

# Map WR-2 Watersheds. **Surface Water & Flood Hazard Areas Exeter, New Hampshire**



**Watershed Boundary** 

## **Sub-Watershed Boundary**

Sub-Watershed are randomly colored for display purposes.

**Dearborn Brook Watershed Boundary** 

## Flood Hazard Area: Zone



An area inundated by 0.2% annual chance flooding; an area inundated by 1% annual chance flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 1% annual chance flooding.



Area inundated by 1% annual chance flooding, for which base flood elevations have been determined



X500

Area inundated by 0.2% annual chance flooding; an area inundated by 1% annual chance flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 1% annual chance flooding.

### MAP DATA SOURCES

Watersheds were delineated and automated by the New Hampshire Department of Environmental Services, Water Resources Division. Source maps for this data layer are USGS 1.24,000 Topographic Quadrangle maps and USDA Natural Resources Conservation Service 1:250,000 watershed

Dearborn Brook Watershed Boundary - Delineation by Danna Truslow, Hydrogeologist, December 2002

Flood Hazard Areas on this map are FEMA Q3 Flood Data. This information was extracted from the Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data DISC 23 (Maine, New Hampshire, Vermont). For more information about flood hazard areas, consult the following website: <a href="http://www.fema.gov">http://www.fema.gov</a>>.

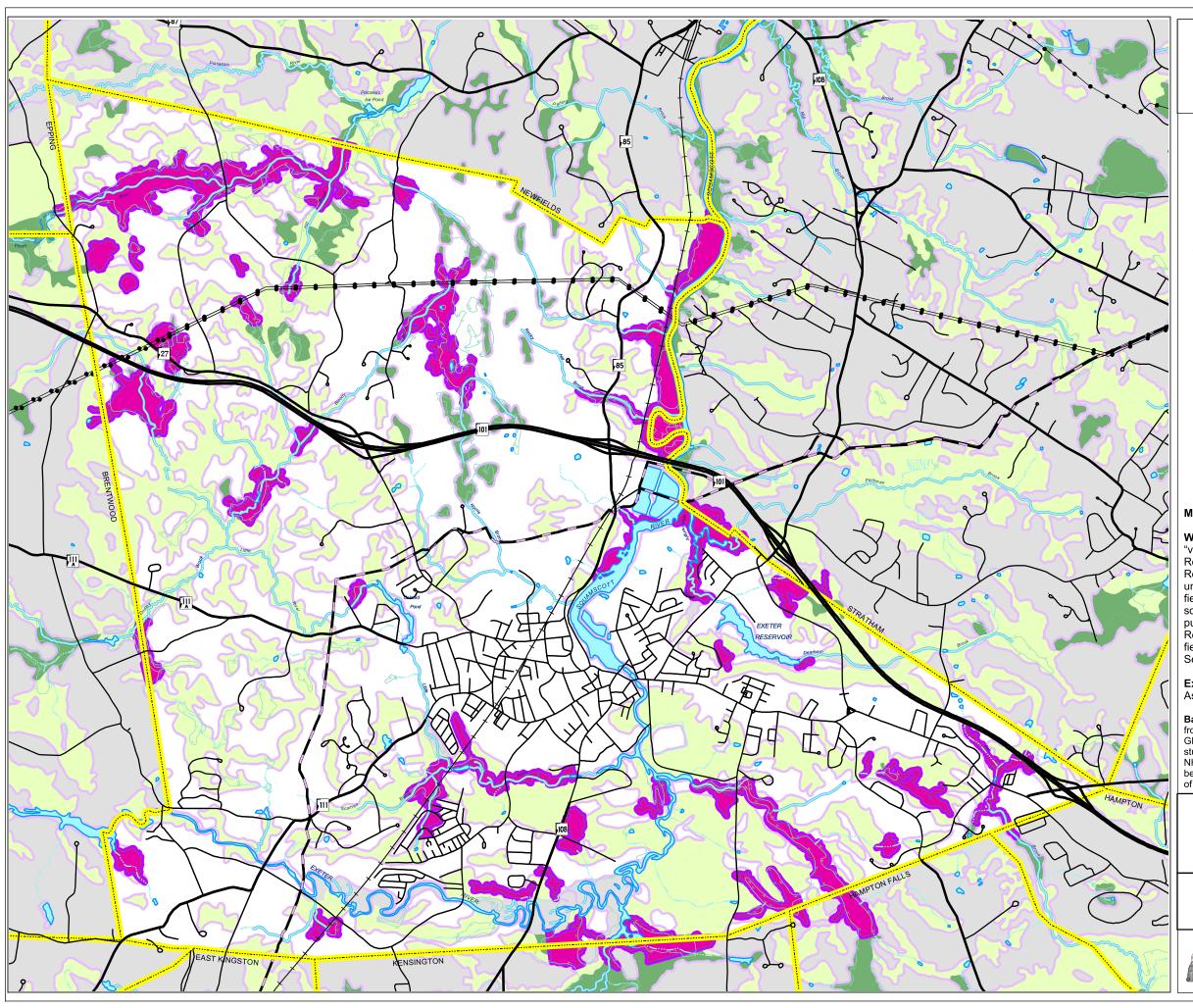
Base features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH; 1992-1999. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.











