Wantastiquet Region

(Calendar of Wantastiquet River Subcommittee Meetings)

NEW - Water Resources (2008)

Recreation priorities (2005)

Summary of the 1997 Wantastiquet Region River Subcommittee Plan 1997

- Introduction
- Outstanding Features of the Wantastiquet Region
- Potential Uses
- Current Problems and Threats
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INTRODUCTION

The Wantastiquet Region includes the New Hampshire towns of Walpole, Westmoreland, Chesterfield, and Hinsdale, and the Vermont towns of Westminster, Putney, Dummerston, Brattleboro, and Vernon. The segment extends 37 miles from the Bellows Falls Dam to the Massachusetts border. The Vernon Dam, just downstream from the Vermont Yankee Nuclear Power Plant, creates a 26 mile long impoundment on the mainstem. Within the river corridor are the town of Brattleboro and clusters of residential, commercial, and industrial development surrounding this and smaller town centers. The City of Keene lies nearby, within the watershed of the Ashuelot River, a tributary of the Connecticut. While there is in general more residential and other development along the river in the Wantastiquet Region than upstream, open space still prevails on both sides of the river.
OUTSTANDING FEATURES OF THE WANTASTIQUET SEGMENT

Water Quality: Water quality, which has improved greatly over the last few decades, is an important economic as well as aesthetic and ecological resource for the Wantastiquet Region. Outstanding river uses and values which depend upon existing water quality include swimming, canoeing, kayaking, boating, wildlife habitat, and migratory corridors, productive fisheries, and an aesthetic contribution to tourism and residential use.

Fisheries: The entire Wantastiquet segment has become a primarily warmwater fishery since the impoundment created by Vernon Dam diversified the types of habitat available for fish. Walleye is a favorite sport fish, and the Connecticut River population, one of the few in this part of New England, is an important draw for tourists/fishermen. Several tributaries provide nursery and rearing habitat as well as potential spawning habitat for Atlantic salmon and spawning areas for blueback herring. The American shad population has developed dramatically in recent years, with thousands passing through the fishladder at Vernon Dam.

Habitat: A rich variety of habitat types is concentrated adjacent to the river. The river functions as a corridor for neo-tropical migrant birds and other species which take advantage of the slightly milder conditions here before passing into uplands as spring proceeds. The mainstem near the Vernon Dam may be the only significant waterfowl wintering site on the northern half of the river. Retreat Meadows, at the mouth of the West River in Brattleboro, is a particularly significant wetland and stopover habitat. Osprey and eagle use is increasing, particularly in open water below the dam in the winter.

Surrounding Wantastiquet Mountain are 6,600 acres of forested habitat with rock outcrops and talus slopes. The Fall Mountain area includes extensive deer yards, marshes, and nesting habitat for turkey vultures. There is at least one deer yard in each town within close proximity to the river. Very well drained soils on raised railroad beds offer one of the last refuges for the rare New England Cottontail Rabbit along the Connecticut River in New Hampshire. Wild turkeys concentrate at riverfront farms, which also host migrating geese.

Recreation: Many recreational opportunities are available on the Connecticut River in the Wantastiquet Region, including swimming, scuba diving, boating, and waterskiing. There are 13 boat launches in
this segment, and navigability of the river by a variety of boats is a valued aspect of recreation here. The Belle of Brattleboro operates scenic cruises, and the marina in Brattleboro occasionally hosts an unofficial steamboat regatta. Jetskis are commonly used from Chesterfield south to the Vernon Dam. Bird watching, hiking, cross country skiing, bicycling, horseback riding, and snowmobiling, along the riverbank and on former railroad beds, are popular forms of recreation, as is hiking along the Wantastiquet trail by the river and up Wantastiquet Mountain. Picnicking is enjoyed on the islands and at access points. The fish ladder at the Vernon Dam is also an attraction.

