# GRRIP II Watershed Analysis for Mansfield, 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

440.1 acres

Forest (74.2%)
Wetland (00.0%)
Agriculture (00.5%) (Cropland & Pasture)
Open Land (02.3%) (agriculture fallow & nurseries)
Residential (17.5%)
Commercial (00.0%)
Industrial (00.0%)
Transportation (00.0%)
Water (05.4%)

Land Use Area in Acres is 440.1
Impervious Area is 29.2 Acres
Percentage of Imperviousness = 6.6%
Avg Annual Nitrogen Load = 2603.7 pounds
Avg Annual Phosphorus Load = 452.1 pounds
Avg Annual Suspended Solids = 102512.8 pounds

Williams St. Bridge near Robinson Pond. Upgradient is a Priority Habitat area and a Zone II area for a municipal well.

1

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2

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3

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4

Williams St. Bridge: this site is in terrible disrepair and although it is no longer functional as a transportation structure, it is an environmental threat as it exists. There are sections of pavement from the road surface and asphalt from swales in the receiving waters. Granite columnar bridge supports have toppled in the water. The dam and spillway are in disrepair and there is very dense aquatic vegetation behind the dam. This structure sits upgradient from very sensitive habitat and the Zone II of a municipal well. This should be a priority repair/replacement project.

- Drainage System
- Potential Vernal Pools
- Certified Vernal Pool
- Public Water Supply
- Public Beach
- Shellfish Beds
- Rarebird_noaa
- Rarefish_noaa
- Rarecrustacean_noaa
- Rarereptile_noaa
- Rarebivalve_noaa
- 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 (Mass Hwy Functional Classes)

- Local Rds & Non-Eligible Functional Class Rds (F-0/F-8)
- Interstate (F-1)
- Rural Principal Arterial & Urban Exit (F-2)
- Rural Minor Arterial & Urban Exit (F-3)
- Other Urban Principal Arterial (F-4)
- Urban Minor Arterial or Rural Major Collector
- Urban Collector or Rural Minor Collector (F-6)

50% (Western Portion) of this Sub-Watershed falls within a Zone 2 Protection Area

Inset of Watershed Location

The GRRIP II(Geographic Roadway Runoff Inventory Program) is an analysis of roadway drainage facilities located in environmentally sensitive areas on defined Federal Aid Eligible Roads. GRRIP II analyzed towns in the SRPEDD region that fall within the Narragansett and Taunton River Watersheds.
This Watershed Analysis Project further details several of the drainage systems within each of this town 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 Schueler Watershed Metodology 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.

The following data sources from the MA Natural Heritage & Endangered Species Program of the DFW, Natural Heritage are identified as follows:

Rare and Native of Rare Wildlife
NHESP 1998-2001 Terrestrial Habitat of Rare Wildlife Species within the Wetlands Protection Act

Priority Habitat of known rare species and rare of species
NHESP 1998-2001 Priority Habitat of State Listed Rare Species. NOT equivalent to "Significant Habitat" as designated under the MA Endangered Species Act.

Certified Vernal Pools
NHESP 1998-2001 Massachusetts Certified Vernal Pools

This map was produced by SRPEDD (Southeastern Regional Planning and Economic Development District) Taunton, MA. Portions of the source digital data may have been supplied by the Massachusetts Executive Office of Environmental Affairs, MassGIS, Cullen Corporation of Newton, MA, DRI, the Bureau of Transportation Planning & Development, Division of Marine Fisheries, Division of Fisheries & Wildlife, Buzzards Bay Project, USDA Soils Conservation Service, Coastal Zone Management, National Oceanic & Atmospheric Association (NOAA).

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

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