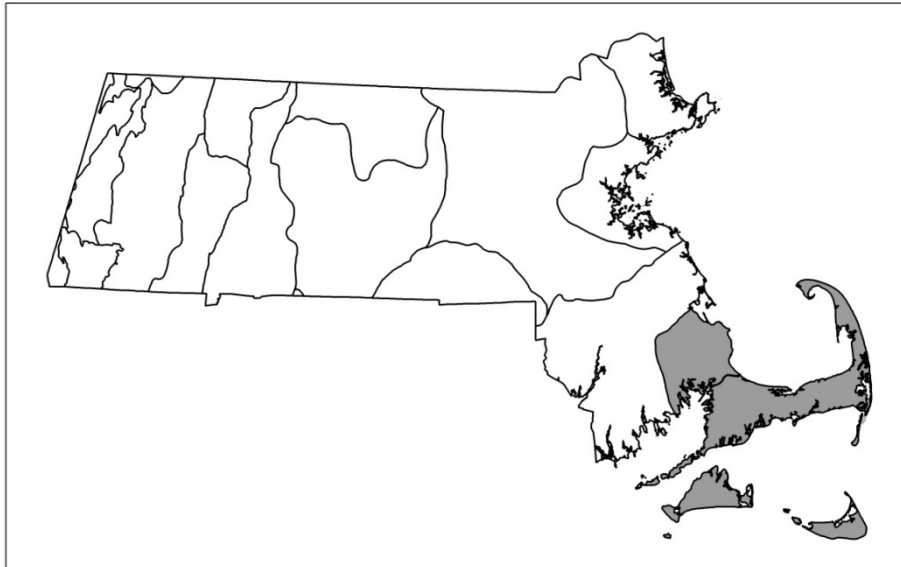




## Fresh/Brackish Tidal Shrubland

**Community Code:** CE2C000000

**State Rank:** S1



**Concept:** Dense to open shrubland flooded by daily tides, occurring along the freshwater to brackish reach of coastal rivers and along the upland edges of salt marshes.

**Environmental Setting:** Normally located as a transition between Freshwater Tidal Marsh and Fresh/Brackish Tidal Swamp, there may also be patches of tidal shrublands throughout the Freshwater Tidal Marshes. Additional brackish occurrences are along the upland fringes of Salt Marshes. There is a great deal of micro-relief (tussocks and furrows) leading to high species diversity. Floodwaters are typically slightly acid (pH less than 5) and soils are usually mineral without significant peat deposits. Average annual salinity values of less than 0.5 ppt would be expected in Fresh/Brackish Tidal Shrublands, and (0.5) -5 -18 ppt in Fresh/Brackish Tidal Swamps.

**Vegetation Description:** Tidal freshwater or slightly brackish shrublands dominated by sweet gale (*Myrica gale*) and smooth alder (*Alnus serrulata*) with some speckled alder (*Alnus incana* ssp. *rugosa*). Some examples may have a mixed canopy with other shrubs such as silky dogwood (*Swida amomum*), swamp-rose (*Rosa palustris*), winterberry (*Ilex verticillata*), common elderberry (*Sambucus nigra* ssp. *canadensis*), willow (*Salix* spp.), buttonbush (*Cephalanthus occidentalis*), and poison ivy (*Toxicodendron radicans*). More northern examples may contain northern arrow-wood (*Viburnum dentatum* var. *lucidum*) and meadowsweet (*Spiraea alba* var. *latifolia*). Tussock-sedge (*Carex stricta*) may also be present. Some herbaceous associates are royal fern (*Osmunda regalis* var. *spectabilis*), marsh-fern (*Thelypteris palustris* var. *pubescens*), bedstraws (*Galium* spp.), common cattail (*Typha latifolia*), arrow-arum (*Peltandra virginica*), New York aster (*Symphotrichum novi-belgii*), false nettle



(*Boehmeria cylindrica*), touch-me-not (*Impatiens capensis*), and swamp milkweed (*Asclepias incarnata*).

**Differentiating Occurrences:** Tidal swamps are forested, dominated by trees. Tidal shrublands have less than 25% tree canopy. The key difference from other types of Shrub Swamp is that Fresh/Brackish Tidal Shrublands are restricted to the area of freshwater/ brackish water tidal action on coastal rivers, or where there is freshwater seepage along the edges of salt marshes just above the zone of regular saltwater incursion. An additional difference is the presence of salt marsh plants mixed with the more usual freshwater species. Maritime Shrublands are upland communities. Shrubby areas within and at the upland edges of Salt Marshes would be mappable as Fresh/Brackish Tidal Shrubland if large enough; otherwise, they are considered to be part of the expected variation of Salt Marshes.

**Associated Fauna:** Because the size and structure of the shrubland present are more important to most animals that would use such a habitat than are the slight fluctuations in water levels on a daily basis, the species present are often those of maritime and coastal shrublands. Coastal shrublands are particularly important to migrating flocks of songbirds.

**Public Access:** There are no examples on public land in the NHESP database.

**Threats:** Disruption of tidal influence on the rivers, clearing for boat landings. Invasion by expanding populations of the non-native *Phragmites australis*.

**Management Needs:**

**USNVC/NatureServe:** *Alnus (incana, serrulata)* Tidal Shrubland Alliance -- *Alnus (incana ssp. rugosa, serrulata)* - *Cornus amomum* Shrubland [CEGL006337]; *Baccharis halimifolia* - *Iva frutescens* Tidal Shrubland Alliance: *Baccharis halimifolia* - *Iva frutescens/Panicum virgatum* [CEGL003921]; *Iva frutescens/Spartina patens* Shrubland [CEGL006848].