## Norton Reservoir

<u>Location:</u> Northern portion of Norton at town boundary with Mansfield

<u>Access:</u> Small lot, canoe-top access only available on town property. Mansfield Avenue boat ramp not constructed yet.

Size: 580 ± acres, 12,570 acre watershed

Depth: 4.5-10 feet

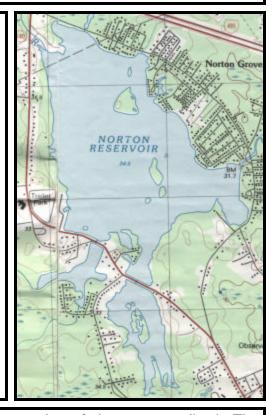
Source: Rumford River, Great Brook and Back Bay Brook, outlets

from Norton Reservoir Dam as Rumford River

<u>Water Quality:</u> Section 303(d) list: nutrients, noxious aquatic plants, turbidity, pesticides, exotic invasive species (non-polluting)

Owner: Norton Conservation Commission

Reservoir Dam: high hazard classification



<u>Vegetation:</u> With over 33,340 feet of shoreline, the Reservoir has a number of plants surrounding it. The shoreline and islands contain red maple, white birch, white pine, sweet pepperbush, buttonbush, red osier dogwood, swamp loosestrife, spikerush, high bush blueberry, cardinal flower, purple loosestrife, narrowleaf cattail, wild grape, willow, swamp rose, smartweed, bittersweet nightshade, swamp milkweed, and bulrush. Aquatic plants include watershield, coontail, waterweed, green algae, duckweed, Eurasian milfoil, bushy pondweed, white water lily, yellow water lily, bladderwort, water celery, watermeal, pickerelweed, pondweed, and arrowhead.

<u>Fish</u>: largemouth bass, chain pickerel, yellow perch, bluegill, pumpkinseed, golden shiner, American eel, brown bullhead, black crappie, white sucker, lake chubsucker, bridle shiner, Johnny darter, northern pike, and tiger muskies (1990 data).

<u>Birds</u>: black crowned night heron, great blue heron, bald eagle, hooded merganser, double breasted cormorant

Amphibians/reptiles: Snapping turtle, painted turtle, green frog, bullfrog,

<u>Dragonflies/damselflies/butterflies</u>: green darner, lilipad forktail, fragile forktail, eastern forktail, eastern amberwing, black shouldered spinylegs, skimming bluet, slender bluet, blue dasher, eastern pondhawk, eastern amberwing, variable dancer, orange bluet, swamp spreadwing, elegant spreadwing, lilipad forktail, monarch

Other wildlife: freshwater mussels Elliptio complanata, Pyganadon cataracta, mink, colonial bryozoan,

## Norton Reservoir

<u>History</u>: An early map of Norton in 1871 depicts the Reservoir as "Buttomennumonthe Pond". Located in Norton (525+ acres) and Mansfield (25 acres) is one of the largest dammed water bodies in southeastern Massachusetts. The damming of the Rumford River for private industrial waterpower and fire protection uses in the late 1860's created the Reservoir.

For decades organized groups of residents and town officials tried to negotiate with the private owners, the Wading River Reservoir Corp. (formerly Dighton Industries), to sell the Reservoir to the Town of Norton so that the Reservoir could be restored for regional recreational use. In 1986, the residents of the Town of Norton approved the purchase of Norton Reservoir for \$2.1 million and in 1990 received a Self-Help Grant of \$1 million for partial reimbursement of the purchase from the Division of Conservation Services. At the 1991 annual Town Meeting residents approved the use of \$92,210.00 of those funds to be expended on a Diagnostic and Feasibility study for dredging the Reservoir. It was completed in 1994.

For many years, the Conservation Commission pursued the Norton Reservoir Dredging project, obtaining various permits and design plans. But by May of 2007 it became apparent that the project was not economically feasible. A private consultant determined that the sand and gravel that was supposed to fund the hydraulic dredging activities was heavily composed of silt, so much silt that it is not economically feasible to sort the silt from the rest of the material. The difference in the cost to process the sand and gravel and the cost of hydraulic dredging is between \$23 million and \$30 million. Even factoring in a revised project scope, where the dredging would be confined to a smaller portion of the reservoir with higher quality sand and gravel the project costs would still have a deficit of \$19 million. In very simple terms the cost to dredge, as of 2007, would be \$10.00/yard and the value of the material, in 2007, was \$8.10/yard, at best.

Therefore, the Norton Reservoir Dredging project is indefinitely on hold.

Each year the Emergency Action Plan (EAP) is updated and submitted to the Office of Dam Safety (ODS) for the Norton Reservoir Dam. The EAP contains information for town officials to handle problems in the event of a failure of the dam.

<u>Invasive species</u>, <u>pollution</u>, <u>water quality</u>: Known problems include shallow depth, excessive algal presence, high-suspended solids and phosphorus concentrations, and 18+ point-source and non-point source nutrients from storm water runoff via local roads, Rt. 140, and Rt. 495. Sewage discharges from the old Mansfield sewage treatment plant (1938-1985), and septic discharges from shoreline cottages, degraded the water quality for recreational use. Some improvements have been made though since the Mansfield Waste Water Treatment Plant was construction and in 1991, 765 Norton homes received town sewer.

<u>Events, special announcements:</u> In recent years, the Open Space Committee has led canoe trips on the Reservoir for residents. LL Bean and the Norton Kayak Company have expanded this opportunity and have led many kayak tours. Norton Kayak Company organized the first Reservoir Clean Up Day in 2010.

Some information and maps were taken from the Draft Environmental Impact Report, EOEA 9903, Norton Reservoir Dredging Project, Baystate Environmental Consultants, April 15, 1998.