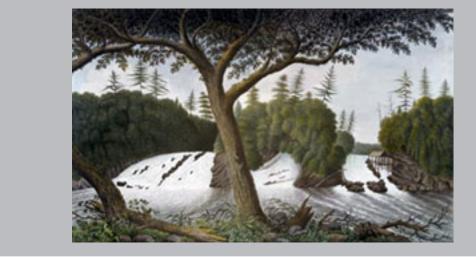


On the Banks of Otter Creek

How hydrology dictated early settlement patterns



Phebe Meyers

Historical Overview

The banks of Otter Creek remained unsettled until the late 1760. Prior to the European exploration and settlement, Otter Creek was a major transportation route for the Native Americans that inhabited the region, known as the "Indian Road" and later as "The Settler's Road," as the only route into the valley. The French were the first to discover the Creek after navigating through Lake Champlain, but did not venture up beyond Vergennes falls (Petersen 1991).

At first only a few brave pioneers ventured into the wilderness along Otter Creek, yet the number dramatically increased between 1765 and 1775, creating an in-migration of settlers looking to claim land, farm, or build an industry, following town charters in 1761. Settlers attempted to use Otter Creek to the best of the ability, improving their quality of life (Eccleston 1995). Early surveyors were instructed to fully observe the course of the river, its depth, where the falls were, and the nature of the soils on either side of the creek as well as the forest types along the bank (Petersen 1991). The type of settler chose their place on the bank, some choosing the falls over the fertile, flat landscapes of the middle section. Those that did not use the river for transportation used it as a guide, bushwhacking a trail along the banks. It became a major transportation corridor during the 18th century. By the end of 1775, every town along Otter Creek had settlers (Peterson 1991).

Early settlement occurred from settlers coming in from Lake Champlain, finding the falls that produced waterpower. This section was navigable the first eight miles to Vergennes and then hiking up to Middlebury. Next was the southern end closer to Massachusetts and Connecticut where most of the settlers were from. The road network also ended right at Sutherland Falls in Proctor which was part of Pittsford until the 1880s. Once towns were established and the Crown Point Military Road was completed in 1760, the navigable waters of the center section of Otter Creek opened up the ample farm land around Cornwall. The mountain town of Mount Table and Ferrisburg were settled later due to their locations and minerals found.

Geologic Overview

Vermont was buried under glaciers about 10,000 years ago. When the ice retracted, it left lakes, rivers, and valleys etched into the bedrock, forming the soils and topography which dictate the hydrology of the creek (Meeks 1986). Much of the Otter Creek and Champlain Valley that we know today was underwater, resulting in clay rich soils. Over thousands of years, along the steeper parts of the creek, the water has carved out gorges in the limestone, creating a varied topography, and a dynamic stream flow. As tributaries feed water into the main artery of the creek, the water volume increases, which also depends on precipitation and spring-fed tributaries. The velocity of the river varies at different parts along the creek, increasing in the narrower channels, and becoming almost placid along the wide flat sections.

The landscape was originally covered in a dense virgin forest, which was cleared rapidly following settlement. Pine, cedar, tamarack, soft maple, black ash and elm, interspersed with other deciduous trees grew along the banks (Smith 1886). The rocks along the creek are deposited in parallel ranges extending north and south (Smith 1886). Marble and limestone beds are the metamorphic rocks that are commonly found around the banks and on the falls. The soils vary in their construction and composition. The fertile alluvial lands along the Otter Creek valley are prime for agricultural.

