

ENVIRONMENTAL Fact Sheet



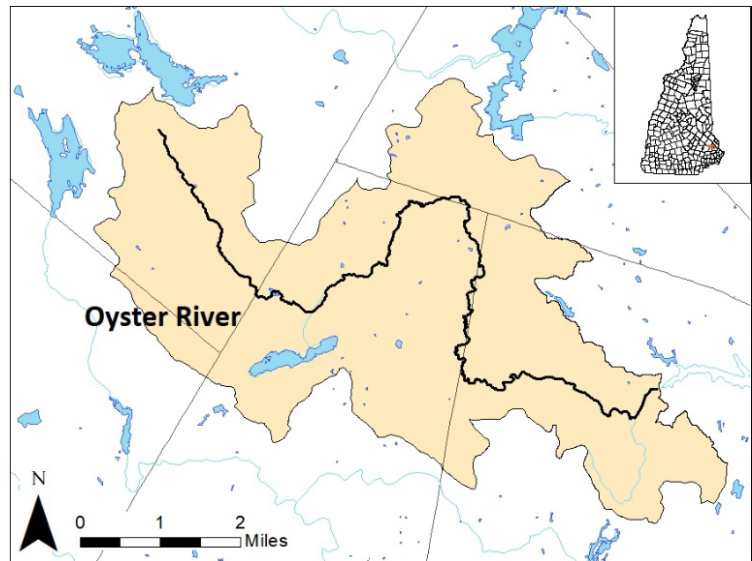
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WD-R&L-27

2024

The Oyster River

The Oyster River is a tributary of the Piscataqua River and part of the Great Bay Estuary in coastal New Hampshire. The river's headwaters begin in the town of Barrington and flow east through Lee, Madbury and Durham before flowing into the Great Bay. The river drains approximately 21 square miles. The freshwater and saltwater portions of the river are separated by the Mill Pond Dam in Durham. There is relatively little development along most of the river's length, with the riverbanks being primarily rural in nature. However, development in Durham and along state roads in Lee has increased in recent years.



In 2011 the freshwater portion of the Oyster River, which is approximately 14 miles long,

was designated into the New Hampshire Rivers Management and Protection Program. This was done to protect the unique environmental and recreational resources of the river, as well as the river's use as a drinking water source. The northern reaches of the river are home to a number of unique habitats, including the Spruce Hole Bog, one of the only undisturbed kettle-hole bogs in New England and a unique ecological area as classified by the US National Park Service.

History

Human occupation of the Piscataqua region by Native Americans began approximately 11,000 years ago. Called Shankhassick by the Native Americans, the river was widely used for shellfish collection, hence its modern name. European settlement began in the 1630s and extended westward over time. The water of the river was impounded to power saw and textile mills. Some of the foundations of these mills can still be seen alongside the river, and the Mill Pond Dam in Durham, which was built in 1913, is listed on the state's Register of Historic Places. Within the designated river corridor, the John Sullivan House is listed as a national historic landmark, and the Town of Durham has a historic downtown district abutting the river.

Geology

The Oyster River is home to an extensive array of natural rock strata, mostly plutonic and meta-sedimentary rock formations. The bedrock underlying the Oyster River was covered by stratified drift deposits of till during the last ice age, making the banks fertile and suitable for farming. The porous rock adjoining and underlying the river has contributed to a proliferation of natural springs and aquifers, most notably the Spruce Hole Aquifer,

which lies beneath the bog of the same name and is used by the Town of Durham as a supplemental water source.

Wildlife, Habitat and Vegetation

Critical wildlife habitat is found along the Oyster River corridor. A wide variety of species rely on this unique “wildlife highway” with uninterrupted waterways and unfragmented forests that give fish, birds and mammals safe passage between forested regions. The Oyster River contains some of the highest quality natural habitat in New Hampshire. It is home to at least eight rare, threatened or endangered wildlife species including the grasshopper sparrow, Blanding’s turtle, and Eastern Hognose snake. One hundred-thirty-nine plant species have been identified along the river corridor, making it one of the most vegetatively diverse rivers in New Hampshire. Eighteen species of fish are known to live within the river, most notably the state endangered American brook lamprey and the state threatened bridle shiner that is also considered rare globally. A large number of the fish living in the river are diadromous, capable of moving between fresh and salt waters. To facilitate this, a fish ladder has been installed at the Mill Pond Dam. The Oyster River is considered critical spawning ground for blueback herring and sea lamprey. However, blueback herring numbers have declined significantly in recent years, possibly due to decreased levels of dissolved oxygen in the water. As of 2024, the Town of Durham is planning for the removal of the Mill Pond Dam to facilitate fish passage and eliminate concerns about the dam’s structural integrity.

Recreation

The primary form of recreation on the river is fishing. The lower reaches of the river are suitable for canoeing and kayaking. Motorized boats are prohibited on the river and generally impractical due to the river’s shallow water and rocky bottom. The primary boat access point is the Mill Pond in Durham. Several trails and hiking areas are available along the length of the river, including a tract of land along the river covering portions of Lee, Madbury and Durham. Many locations are suitable for bird watching or wild animal watching, and several ball fields are located adjacent to the river in Durham.



Fishing

The exceptionally pure water and rural nature of the Oyster River make it an excellent fishery and provide some of the finest fishing found in New Hampshire. The river is home to a large number of warm water game fish, most notably largemouth bass, yellow perch, and black crappie. The predominant breeding ground for these fish is Wheelwright Pond, which has a number of fishing spots along its banks. The waters west of Durham are abundant with brook trout, and the supply of trout is restocked yearly. Sea lamprey adults have been sporadically stocked in the river and may still be caught, or be seen attaching themselves to caught fish. While not popular in America, sea lampreys are eaten as a delicacy in Europe, and foreign fishing enthusiasts often pursue them in the Oyster River.

For More Information

For further information visit the New Hampshire [Rivers Management and Protection Program](#) page on the NHDES website, or contact the Rivers Coordinator, 29 Hazen Drive; PO Box 95; Concord, NH 03302-0095; [\(603\) 271-2959](tel:603-271-2959); riversprogram@des.nh.gov.