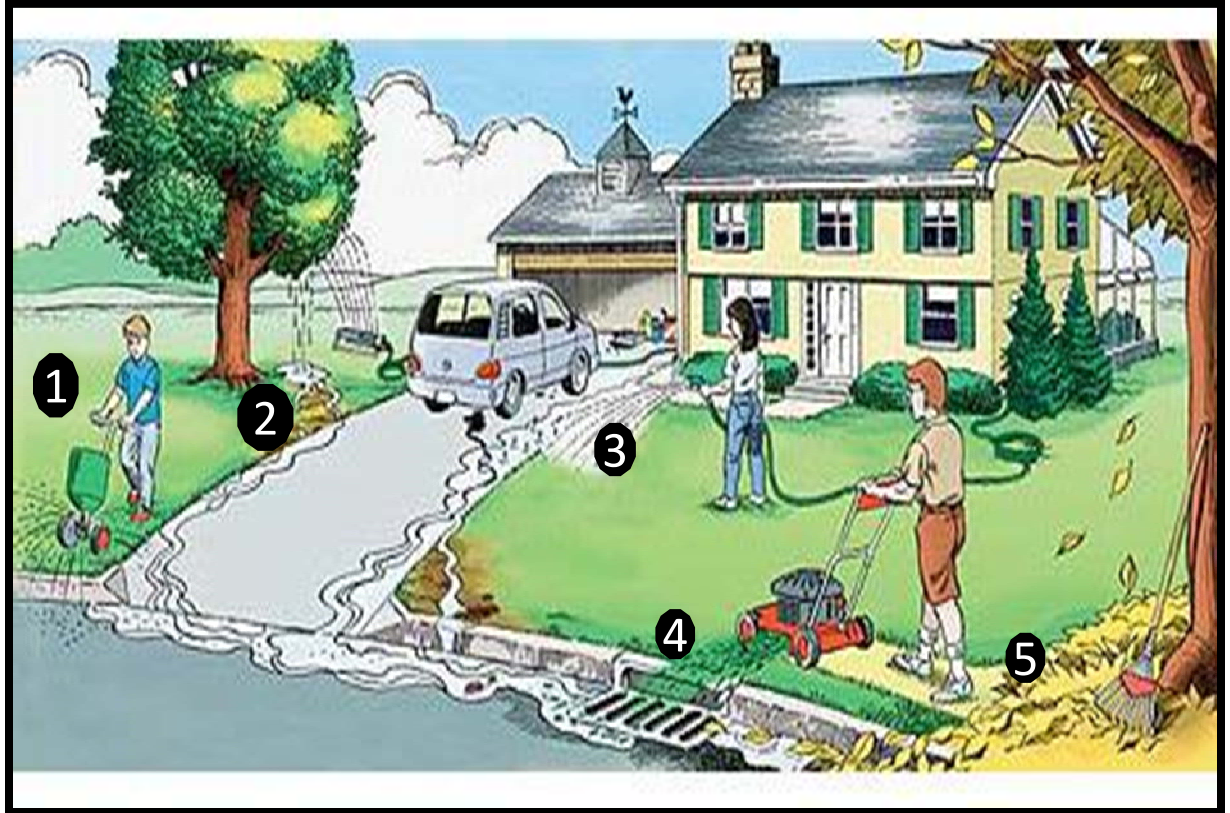
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Harmful Algae Blooms In Rockland

Multiple **Harmful Algae Blooms** (HABs) have been confirmed in Rockland since 2012. HABs occur most often in **waters high in Nutrients** (nitrogen and phosphorus).

Many of our **outdoor activities** send excess nutrients to local waterways. **Fertilizer** can be particularly harmful. Per Rockland's *Lawn Fertilizer Regulation Act* fertilizer cannot be applied from December 1st-April 1st, to impervious surfaces (driveways, sidewalks), or within 50 feet of surface water without a continuous, 10-foot minimum natural vegetative buffer separating the lawn from the water. **Directing car-wash soap to the storm drain** is also a contributor, as many soaps contain phosphorus.

See reverse side and links below for precautions and further things to know about HABs.



1 -3: Fertilizer must remain on the lawn and not enter the storm drain. **Do not over-apply, apply prior to rain, or apply against accordance to county law.**

2 & 3: Washing car-wash soap, pet waste, sediment, and other pollutants to the storm drain. Direct to the lawn which will filter out nutrients and pollutants.

4&5: Leaves & Grass Clippings will clog storm drains and send nutrients to local waterways.

For further information:

NYSDEC HAB Notification Page: <https://www.dec.ny.gov/chemical/83310.html> Rockland

County Fertilizer Law Act: <http://rocklandcce.org/fact-sheets>

Nutrient Pollution:

rocklandcce.org/stormwater-consortium-water-quality-education/nutrient-pollution

Volunteer Opportunities: <http://rocklandcce.org/volunteer>



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