## Map WR-3 Wetlands Exeter, New Hampshire

## Legend

- 75 Foot No Structures Buffer (All Wetlands)
- 100 Foot No-Cut/No Disturbance Protective Buffer Around Prime Wetlands
- Prime Wetlands

Wetland Soils

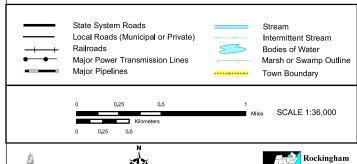
- Very Poorly Drained Soils
  - Poorly Drained Soils
- Hydric B Non Hydric Complex or Association

### **MAP DATA SOURCES**

Wetlands shown on this map are derived from soils classified as "very poorly drained" and "poorly drained" by the USDA Natural Resources Conservation Service. Soil boundaries are from NRCS Rockingham County Soil Survey, published at 1:20,000 scale. Soil unit boundaries that coincide with water body boundaries in the field will not always coincide on this map, due to their differing data sources and scales. Information shown on this map is for planning purposes only. Data automation completed by Complex Systems Research Center, UNH; October 1999. Soils delineation based on field work, conducted by the USDA Natural Resource Conservation Service, completed in 1985.

**Exeter Prime Wetlands** were automated by Cartographic Associates, Inc. and were provided to RPC on July 29, 2003.

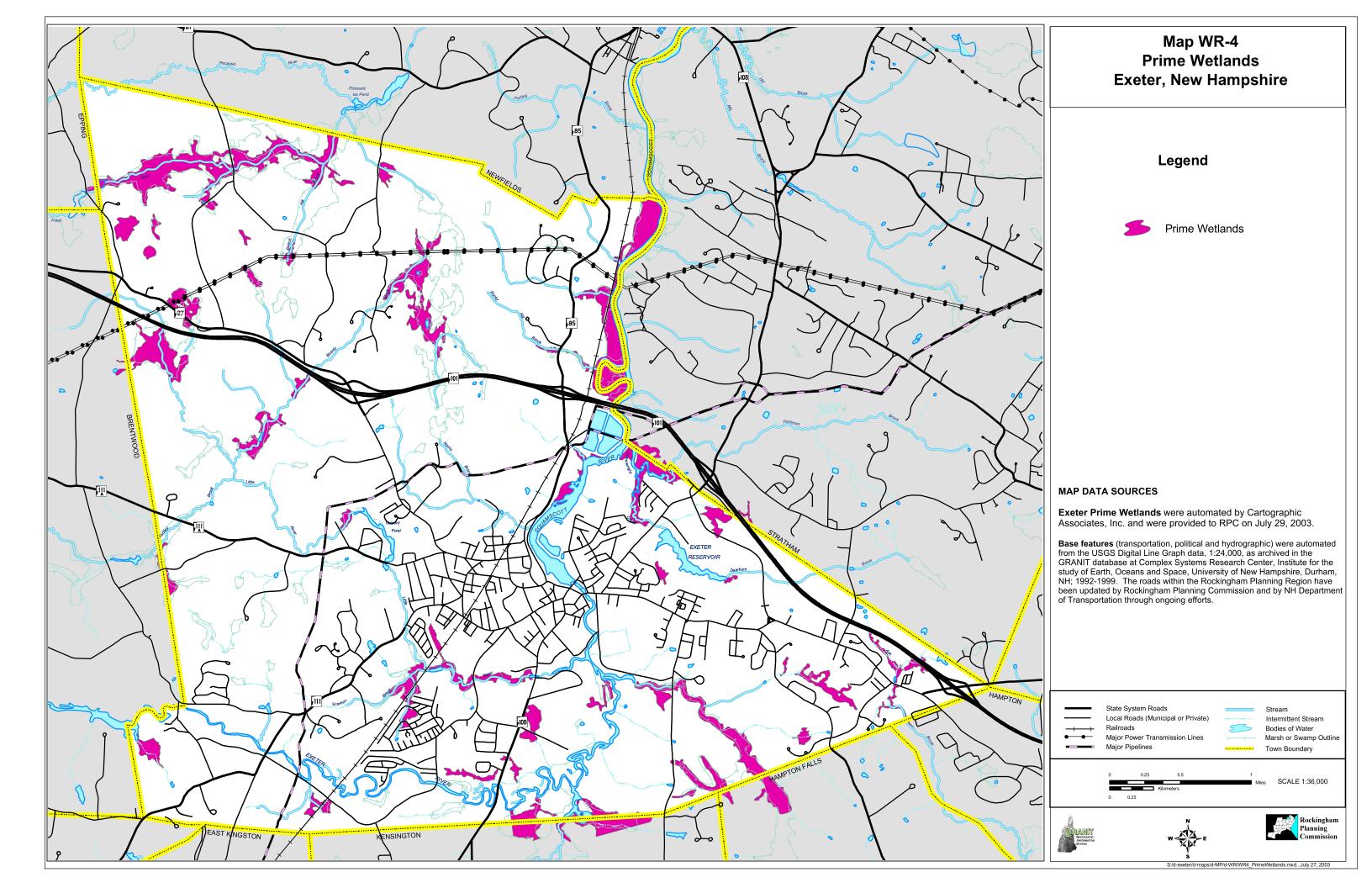
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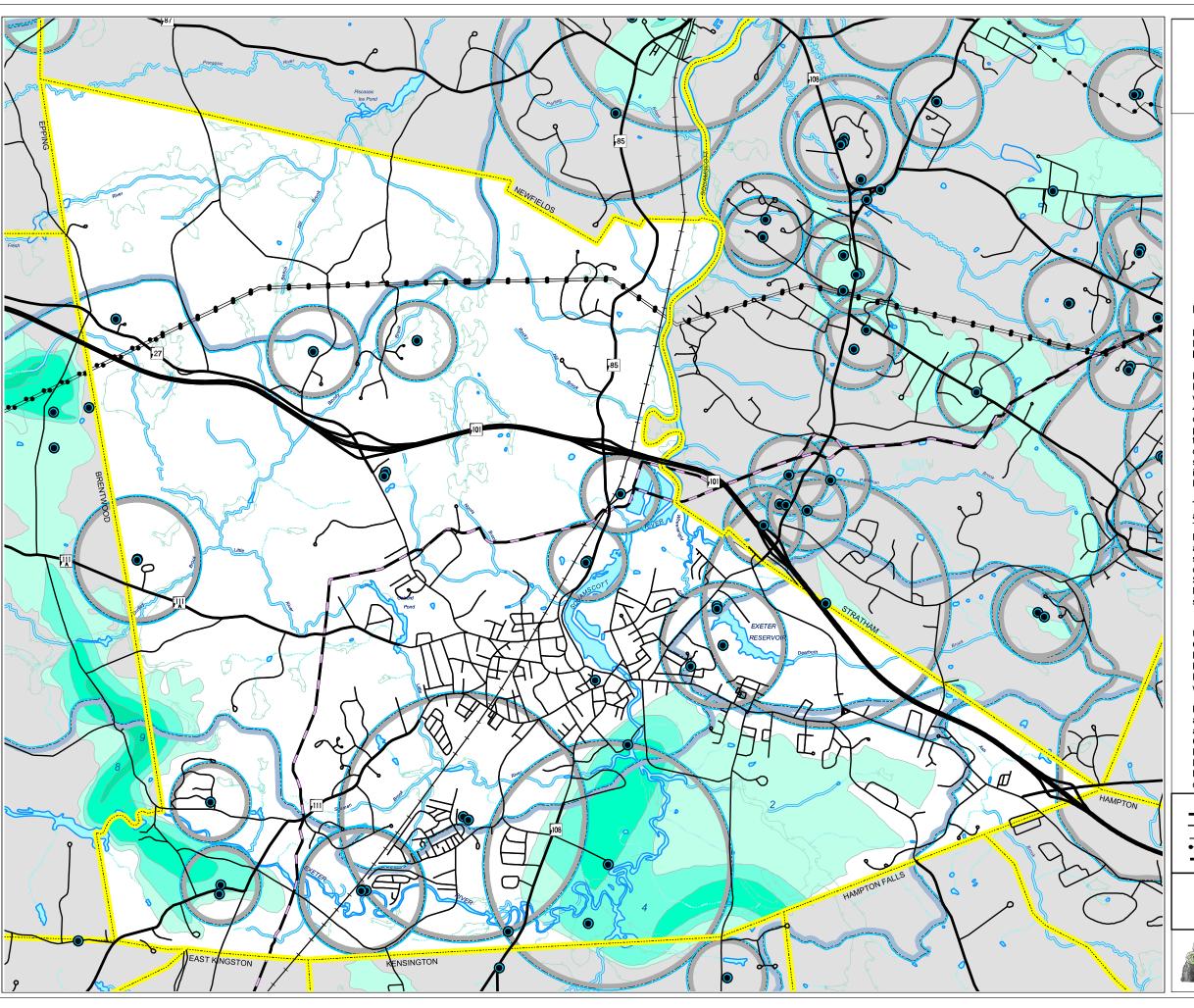












