

GRRIP I Watershed Analysis for Middleborough, MA.

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

- Drainage Systems
- Potential Vernal Pools
- Certified Vernal Pool
- Public Water Supply
- Public Beach
- Shellfish Beds
- Rarebird_noon
- Rarefish_noon
- Rareplant_noon
- Rareinvertebrate_noon
- Rareinvertebrate_noon
- Rareinvertebrate_noon
- Rareinvertebrate_noon
- Intermittent Wetland 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 (F-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)

Land Use Allocation 2454.4 acres

Forest (61.7%)
Open Land (28.4%)
Water-based Rec. (0.2%)
Woolly Perennial (0.4%)
Other (7.3%)

Land Use Area in Acres is 2454.4
 Impervious Area is 460 Acres
 Percentage of Imperviousness = 18.7%
 Avg Annual Nitrogen Load = 14628.8 pounds
 Avg Annual Phosphorus Load = 2380.5 pounds
 Avg Annual Suspended Solids = 640336.4 pounds

- Land Use Types**
- 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
 - Woolly Perennial

This drainage system is located in an area where stormwater management and the maintenance of conveyance facilities is critical for areas like the Nemaskeet River. This section of the Nemaskeet corridor provides important state recognized priority habitat areas.

POINT 1 (Photo 1): This drainage is a subsurface system located in an environmentally sensitive area on a Federal Aid Right-of-Way.

POINT 2 (Photo 2): This drainage is a subsurface system located in an environmentally sensitive area on a Federal Aid Right-of-Way.

The GRRIP I (Geographic Routing Runoff Inventory Program) is an analysis of roadway drainage facilities located in environmentally sensitive areas on Federal Aid Right-of-Way. GRRIP I analysis details in the SRPEDD report that fall within the Buzzards Bay Watershed. This 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 to areas of imperviousness using the Scholar WatershedModel and the Watershed Tools Extension developed by Mass GIS.

This map was prepared by SRPEDD (Southwest Regional Planning and Economic Development District), Taunton, MA. Portions of the aerial digital data have been provided by the Massachusetts Executive Office of Environmental Affairs, MassGIS, Capital Corporation of Boston, MA, ERI, the Bureau of Transportation Planning & Development, Division of Air and Planning, Division of Planning & Policy, Statewide Project, USGS, and Conservation Services, Central and Management, Natural Change, and Geographic Information Systems.

The location of feature layer areas shown on this map are approximate and are intended for planning purposes only. This map is not intended for navigation or survey purposes.

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Map prepared by SRPEDD
 88 Broadway, Taunton MA
 Sept 2003

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

Inset of Watershed Location

0 0.2 Miles

MASS GIS
 Massachusetts Geographic Information System