

## **RSA 483: RIVERS MANAGEMENT AND PROTECTION PROGRAM (RMPP)**

### **A continuum of watershed management success from state to local level activities**

#### **RMPP Summary**

The RMPP protects human health and safety and economic benefit by being the only formal state mechanism for municipalities to collaborate on source water protection and hazard mitigation strategies. It supports local and state collaborations to provide sustainable, clean public drinking water supplies and a reduction in loss of life and property from inundation and erosion, and protects the economic values of the swimming, fishing, and boating uses of N.H.'s surface waters.

#### **RMPP Continuum of Watershed Management Success: River Erosion-state level policy to local level implementation**

##### **I. State Designation**

The Exeter River begins in the town of Chester, and flows east and north to the town of Exeter where it becomes tidal and changes its name to the Squamscott River, before emptying into Great Bay. As a primary tributary to Great Bay, the river has natural resources associated with both freshwater and saltwater systems, including freshwater wetlands, floodplain, vegetated shoreland, salt marsh, and tidal creeks. Its drainage basin encompasses an area of 126 square miles. It is also the primary source of municipal water supply for the town of Exeter. For these reasons and many others, the upper 33.3 miles of the river, from its headwaters to its confluence with Great Brook in Exeter, were designated into the NH Rivers Management and Protection Program in August 1995.

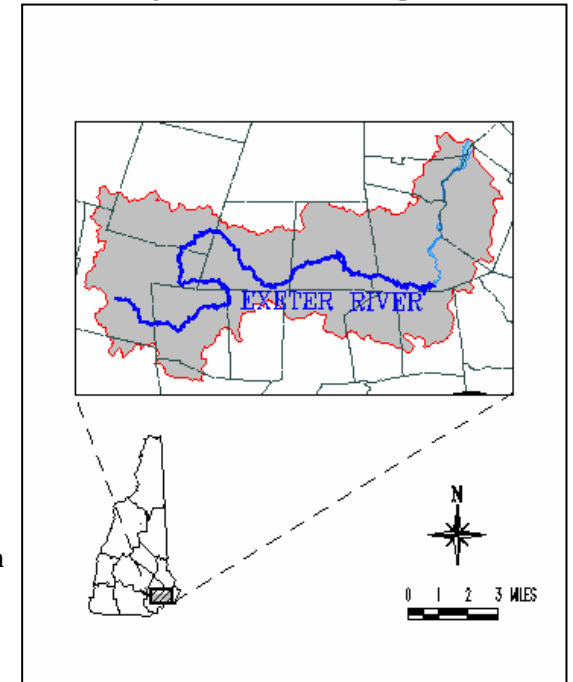
##### **II. Local Level Management and Collaboration**

Once the Exeter River was designated, per RSA 483:8-a, the Exeter River Local Advisory Committee (ERLAC) was formed – an all-volunteer group comprised of riverfront landowners and residents in the watershed. ERLAC has met monthly for over 15 years and provides local officials, riverfront landowners and residents with an efficient and effective forum for the discussion of river management issues, including land development and conservation, water use, and future water needs.

##### **III. State Level Policy**

As a result of the flood disaster declarations of 2005, 2006, & 2007, the General Court established the Comprehensive Flood Management Study Commission. The RMPP Rivers Coordinator serves as the DES lead on river related policy, and as such the Rivers Coordinator served as the DES representative to the HB648 Flood Commission. This involvement led to the understanding that rivers flood and erode and that NH did not have a framework to address river erosion. As such, the Rivers Coordinator recommended NH create a fluvial erosion hazard program. This recommendation was adopted by the Commission and incorporated into several recommendations in the September 2008 Final Report for the NH House Bill 648 Comprehensive Flood Management Study Commission (Chapter 179, Laws of 2007).

The RMPP Rivers Coordinator then worked with the General Court in 2008 to amend state statute to allow municipalities to develop and adopt ordinances based on fluvial erosion hazards. Concurrently, the RMPP Rivers Coordinator worked with the NH Department of Safety to secure FEMA funding to establish a Fluvial Erosion Hazard Program for NH.



