



Land Use Planning & Regulations



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**
Local review through Select Board or Town Council. 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

The objective of land use planning and regulations around ponds is to protect pond health and the land surrounding ponds through the creation and implementation of regulations focused on reducing land-based inputs of pollution and pathogens to ponds. Land use planning and regulations are used to regulate specific land use practices around ponds based on community concern and to protect pond water quality and public health. Examples include mandating larger septic system setbacks, imposing development site stormwater management regulations, preventing vegetation clearing, requiring vegetated buffers made up of native vegetation, restricting use of fertilizers and pesticides, imposing limits on public access, and pet restrictions. Bylaws and regulations are drafted and adopted by a town or homeowner’s association (HOA). The town or HOA may also develop outreach and education materials to inform residents of regulations.

ADVANTAGES

- Targeted, localized approach – communities can tailor plans or regulations to their local concerns
- Not expensive, no equipment required
- Towns can have stricter standards (e.g., wetland buffers, septic setbacks) than the state
- If an HOA sees benefits, regulations can spread to other communities and HOAs without needing town action
- Generation of beach parking and other user fees can be used for resource protection, preservation projects
- Compliance with land use regulations may improve pond ecosystem function
- Compliance with land use regulations may enhance the visitor experience

CONSTRAINTS

- Local bylaws / regulations have to be drafted / adopted based on scientific explanation / justification. Requires legal knowledge
- May be difficult to enact and enforce
- For septic setbacks, need to explore which properties it would apply to (e.g., all new construction, redevelopment), and whether it would make some lots unbuildable
- Some pond shore property owners may not like having restrictions placed on their land
- HOAs may prefer a landscaping aesthetic that may conflict with fertilizer restrictions or natural landscaping requirements
- User fees and licenses for parking/beach access require town involvement in granting licenses and personnel to staff the beach to regulate licenses



IMPLEMENTATION

POTENTIAL ACTORS



Towns: May propose, review, and approve zoning, bylaws and regulations



Pond Groups: May propose or support the adoption of land use plans and regulations



Private Landowners: May propose or support the adoption of land use plans and regulations



Land Trusts: May propose or support the local adoption of land use plans and regulations

SITING REQUIREMENTS

- All ponds within a town or within a district

INFORMATION NEEDS

- Pond surrounding land use characterization and identification of potential causes and sources of land-based inputs, including survey of location and condition of septic and stormwater systems within pond buffer (e.g., 300')
- Groundwater flow/direction
- Nutrient sources/travel times/distances from sources to ponds
- Pond buffer plant survey
- Review of town's own and other towns' land use bylaws and regulations around ponds

IMPLEMENTATION EXAMPLES

The Town of Mashpee amended their [Wetlands Protection Bylaw and Regulations](#) to expand the buffer zone from 100' to 150'. The buffer zone was expanded to mitigate stormwater impacts to water quality, increase and enhance wildlife habitat, and protect properties from storms.

The Town of Brewster has a [Leaching Facility Setback Regulation](#) that prohibits new and replacement leaching facilities of septic systems within 300' of a pond.

Several towns on Cape Cod have proposed home rule petitions limiting or prohibiting the use of fertilizers and pesticides such as the [Town of Orleans Fertilizer and Pesticide Home Rule Petitions](#).

RESOURCES

- The Massachusetts' Department of Conservation and Recreation's [Lakes and Ponds Program](#) provides related resources.
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COST ESTIMATE

Variable

Variable depending on scope of planning process and regulations adopted



ADDITIONAL FINANCIAL CONSIDERATIONS

Assessment: Planning and information gathering including researching and mapping land uses and collecting use statistics

Implementation: Public process including presenting at meetings, developing and posting informational materials, and adopting and enforcing regulations

Maintenance: Information will need to be kept up-to-date and regulations enforced



POTENTIAL FUNDING SOURCES



Community Preservation Act



Capital Budget



Grants

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