Exeter Reservoir/ Dearborn Brook Watershed Management Plan

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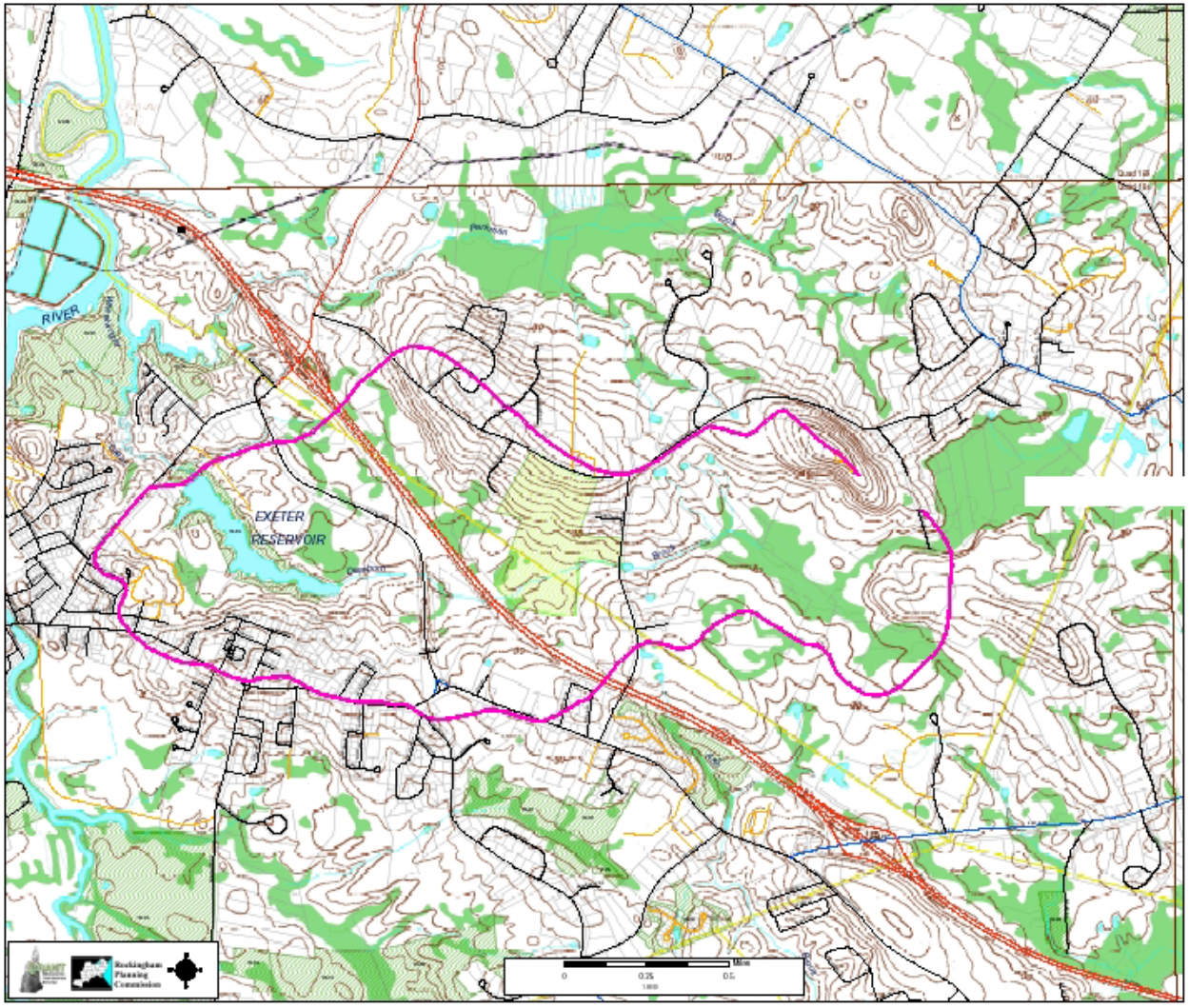

Dearborn Brook Watershed Recharge/Discharge Evaluation Project
Map 1 - General

February 2003

LEGEND

- Dearborn Brook Watershed
- GRANIT Conservation Lands, 1:24 scale
- Recent Conservation Lands (by RPC)
- Wetland Wildlife Inventory
- Property Boundaries
- USGS Quadrangle Boundary
- Elevation Contours - USGS 7.5 Minute Topographic Quadrangles
  - Quad 100 - 100 foot Contour Interval
  - Quad 50 - 20 Foot Contour Interval

