

GRRIP I Watershed Analysis for Lakeville/Freetown, MA.

Estimates of Land Use, Impervious Surface and Annual Nonpoint Source Pollution Loads

- Drainage System
- Potential Vernal Pools
- Certified Vernal Pool
- Public Water Supply
- Public Beach
- Shellfish Beds
- Rarebird_noun
- Rarefish_noun
- Rareinsect_noun
- Rareplant_noun
- Rarewildlife_noun
- Intermittent Wellhead Protect
- Cold Water Fisheries
- Anadromous Fish Run
- Critical Area after Storm Event
- Wetlands
- Solid Waste Facility
- Estimated and Priority Habitats
- ACEC
- Zone 2
- Zone B
- Rivers and Streams
- Lakes & Ponds
- Road Island Towns
- Other MA Towns
- Town Boundary
- Ocean
- Transmission Lines
- Railroad
- Roads**
- Local Rds & Non-Eligible Functional Class Rds (F-0)/F-6
- Interstate (I-1)
- Rural Principal Arterial & Urban Ext (F-2)
- Rural Minor Arterial & Urban Ext (F-3)
- Other Urban/Principal Arterial (F-4)
- Urban Minor Arterial or Rural Major Collector
- Urban Collector or Rural Minor Collector (F-6)

- Crop Land
- Pasture
- Forest
- Non-Forested Wetland
- Mining
- Open Land
- Participation Rec.
- Spectator Rec.
- Water-based Rec.
- Multi-Fam. Res.
- High Density Res.
- Medium Dens. Res.
- Low Dens. Res.
- Salt Water Wetland
- Commercial
- Industrial
- Urban Open
- Transportation
- Waste Disposal
- Water
- Woody Perennial

Land Use Allocation 832 acres

Forest (61.6%)
Open Space (21.2%)
Agriculture (12.2%)
Open Space (12.4%)
Water-based Rec. (12.2%)
Commercial (12.2%)
Transportation (12.2%)
Waste Disposal (12.2%)
Water (12.2%)
Woody Perennial (12.2%)

Land Use Area in Acres is 832
 Impervious Area is 46.4 Acres
 Percentage of Imperviousness = 5.6%
 Avg Annual Nitrogen Load = 3819 pounds
 Avg Annual Phosphorus Load = 518.6 pounds
 Avg Annual Suspended Solids = 130889.5 pounds

A Zone B protection area coincides with the Priority Habitat protection area shown. The Zone B area extends approx. 500' beyond the Priority Habitat on the left of the watershed and approx. 1500' beyond the Priority Habitat on the right.



This drainage point is located at the Freetown public boat landing area. The culvert-inlet style drainage system has substantial sediment buildup at the outfall pipe which deposits drainage into a separate wetlands area, flowing for several hundred feet before emptying into Long Pond.



Point 1 shows the location and nature of drainage pipe blockage at the Freetown Boat Ramp at #11.



Point 2 shows the drainage pipe blockage at the Freetown Boat Ramp at #11.

The GRRIP I Geographic Runoff Inventory Program is an analysis of roadway drainage facilities located in environmentally sensitive areas on defined Federal Aid Eligible Roads. GRRIP I analyzed towns in the SRPEDD region that fall within the Buzzards Bay Watershed. The Watershed Analysis Project further details several of the drainage systems within each of the towns in the Buzzards Bay Watershed to show the general health of the contributing watershed from the specified drainage system by extrapolating an area of imperviousness using the Scholar Watershed methodology and the Watershed Tools Extension developed by Mass GIS.

Map produced by SRPEDD
 88 Broadway, Taunton, MA
 01960
 54973003

Watershed Analysis produced using the Watershed Tools Extension developed by Mass GIS.

This map was produced by SRPEDD (Southwest Regional Planning and Economic Development District), Taunton, MA. Portions of the aerial digital data were derived from the Massachusetts Executive Office of Environmental Affairs, Massachusetts Coastal Commission of Taunton, MA, DEB, the Bureau of Transportation Planning & Development, Division of Motor Vehicle Services, Planning & Policy, State and the Project, USGS, GIS/Geospatial Services, Coastal Zone Management & Natural Change Assessment Association (PCNA).

The location of features shown on this map are approximate and are intended for planning purposes only. This map is not intended for legal or planning or survey purposes.

The funding for this project was provided by the Executive Office of Transportation (DOT) Open Space and Parks/Highway Department.

0.5 Miles