Rock Meadow Conservation Master Plan Abstract

Phase 1 : Year 1 - 4

• Replace parking lot

- Remove asphalt
- Import fill, regrade, and repave
- Install bioswales and rain gardens
- Install trees and vegetation
- —Install kiosk, trash receptacle, composting toilet, and boulders

Regrade and install universally accessible trail loop

An ADA-compliant, crushed gravel trail loop (maximum 5% slope) provides wheelchair access to the Victory Gardens, Piggery Picnic Area, western oak-hickory savanna, and natural playground.

• Install new trail section(s) (north meadow)

Map ID #1. A wooden boardwalk running north-south through the deep emergent marsh #2. A compacted earth path that bisects the north meadow and leads to the former landfill site, #3 an extended loop emerging from the central woodland to an observation deck. Additionally, several existing trail segments are removed from the west meadow to establish optimum grassland bird nesting habitat and the burn plot.

• Install trail intersection "nodes"

- Plant sentinel trees
- Place boulders

Clear trees and seed west meadow (warm-season grass seed mix) in May/June

Three additional areas of woodland are removed to expand existing grassland habitat to 40+ contiguous acres: 1) the tip of the central wooded hill, 2) copses in the west meadow, and 3) a portion of the "southern finger" extending west of the Victory Gardens. This provides suitable acreage for bobolinks (requiring 10 contiguous acres), vesper sparrows (requiring 15 contiguous acres; threatened in Massachusetts), and savanna sparrows (requiring 25 contiguous acres). The west meadow is managed as warm-season native grassland with few forbs; the east and north meadows remain as cool-season fields seeded with pollinator-supporting flowers.

1st round: thin, plant, and seed oak-hickory savannas

Oak savanna eco-tone introduces habitat & vegetation diversity. Two sections of existing edge woodland are cleared and replanted with groves of oaks and hickories [#4] above an understory of shade tolerant grasses, which may be managed through grazing or mowing. These savannas provide fat- and protein-rich nuts for wildlife and edge habitat as an ecotone between meadow and woodland. Rotational grazing 1- to 2-acre paddocks with sheep and goats maintains and enriches meadows and savannas where mowing and burning don't occur—a tribute to McLean Farm's legacy of food production. Funds from a potential meat CSA program could supplement the Conservation Commission's management budget.

Seed and plant wet meadow

Currently, the central wetland has high integrity in terms of species richness and diversity. To further enhance ecological function, the wet meadow is planted in early spring or late fall with a mix of shrubs and forbs (see Plant Palette III). Further study of the functions of the channelized waterway that drains the wetland is recommended and may reveal opportunities for restoration of the original wetland.

• Plant evergreen buffer (Concord Avenue)

Mixed evergreen buffer to shield from traffic on Concord Avenue

Plant pollinator patches (4)

Vibrant, low-growing pollinator patches punctuate entrances. Clusters of pollinator-attracting perennial forbs are established to punctuate entrances, thresholds, and trail crossings.

Phase 2: *Year 4 – 7*

Install central hill observation deck

Clear trees on hill and re-plant with shrubs on steep slopes

An observation deck provides educational information about the **vernal pool** (located 200' to the northeast), **chestnut grove**, and **old rock wall** that runs along the trail loop from the main path. Like the Piggery Picnic, observation decks can also be constructed with in situ black locust. It features a small bench facing southwest, with sweeping meadow views. Slopes up to the observation deck are between 30-50% and therefore may require stone or wooden steps to access.

• Plant "Dunstan" chestnut grove

This area of the site's "uplands," 200' south of the certified vernal pool, are cleared of existing woodland (leaving the roots masses intact) and the steep slopes are replanted with low-growing shrubs and meadow grasses, as well as a stand of blight-resistant chestnut northwest of the observation deck. The chestnut variety, Castanea dentata x mollissima, is a hybridized cultivar called "Dunstan" that grows up to 60' tall, bears nuts in 3-5 years, and serves as an important food source for wildlife. Interpretive signs on the observation deck will detail the history of the American chestnut (as well as the chestnut blight), and highlight the adjacent vernal pool and burn plot.

• Install Piggery Picnic Area

- Seed Indian paintbrush
- Concrete footings, beams, joists, and decking
- Plant "Accolade" elms
- Install picnic tables

The old piggery foundation in the west meadow is reclaimed and transformed into an intentional gathering area with seating and an elevated wooden deck through which three disease-resistant "Accolade" elm varieties rise and shade the 3,000 ft2 footprint. The Piggery Picnic Area sign details the legacy of animal husbandry on the old McLean Farm and the history of the American elm in North America.

• 2nd round: thin, plant, and seed oak-hickory savannas

See Round 1 above.

Phase 3: Year 7 - 10

• Install boardwalk through deep emergent marsh (and observation deck)

Plant Atlantic white cedar and shrubs

A wooden boardwalk running north-south through the deep emergent marsh. Atlantic white cedars line the boardwalk in the deep emergent marsh, introducing an historically important evergreen species to a hardwood-dominated canopy.

Install observation deck in central wetland

Another observation deck provides access to, and information about, the **deep emergent marsh** and gives historical context to planted **Atlantic white cedars**.

Install natural playground

Replacing or accompanying the swingset in the southern corner of the west meadow is a nature-inspired playground of logs, stumps, and rock piles

• 3rd round: thin, plant, and seed oak-hickory savannas

See Round 1 above.