## Map WR-5 **Aquifers** and **Wellhead Protection Areas Exeter, New Hampshire**

Public Supply Wells (active)

\_\_\_\_\_ Drinking Water Protection Area Source Water Protection Area

### Transmissivity of Stratified Drift Aguifers

Feet squared per day	Range
Less than 500	2
500 to 1000	4 (labeled on map)
1000 to 2000	8
2000 to 3000	9

### **MAP DATA SOURCES**

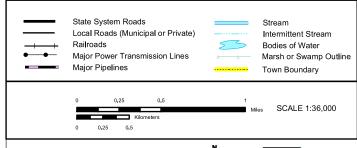
Public Water Supply Wells were mapped by the NH Department of Environmental Services. They consist of wells and surface water intake locations. Development of this data is ongoing; last updated May 2002.

Drinking Water Source Protection Areas have been delineated by the NH Department of Environmental Services as part of the State's drinking water protection program under the Groundwater Protection Act, RSA 485-C. The coverage is limited to sources for community and noncommunity, non-transient public water systems. Under the State's program, a protection area is the area from which water is likely to flow toward and reach a water supply source. This map shows wellhead delineations for groundwater sources and watershed delineations for surface water intakes and groundwater sources under the direct influence of surface water. These areas are used by the Department of Environmental Services in setting priorities for protection activities.

Transmissivity of Stratified Drift Aquifers quantifies the ability of an aquifer to transmit water, measured in feet squared per day. Transmissivity/Aquifer data was automated by Complex Systems Research Center, UNH and is archived in the GRANIT Database. The aguifer data was automated from maps generated as part of a larger study of groundwater resources in New Hampshire. The Study was conducted under a cooperative agreement between the US Geological Survey and the NH Department of Environmental Services, Water Resources Division. It included an assessment of the aquifers within stratified sand and gravel deposits.

The specific reports that cover the Town of Exeter is: US Geological Survey Open-File Report 92-95, "Geohydrologic and Ground-Water-Quality Data for Stratified-Drift Aquifers in the Exeter, Lamprey, and Oyster River Basins, Southeastern New Hampshire." This study was prepared in cooperation with the NH Department of Environmental Services, Water Resources Division and was completed in 1992.

