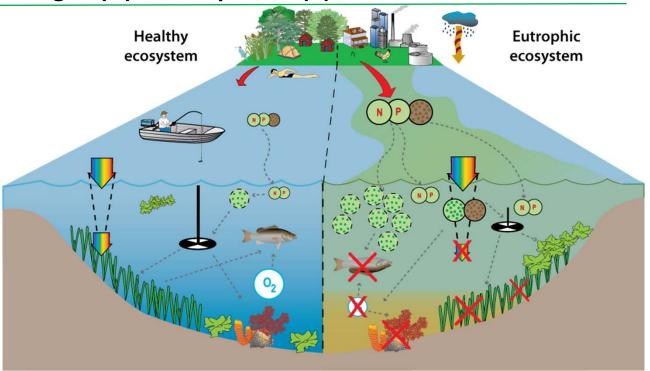
Nitrogen (N) & Phosphorus (P) in our waters...



In healthy aquatic ecosystems, input of nutrients
In an eutrophic aquatic ecosystem, increased including nitrogen and phosphorus (1) allow for the balanced growth of seagrasses W and macroalgae (submerged aquatic vegetation), and phytoplankton (chlorophyll *a* ⓐ). A low level of chlorophyll a in the water column helps keep water clarity high \perp , allowing light to penetrate deep enough to reach submerged aquatic vegetation. Primary productivity by submerged aquatic vegetation and phytoplankton results in dissolved oxygen (02) levels suitable for healthy fish and benthic communities and allows humans to enjoy A the

benefits of a healthy coastal environment.

nutrient nutrient loads ment loads from land-based sources 📋 , including wastewater , agriculture, and stormwater, as well as nutrients dissolved in rainwater 17, can trigger blooms of phytoplankton (and macroalgae 🦀. These blooms 📖 can result in decreased water clarity , decreased light penetration 🖞 , decreased dissolved oxygen 💢 , loss of seagrasses WW, nuisance/toxic algal blooms, and the contamination or die-off of

Diagram courtesy of the Integration and Application Network (ian.umces.edu), University of Maryland Center for Environmental Science. Source: Kruczynski, W.L. and P.J. Fletcher (eds.). 2012. Tropical Connections: South Florida's marine environment. IAN Press, University of Maryland Center for Environmental Science, Cambridge, Maryland. 492 pp.

Links

WATER QUALITY

Organic Fertilizer Fact Sheet (CT NOFA) www.organiclandcare.net/sites/default/files/or ganicfertilizerfactsheet-opt 0.pdf

Nutrient Pollution (US EPA)

www.epa.gov/nutrientpollution/sources-andsolutions

Ways to Protect Your Watershed

www.cwcnetwork.org/CWCN/cwcn.cfm?page= cons.htm#Gardens%20and%20Landscapes

2016 Water Quality Report (Connecticut DEEP) www.ct.gov/deep/lib/deep/water/water qualit y management/305b/2016 iwgr draft.pdf

Solutions to reduce runoff reducerunoff.org (click the Solutions tab)

The River Alliance of Connecticut www.riversalliance.org/main.cfm

School Garden Resource Center (New Haven) commongroundct.org/communityprograms/school-garden-resource-center/

GENERAL

USDA Natural Resources Conservation Service (NRCS) - CT

www.nrcs.usda.gov/wps/portal/nrcs/site/ct/ho me

Northeast Organic Faming Assn.-Connecticut www.ctnofa.org

New Farms and Farmers

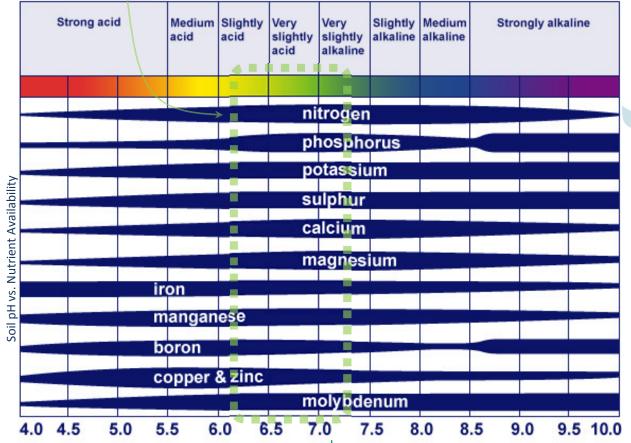
newfarms.extension.uconn.edu

Eastern CT Community Garden Association getgrowingct.org

Rodale Institute rodaleinstitute.org

CT Dept. of Agriculture www.ct.gov/doag

This is the ideal range for soil pH. If not, needed nutrients are "locked up" and not available to plants.



Lauter Park's *Urban Growers*Workshop Series is supported by

Conservation District







More workshops this spring!

Saturdays, 10-12:30

May 27
Composting
Integrated Pest
Management

For more information, contact us: GROW Windham

872 Main St, Willimantic, CT www.growwindham.org (860) 423-4534 x312

Eastern CT Conservation District (ECCD)

238 West Town St, Norwich, CT www.conservect.org/eastern (860) 319-8809



Water Quality

Spring 2017 ◆ Willimantic, CT

Build and maintain healthy soils

- 1. <u>Minimize disturbance to the soil.</u> Soil has structure that helps plants <u>and</u> increases water infiltration and retention.
- 2. <u>Keep it covered.</u> Mulch, straw, and cover crops slow evaporation (and add organic matter).
- 3. <u>Keep living roots in the soil as much as possible.</u> Schedule cover crops between veg harvests.
- 4. <u>Have a diverse garden.</u> Plant diversity encourages the diversity of helpful microbes (bacteria, fungi).

Before adding nutrients, get the soil tested

You will learn the levels of major nutrients, pH, and organic matter. Results also give recommendations on how to improve the soil. (UConn Plant Science: soiltest.uconn.edu)

Read the labels before buying & applying

Avoid adding excess nutrients. Clear directions should come with pesticides & fertilizers (organic and inorganic). If these are necessary, only buy and apply if the info makes sense to you.

Add less than 1 inch of compost per year.

Again, avoid adding excess nutrients – unless your soil tests, research, and calculations suggest more.