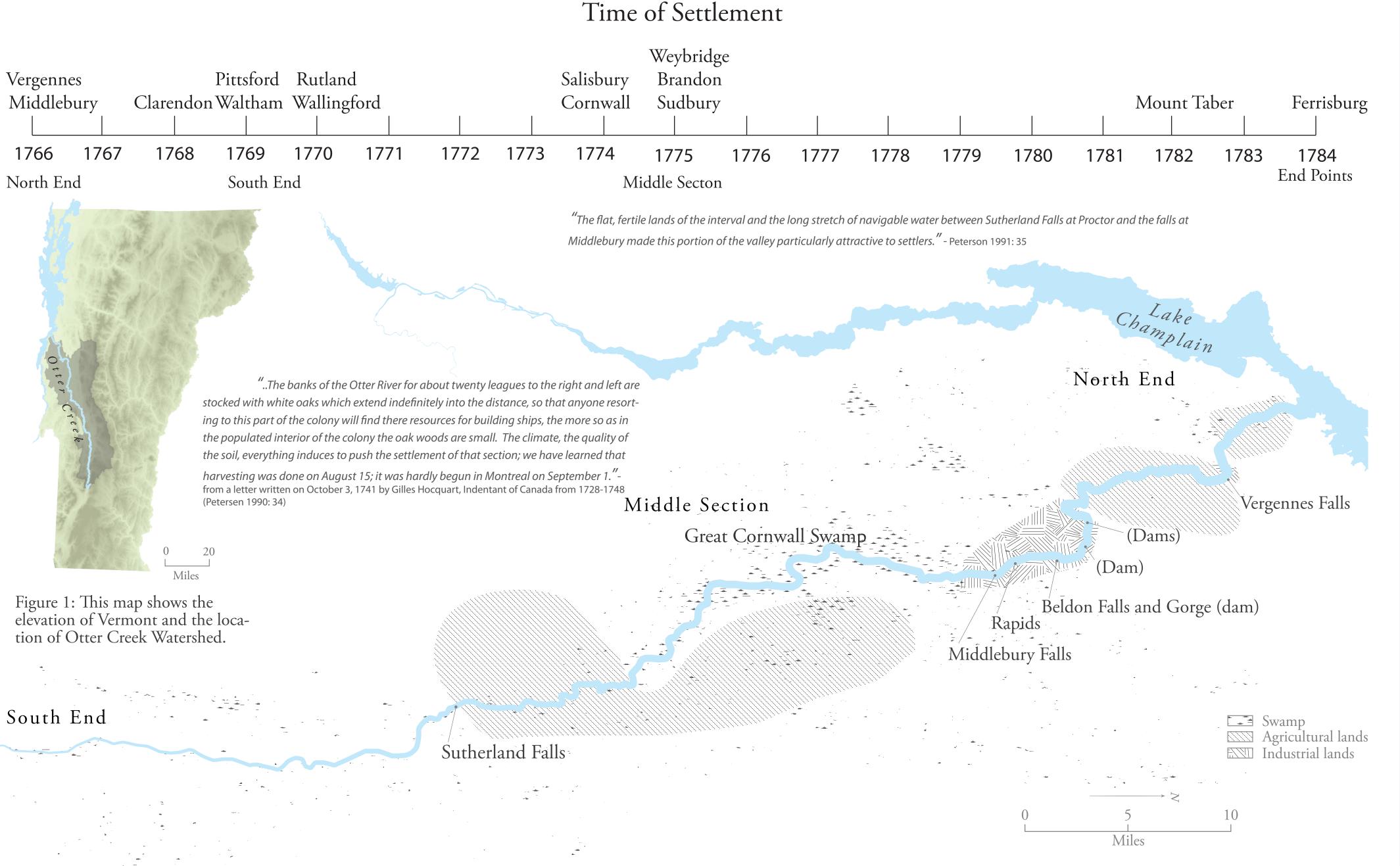


Figure 2: Map of Otter Creek with prime settlement locations. The rocky hills of the Green Mountains at the birth of the creek has a weak veolcity and volume as well as steep terrain not condusive to settlement. The fertile lands of the middle section were great for farming, due to the meandering river and soil types. The falls and limestone gorges made travel a challenge, yet prime area for water powered industry. Those in favor of a farming lifestyple chose to live elsewhere. It moves slowing and silently northward through Wallingford and Clarendon, plummeting over the falls in Rutland and Proctor, meandering through the valley between the Taconic Mountains and the Green Mountains, through Pittsford, Brandon, Sudbury, Leicester, and Whiting, bordering the Great Cornwall Swamp between Salisbury and Cornwall, to plunge down the falls in Middlebury, through New haven and Weybridge, snaking through the fertile flats of Waltham and Addison, before tumbling down the last final fall at Vergennes.

