# Shallow Emergent Marsh

**State Rank: S4 - Secure**

Shallow Emergent Marsh with patches of cattail. Photo: Tom Lautzenheiser.

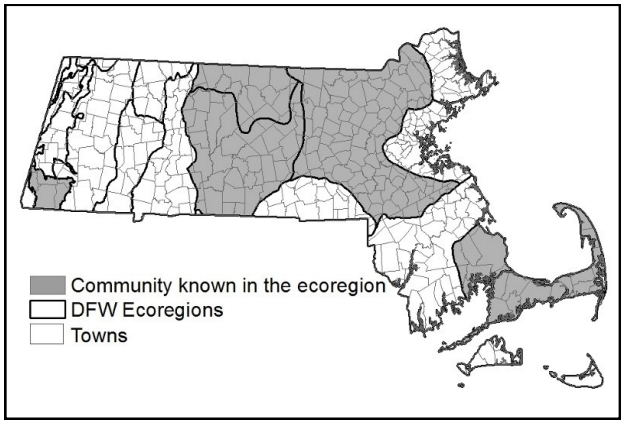
**Description:** Shallow Emergent Marshes (SEM) occur in broad, flat areas bordering low-energy rivers and streams (often in backwater sloughs), along pond and lake margins or in abandoned beaver flowages. There is standing or running water during the growing season and throughout much of the year, with water depth averaging less than about 15 cm (~6 in.). The substrate is typically a layer of well-decomposed organic muck overlying mineral material.

**Characteristic Species:** Short grasses, sedges and rushes mixed with scattered forbs (broad leaved herbaceous plants) dominate Shallow Emergent Marshes. Tussock forming species such as tussock sedge and Canada bluejoint may form a hummock-hollow topography over broad areas. Forbs often include sensitive fern, marsh fern, swamp-candles, marsh St. John's-wort, Joe-Pye-weeds, bonesets, and water-horehound. Low shrubs such as spiraea, red osier dogwood, leatherleaf, and sweet gale may be present with <25% coverage. Areas between, or instead of, tussocks with shallow water typically have a mixture of bur-reeds, sedges, and rice cut-grass. Areas with more permanent open water often support floating leaved plants like water-lilies and submerged plants like pondweeds. It is common to see tussock sedge-dominated marshes in old beaver flowages mixed with scattered alder and spiraea. Sites with a history of severe disturbance may be dominated by or include an abundance of exotic species including purple loosestrife, reed canary grass, phragmites, or Japanese knotweed. Cat-tails, phragmites, and wool-grass often occur, but do not dominate. Tall shrubs and tree saplings are uncommon and when present are often clustered together.

The Shallow Emergent Marsh community is a graminoid/herbaceous wetland found in broad, flat areas bordering rivers or along pond margins. The mucky mineral substrate has shallow standing water throughout the growing season.

A small Shallow Emergent Marsh in the winter. Photo: Patricia Swain, NHESP.

**Differentiating from Related Communities:** The physical and biological characteristics of emergent marsh, wet meadow, and shoreline communities overlap and intergrade. Shallow Emergent Marshes are short graminoid/herbaceous wetlands that usually have shallow (<6 in. deep) surface water all year. Cat-tails, phragmites, and wool-grass (the dominants of Deep Emergent Marshes) occur but do not dominate SEM. Deep Emergent Marshes are tall graminoid wetlands in deeper water (6 in. to 3 ft.). Wet Meadows are subtypes of SEM, typically with a single sedge or grass species dominating. Standing water is not present throughout the growing season as in emergent marshes. Kettlehole Wet Meadows occur in small basins with mucky peat substrates. Coastal Plain Pondshore Communities and its Inland Variant are generally on sand around ponds in closed basins that intersect groundwater. The exposed pondshores support mixed herbaceous species but are not generally dominated by dense graminoids. Acidic Pondshore/Lakeshore Communities are broadly defined, variable shorelines around open water not explicitly included in calcareous or coastal plain pondshores. The shorelines often merge into marsh or other wetlands. Bogs and fens are peatlands and have peat instead of mucky mineral soil, however gradations do exist. Shrub Swamps have >25% cover of tall shrubs.




**Habitat for Associated Fauna:** Many animals, vertebrates and invertebrates, common and rare, use marshes for feeding, nesting, roosting, cover, and movement corridors. The sedges, bulrushes and grasses provide a food resource for a variety of marsh birds. Inconspicuous ("secretive") water birds, such as rails and bitterns, nest in extensive marshes that lack human disturbance. Shallow Emergent Marshes are excellent habitat for muskrats. Many species of frogs and salamanders, especially leopard, pickerel, green and bull frogs, and some vernal pool obligate species, such as wood frogs and spotted salamanders, may use areas of Shallow Emergent Marsh for egg-laying if they are fish free.

**Examples with Public Access:** Wolf Swamp WMA, Brookfield, Sturbridge; Warwick SF, Warwick; Great Meadows NWR (USFWS), Concord area; Charles River Watershed (USACE), Dedham area; Neponset River Reservation (DCR), Canton area.

Large riverside Shallow Emergent Marsh. Photo: Bruce A. Sorrie, NHESP.

From: *Classification of Natural Communities of Massachusetts* http://www.mass.gov/nhesp/
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