**Agriculture:** Connecticut River Valley flood plain soils of the Wantastiquet Region are among the most productive soils in either state. The average sales of agricultural products per acre on these soils is substantially higher than elsewhere in the New Hampshire and Vermont valley. Deep, nutrient- laden sandy loam is widespread on the river valley floor, and the stony loams of the valley walls have excellent forest-sustaining properties. Close to the river, the frost-free growing season is considerably longer than on adjacent uplands anywhere else in either state, greatly multiplying the agricultural value of riverfront lands, which are also less susceptible to drought. During most of the 20th century, these soils have been used to grow crops to support dairy, sheep, and livestock farming, although within the last five years, vegetable, fruit, and ornamental production have increased.

**Historic and Archeological Resources:** The Connecticut River has long woven the natural and cultural fabric of the valley together to create the industrial and agricultural heritage of the Wantastiquet Region. Historic agricultural settings throughout the region define its rural character. Diverse small scale industries, followed later by large scale manufacturing, have depended upon the river for their power, and once also depended upon the river to move their raw products to market. Remaining historic villages and covered bridges are highly valued.

**Land Use and Development:** The Connecticut River and its corridor's forests, wetlands, and farmlands offer a special scenic beauty that is appreciated by both residents and visitors. Because of the return of the river's water quality, it is once again attractive to those who want to make their homes close by its banks.
POTENTIAL USES

There could be valuable Atlantic salmon and American shad populations throughout the segment; particularly with better fish passage into smaller tributaries through properly located culverts. New recreational trail corridor easements could function as habitat connections for some species. Farmers could use assistance to plant forage crops for turkeys and other wildlife on land they no longer use, allowing them to justify keeping this land open. There could be an additional boat access in the town of Westmoreland and more access for canoes and kayaks in general. There are opportunities for interpretive trails and centers, better use of abandoned railroad lines and roads, campsites, and more connections between VT and NH trail systems. There is potential for a tourist excursion train along the river from Brattleboro to Charlestown, and for better local markets for local produce and specialty foods, particularly through farm stands and regional farmers' markets. Hobby farming could help keep land open and maintain demand for farm-oriented support services. Horse-drawn sleigh and wagon rides would serve the large tourist industry, which in turn could support another market for hay. There is potential for further diversity of products, including more maple sugar production, local beef and lamb, more value-added dairy products, locally bottled water, and manure as a cash crop. Tourists should be attracted by and better appreciate the Wantastiquet Region's history and pre-history, bringing more dollars into the area through "heritage tourism."

CURRENT PROBLEMS AND THREATS

Water Quality: Significant amounts of organic matter and nutrients are believed to be entering the Wantastiquet reach from the streambank soils, agricultural runoff, tributaries, and upstream sources. As the river passes through this most densely populated portion of its upper watershed, it can acquire an even heavier load of pollutants. The slowing of the flow through the Vernon impoundment may promote algal blooms. The Subcommittee is concerned about soil and water contamination from junkyards and landfills, leachate disposal, and the
potential for pollution from marinas, all of which would threaten aquatic habitat, public health, recreation, and water supplies.

Pollutants can reach the river if a homeowner mows a lawn too close to the waterway.

Land development, inadequate culverts, and poor drainage ditch construction are primary sources of eroded sediments. Other contaminants enter the river from parking lot runoff and direct dumping of snow. Improper use of fertilizers, pesticides, and other toxic materials on the home landscape can allow these pollutants to reach the river, especially if the homeowner mows a lawn too close to the waterway without leaving an adequate buffer of natural vegetation to catch pollutants.

Streambank erosion and removal of riparian vegetation are important problems in the Wantastiquet Region. Conventional stabilization with rock riprap has a number of disadvantages: it may actually speed up the flow of water, contributing to flooding downstream, and can start new erosion.

**Fisheries:** The community of aquatic organisms upon which fish feed declines in quality from north to south. Just below the Bellows Falls Dam, it appears to be good, while farther downstream, the aquatic community indicates moderate pollution by organics and nutrients. Below Vernon Dam, the aquatic macro invertebrate community is rated as poor. Potentially harmful concentrations of chromium and PCBs have been found in fish collected in the Brattleboro area and below the Ashuelot River. Erosion and sedimentation destroy spawning habitat. An entire year of fish reproduction can be lost if fish eggs are allowed to dry as a result of water level fluctuations.

