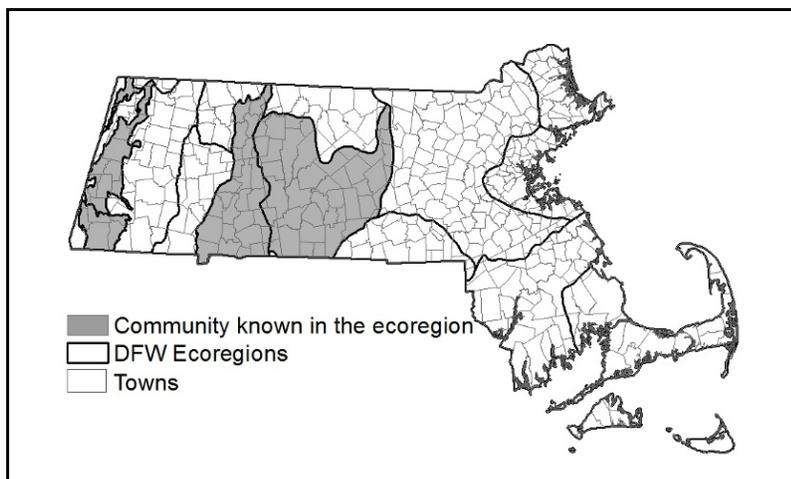


## Transitional Floodplain Forest

**Community Code:** CP1A2B2000

**State Rank:** S2



**Concept:** Silver maple-green ash-American elm forests occurring on alluvial soils. Transitional floodplain forests are intermediate in vegetation composition and soils between major- and small-river types.

**Environmental Setting:** Transitional floodplain forests are known to occur on third-order or smaller tributaries of the Connecticut River, on portions of the Housatonic River, and in depressions within major-river floodplain forests of the Connecticut and Deerfield Rivers. Sites generally experience annual flooding. The severity of flooding, soil texture, and soil drainage of transitional floodplain forests is intermediate between major-river and small-river floodplain forests. Soils are either silt loams or very fine sandy loams, and soil mottling is generally present within 60 cm (2 ft.) of soil surface. A surface organic layer is typically absent.

**Vegetation Description:** All floodplain forest communities in Massachusetts have silver maple (*Acer saccharinum*) as the dominant tree taxon, but associated plant species vary depending on the intensity and duration of flooding and on geographic location. Transitional Floodplain Forests have a vegetation association intermediate between Major-river and Small-river Floodplain Forests. Silver maple is dominant in the canopy, but unlike in major-river forests, cottonwood (*Populus deltoides*) is typically absent. Similar to Small-river Forests, green ash (*Fraxinus pennsylvanica*) and American elm (*Ulmus americana*) are in the canopy and subcanopy. A shrub layer is generally lacking; however, saplings of overstory trees are common. Vines are abundant with hog peanut (*Amphicarpaea bracteata*) most common and poison ivy (*Toxicodendron radicans*) regularly present. The herbaceous layer is typically an even mixture of wood-nettle (*Laportea canadensis*), ostrich fern (*Matteuccia struthiopteris*), sensitive fern (*Onoclea sensibilis*), and false nettle (*Boehmeria cylindrica*). Occasional associates include Gray's Sedge (*Carex grayi*), Cat-tail sedge (*Carex typhina*), and Green Dragon (*Arisaema dracontium*).



## Transitional Floodplain Forest

### Differentiating Occurrences:

Small-river, Transitional, and Major-river Floodplain Forests all occur along rivers with active annual flooding and silt deposition. They differ in the size of river on which they occur and in the flooding severity. They are points in a continuum of scouring and drainage. Transitional Floodplain Forest soils are intermediate in severity of flooding, soil texture, and drainage, usually without a surface organic layer. Cottonwood is usually absent, but ash and elm trees are present. Tree saplings are common but shrubs are generally absent. The herbaceous layer is a mix of species. Small - river Floodplain Forests occur on small rivers where banks are low and overbank flooding occurs annually, but with limited water volume and scour. Soils are hydric silt or fine sandy loams, sometimes with a surface organic layer. They also lack cottonwood and have ash and elm trees, but have a distinct shrub layer and a diverse herbaceous layer. Major-river Floodplain Forests occur along large rivers with severe flooding and scouring. Soils are predominantly not hydric and lack a surface organic layer. Cottonwood can be common in the canopy with silver maple, but few other trees are present. A shrub layer is usually absent and the herbaceous layer is often dominated by a near monoculture of wood nettle. High-terrace Floodplain Forests are on high alluvial terraces that do not flood annually and then for a short duration. They have upland trees such as sugar maple as well as floodplain species. They have more litter accumulated than other floodplain forests. Alluvial Red Maple Swamps along low-gradient rivers flood annually and are slow to drain. Silver maple is often a codominant with red maple. Alluvial Hardwood Flats are along small streams that have multiple short flooding events throughout the year. Black cherry and white pine are abundant in the canopy with red maple, but not silver maple.

### Habitat Values for Associated Fauna:

Floodplain forests are often part of the habitat of the wide ranging riverine and upland animals providing sheltered, riverside corridors for deer and migratory songbirds. Floodplain forests are insect-rich habitats that attract warblers, thrushes and other songbirds. Yellow-throated and Warbling Vireos nest in the canopies of riverside trees. Raptors such as Bald Eagles use riverbank trees as nest and perch sites. In spring floods, Wood Ducks and Hooded Mergansers like the shady edges of floodplain forests and the interior meander scar pools. Eastern Comma Butterflies feed on elm, nettles and hops, and the shady riverbanks are patrolled by several dragonfly species such as Beaked and Fawn Darners. Where vernal pools occur in floodplain forests, such as meander scars or backwater sloughs, Leopard, Pickerel and Red Spotted Frogs, American Toads, and Mole Salamanders can be found. Changes in water quality and quantity alter herbaceous, and eventually tree, species, changing habitat for birds and browsers, such as deer and rabbits.

### Threats:

Threats are similar to those for major-river floodplain forests. Non-native plant species can be abundant in disturbed, open areas. The most common non-native plant species are moneywort (*Lysimachia nummularia*), forget-me-not (*Myosotis scorpioides*), and glossy alder-buckthorn (*Frangula alnus*).

### Management Needs:

All efforts should be made to mechanically remove non-native plant species and to prevent further clearing.

### USNVC/NatureServe:

Similar to *Acer (rubrum, saccharinum) - Ulmus americana* temporarily Flooded Forest Alliance -- *Acer saccharinum-Ulmus americana/Onoclea sensibilis* Forest [CEGL006001], and *Acer rubrum - Fraxinus pennsylvanica* Seasonally Flooded Forest Alliance *Acer (rubrum, saccharinum) - Fraxinus pennsylvanica - Ulmus americana / Boehmeria cylindrica* Forest [CEGL006548].

