

GRRIP II Watershed Analysis for Plainville, MA.

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

Watershed 2

2003 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
- Woody Perennial (Includes Cranberry Bogs and Nurseries)

Land Use Allocation

70.5 acres

- Forest (20.5%)
- Water (11.4%)
- Crop Land (2.1%)
- Open Land (20.5%)
- Residential (20.5%)
- Commercial (20.5%)
- Industrial (20.5%)
- Urban Open (20.5%)



Land Use Area in Acres is 70.5

Impervious Area is 15.0 Acres

Percentage of Imperviousness = 21.3%

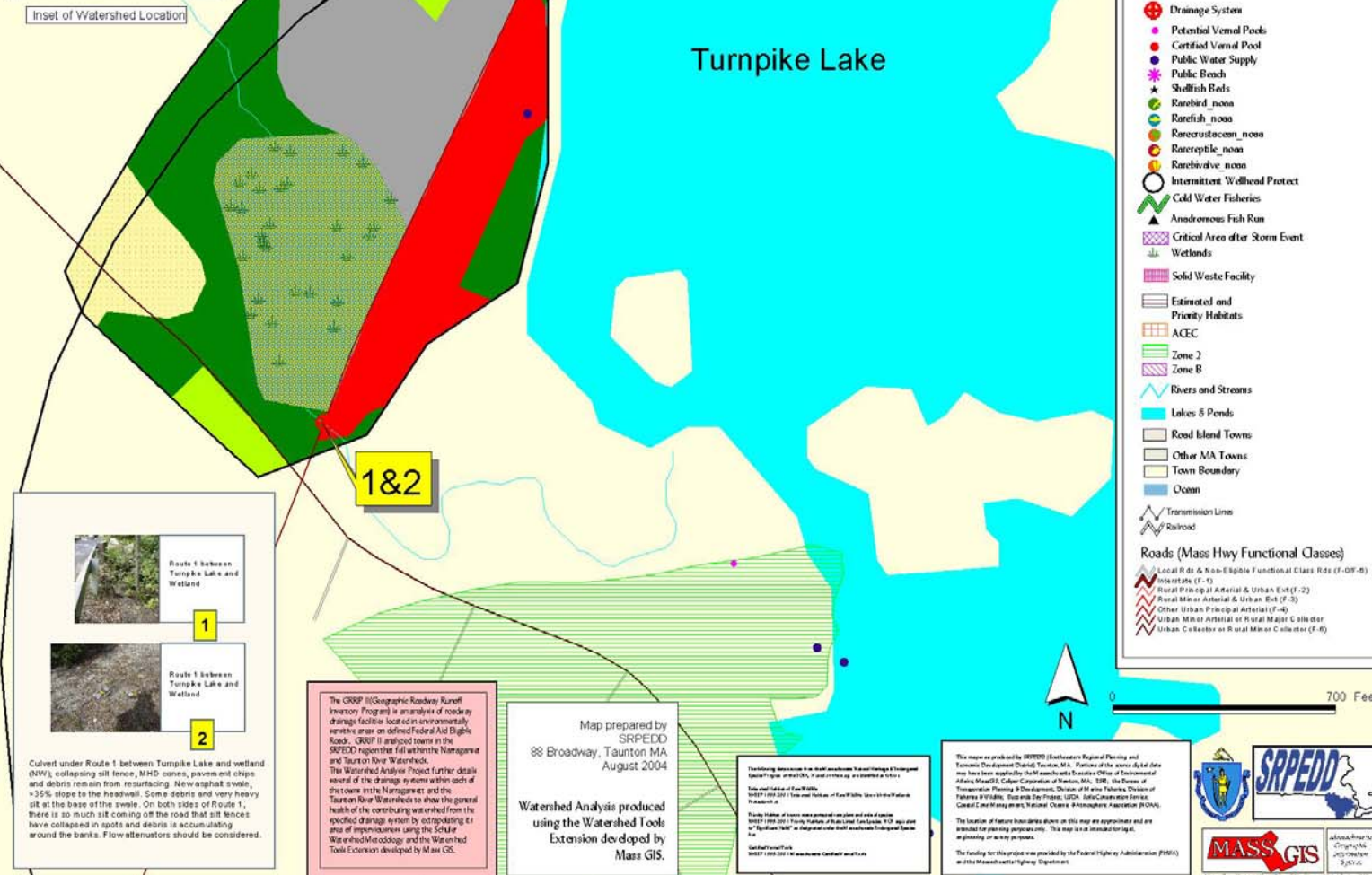
Avg Annual Nitrogen Load = 380.9 pounds

Avg Annual Phosphorus Load = 87.9 pounds

Avg Annual Suspended Solids = 17863.4 pounds



Inset of Watershed Location



Tumpike Lake

1&2

- Drainage System
- Potential Vernal Pools
- Certified Vernal Pool
- Public Water Supply
- Public Beach
- Shellfish Beds
- Rarefish_nona
- Rarefish_nona
- Rarecrustacean_nona
- Rareinvertebrate_nona
- Rareinvertebrate_nona
- Rareinvertebrate_nona
- 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 8
- Rivers and Streams
- Lakes & Ponds
- Road Island Towns
- Other MA Towns
- Town Boundary
- Ocean
- Transmission Lines
- Railroad
- Roads (Mass Hwy Functional Classes)
 - Local Rte. & Non-Express Functional Class Rte (F-0F-8)
 - Interstate (F-1)
 - Rural Principal Arterial & Urban Ext (F-2)
 - Rural Minor Arterial & Urban Bld (F-3)
 - Other Urban Principal Arterial (F-4)
 - Urban Minor Arterial or Rural Major Collector
 - Urban Collector or Rural Minor Collector (F-6)



1



2

Culvert under Route 1 between Tumpike Lake and wetland (NW), collapsing silt fence, MHD cones, pavement chips and debris remain from resurfacing. New asphalt overlay, +35% slope to the headwall. Some debris and very heavy silt at the base of the swale. On both sides of Route 1, there is so much silt coming off the road that silt fences have collapsed in spots and debris is accumulating around the banks. Flow attenuators should be considered.

The GRRIP II Geographic Roadway Runoff Inventory Program is an analysis of roadway drainage facilities located in environmentally sensitive areas on defined Federal Aid Eighty Roads. GRRIP II analysis occurs in the SRPEDD regional fall watershed Narragansett and Taunton River Watersheds. This Watershed Analysis Project further details the results of the drainage system within each of the towns in the Narragansett and the Taunton River Watersheds to show the general health of the contributing watershed from the specified drainage system by extrapolating the area of imperviousness using the Scholar Watershed Hydrology and the Watershed Tools Extension developed by Mass GIS.

Map prepared by
SRPEDD
88 Broadway, Taunton MA
August 2004

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

Watershed Analysis is a multi-agency project involving the Transportation Planning & Development, and the Office of Environmental Affairs, MassGIS, Central Conservation District, and the Division of Transportation Planning & Development, Division of Massachusetts Division of Fisheries & Wildlife, and the Division of Environmental Services, Central Conservation District, and the Division of Environmental Services.

This map was produced by SRPEDD (Southcoast Regional Planning and Economic Development District), Taunton, MA. Portions of the aerial digital data may have been supplied by the Massachusetts Executive Office of Environmental Affairs, MassGIS, Central Conservation District, and the Division of Transportation Planning & Development, Division of Massachusetts Division of Fisheries & Wildlife, and the Division of Environmental Services, Central Conservation District, and the Division of Environmental Services.



Massachusetts Department of Transportation