

## NUTRIENTS IN YOUR COMMUNITY: CHECKLIST

**Note:** This is not meant to be a comprehensive checklist but a working document that we will update periodically. If your community has an ordinance or program that can serve as a good model for other communities, please share with us. We would like to collect good models to share within the Coastal Academy network.

### POTENTIAL SOURCES AND SOLUTIONS TO CONSIDER:

#### STORMWATER RUNOFF

##### ■ Fertilizer & Pesticide Ordinances

Some Casco Bay communities are considering ordinances to restrict the use of fertilizers, one source of nitrogen, and/or pesticides.

Actions to consider:

- Has your community created a fertilizer and/or pesticide task force?
- Is there a fertilizer ordinance in place?
- Is there a pesticide ordinance in place?

##### ■ Roadways/Erosion Control

Poorly maintained gravel or “camp” roads have been shown to be a major source of nutrient runoff to surface water bodies. There are several actions to consider which can help address gravel road erosion issues:

Actions to consider:

- Review the Gravel Road Maintenance Manual provided by the Maine Department of Environmental Protection
- Encourage homeowners on private gravel roads to create road associations to pool resources for operation and maintenance
- Encourage homeowners on private gravel roads to create written operation and maintenance plans

#### RESOURCES:

The Gravel Road Maintenance Manual provided by the Maine Department of Environmental Protection can be found here: [https://www.maine.gov/dep/land/watershed/camp/road/gravel\\_road\\_manual.pdf](https://www.maine.gov/dep/land/watershed/camp/road/gravel_road_manual.pdf)

Project Canopy: Funding for tree projects can be found here:

[https://www.maine.gov/dacf/mfs/policy\\_management/project\\_canopy/](https://www.maine.gov/dacf/mfs/policy_management/project_canopy/)

##### ■ Low-Impact Development/Green Infrastructure

Managing stormwater with Low-Impact Development (LID) techniques can help jurisdictions meet National Pollutant Discharge Elimination System (NPDES) requirements, reduce construction costs, and provide a variety of other benefits. The goal of LID is to reduce runoff and to mimic a site’s pre-development hydrology by infiltrating, filtering, storing, evaporating, and detaining stormwater runoff. LID techniques are flexible and can be applied to nearly any site, including both infill/redevelopment sites and new development.

### Actions to consider:

- Update development and redevelopment standards and pass ordinances with LID incentives
- Depending on how new requirements are codified in your community, develop new code language, propose changes to the zoning or development ordinances, or develop a separate stormwater ordinance that outlines the new standards.
- Recommend LID measures, such as ordinances, in your town's comprehensive plan. (*Work with your city or town planner*)
- Tree canopy: Implement community forestry projects such as planting street trees and developing a management plan for town forests. Funding is available from "Project Canopy." (*Work with your city or town urban forester or public works department*)
- Does your community (public works, recycling, or water district) have a rain barrel purchase program? (*Work with your city or town departments*)

## HUMAN AND AGRICULTURAL WASTE

### ■ Septic System Inspections

Improperly functioning and overloaded septic systems are major sources of water pollution. Malfunctioning septic systems leak pollutants like excess nutrients into groundwater and from there, other water bodies.

#### Actions to consider:

- Has your community applied to the Small Community Grant Program at DEP? This program offers grants to help replace malfunctioning septic systems.

### ■ Boat Pump-Outs

Boat sewage discharges result in unsightly and unpleasant debris, odors, and murky water. Raw sewage can also spread diseases, contaminate shellfish beds, accelerate the growth of nuisance algae, and lower oxygen levels in the water. Casco Bay is a No Discharge Area (federal law) but some recreational boaters still dump their waste into coastal waters.

#### Actions to consider:

- Pump-out program: Is your community aware of the OBD Grant Program for the removal of individual overboard discharges of wastewater?

### ■ Agricultural Waste

Excess nitrogen and phosphorus can be washed from farm fields and into waterways during rain events and snow melts and can also leach through the soil and into groundwater over time.

### RESOURCES:

- Small Community Grant Programs at the Department of Environmental Protection:  
<https://www.maine.gov/dep/water/grants/scgp.html>
- OBD Grant Program for the Removal of Individual overboard discharges of wastewater:  
<https://www.maine.gov/dep/water/grants/obdpara.html>

Actions to consider:

- If your community has large agricultural operations, those businesses may be eligible for the Finance Authority of Maine's (FAME) Nutrient Management Loan program.
- Eligible landowners and agricultural producers may be eligible for financial and technical assistance to help manage natural resources, through USDA Natural Resources Conservation Service.

