

# Vermont Natural Heritage Inventory

## Vermont Fish & Wildlife Department

### Element Occurrence Report

*Silver Maple-Sensitive Fern Riverine Floodplain Forest*

**EO ID** 4739 **EO #** 4

**Global Rank** GNR

**State Rank** S3

**ID Confirmed?** Y

POULTNEY RIVER-EAST BAY

<b>County</b>	<b>Town</b>
Rutland	West Haven

<b>Topo Quad</b>	4307354	<b>Latitude</b>	433429N	<b>Longitude</b>	0732335W
	4307353				

#### Directions

South end of West Haven, along East Bay.

#### General Description

1997: The valley in which East Bay lies is about 0.25 miles wide and is bounded by steep-sided low mountains in both Vermont and New York. The valley's landscape is a complex of forested levee, forested floodplain and lower depressions filled with marsh or shrub swamp. This landscape of floodplain, wetland, and calcareous and non-calcareous mountain slopes and cliffs is one of the most fascinating in the state. Riverine floodplain forest extends approximately 5 miles (8 kilometers) upstream from The Elbow, where East Bay meets the head of Lake Champlain. East Bay itself is the lower portion of the Poultney River, and more closely resembles a river than Lake Champlain proper. Therefore, the floodplain forest along the waterway has more characteristics of riverine than lakeshore floodplain forest.

<b>Minimum Elevation (ft)</b>	98	<b>Maximum Elevation (ft)</b>	100
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<b>Last Survey</b>	1997-09-02	<b>Last Observation Date</b>	1997-09-02	<b>First Observation Date</b>	1997-09-02
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#### EO Data

2005: Boundaries remapped but no new vegetation data collected. 1997: The levee forests are narrow (to approximately 65 feet (20 meters) wide). The backslope of the levee in places grades quickly down to patches of floodplain forest, but more often the levee forest stands as a strip of forest separated from upland fields (historically forested) by marsh and shrub swamp. The low floodplain forests are much less diverse than the levee forest. Levee forest features an open canopy of green ash (*Fraxinus pennsylvanica*), basswood (*Tilia americana*) and American elm (*Ulmus americana*) (the majority of which are dead) and an understory of green ash, living and dead American elm and box-elder (*Acer negundo*), with a very occasional black ash (*Fraxinus nigra*). A gallery of silver maple (*Acer saccharinum*) overhangs the river, whose waters are 5 feet (1.5 meters) below the levee. Walking on the levee is a challenge; patches of tall shrubs--nannyberry (*Viburnum lentago*), box-elder, arrow-wood (*Viburnum recognitum*)--alternate with dense growth of tall herbs--wood-nettle (*Laportea canadensis*), goldenrod (*Solidago gigantea*), sensitive fern (*Onoclea sensibilis*) and more than 30 less abundant species of herbs, ferns and sedges. Twining throughout is a tangle of woody and herbaceous vines--Virginia creeper (*Parthenocissus quinquefolia*), riverbank grape (*Vitis riparia*), hog-peanut (*Amphicarpaea bracteata*), virgin's bower (*Clematis virginiana*) and groundnut (*Apios americana*). In great contrast to the diverse flora of the levee, the low floodplain forest is overwhelmingly dominated by a closed canopy of silver maple and green ash and previously American elm. Beneath this is a sea of sensitive fern in which wood-nettle is the only other herb species that accounts for more than 1% coverage. Soil also differs between levee and floodplain. The levee has more than 20 inches (50 centimeters) of very fine sandy loam, with mottles starting 20 inches (50 centimeters); the floodplain soil is silt loam with mottles evident at the surface and a water table only 16 inches (40 centimeters) down (September). Both soils are fertile and have pH 7.0-7.2.

**EO Rank** B **Rank Date** 2005

**Size** A

**Condition** BC - not old growth.

**Landscape Context** C

#### Management Comments

1997 Lapin: Much work has been ongoing and more is needed to restore and protect the East Bay floodplain ecosystem. One of the principal management problems is dumping of household trash and unwanted, large appliances. Unfortunately, constant cleanup has been required to maintain the attractiveness of the roadside and riverbanks. Serious restoration of the floodplain could be accomplished by closing the road between the two bridges; alternatively, if the bridge at The Elbow were closed, it would probably reduce traffic and refuse dumping on the floodplain. Managers should seriously consider traffic management in order to create a first-class nature preserve on the East Bay floodplain. Without tree-cutting, the floodplain forests are likely to take care of themselves and require no active management at this time. If in the future, exotic plants become a problem, they may need to be managed.

Managed Area	EO Contained?
HELEN W. BUCKNER MEMORIAL PRESERVE AT BALD MOUNTAIN	N

Reference Code	Citation
F97SOR02VTUS	Sorenson, E., M. Lapin, and B. Engstrom. 1997. Field visit to East Bay of the Poultney River, West Haven, Vermont on 02 September 1997. Vermont Nongame and Natural Heritage Program.
U98SOR03VTUS	Sorenson, E. et al. 1998. Floodplain Forests of Vermont, Some Sites of Ecological Significance. Prepared for the Vermont Nongame and Natural Heritage Program.
U06SOR02VTUS	Sorenson, E. 2006. Natural communities of the Helen W. Buckner Memorial Preserve and adjacent lands at Bald Mountain and Austin Hill, West Haven, Vermont. Vermont Nongame and Natural Heritage Program.