

intertidal area under this scenario is approximately 218 acres, compared with 570 acres to be achieved at the end of Phase 1.

A significant benefit of the initial tide gate management policy is that it maximizes the value of monitoring and data analyses, which will provide a real time assessment of system responses to the reintroduction of tidal flows. The data will be incorporated into modeling to enhance its predictive value in selecting tide gate management policies to govern beyond year three.

The HREC continues to receive regular monitoring updates and will review and revise the tide gate management policy as needed.

6.3.2 Secondary Management: Vegetation

During Phase 1, vegetation management on federally owned Seashore property will be needed to enhance restoration. Because this work is to be conducted by the National Park Service on federally owned land, it does not require Conservation Commission authorization. For informational purposes, the proposed vegetation management on federally owned land is described below and in Appendix C.

Vegetation management during the initial tidal restoration implementation period described in 6.3.1 above will involve removing trees, shrubs, and Phragmites in current and future brackish and saltwater habitats. Phase 1 vegetation management involves 348 acres or 62% of the Phase 1 area.

The focus of vegetation management efforts are removal of Phragmites (up to 45 acres), removal of shrublands (179 acres), and removal of woodlands (126 acres) as follows:

- Year 0 - Phragmites mowing in up to 45 acres; Tree removal in up to 42 acres;
- Year 1 - Tree removal in up to 42 acres; Shrub cutting in up to 39 acres;
- Year 3 - Tree removal in up to 42 acres; Shrub cutting in up to 39 acres.

The primary purposes of vegetation management are to:

- Enhance/promote growth of salt marsh vegetation
- Avoid accumulation of dead material in tidal creeks and channels
- Improve/manage aesthetics through removal of dead above ground vegetation
- Promote Blue Carbon Benefits; Retain Carbon Within the Marsh Soil

Work will occur using a number of methods:

- Land Clearing Contractor(s) and HR-Specific Field Crew (e.g. “AmeriCorps Cape Cod”)
- Mowing, Machine-mounted “Brush Hog”; Specialized for Low Ground Pressure
- Hand Removal: Powered (i.e. Brush Saw) and Non-Powered Equipment
- Standard Forestry Practices, Single Trees

- Full-Tree “Fecon”/”Brontosaurus” Mulchers

Various means are being considered for managing brush, vegetation debris and slash, etc., depending on the type of material and location, among other factors.

If the need for additional vegetation management on private property arises during Phase 1, Project Proponents will confer with the Conservation Agent to determine the appropriate authorization for the proposed work. Any such work will be designed to be consistent with the Project’s Adaptive Management Plan and the NHESP-approved Habitat Restoration and Monitoring Plan.

6.3.3 Secondary Management: Marsh Surface, Channel Restoration and Sediment

In addition to additional vegetation management, secondary marsh management actions such as marsh drainage and fill will be needed to enhance restoration. However, the precise location, timing and methods for this work will depend in part on the system response to the return of tidal flow. Accordingly, this work is not included for authorization in this NOI. Many of the locations where marsh management work could potentially be necessary are remote and currently either covered in dense, shrubby vegetation or under water. The work is also dependent on specific vegetation, microtopography, and tidal flow characteristics. Attempting to evaluate potential treatment sites and design future marsh surface restoration actions based on existing conditions is not appropriate since these conditions will change as tidal exchange is restored. Conditions will also vary greatly among locations and for different stages of the restoration process.

As the need for these secondary management actions arises, Project Proponents will confer with the Conservation Agent to determine the appropriate authorization for the proposed work.