### ■ Wastewater Facilities

Several sewage treatment facilities in Casco Bay are now working to reduce the amount of nitrogen released in their treated effluent water.

Actions to consider:

- How can you support your community in making sewage and stormwater treatment improvements?  
(Contact your local public works and/or sewage treatment facility)

### ■ Atmospheric Deposition

Atmospheric deposition, including emissions from vehicles and industrial sources, account for anywhere from 13-53% of nitrogen entering the Bay. We can plan our communities in a way that encourages less automobile use and more alternative transportation modes (See "Planning and Development" below).

### RESOURCES:

- FAME Nutrient Loan Program:  
More information may be obtained by contacting the Department of Agriculture Nutrient Management Coordinator at 287-1132, or Scott Bursey at FAME at 623-3263 or [info@famemaine.com](mailto:info@famemaine.com)
- USDA Natural Resources Conservation Service:  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/me/programs/financial/>

## POLICY TOOLS TO MANAGE NUTRIENTS IN COMMUNITIES

### ■ Conservation Subdivision/Open Space Protection

Many towns have adopted local subdivision ordinances that allow "open space" approaches to subdivision design. The intent of the open space subdivision approach (often referred to as "clustering") is to create a compact development that establishes protected green space through the development process. This green space is often owned by the subdivision homeowners' association and may include neighborhood trails and provide some habitat benefit, but more often this land's primary value is as a buffer between neighboring developments. Some communities have wildlife habitat overlay districts that are intended to work in concert with subdivision ordinances; some communities have impact fee ordinances that equip a municipality with a mechanism to pay for future open space needs as the local population expands.

- Actions to consider: Has your community adopted a wildlife habitat overlay district?
- Does your community have an impact fee ordinance?
- Does your community have an open space plan?
- Has your community drafted or adopted a conservation subdivision design ordinance?

# CASCO BAY COASTAL ACADEMY

## Nutrient Pollution in the Bay

January 27, 2020

### ■ Lawn and Garden Care

There are two local programs that work with Casco Bay area communities to keep pesticides and fertilizers from polluting the Bay through healthy lawncare practices (See *resource guide*).

Actions to consider:

- Has your community invited organizations to present their YardScaping /BayScaping programs?
- Has your community adopted pesticide and/or fertilizer ordinances?

### ■ Stewardship Education & Outreach

Conservation commissions and other municipal boards around Casco Bay are carrying out many conservation-related programs for the public.

Actions to consider:

- Residents Conservation Guides:* Some communities, such as Harpswell and Phippsburg, have put together conservation guides for residents, which address many of these topics and things residents can do.
- Education Programs:* Partner with schools, land trusts, and other community groups to carry out conservation education and outreach programs in your community. Casco Bay Community Grant program is one possible source of funding.
- YardScaping and BayScaping Programs:* Organize one of these programs in your community for residents. Falmouth Conservation Commission put together a YardScaping homeowners guide.
- Community Engagement Programs:* Consider innovative ways to involve the community in restoring and protecting water resources. South Portland's Conservation Commission set up a community service grant program with their Freshwater Wetlands Compensation Fund.
- Pet waste education programs:* Waste from domestic animals such as dogs and cats also impacts water quality. Beaches where people frequently walk their dogs and do not pick up dog waste will likely show high fecal coliform counts. Many Casco Bay communities have brochures, posters, signage, and offer special dog waste receptacles at parks and beaches. Your community could also consider an ordinance for pet waste like the Town of Windham.

### RESOURCES:

- Residents Conservation Guides:  
[www.harpswell.maine.gov](http://www.harpswell.maine.gov)  
[www.phippsburg.com](http://www.phippsburg.com)
- Casco Bay Community Grant Program: [www.cascobayestuary.org](http://www.cascobayestuary.org)
- Yardscaping and Bayscaping Programs:
  - <https://www.falmouthme.org/sites/falmouthme/files/file/file/yardscapingfactsheet.pdf>
  - <https://www.cascobay.org/our-work/community-engagement/bayscaping/>
  - <https://cumberlandswcd.org/site/2019/12/2020-spring-lawn-care-classes/>
- South Portland Conservation Commission Freshwater Wetlands Compensation Fund:  
[https://www.southportland.org/files/4615/1440/0663/1\\_Overview\\_FWCF\\_CSG.pdf](https://www.southportland.org/files/4615/1440/0663/1_Overview_FWCF_CSG.pdf)
- Windham Ordinance for Pet Waste:  
<https://www.windhammaine.us/DocumentCenter/View/526/Chapter-81--Animal-Control->