**Habitat:** Flood plain forests, of which only remnants remain, are now altered by flow regulation. Areas of suitable habitat are becoming fragmented, interfering with dispersal of wildlife. As dairy farms decline, the wildlife habitat they provide is threatened. The vegetation of the islands in the river needs better understanding, but there are current funding inadequacies in state natural heritage inventory programs. Class III wetlands remain largely unprotected. The introduction of invasive species such as purple loosestrife and Phragmites displaces native plants which offer better food or cover for wildlife. If introduced to the hospitable waters of the Connecticut River system, the zebra mussel could drastically alter food chains and cause problems for industry and recreation.
Recreation: Conflicts occur between canoes/kayaks and power boats, and between jetskis and fishermen. The current trail system on the NH side needs better signage, maintenance, and connections. There is inadequate access for canoes and kayaks. The parking area at the Hinsdale boat ramp is often full and cars with trailers park along the road on private property. Boaters are sometimes unaware of the boat speed law and proper boating etiquette, and heavy use by power boats can cause bank erosion and threaten safety. It may not be safe to swim in the mainstem during or shortly after storm events, due to polluted runoff.

Agriculture: The long-term loss of agricultural land and the region's ability to help feed itself amid a growing worldwide food shortage are key concerns. Some farmland is being allowed to go fallow, increasing the cost and effort necessary to bring it back into production, and prompting its sale for non-agricultural purposes. The increasingly close juxtaposition of farm and residential land use sometimes leads to conflicts. Costs are high for a farming operation from the beginning, and the cost of compliance with many environmental regulations and best management practices also takes a toll. There are still some farms in the area without adequate manure storage to protect water quality. Where livestock are allowed access to streams, bacteria can enter the water and make it unsafe for swimming. The riverfront farmer may have to battle bank erosion on one hand, and on the other, the disrespect of recreationists who damage crops or use his land without asking permission.

Historical and Archeological Resources: Historic buildings are still lost to decay or indifference. Road "improvement" projects may detract from the character of the area by removing stone walls or culverts and changing the nature of rural roads. Agricultural landscapes and the identity of historic village clusters can be lost to insensitive development. Archeological sites are threatened by bank erosion and by looting. Historic bridges may deteriorate if they are taken out of service and funds are not available for their maintenance.

Land Use and Development: Riverbank erosion threatens housing and roads built close to the river in North Walpole and elsewhere. Good agricultural land is being lost to residential and commercial development, along with riparian buffers and exposure of soils to erosion. In some places, development increasingly threatens the scenic character of the river corridor. Under current town regulations, the
capacity exists to double the number of homes within 2 mile of the river, at least on the NH side, which could have undesirable impact upon farmland and the region's rural character.

OBJECTIVES

- Improve the balance of compatible uses of the land;
- Minimize the impact of forestry and agricultural practices on the river while preserving these uses of the land;
- Discourage polluting industrial uses.

While the focus of this plan is the mainstem of the Connecticut River, the Wantastiquet Subcommittee recognizes that the river's tributaries have a significant influence, because many valued fish use them for breeding, and because the quality and quantity of water delivered by the tributaries directly affects the mainstem. The Subcommittee values the diversity of wildlife here, and seeks to balance multiple uses of the region with wildlife requirements through conservation rather than strict preservation.

The Subcommittee seeks to maintain economically viable agriculture in the region. Prime farmland soils should be given a priority protection status. These soils are so valuable that holding them open for agriculture and feeding humans is justified for the future.

The improving condition of the river has led to increasing pressure for recreational uses of all types. These uses should be better managed to minimize threats to the river and human safety, while maximizing the opportunities to enjoy this singular natural resource. The varied and rich cultural and historic heritage of the Wantastiquet Region should remain evident for the enjoyment and education of both residents and visitors.

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