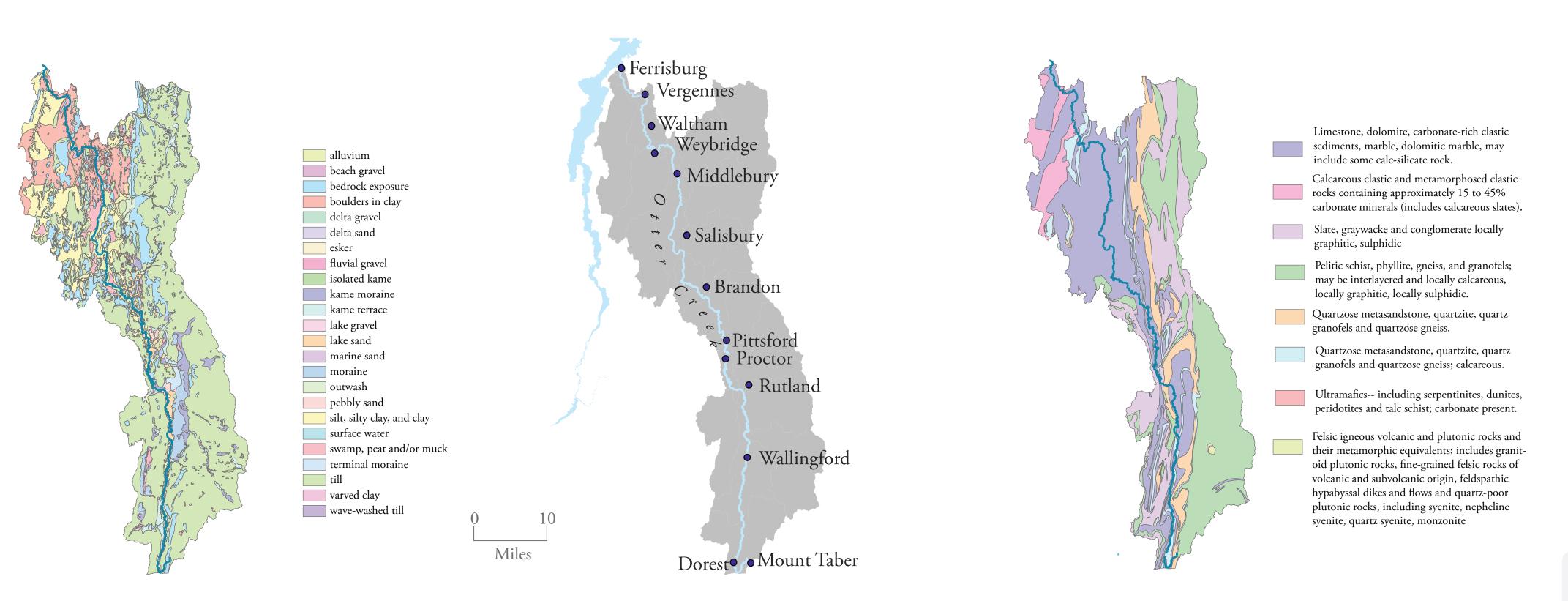


Figure 3: Map of the soils of Otter Creek Watershed. The soils along the banks of Otter Creek at the north end are boulders in clay, silt, clay, and fluvial gravel. Glacial till dominates the southern end.

Figure 4: Otter creek is Vermont's longest river, flowing 100 miles north of Dorset Vermont into lake Champlain in Ferrisbury, as well as the drainage system for most of Addison County (Smith 1886, Petersen 1991).

