

Chapter 2: Description Of The Study Area

2.A. Regional Setting

The Farmington is the largest tributary to the Connecticut River and the Salmon Brook is the largest tributary to the Farmington. Due to its high-quality resources, Salmon Brook is arguably the most important tributary. Salmon Brook joins the Farmington River in the Town of East Granby. The confluence of the Farmington and Connecticut Rivers is in the Town of Windsor which is 55 miles north of the Long Island Sound, 2.8 miles north of the City of Hartford, and 13.1 miles south of the Massachusetts state line. The Farmington River Valley is situated about halfway between New York and Boston. The towns of the Wild and Scenic Study area include Avon, Bloomfield, Burlington, Canton, East Granby, Farmington, Granby, Hartland, Simsbury and Windsor.

2.B. Watershed Characteristics

General Description

The Lower Farmington River presents a sharp contrast to its upper reaches in Massachusetts and northern Connecticut. The upper river is generally narrow, swift, and steep-sided, but as it reaches the beginning of the Study Area in Canton and Burlington the river broadens and slows, flowing southeast toward the lowlands of the Town of Farmington. In

mid-Farmington, the river's historical route is blocked by glacial deposits, and it turns sharply north, traversing Avon and Simsbury along an ancient lakebed. This reach of the river is called the "bathtub" because of its relatively placid flow and broad valley, bounded on the east by a traprock ridge. At Tariffville, the river dramatically exits the "bathtub," punching southeast through a notch in the ridge, then meanders through Bloomfield, East Granby, and Windsor before finally entering the Connecticut River.

Salmon Brook resembles the upper reaches of the Farmington River, in that it starts in the western highlands of the Study Area and is generally narrow, swift, and steep sided. The headwaters of the West Branch are in Hartland near Sunset Road. The East Branch extends into Granville, Massachusetts; however, for the purpose of this Management Plan and Wild and Scenic designation, the state line represents the terminus of the East Branch. Salmon Brook flows southeast through Hartland, Granby, and East Granby and has three distinct segments: the main stem, 2.4 miles long; the West Branch, 12.6 miles; and the East Branch, which is 11.4 miles. Salmon Brook is a source of clean cold water that contributes to the high water quality and diversity of life in the lower Farmington River. It joins the Farmington River in East Granby, above the East Granby/Simsbury town line.

Overall, the Lower Farmington River and Salmon Brook corridors are a remarkable combination of varied geology, healthy forested watershed, excellent fishing and paddling areas, well-kept walking and biking trails, diverse communities of plants, wildlife, fish, and aquatic invertebrates, rich agricultural soils, archaeological sites, historic towns and landmarks, and striking scenic views. The watercourses are exceptional natural and cultural resources.

Ecology and Natural Communities

The landscapes of the Study area range from low, flat wetland to steep upland and thus support a diverse array of plants, including 19 state-listed species. They also provide a critical dispersal and migratory route for both terrestrial and aquatic wildlife. The thriving mammalian community includes bear, fisher, otter, bobcat, fox, coyote, deer, and occasional