BASE FEATURES

Roads by Legislative Class
- Class I - Primary System
- Class II - Secondary System
- Class III - Other Recreational
- Class IV - other Compatible
- Class V - Municipal
- Class VI - Undedicated Municipal
- Private

Political Boundaries
- Town Boundary
- County Boundary
- State Boundary
- Railroads
- Major Transmission
- Major Pipelines

Surface Water Features
- Shoreline
- Intermittent Shoreline
- Applicant Wetland Land
- Other Water Features
- Streams
- Bodies of Water

Map Data Sources

Dearborn Brook Watershed Boundary - Delineation by Dianne Trustler, Hydrogeologist, December 2002

Elevation Contour lines are displayed from scanned images of USGS 1:24000, 7.5 Minute Topographic Quadrangle Maps. Production and distribution by GRANIT, CSRC, Durham, NH.

Conservation Lands are from the NH GRANIT database. This database includes parcels of land of less or more acres that are mostly undeveloped and are protected from future development. The data was developed from the records of the Society for the Protection of NH Forests (SPNHF), many of the stakeholgnaction, and original research from deeds and tax maps. The last update was completed in the winter of 2002 by NH GRANIT at UNH, Durham. Additional parcels presented here are the result of more recent mapping work of the RPC in an effort to collect other known conservation lands that are not currently listed in the GRANIT database.

The US Fish and Wildlife Service National Wetlands Inventory (NWI) is an ongoing effort to map and inventory the wetland areas within the United States. National Wetlands Inventory wetlands were automated by the US Fish and Wildlife Service, National Wetlands Inventory, and were distributed by GRANIT, Complex Systems Research Center. Map source scale 1:24,000.

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, 1982-1989. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Exeter Tax Parcels

Exeter Tax parcel data was produced by Cartographic Associates Inc., Littleton, MA. Information shown on this map was received from Cartographic Associates Inc. on January 28, 2002.

Stratham Tax Parcels

Property boundary information shown on this map was automated by The Rockingham Planning Commission from original tax maps created by James H. Sewall Company. Property boundaries are updated on a yearly basis by RPC and were last updated from April 2001 submissions.

North Hampton Tax Parcels

Preparation of a Digitized Tax Parcel Map for the Town of North Hampton, N.H. was performed by the Rockingham Planning Commission. Source maps were provided to RPC by the Town and automated to produce a composite layer in June 1996. Subsequent updates were performed by James Vara and Associates, Inc. This database has been updated to September 2002.

Disclaimer:
Tax maps are for assessment purposes only. Discrepancies may exist with field surveys. Not to be used for conveyance.

Watershed Management Committee Members

- Exeter Planning Department
- Exeter Conservation Commission
- Exeter Department of Public Works
- Exeter Water and Sewer Advisory Committee
- Stratham Planning Department
- Stratham Water Commission

Project Funded by NH DES and the Town Exeter

Watershed Facts

- 1.9 square miles in Stratham and Exeter
- 1,152 acres, 2/3 of land in Stratham
- Primary source of drinking water for Exeter
- 25% of the watershed had impervious surface greater than 10% in 2000
- Exeter's 2001 population = 14,190
- Exeter's projected population in 2025 = 17,230
- Stratham's 2001 population = 6,530
- Stratham's projected population in 2025 = 8,410

Opportunities and Challenges

- 75% of the land (826 acres) in the watershed is undeveloped
- Strong local support for land conservation
- Planning Boards and Conservations Commissions constantly review land use regulations
- Established and effective public education programs
- Enormous development pressure in both communities creating an increase in impervious surface and NPS, and a decrease in the forested canopy
- Existing state and local road network presents contamination threat

Plan Recommendations

- Protect undeveloped land remaining in the watershed from development
- Develop and implement public education programs for residents, town employees, contractors and the general public
- Annually review local land use regulations and regulations enforcement
- Establish water quality and streamflow testing programs
- Review existing and potential contaminations sources
- Complete emergency response training
- Maintain watershed advisory committee and increase membership to include residents

Future Plans

- Develop public education and outreach programs
- Coordinate land protection efforts in Stratham and Exeter
- Increase opportunities for communication between local boards, commissions and town departments
- Maintain watershed advisory committee