



Green your Waterfront



Even a few trees, shrubs and plants bordering a waterfront can help protect water quality



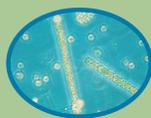
Typical HAB scum

What is a Harmful Algal Bloom (*HAB)?

A freshwater Harmful Algal Bloom (HAB) is an excessive growth of phytoplankton known as cyanobacteria in a lake, pond or stream. Although not true algae, cyanobacteria are often referred to as "blue-green algae".

Toxic HABs

Some cyanobacteria produce dangerous toxins harmful to humans, pets, livestock and wildlife. Do not come in direct contact by swimming, touching, ingesting, or inhaling aerosolized toxins within suspected or confirmed HAB waters. Keep pets and domestic animals away from HAB waters.



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How to ID a HAB?

CyanoHABs typically turn normally clear waters a pea soup-green. The presence of paint-like blue-green or off-white scums; parallel green streaks, green swirls; foam on the surface or green dots or blobs suspended in the water column suggest a HAB. True non-toxic algal mats or tiny duckweed leaves are not HABs.

For more information visit: <https://www.state.nj.us/dep/hab/>

What causes a Harmful Algal Bloom (HAB)?

HABs form in the presence of sunlight, nutrients, warm temperatures and calm waters. Heavy rains can mobilize fertilizer and other nutrients off lawns, washing them into lakes, rivers and streams. The sudden influx of phosphorus and nitrogen can trigger a HAB.

Lawns sloping all the way down to waterfronts, without any intervening

landscaping, allow those stormwaters to wash nutrients into waterbodies.

Plant Riparian Buffers along edges of lakes and streams

You can reduce the amount of nutrients entering lakes and streams by planting a "Riparian Buffer"—a vegetated strip of trees, shrubs, and plants that borders



VEH ©

a waterway. Plants block and slow down polluted stormwater, allowing it to first percolate into the ground, followed by uptake by the roots. Plant tissues filter out dissolved nutrients, heavy metals and bacteria. Roots help anchor stream banks preventing sediment from entering nearby water bodies. Wide, dense plantings with trees and shorter plants filter the most stormwater; but even a simple, narrow planted border can help improve water quality!

Go Native, Go Wild!

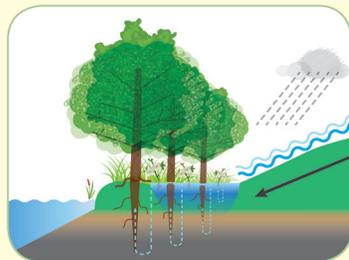


Native plants need less maintenance than non-natives because they're better adapted to local climates and soils. Native perennials and grasses have much deeper roots than turf grasses, so are better at preventing erosion. Seasonal colors brighten vistas.

See back for recommended trees, shrubs, flowers, grasses, sedges, and rushes.



© EPA



▲ Riparian Buffer along stream

◀ Trees & shrubs can buffer and filter stormwater run-off from lawns

Plant *anything* but lawn.



Plants to help stop a HAB Native trees, shrubs, woody and herbaceous plants, grasses, sedges, rushes and aquatic plants listed below. Many NJ nurseries now carry native plants (see links below). Plant in the spring after last frost to allow plants to get established but before soils dry out in summer's heat or plant in fall before first frost.

TREES (tall to shorter)

Shade Trees

- American Sycamore | 60-140'
- Black Willow | 30-90'
- Pin Oak | 70-90'
- Swamp White Oak | 60-80'
- River Birch | 40-80'

- Red Maple | 60-90'
- Silver Maple | 50-80'
- Sweet Gum | 60-90'
- Black Gum | 30-50'
- Hackberry | 25-50'
- Sweetbay Magnolia | 20-60', late Spr

Ornamental/Small Trees

- Shadbush/Serviceberry | 25-30', early Spr
 - Ironwood, A. Hornbeam | 25-30'
- Evergreens**
- Eastern Red Cedar | 40-50'
 - American Holly | 40-50', berries Fall-Win