#### IV. State Level Policy to Local Level Planning

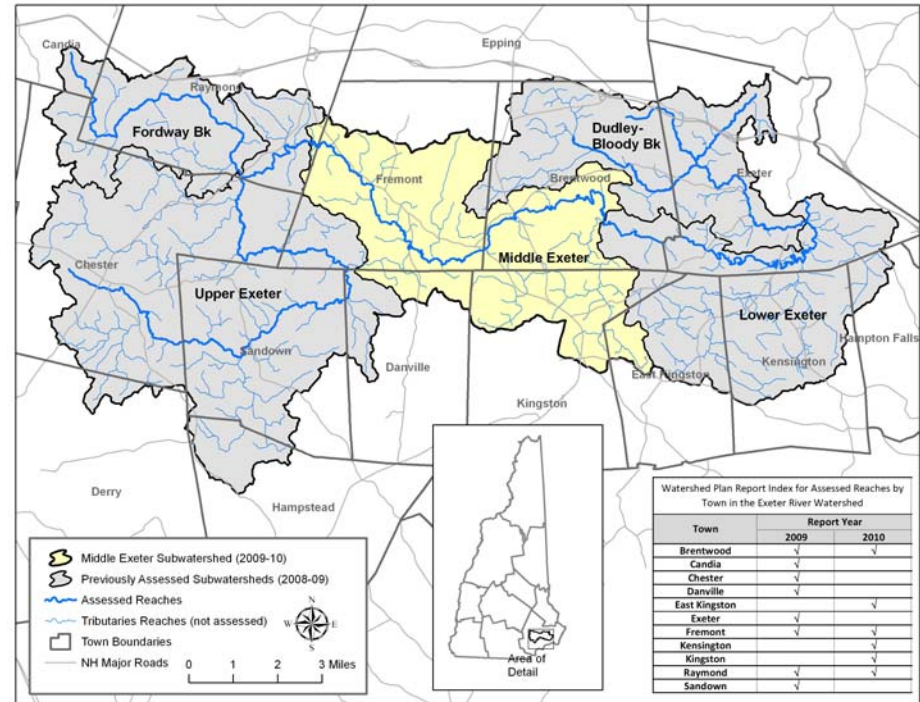
In 2007 the RMPP coordinated a multi-agency effort to develop an Exeter River Geomorphic Assessment and Watershed-Based Plan. The Geomorphic Assessment and Watershed-Based Plan was the first in the state and provides information to help watershed managers understand how the river responds to the land over which it flows. The plan was developed in two phases with diverse community, state and federal partners (FEMA, DES RMPP, NH Geological Survey, ERLAC, Natural Resources Outreach Coalition, Southern NH Planning Commission, & Rockingham Planning Commission)

##### Phase I: Upper and Lower Exeter River Watershed (\$197,000 in grants)

FEMA: \$81,000 Hazard Mitigation Grant for pilot study  
DES Watershed Restoration, Source Water Protection, and Coastal Restoration Grants: \$106,000  
Town of Exeter: \$30,000 cash match (warrant article)

##### Phase II: Middle Exeter River Watershed (\$45,000 in grants)

DES Watershed Restoration Grant: \$45,000  
Brentwood match: \$56,000 (local in-kind match)  
Fremont: In-kind match with volunteers ~\$5,000  
Piscataqua Estuary Regional Partnership extra bridge and culvert assessment funding for lower watershed: \$8,000



#### V. State Level Policy to Local Level Implementation

The data and analysis in the Exeter River Geomorphic Assessment and Watershed-Based Plans have led to local level actions:

##### **Project: Town of Sandown – Wells River Road Culvert Replacement**

**Grant: \$175,000 FEMA Hazard Mitigation Grant Program**

**Project Scope:** Replace an undersized culvert on Wells Village Road over the Exeter River. Assessment conducted during the Exeter River Geomorphic Assessment showed the culvert was undersized. The town used data from the geomorphic assessment to help prepare and substantiate their grant request to FEMA. The structure was replaced in 2011 with a larger box culvert-type structure.

##### **Project: Town of Danville -- Sandown Road Bridge Replacement**

**Grant: \$625,000 American Recovery and Reinvestment Act of 2009 (ARRA)**

**Project Scope:** Replace the failed Sandown Road Bridge/culvert over the Exeter River. Modeling conducted during the Exeter River Geomorphic Assessment showed that the structure lacks capacity to pass 25 and 50-year flow events. The structure was replaced in 2010 with two 10-ft wide concrete box culverts.

##### **Project: Town of Brentwood -- Rowell Road-West Improvements**

**Grant: \$49,000 DES Watershed Restoration Grant**

**Project Scope:** Restore the riparian buffer along Rowell Road.. Assessment conducted during the Exeter River Geomorphic Assessment indicated significant erosion and sedimentation along Rowell Road. The project will consist of buffer plantings and a five foot wide grassed filter along approximately 400 feet of the shoulder of Rowell Road. Project completion expected in 2013.