Figure 5: Map of the bedrock of the Otter Creek Watershed. The bedrock is dominated by carbonate-rich rocks, such as limestone and marble, with a few ribbons of quartizite. These are mainly sedimentary.

Prime Settlement Locations

Even though the creek provided a throughway for travelers, the banks along the parts that were not navigable provided a clear path instead of trekking through unfamiliar wilderness (Sheldon Museum). In the winter, the ice created a surface, transforming the flowing river into an actual "road."

Settlers who wanted to have their own farms and sought the fertile soils of the lowlands lying between the lake and the Green Mountains. After clearing the forested landscape for agriculture, byproducts of commercial value could be produced and transported down the river (Sheldon Museum). The annual flooding of the banks of Otter Creek, taught settlers early on that building right along the banks of Otter Creek would not be the most strategic building locations unless one wanted to be flooded every spring. Those that lived within sight of the creek valued the lakes that formed from the winter snow melt.

The falls in the northern and southern ends of the creek were prime locations for industry, offering waterpower to mills. This transformed many frontier settlements into established industrial towns and commercial centers. What was a subsistence lifestyle gave way to a more "entrepreneurial mode of existence (Sheldon Museum)." Middlebury falls offered one of the best mill opportunities in the state (Smith 1886).

The stone free flat valley which Otter Creek meanders through full of glacial clay was the preferred location for those wanting to sustain themselves on farming. Around Weybridge, Salisbury, and Waltham the soil is varied in character from the rich alluvian clay and was prime for farming, both grazing and cultivation. Those who wished to move to the industrial sector chose to on the hills around the falls such as Middlebury, Vergennes, and Brandon (Meeks 1986: Chapter 12).

Throughout history, Otter Creek has been a primary resource for those that live along or near its banks. In the years that followed settlement and chartering of towns, competition over the creek as a resource became a highly contended issue, since farmers and mill owners had different interests in how the hydrology of the river should be altered.

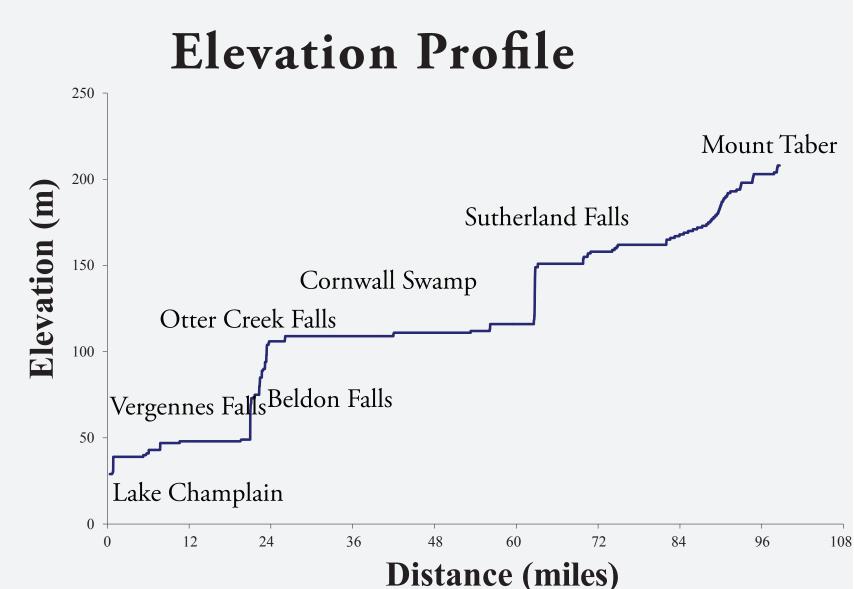


Figure 6: Elevation profile of Otter Creek from Lake Champlain traveling southward to the birth of the river up in the hills aroud Mouth Taber. Even though dams have been placed in the rapid part of the river, the profile does show the flat streach that was so attractive to settlers as well as the water power potential.

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