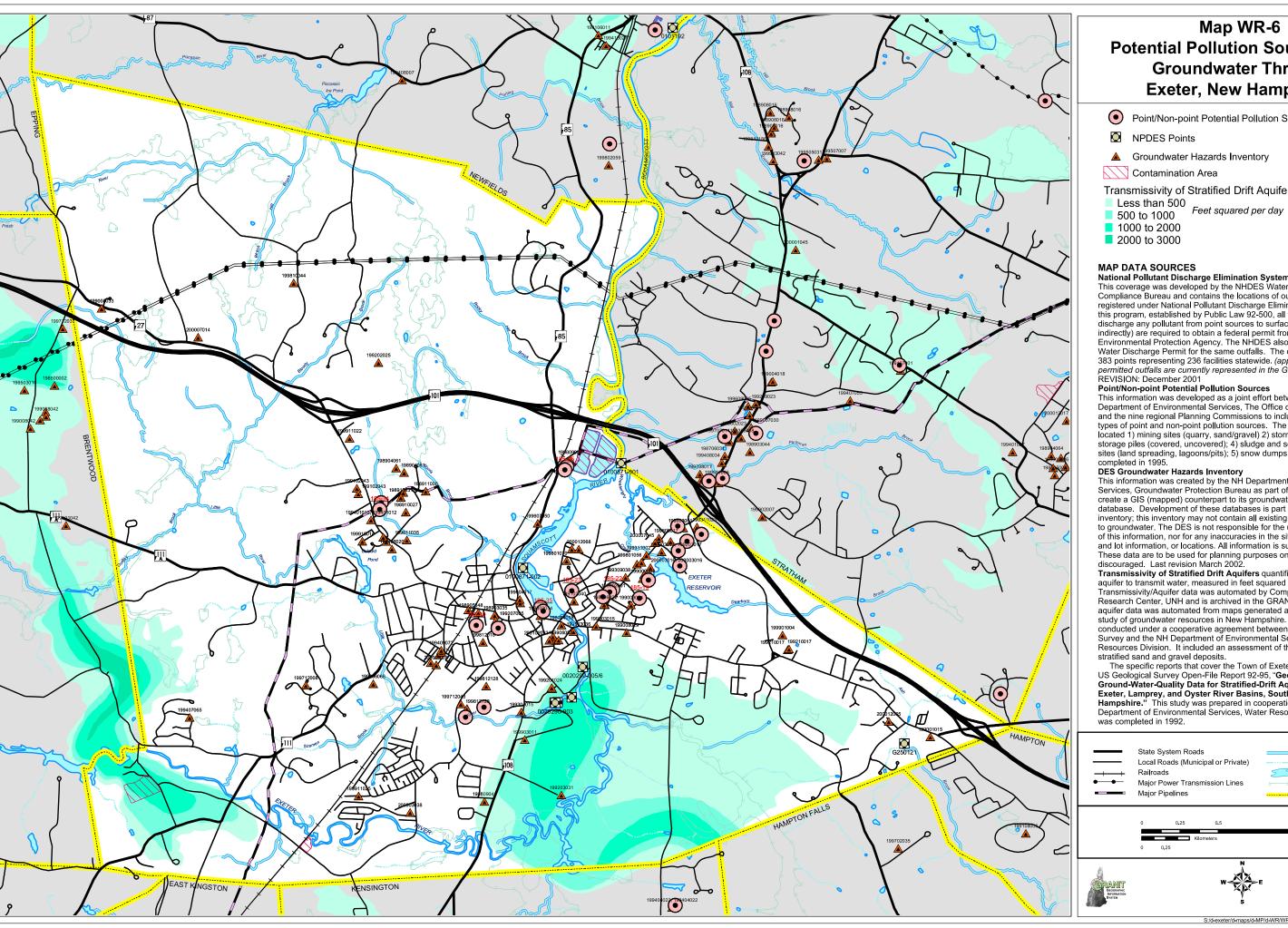
Base features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH; 1992-1999. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.











# Map WR-6 **Potential Pollution Sources and Groundwater Threats Exeter, New Hampshire**

Point/Non-point Potential Pollution Source

Groundwater Hazards Inventory

Contamination Area

Transmissivity of Stratified Drift Aquifers

National Pollutant Discharge Elimination System (NPDES) Outfalls This coverage was developed by the NHDES Water Quality/Permits and Compliance Bureau and contains the locations of outfalls for facilities registered under National Pollutant Discharge Elimination System. Under this program, established by Public Law 92-500, all facilities which discharge any pollutant from point sources to surface waters (directly or indirectly) are required to obtain a federal permit from the US Environmental Protection Agency. The NHDES also issues a State Water Discharge Permit for the same outfalls. The coverage contains 383 points representing 236 facilities statewide. (approx. 40% of the permitted outfalls are currently represented in the GIS coverage). LAST

REVISION: December 2001

Point/Non-point Potential Pollution Sources
This information was developed as a joint effort between the NH
Department of Environmental Services, The Office of State Planning,
and the nine regional Planning Commissions to include data on selected types of point and non-point pollution sources. The data includes field located 1) mining sites (quarry, sand/gravel) 2) storm drains; 3) salt storage piles (covered, uncovered); 4) sludge and septage application sites (land spreading, lagoons/pits); 5) snow dumps. This data was

DES Groundwater Hazards Inventory
This information was created by the NH Department of Environmental Services, Groundwater Protection Bureau as part of an ongoing effort to create a GIS (mapped) counterpart to its groundwater hazards inventory database. Development of these databases is part of an ongoing project inventory; this inventory may not contain all existing and potential threats to groundwater. The DES is not responsible for the use or interpretation of this information, nor for any inaccuracies in the site names, tax map and lot information, or locations. All information is subject to verification. These data are to be used for planning purposes only; distribution is

discouraged. Last revision March 2002.

Transmissivity of Stratified Drift Aquifers quantifies the ability of an aquifer to transmit water, measured in feet squared per day.

Transmissivity/Aquifer data was automated by Complex Systems Research Center, UNH and is archived in the GRANIT Database. The aquifer data was automated from maps generated as part of a larger study of groundwater resources in New Hampshire. The Study was conducted under a cooperative agreement between the US Geological Survey and the NH Department of Environmental Services, Water Resources Division. It included an assessment of the aquifers within stratified sand and gravel deposits.

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