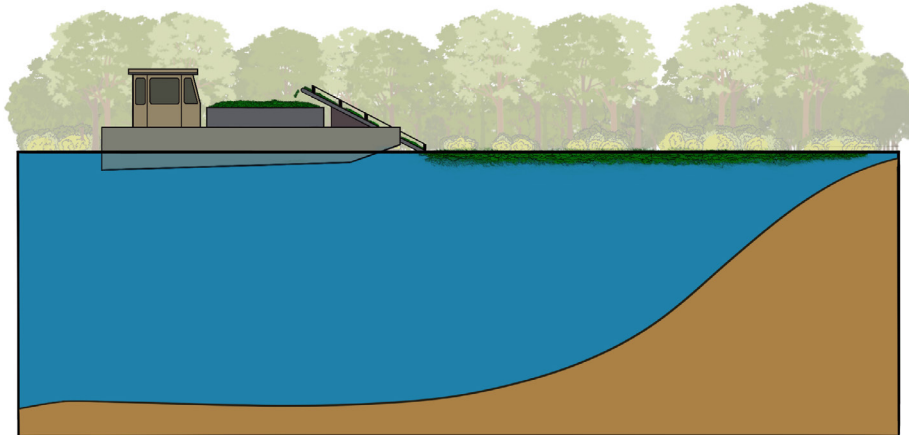


**THREATS
ADDRESSED**Excess
NutrientsPollutant
InputsAlgal
Blooms

Erosion

Invasive/Nuisance
Species**STRATEGY
GOALS**Protect
Manage
Rehabilitate
**STRATEGY
CO-BENEFITS**Habitat
 NeutralAesthetics
 ImproveRecreation
 Improve**Permittable in Massachusetts**Local planning process. 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**

Local review and permitting may be required.

**Nature-based Solution****DURATION
OF BENEFITS**Less than
one month
One season
or year
Multiple seasons
or years
**MAINTENANCE
REQUIREMENTS**Monthly
Annually
Infrequent

DESCRIPTION

Algae harvesting is the removal of algae and algal mats from a pond by hand or mechanical methods. Algae may be physically removed by various methods including by hand or with a "skimmer." The skimmer is dragged across the surface of the water to collect surface/filamentous algae.

ADVANTAGES

- Effective rapid-response tool
- When done properly, harvesting should not significantly disturb the substrate
- Provides cosmetic control of excessive growth to sustain popular recreational uses

CONSTRAINTS

- Limited track record but some promise
- Non-selective, may also remove desirable organisms
- May need to be performed several times per year
- Provisions must be made to minimize turbidity
- Hand harvesting is not practical for large areas



IMPLEMENTATION

POTENTIAL ACTORS



Towns: Towns may propose algae harvesting in town-managed ponds



Pond Groups: May propose or support algae harvesting in public or private ponds and provide supportive role through education



Private Landowners: May propose or support algae harvesting



Land Trusts: May provide supportive role through education

SITING REQUIREMENTS

- Smaller ponds where whole water volume can be impacted in short time period
- Most useful for small ponds or areas of ponds (e.g., swimming and docking areas)
- Drying and disposal sites

INFORMATION NEEDS

- Phytoplankton abundance and species composition
- Volume of water to be handled on weekly basis
- Bathymetry
- Wind pattern



IMPLEMENTATION EXAMPLES

The Town of Concord has used [trap and removal devices in White Pond](#) to target, contain, and remove harmful algal blooms, their toxins, excess nutrients, and their total organic carbon content from surface water and sediment.

RESOURCES

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

COST ESTIMATE

Variable

Varies with method, treatment area, and algal density

ADDITIONAL FINANCIAL CONSIDERATIONS

Assessment: Planning, design, and permitting

Implementation: Harvesting equipment, labor

Maintenance: Monitoring and additional harvesting, as needed

POTENTIAL FUNDING SOURCES

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

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