### PLANNING AND DEVELOPMENT

#### ■ Shoreland Zoning

The Mandatory Shoreland Zoning Act (MSZA) requires municipalities to adopt, administer, and enforce local ordinances that regulate land use activities in the shoreland zone. The Beginning with Habitat Program Toolbox provides several examples of how towns have adopted more specific rules beyond what minimum shoreland zoning guidelines require. As a result, these towns have not only increased habitat protections, but are in better control of protecting surface and groundwater quality and managing stormwater at the local level.

[https://www.beginningwithhabitat.org/toolbox/about\\_toolbox.html](https://www.beginningwithhabitat.org/toolbox/about_toolbox.html)

Actions to consider:

- Has your community adopted any amendments to shoreland zoning to better protect resources?

#### ■ Wetland & Resource Protection Ordinances

Despite the importance of wetland and riparian areas and despite the regulations that currently exist to protect these areas, wetland losses continue to occur. Cumulative loss of wetlands has led to significant stormwater runoff problems in some Maine communities. At the local level, Maine communities regulate wetlands under the home rule provisions of the Maine Constitution and under Maine's Municipal Shoreland Zoning statute. Some communities have adopted freshwater ordinances to reduce the cumulative impacts of wetland losses resulting from small wetland alterations not subject to compensation requirements under state law or regulation. Some communities, like South Portland, use in-lieu fee mitigation funds for land protection and restoration projects.

Actions to consider:

- Has your community adopted a freshwater wetlands ordinance?
- Does your community use In-Lieu Mitigation Fee funds to meet your land and habitat protection objectives?

#### ■ Other Special Overlay Districts

Some communities have adopted or are considering adopting overlay districts to protect impaired or at-risk watersheds, with a focus on nutrient reductions. For instance, Falmouth and Windham adopted an overlay district to protect Highland Lake.

#### ■ Comprehensive Planning

Comprehensive plans are an important community tool to promote responsible growth and maintain sense of place. They can also be an important tool for highlighting significant natural resources and helping develop town policies to protect them. Comprehensive plans are the required underpinning for any zoning changes and adopted plans make a community more competitive for state grants.

Actions to consider:

- Does your community have an up to date (within five years) comprehensive plan?
- Does your comprehensive plan adequately and fully address natural resources, including water resources and water quality?



### ■ Open Space Planning

Open space plans prioritize areas that should be left undeveloped and protected, so people can better direct future development patterns and important natural resources can be protected. An open space plan can be part of a comprehensive plan or a stand-alone plan. Many Casco Bay communities have an adopted open space plan.

Actions to consider:

- Does your community have an open space committee or adopted open space plan?

### ■ Rideshare/Park & Ride/Vanpools

GO MAINE is the statewide commuter program and is a program of the Maine Turnpike Authority and MaineDOT. They offer a variety of benefits and rewards for commuters.

- Does your town have a designated Park & Ride lot?

### ■ Transit

The Biddeford-Saco-Portland and Southern Mid-coast areas have regular bus service and Downeaster train service.

- Does your community promote the use of these services in your municipal office?
- Does your community have a transit or transportation committee?

### ■ Bicycle & Pedestrian

It is important to plan and grow our communities to be inclusive of bicycles and pedestrians.

- Does your community have a bicycle and pedestrian advisory committee?
- Does the comprehensive plan address the importance of bicycle and pedestrian issues, such as bike lanes, signage, street crossings, etc.?

### ■ Electric Vehicles

Consider providing incentives for electric vehicle use in your communities.

- Visit the GPCOG webpage (see sidebar on this page) to learn more about the benefits of EVs and other clean transportation alternatives
- Consider using funding from Efficiency Maine to install public EV charging stations in your community.
- Raise awareness of incentives available to promote purchases of EVs, including \$1,000-\$2,000 rebates from Efficiency Maine, plus federal tax credits.
- Consider EVs for use in corporate or municipal fleets.

### RESOURCES:

- GO MAINE Program:  
<https://www.gomaine.org/>
- Greater Portland Council of Governments: Clean Transportation  
<https://www.gpcog.org/158/Clean-Transportation>
- Funding from Efficiency Maine to Install Public EV Charging Stations:  
<https://www.energymaine.com/at-work/electric-vehicle-charging/>