SHRUBS (many flowering Spring-Summer and/or colorful Fall berries)

- Eastern Redbud | up to 40', early Spr
- Pussy Willow | 6-20', Feb-Mar
- Spicebush | 3-9', early Spr
- Red-twig Dogwood | 6-10', late Spr
- Silky Dogwood | 6-10', Jun-July
- Blackhaw Viburnum | 12-15'

- Arrowwood Viburnum | 6-10'
- Cranberrybush | 6-12'
- Smooth Alder | 8-12', Mar, Apr
- Red Chokeberry | 5-10', Spr
- Elderberry | 4-12', late Spr
- Buttonbush | 3-8', mid-summer

- Highbush Blueberry | 6-12', July
- Swamp Rose | to 7', Jun-July
- Virginia Sweetspire | 3-6', late Spr
- Fragrant Sumac | 2-4' (also "GroLow" variety for very compact form)
- Winterberry Holly | 6-10', berries Winter

PERENNIALS (for color and texture across the seasons)

Flowering Plants for Sun

- Scarlet Beebalm | 3-6', Jun-Aug
- Cardinal Flower | to 5', Jul-Aug (also shade)
- Blue Lobelia | to 5', Jul-Sept
- Wild Blue Indigo | 3-4', Apr-Jul
- Swamp Milkweed | to 6', Jun-Aug
- Joe Pye Weed | 4-6', Jul-Sept
- Dense Blazing Star | to 4', Jun-Sept
- Sneezeweed | 4-6', Aug-Oct
- Monkeyflower | to 3', July-Sept
- Foxglove Beardtongue | to 3', May-July

Flowering Plants for Shade

- Heart-leaf Foamflower | 1-3', May
- Alumroot, Coral Bells | 1-3', late Spring
- Virginia Bluebells | 1-2', Apr-May

Ferns

- Eastern Hayscented Fern (can take dry shade) | 1-3'
- Sensitive Fern (can take sun if moist) | to 3'
- Ostrich Fern | to 5'
- Cinnamon Fern | to 5'

Grasses, Rushes & Sedges

- Switchgrass | to 6'

- Little Bluestem (grass) | 2-4'
- Northern Sea Oats (grass) | 3-5'
- Soft/Common Rush (rush) | to 3'
- Green Bulrush (rush) | to 5'
- Woolgrass (sedge) | 3-5'

Flowering Plants for Water's Edge

- Blue Flag Iris | 2-3', May
- Swamp Rose-mallow | to 5', Summer

Aquatic Flowering Plants

- Pickereel Weed | to 3', Summer
- Broadleaf Arrowhead | to 2', Summer

MOISTURE PREFERENCE KEY

Aquatic Wettest (wetlands) Wet (moist) Average (but not dry) None listed = slightly moist to dry

For more information and where to find native plants

- [Jersey-Friendly Yards](#)
[Native Plant Society of New Jersey \(NPSNJ\)](#)
[Lady Bird Johnson Center's list of NJ Native Plant Suppliers](#)
[US Fish & Wildlife Service: Native Plants for Wildlife Habitat](#)
- [Conservation Landscaping, Chesapeake Bay Edition](#)
[NPSNJ's Invasive Plant Species](#)
[Lake Hopatcong Foundation's Lake Friendly Living Guide](#)
[Arboretum Foundation: Greening a Shoreline Garden](#)
- [Understanding lake-shore ecostems— Part 3: Natural vegetation](#)
[Speaking of Landscapes: Lake Hayward buffer garden, year two](#)
- [The Wetlands Initiative: Nutrient Removal](#)
[Landscape Plants Rated by Deer Resistance \(Rutgers NJAES\)](#)
[NJ's native trees, shrubs & vines beneficial to birds by Patricia Sutton](#)
- [Incorporating Native Plants in Your Residential Landscape](#)