Tariffville Gorge Photo: Bob Perron



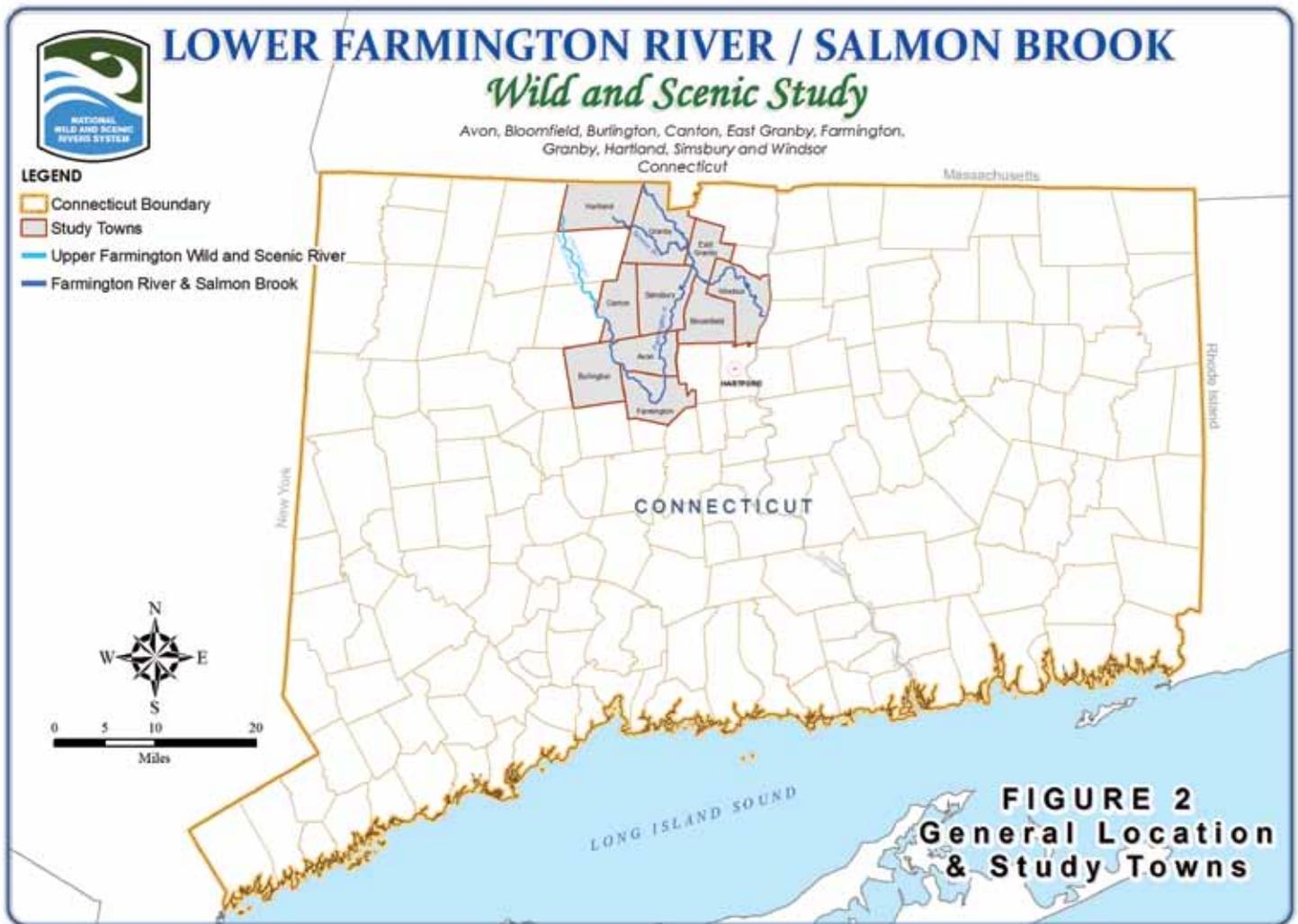


Figure 2: General Location & Study Towns Map

moose. A migratory bird survey conducted along the Farmington in spring 2009 alone yielded a significantly high species diversity (Shannon-Weiner Index of 3.0), totaling 2124 individuals of 105 species, including all state and federally listed raptors as well as a number of other federally listed wading and perching birds. Notable sightings included bald eagle, osprey, American kestrel, northern harrier, American bittern, snowy egret, and great egret. In addition, the river supports a great blue heron rookery. The lower Farmington River is the only river known to support all 12 of the freshwater mussel species native to southern New England. There are only five known viable populations of the federally endangered dwarf wedgemussel worldwide and the Farmington supports the largest. At least 35 species of finfish are also present, supporting an exceptional recreational fishery featuring native brown and brook trout. Migratory fish such as American shad, blueback herring, alewife, American eel, and Atlantic salmon have excellent spawning

habitat in the corridor. The Farmington River is considered one of the most important rivers in Connecticut for diadromous fish restoration and the Salmon Brook the most important tributary to the Farmington for salmon restoration due to high habitat quality and the lack of obstructions to their migration.

Land Use and Ownership Patterns

Land use within the river corridor is similar to that in the watershed as a whole. Large tracts of forest and extensive ridge and wetland systems combine with a mix of urban centers, suburban residential and commercial development, light industry, and agriculture. This combination of land uses in the corridor (in 2000, 52% urban areas, 48% non-urban) can result in declining biodiversity over time. However, the corridor has retained an impressive degree of biodiversity to date, which could be maintained or improved if well managed. Overall the land cover within the corridor is on average 45% forested with an impressive 57% forested within the Salmon Brook corridor. Over 27% of the land in the

corridor is open space and recreation areas. The high percentage of forested land cover and open space contributes to the excellent water quality of the watercourses and the recreational viability of the resource.

The study towns' populations have remained fairly stable with modest increases. The

largest percentage increases over two decades from 1990 to 2009 have occurred within the towns of Avon (10%), Canton (15%), and East Granby (10%). The towns with populations exceeding 20,000 include the towns of Bloomfield, Farmington, Simsbury, and Windsor.

See Figure 3 & 4 & 5 Land Use Percentages within the Corridor, Study Corridor Land Cover Values and U.S. Census Populations from 1990–2009.

Figure 3: Land Use Percentages Within the Corridor

Land Use Classification	Farmington River	Salmon Brook	Total Area
Agriculture	9.4%	8.4%	9.1%
Residential	22.2%	47.3%	30.3%
Commercial	8.0%	0.8%	5.7%
Industrial	0.0%	0.0%	0.0%
Cemetery	0.7%	0.2%	0.6%
ROW (Road & Utility)	5.8%	4.5%	5.4%
Mixed Use	12.3%	0.2%	8.4%
Health/Medical	0.2%	0.1%	0.2%
Open Space/Recreation	27.0%	28.0%	27.3%
Government/Non-Profit	4.1%	0.2%	2.8%
Undeveloped	9.3%	10.2%	9.6%
Unknown	0.8%	0.0%	0.6%

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Figure 4: Study Corridor Land Cover Values

Sorted by Total Study Town Area

Classification	Farmington River	Salmon Brook	Total Area
Deciduous Forest	33%	35%	34%
Developed/Roads	18%	14%	17%
Agriculture	13%	16%	14%
Coniferous Forest	6%	22%	11%
Turf & Grass	9%	7%	8%
Water	12%	1%	8%
Other Grasses	4%	2%	3%
Forested Wetland	3%	3%	3%
Utility ROWs	1%	0%	1%
Non-forested Wetland	0%	0%	0%
Barren Land	0%	0%	0%

Land Cover data from UCONN CLEAR (2006)

Figure 5: U.S. Census Populations from 1990–2009

Town	Percent Change 2000–2009	Census 2009	Census 2000	Census 1990
Hartland	4%	2,087	2,012	1,866
Granby	8%	11,220	10,347	9,369
East Granby	10%	5,210	4,745	4,302
Windsor	3%	29,014	28,237	27,817
Bloomfield	6%	20,696	19,587	19,483
Simsbury	2%	23,648	23,234	22,023
Avon	10%	17,357	15,832	13,937
Farmington	6%	25,144	23,641	20,608
Canton	15%	10,125	8,840	8,268
Total:	6%	144,501	136,475	127,673

Source: U.S. Census Bureau, 2009 Population Estimates
Census 2000, 1990 Census (FactFinder.census.gov)