



THREATS ADDRESSED

- Excess Nutrients
- Pollutant Inputs
- Algal Blooms
- Erosion
- Invasive/Nuisance Species

STRATEGY GOALS

- Protect
- Manage
- Rehabilitate

STRATEGY CO-BENEFITS

- Habitat (Neutral)
- Aesthetics (Neutral)
- Recreation (Neutral)



- Permittable in Massachusetts**
List of potential permits available [here](#).
- Implemented on Cape Cod**
See examples of pond projects implemented on Cape Cod [here](#).
- Listed in 208 Plan Technologies Matrix**
Learn more about the nutrient management strategies in the Tech Matrix [here](#).
- Can be Performed at Homeowner Scale**
- Nature-based Solution**

DURATION OF BENEFITS

- Less than one month
- One season or year
- Multiple seasons or years

MAINTENANCE REQUIREMENTS

- Monthly
- Annually
- Infrequent

DESCRIPTION

Education and outreach are used to engage with and teach the public about water quality, wastewater, stormwater, and land and pond use best management practices within ponds, lands surrounding ponds, town wide, and/or regionally. An educational outreach effort or campaign may consist of printed social media materials, and in-person or remote meetings, events, or trainings. Education and outreach make the public aware of pond problems and solutions and promotes best management practices in and around ponds.

ADVANTAGES

- Education can be tailored to a variety of age groups
- Education may inform action (best management practices), empowering people to make their own decisions
- Can be inexpensive

CONSTRAINTS

- Education is generally directed toward adults, but research suggests that long-lasting changes in behavior are best achieved by engaging youth through school or other activities as children can reach their parents with an educational message more effectively than agency professionals
- A campaign needs to have a strong objective and ask regarding what it's trying to achieve (more than just educating)
- Not enforceable
- Logistics of planning meetings/workshops and getting the public to attend can be challenging, as can developing and distributing educational materials
- Maintaining momentum can be challenging as each new homeowner, visitor needs to be educated



IMPLEMENTATION

POTENTIAL ACTORS

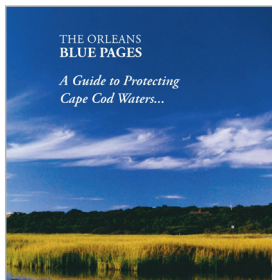
- Towns:** A town may develop an educational campaign focused on freshwater ponds
- Pond Groups:** May develop or support an educational campaign
- Private Landowners:** May develop or support an educational campaign
- Land Trusts:** May develop or support an educational campaign

SITING REQUIREMENTS

- All ponds

INFORMATION NEEDS

- Survey of pond community concerns
- Review of existing resources from other towns and pond associations



IMPLEMENTATION EXAMPLES

The Orleans Pond Coalition created the [Orleans Blue Pages](#) to describe the Cape's water cycles and to provide practical information on how to do everyday tasks in a way that benefits Orleans waterbodies. The booklet includes tips on healthier practices and explanations of why some existing practices are harmful.

The Town of Eastham developed [Pond Fact Sheets](#) that provide information on the town's ponds, including physical and biological characteristics, water quality conditions, and recommended actions.

RESOURCES

- The Massachusetts Department of Conservation and Recreation's [Lakes and Ponds Program](#) provides related resources.
- Other New England states have lake programs with educational components such as [Vermont's Lake Wise Program](#) and [Maine's Lake Smart Program](#).

COST ESTIMATE

Variable

Variable depending on scope of education campaign



ADDITIONAL FINANCIAL CONSIDERATIONS

Assessment: Planning and information gathering regarding best management practices

Implementation: Public process including presenting at meetings, and developing and distributing informational materials

Maintenance: Information will need to be kept up-to-date



POTENTIAL FUNDING SOURCES

- Community Preservation Act
- Capital Budget
- Grants
- Private Funding

Additional information regarding potential funding sources is available [here](#).