

# **FRWA Curriculum Guide**

## **Week II - High School**

# **Watershed**

## **Watershed – Background Information**

*“The river moves from land to water to land, in and out of organisms, reminding us what the native peoples have never forgotten; that you cannot separate the land from the water, or the people from the land. – Lynn Noel, Voyages Canada’s Heritage Rivers*

A watershed consists of an area of land and water where water drains into particular water basins, such as rivers, lakes, ponds, wetlands, or streams. It encompasses all the land, animals, plants, buildings, towns and people within the area. The precipitation that falls that is not used by the plants or animals travels within the watershed. Land elevation determines the flow of water, while surrounding ridge areas define the boundaries.

Farmington River Watershed is a sub-basin of the Connecticut River Watershed. All the tributaries of the Farmington River are included in the watershed. The area of land encompasses 386,000 acres, or 609 square miles, which drains into the Farmington River and its tributaries. Included in the watershed are 10 towns in Massachusetts and 23 towns in Connecticut. The Farmington River, in turn, drains into the Connecticut River.

The 81 miles of river begin at an elevation of 2,180 feet in the Berkshire Hills of Becket, MA, traveling 16 miles through Otis and Tolland, and enter Connecticut in Colebrook at 1,300 feet. The west branch river flows through land areas that feature hills, ponds, wetlands and lakes.

The river continues in a southeasterly direction, entering the towns of Barkhamsted and New Hartford. The confluence of the west and east branches occurs, creating the main stem of the Farmington River. As the main stem flows through New Hartford, a deep gorge, known as Satan’s Kingdom, results in the formation of significant rapids.

As the river continues downstream, into Farmington, the river turns north and enters a section known as the “bathtub” because of slower, moving waters. It then meanders through Farmington, Avon and Simsbury. The Tariffville Gorge restricts the flow as the river turns east towards the towns of East Granby, Bloomfield and Windsor. Meeting the Connecticut River downstream of the Loomis Chaffee School in Windsor, the Farmington River has joined the biggest river in New England.

In 1994, the federal government designated 14 miles of the Farmington River as a National Wild and Scenic River. The designation highlights the section from Hartland to the New Hartford/Canton line as an area of particular beauty, importance to wildlife, and recreational value, and grants federal protection to the river. Visitors canoe, kayak, fish, visit historic mills and state parks, and observe bald eagles and other wildlife that call this section of the river “home”.

There are many tributaries and water bodies within the watershed that contribute to the flow and health of the Farmington. One of the major ones include Otis Reservoir, located in Otis, MA. It was originally a series of three ponds (Messenger, Little, and Rand) until a dam was built in 1865 to provide water to downstream mills. It encompasses 1,050 acres and is a vacation spot that offers fishing and camping facilities.

The Clam River, approximately 8 miles south of Otis, supports timbering and fishing industries and has a number of dams for flood control and recreational purposes. Sandy Brook flows in a southeasterly direction from Colebrook, CT and joins Still River between Robertsville and Riverton. The terrain runs through rocky glens or valleys in the Algonquin State Forest.

Continuing south, The Mad River joins Mill Brook above Winsted and contributed to the

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destruction of Winsted during the flood of 1955. Since then, it has been contained by a flood control dam built under the direction of the U.S. Corps of Engineers.

The Highland Lake outlet connects with the Mad River at Winsted and joins the Still River in East Winsted. Still River also flows through Winsted, connects with Mad River before joining Sandy Brook.

Once a whitewater boating stream, the East Branch originally ran through a deep, forested area. Numerous mountain streams fed into the river, but in 1940, Metropolitan District Commission impounded the entire Connecticut section to create the Barkhamsted Reservoir. Its sole purpose is to supply drinking water to the Greater Hartford area; therefore, no recreational activities are allowed. It still affords a fine view from the Saville Dam.

Below the Saville Dam, Lake McDonough provides a recreational area for boating, fishing and swimming. Cherry Brook flows through North Canton to the Farmington at the New Hartford/Canton line. Starting in New Hartford, the Nepaug River meanders through open country and woods, flowing through a deep glen to the Nepaug Reservoir. This area comprises another closed reservoir administered by Metropolitan District Commission.

Roaring Brook flows through Secret Lake in Canton into the Farmington in Unionville. The Pequabuck River originates in Harwinton and flows southeasterly through Plymouth, Bristol, Forestville and Plainville. It then connects with the Farmington River in Farmington, where the Farmington reaches its most southerly point. The Talcott Range forces the Farmington River to change direction to flow north.

The Thompson Brook flows through Avon into the Farmington and the Nod Brook runs through Avon and Simsbury to join the Farmington at the Avon/Simsbury town line. Stratton and Hop Brook both meander through Simsbury before linking up with the Farmington. The east branch and west branch of the Salmon Brook run through Granby and flow through East Granby before connecting with the Farmington.

The Massachusetts portion of the watershed consists of mostly forested land and hilly terrain. Wetland resources are abundant and current land use is limited to forest and agriculture. Overall, the watershed is rural, but there have been substantial changes in land use in Connecticut as residential development has expanded into agricultural areas. The communities most greatly affected by the change in land use include Farmington, Avon, Simsbury, Bloomfield, and Windsor.